

**The Potential Economic Impacts of the
Oldham Reserve
Office Campus Development**



for
Oldham-LaGrange Development Authority
and
Oldham County Economic Development Authority

by
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Consulting Economist

March 18, 2008

Contents

Executive Summary	1
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Background

The property and plan.....	3
Commuting patterns, and pay of commuters	5
Occupations, education, incomes of Oldham residents	7
Tax base	8

Impacts

1. Office campus vs. residential property development	12
2. More private sector employment opportunities	17
3. Reduced commuting costs for some residents	18
4. New sales for County businesses	20
5. Diversification of tax base.....	22

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Oldham County is developing a large parcel of land along Interstate 71 near the LaGrange interchange. In this report I provide estimates of the potential economic and fiscal impacts associated with the development, now called Oldham Reserve. A Master Plan for development has been approved, and I consider that build-out scenario in this report. However, while land has been acquired and some infrastructure put in place, changing market conditions mean it is still not clear what the ultimate development mix will be. Certainly, the campus will contain offices, retail, and housing. But further infrastructure investments, marketing efforts, pricing and incentives, as well as local regulations will determine the outcome over the coming decades. Because of the uncertainty about ultimate land use, I analyze several other development scenarios and make estimates of their various economic and fiscal impacts. Also, to provide context, I organize a body of public data on economic conditions, demographics, and the local tax base.

The likely impacts fall roughly into five categories.

1. Developing the site as an office campus will generate more net tax revenues and less public costs per acre than development as residential property. I estimate that the development will generate between \$8 and \$14 million in additional local tax revenues annually, depending on the build-out scenario. An intensive residential build-out would generate substantial property taxes, but these would mainly be a displacement from other current and possible residential developments in the County. The office campus build-out appears to be a better land use, given the highly desirable location next to Interstate-71 and LaGrange. Moreover, the office jobs would give the County a new tax base should a long-discussed local occupational tax be levied.
2. If developed as planned, the site will host thousands of high-paying private sector jobs, many of which will be held by County residents. This would help offset the recent trend towards low-paying jobs in retail and personal services. Rawlings, the first tenant, is already the largest private employer in the County and an increasing number of its employees are residents of Oldham.
3. The site will reduce the commuting time for many current residents of Oldham County. I estimate that a typical County resident who switches from a professional job in Jefferson County to one at Oldham Reserve would save around \$3,000 per year in auto mileage expenses, gain leisure time valued at over \$1,000 per year, and save hundreds of dollars in reduced taxes (and parking fees).

4. The office-based development will generate business for company vendors, as well as restaurants and other retail outlets in the County, as workers go out for lunch and do shopping close to their workplace. Assuming 2,000 office workers at Oldham Reserve, I estimate that another 822 jobs would be created elsewhere in the County due to the office activity. Moreover, these office workers would tend to purchase many more retail items in Oldham County than if they continued to commute into Jefferson County. I estimate that restaurants, health care providers, grocery stores, and other retail and personal service firms in the County would see over \$5 million in additional sales due to the nearby presence of the office complex.
5. The development will diversify the County's tax base, which today is heavily reliant on property tax revenues from homes. Assuming the Master Plan is followed and supported by market conditions, Oldham Reserve will support between four and eleven thousand jobs, with a yet to be determined mixture among office, hotel, and retail uses. This would represent a new payroll base of between \$150 and \$470 million in the County, meaning a one percent occupational tax would yield \$1.5 to \$4.7 million annually. However, the tax *structure* is not now aligned to take advantage of employment centers. The City of LaGrange and the County would have to levy such a tax to take advantage of the diversity in the tax base.

BACKGROUND

The property and plan

The Oldham-LaGrange Development Authority (OLDA) is in the process of developing its new 1,000 acre business campus (Oldham Reserve), located in the southwest quadrant of the Interstate 71 interchange at LaGrange. OLDA seeks to attract anchor and satellite office operations that will employ thousands of professional persons in a campus-like setting compatible with the Park's master plan. The Park will be unique in the Louisville market in that professionals can work near their homes in a charming rural setting, yet have most of the business amenities associated with a more urbanized setting. The campus may include a conference center, an extended stay hotel, full service restaurants, a retail village, as well as public services like a K-12 school, a post office, and a place to take college courses.

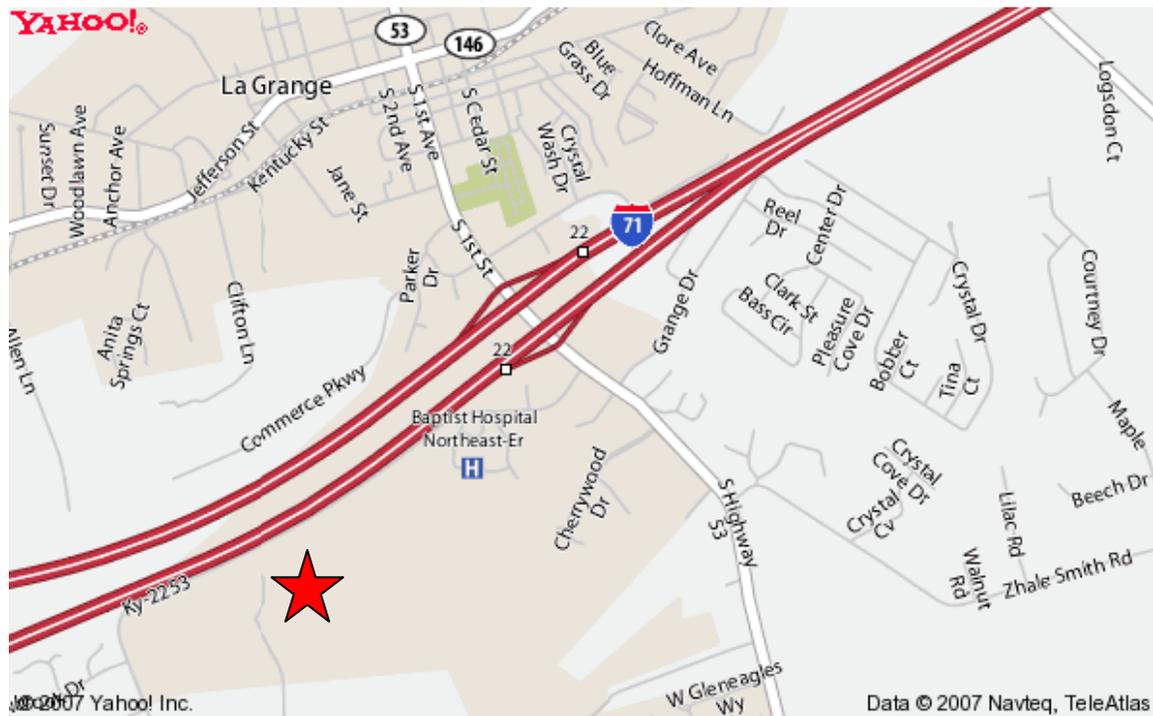
The objectives of the business campus development include (a) increased employment opportunities for county residents (b) increased personal income of residents (c) increased tax revenue for county government, (d) diversify the county tax base to make it less dependent on residential property, and (e) generally ensure that the development contributes to the overall quality of life in the area.

Community support and marketing efforts need to be developed in the context of certain economic realities, mostly positive in nature. Residents of Oldham County have on average the highest educational attainment of any county in the 25-county regional economy. Oldham also has the fastest population growth of any county, except for small but booming Spencer County. These important characteristics present opportunities, particularly among office-based enterprises, for high paying jobs at the campus. However, without an occupational tax, a large payroll does not translate into a larger tax base for the county. New real and tangible personal property would add to the tax base, but typically capital-intensive developments do not support many employees. Thus, a light manufacturing operation might add tens of millions of dollars in property assessments but few employees. A low-end distribution and warehousing operation might generate hundreds of jobs, but would add little in the way of new property or payroll. It would also not contribute as much to the quality of life in the county as an office campus.

The City of LaGrange and the Oldham County governments have jointly borrowed money to acquire the land and to prepare the property for the market. A bond was issued for \$20 million in 2005, and debt service payments are due in 2008. The 977-acre farm was purchased from Badgett Properties in 2005 for \$13 million. OCEDA has also constructed a four-lane road, Eden Parkway, and added water, sewer, and drainage improvements, costing a total of around \$4 million.

The campus's anchor tenant was signed in 2006. The Rawlings Group has now relocated its headquarters and all operations from downtown Louisville to the campus. The Rawlings Group purchased 67 acres for \$1.34 million, putting that parcel back on the property tax rolls. A \$25 million, 150,000 square foot 3-story Class A office building is complete. In October 2007, the company moved all its employees to the site, and with

their planned expansion will have around 600 employees and a total payroll of \$31 million. Rawlings is immediately the largest private employer in Oldham County.



The economic challenge now is to develop the rest of the campus in a complementary way, adding organizations and activities that fit the office campus model, and generating synergies with Rawlings that lead to mutually reinforcing business success. Likely candidates are other office operations, a conference hotel, restaurants, a print and mail shop, fitness center, educational programming, and childcare. Public buildings, such as a post office or school, might also fit, providing they make sense in terms of service to the residential corridors south of LaGrange. Care should be taken that additional office operations are not simply relocations of legal, accounting, and medical offices already functioning in LaGrange. Rather, given that the campus is intended to be a catalyst for economic growth and deepening of the tax base in the County, developers should look to attract suitable office operations that serve the entire Louisville region or even the national and international markets. Examples that could fit the location and style include software developers, engineering and architectural firms, and headquarters of nonprofit organizations.

There are also a number of financial and political challenges. Funding is needed to mitigate the old sewerage treatment plant, to construct an overpass or interchange on I-71 on the west side of the campus, and to build a loop road through the campus. The sewer plant financing is likely to be from local government, the interchange from the federal government, and the loop road from state government.

Commuting patterns, and pay of commuters

It is very clear from economic data that Oldham County is primarily a bedroom community that supplies workers to the central Louisville economy. The accompanying table shows some detailed results

Oldham County Commuting Patterns, 2000

on commuting patterns from the 2000 Census. There were nearly 22,000 Oldham County residents that worked somewhere that year. Seventy-six percent more Oldham County residents commuted into Jefferson County than worked in their home county. By contrast, only 2,875 Jefferson County residents commuted to work in Oldham County. So, there is a net interchange of nearly 10,000 workers commuting westward to Jefferson.

Workplace State- County Name	Number of Oldham County Residents Commuting to	Share of Oldham County Residents that Work Somewhere
Jefferson Co. KY	12,684	58.4%
Oldham Co. KY	7,207	33.2%
Clark Co. IN	326	1.5%
Shelby Co. KY	304	1.4%
Henry Co. KY	153	0.7%
Floyd Co. IN	126	0.6%
Franklin Co. KY	108	0.5%
Carroll Co. KY	107	0.5%
Trimble Co. KY	72	0.3%
Fayette Co. KY	45	0.2%
Bullitt Co. KY	41	0.2%
Nelson Co. KY	41	0.2%
Union Co. NJ	35	0.2%
Montgomery Co. KY	31	0.1%
Boone Co. KY	24	0.1%
Spencer Co. KY	24	0.1%
Wayne Co. IN	19	0.1%
Hardin Co. KY	18	0.1%
Harrison Co. IN	17	0.1%
Cuyahoga Co. OH	15	0.1%
Brown Co. WI	13	0.1%
Marion Co. IN	11	0.1%
Scott Co. IN	11	0.1%
Butler Co. OH	11	0.1%
Cook Co. IL	10	0.0%
Warren Co. KY	10	0.0%
Jefferson Co. IN	9	0.0%
Pike Co. KY	9	0.0%
Total	21,716	100.0%

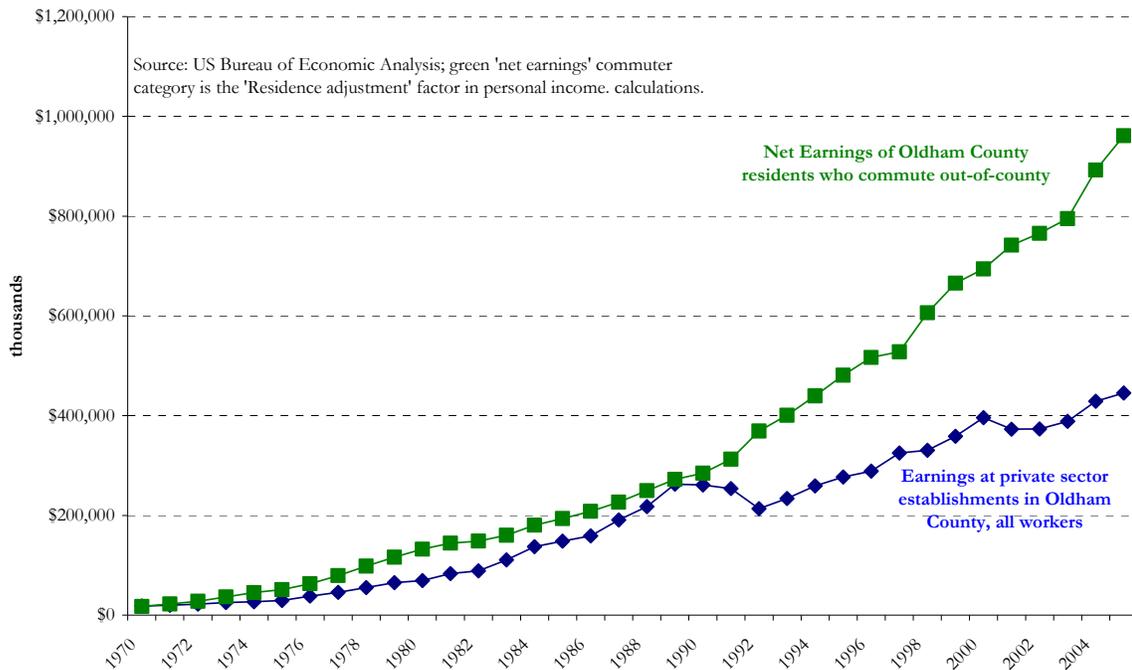
Source: US Census Bureau, 2000 Census

While it is quite typical of large metropolitan areas that surrounding counties feed workers to the central county, there are plenty of examples of suburban and exurban employment centers that provide high-paying jobs closer to home. In some cases, there is even a net flow of workers from the central county to the suburban county. Perhaps the most well-known regional example is Cool Springs in Williamson County just south of Nashville, where Nissan just relocated its North American corporate headquarters. Clearly, Oldham County has a very well-educated population, and this makes the area very attractive for office operations that do not need to be in a central business district environment.

According to the latest personal income estimates from the US Bureau of Economic Analysis, Oldham County residents earn about \$961 million more annually from work outside the County than nonresidents earn by working in Oldham County. This compares to only about \$445 million in earnings at private sector organizations in Oldham County (an additional \$150 million is earned at local, state, and federal government establishments, including public schools). The trend is easy to see in the figure below.

Fifteen years ago the earnings of people working in Oldham County were essentially the same as the net earnings of cross-county commuters¹. By 2005, out-of-county commuters were contributing twice as much to County personal income as those working in the private sector in the County.

Earnings by Place of Work and Place of Residence, Oldham County
1970 to 2005



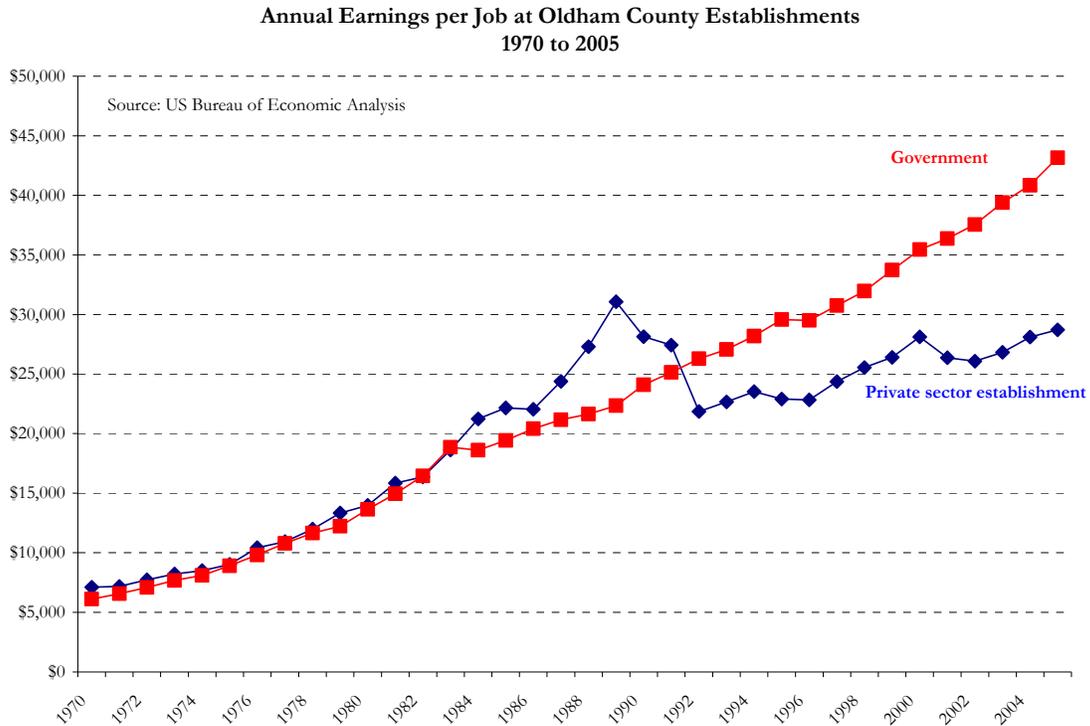
Another interesting, and very relevant, historical observation is that private sector job growth in Oldham County has been dominated by low-paying, part-time, work. Whereas in 1990 private sector and public sector employees earned essentially the same annual wages and salaries, by 2005 government workers earned fifty percent more than those in the private sector. Specifically, the average annual earnings of workers in Oldham County in 2005 were \$30,465; but government workers averaged \$43,162, while private sector workers earned \$28,719. Over one-half of the government employment is accounted for by local government, and the largest component is the public school teachers and staff. The average pay of the 758 certified teachers and staff in the Oldham County Public School system is \$45,000². Additionally, there are nearly 1,400 state government workers in the County, including those at the Reformatory, and their pay

¹ The decline in private sector earnings in Oldham County in 1991 and 1992 was due to a steep drop in estimated farm income, \$118 million in 1990 to \$33 million in 1992. I believe this is spurious, and caused by the federal government's crude method for allocating to counties the net income from all equine operations in Kentucky. Nearly all other private industries posted wage, salary and proprietors' income growth in the County during this period.

² See Kentucky Department of Education web site: www.education.ky.gov/KDE/Administrative+Resources/Finance+and+Funding/School+Finance/District+Personnel+Information/Certified+and+Classified+Staff+Data.htm.

averages \$42,000 per year. These relatively well-paid public sector workers keep the average pay over all workers in the County from being much lower than it is.

In terms of jobs in the County, the fastest growing private sector industries have been Services, Retail Trade, Construction, and Finance, insurance and real estate. These sectors have been dominated by businesses that sell everyday things to local residents, e.g., grocery stores, gasoline stations, physicians' offices, branch banks, real estate agents. This explains why private sector earnings have grown so slowly compared to that in the public sector.



Occupations, education, incomes of Oldham residents

It is clear from Census data that Oldham County is home to some of the most educated and affluent people in the Louisville area. See the table below, which provides some profile information on a residential basis. Oldham residents tend to work in management and professional occupations, compared to the MSA average. A much higher percentage of Oldham adults have a college degree. And nearly two-thirds of Oldham households had incomes above \$50,000, compared to but forty percent of households in the MSA. This is consistent with the commuting story we just examined. Oldham County residents tend to travel to professional jobs in Jefferson County, earn a high income, and use that income to purchase a large home on a large lot. There are few high paying private sector jobs available in Oldham County.

Occupations, education, and income, 2000 Census

	Oldham County	Louisville MSA
Occupational Profile of Residents		
Management, professional, and related	40.1%	30.6%
Service	11.9%	15.6%
Sales and office	26.0%	27.3%
Farming, fishing, and forestry	1.0%	0.2%
Construction, extraction, and maintenance	8.1%	9.0%
Production, transportation, and material moving	13.0%	17.2%
Percent of adults with a college degree	30.6%	22.2%
Percentage of households with income above \$50,000	62.5%	39.9%

Source: Census 2000 Profiles; MSA estimates for prior 7-county MSA definition.

Tax base

Local governments and schools in Oldham County are quite reliant on residential property taxes and the insurance premiums tax. The three major jurisdictions in the County are the City of LaGrange, the Oldham County Fiscal Court, and the Oldham County Public School system. They all receive revenues from local service fees and from external sources, including state and federal transfers, and grants. If we focus on the revenues raised locally the dependence on property taxes and insurance premiums taxes is clear.

I have organized data from recent financial reports on the largest jurisdictions (see table below). The City of Lagrange receives around \$4.2 million annually from local sources (including surpluses), with nearly 52 percent from property taxes and insurance premiums taxes. Oldham County Fiscal Court receives around \$9.3 million annually from locally-generated sources, and with 71 percent from these two tax sources. The Oldham County Public School System receives around \$38 million from local sources, most from property taxes on real estate.

By contrast, the merged Louisville-Jefferson County government relies on these two sources for only about one-fourth of its General Fund revenues. And the Jefferson County Public School system is less reliant on property taxes because it receives over \$110 million annually from a 0.75 percent occupational tax on the wages and profits of those (residents) working or doing business in the County.

Moreover, because there are few major industries in Oldham County most of the real estate and other property taxes are collected from households. The result is that the growth in revenues to fund local public services is dependent on home building and home values. The County has seen tremendous growth in households, many of them affluent with large expensive homes, and this has led to good growth in property tax revenues. However, state law prohibits property tax revenues from rising more than four percent per year (from existing real estate), so that tax revenue growth through housing appreciation is constrained.

Tax and Other Revenues, Local Jurisdictions

	revenues	share of tax collections	share of total General Fund Revenues
Oldham County Fiscal Court, FY 07-08 budgeted			
Real estate tax	\$3,536,000	53.4%	38.0%
Tangible property tax	\$89,610	1.4%	1.0%
Motor vehicle property tax	\$391,400	5.9%	4.2%
Delinquent property tax	\$77,250	1.2%	0.8%
Bank franchise deposit tax	\$86,520	1.3%	0.9%
Franchise corporate tax	\$72,100	1.1%	0.8%
Deed transfer tax	\$515,000	7.8%	5.5%
Insurance premium tax	\$1,854,000	28.0%	19.9%
subtotal, tax revenues	\$6,621,880	100.0%	71.2%
Total General Fund Revenues	\$9,303,445		
City of Lagrange, FY 07-08 budgeted			
Ad valorem (real estate, tangible property) tax	\$1,084,000	49.0%	25.6%
Motor vehicle property tax	\$100,000	4.5%	2.4%
Delinquent property tax	\$15,000	0.7%	0.4%
Franchise tax	\$125,000	5.6%	3.0%
Insurance premiums	\$810,000	36.6%	19.1%
Utility tax	\$70,000	3.2%	1.7%
Omitted intangibles	\$10,000	0.5%	0.2%
subtotal, tax revenues	\$2,214,000	100.0%	52.3%
Total General Fund Revenues	\$4,230,111		
Oldham County Public Schools, FY 05-06			
Local property tax revenues	\$33,598,419	88.5%	
Local utility tax, other local receipts	\$4,363,604	11.5%	
subtotal, local tax revenues	\$37,962,023	100.0%	
Total Revenues, including state and federal transfers	\$79,035,673		

The insurance premiums tax has no such limitation, and has risen in importance as a source of revenues to the City of LaGrange and the Oldham County Fiscal Court. Indeed, in late 2007, the tax rate on insurance premiums was raised from six to ten percent in LaGrange, and from five to ten percent in the remainder of the County.

Potential Tax Revenues from a County-wide Occupational Tax

	Wages and salaries, all workers in County	0.5% Rate	1.0% Rate	Annual Growth Rate
1995	\$234,494,000	\$1,172,470	\$2,344,940	
1996	\$248,490,000	\$1,242,450	\$2,484,900	6.0%
1997	\$278,554,000	\$1,392,770	\$2,785,540	12.1%
1998	\$298,629,000	\$1,493,145	\$2,986,290	7.2%
1999	\$325,649,000	\$1,628,245	\$3,256,490	9.0%
2000	\$355,185,000	\$1,775,925	\$3,551,850	9.1%
2001	\$356,021,000	\$1,780,105	\$3,560,210	0.2%
2002	\$363,972,000	\$1,819,860	\$3,639,720	2.2%
2003	\$382,672,000	\$1,913,360	\$3,826,720	5.1%
2004	\$409,456,000	\$2,047,280	\$4,094,560	7.0%
2005	\$427,973,000	\$2,139,865	\$4,279,730	4.5%
2006	\$444,937,488	\$2,224,687	\$4,449,375	4.0%
2007 (projected)	\$485,736,833	\$2,428,684	\$4,857,368	9.2%

Wage and salary data through 2005 from US Bureau of Economic Analysis. Wages in 2006 estimated using more recent data on the growth in wages covered by the unemployment insurance system, from US Bureau of Labor Statistics. Projection for 2007 using growth rate from 2006, plus estimate of Rawling Group payroll.

As an aside, it is not difficult to estimate the tax revenues that could be raised in Oldham County under an occupational tax, applied to the wages and salaries of all workers (working) in the County. A tax rate of one-half percentage point would have generated about \$2.4 million in 2007. Note that the tax revenues would grow at the same rate as wages, generally between four and six percent annually, and is not constrained by any state laws. Most comparable jurisdictions in Kentucky levy this tax, as well as a tax on the net profits of companies.

Should an occupational tax be levied some day, public officials will be interested in the geographic distribution of the tax payments within the County. We can make some reasonable estimates using published data on private sector payrolls by zip code. The *County Business Patterns* program in the US Census Bureau provides annual counts of establishments, jobs, and payrolls by zip code. The most recent data are provided in the table below, showing economic activity in 2005 for five zip codes. Note that 88 percent of the private payrolls in the County are located in these five zip codes. The LaGrange zip code alone accounts for 45 percent of County payrolls, with the Crestwood/Ballardsville zip accounting for another 24 percent.

Distribution of Businesses, Jobs, and Payroll Inside Oldham County

Community	Zip Code	Establish-ments	Jobs	Payroll
Buckner	40010	60	1,355	\$47,359,000
Crestwood/Ballardsville	40014	432	2,534	\$70,767,000
Goshen	40026	73	269	\$7,431,000
LaGrange	40031	431	4,916	\$131,159,000
Ky State Reformatory	40032	1		
Wesport	40077	10	37	\$670,000
subtotal		1,007	9,111	\$257,386,000
unallocated		166	1,157	\$34,411,000
Oldham County total		1,173	10,268	\$291,797,000

Source: US Census Bureau, County Business Patterns, 2005, <http://censtats.census.gov/cgi-bin/zbpnaic/zbpsect.pl>. The data program exclude self-employed individuals, employees of private households, railroad employees, agricultural production employees, and most government employees.

Source for zip codes: <http://louisville.edu/~easchn01/kentucky/1citylist.html>

County Business Patterns does show an entry for the Kentucky State Reformatory zip code (40032), but reports only a range of between 20 and 99 employees, and reveals no information about its annual payroll. Unfortunately, the *County Business Patterns* data do not cover most government establishments and employees; hence, we cannot use the database to study the geographic distribution of public school, municipal, county, state, or federal payrolls. However, since location, jobs and payrolls for these public institutions are available from administrative sources, the remaining economic activity could be allocated geographically with a modest effort.

IMPACT 1. Office campus vs. more residential property development

Consider four pro forma development projections, where land use assumptions are translated into economic and fiscal activity. The scenarios trace out the likely results in terms of jobs, payroll, and tax receipts as the property is developed in different ways, from the original vision of an office campus to one where the land is primarily used for conventional subdivisions.

The first scenario roughly corresponds to the OCEDA Economic Development Master Plan, approved by the public in April 2005. The Plan called for a high concentration of office space, a hotel/conference center, some retail, limited residential development, and all with an integrated campus feel. The estimates are provided in the first column of the accompanying table. I assume 2.7 million square feet of office space will eventually be absorbed, with the 10,800 workers there averaging \$42,000 per job (in 2005 dollars). A 125-bed hotel and conference center is included, as is 300,000 square feet of small-shop retail space. The approved Master Plan shows only 850 housing units; however, traffic studies at the time did not consider the full site³. I apply some plausible valuations to the property and jobs, and use current tax rates to make calculations of new receipts to local governments. The first scenario would lead to around \$8.3 million in additional property taxes annually. If a one percent occupational tax were levied, local government would receive an additional \$4.7 million per year from the payrolls on the campus.

Proposed Residential Development, from Master Plan, OCEDA Economic Development Campus

	Tracts	acres	units	value per unit	Total Value
Single-family, low density	34, 35	123.1	90	\$400,000	\$36,104,465
Single-family, medium density	48, 49, 52	87.2	143	\$250,000	\$35,694,187
Single-family, specialty	36 to 41, 53, 54	188.2	254	\$225,000	\$57,141,470
Mixed use, neighborhood center	42 to 47, 50, 51	181.5	363	\$275,000	\$99,825,000
Total		580.0	850	\$269,135	\$228,765,122

Usage and acreage from Master Plan developed by Scott-Klausing & Company, with assumptions about the distribution of units across usage type. The Master Plan approved by the public in April 2005 only included 850 housing units, due to a delay in getting an expanded traffic study. However, the Plan does contemplate more units, particularly in the mixed use area (though much less than would be allowed under the County's subdivision regulations). Average home values are educated guesses, based on knowledge of similar developments.

The office assumption is equivalent to over eighteen operations similar to that of Rawlings, a very aggressive assumption resulting in a projection of a significant office cluster. It would likely include a portion of the office space that is more focused on local service provision, like dentists, optometrists, doctors, lawyers, accountants, and brokers. The square footage on the retail village is roughly that of the Summit or Westport Village developments in eastern Jefferson County. This implies a collection of small and medium-sized establishments, including restaurants, clothing stores, bookstores, coffee shop, ice cream shop, and perhaps an upscale grocer, a small furniture store, drycleaner,

³ The planning firm, Scott-Klausing & Company, believes that around 1,550 housing units will ultimately be built, consistent with the topography and campus-style layout in the Master Plan

and fitness center,. But it would not include any ‘big box’ retailers, like a Lowe’s, as these alone require around 200,000 square feet.

Alternative Build-out Scenarios for Oldham Office Campus

	Type of Development			
	Master Plan: office-oriented, with limited residential development	Office-oriented, with extensive residential development	Less office, more retail, extensive residential*	One office, remainder residential
Land use, economics				
<u>Housing units</u>	850	2,595	2,595	3,140
average value per unit **	\$269,135	\$276,387	\$276,387	\$275,000
expected resident population	2,032	7,409	7,409	9,169
<u>Office (square feet)</u>	2,700,000	2,700,000	675,000	150,000
average value per square foot	\$130	\$130	\$130	\$130
office jobs	10,800	10,800	2,700	600
average earnings per job	\$42,314	\$42,314	\$42,314	\$42,314
<u>Hotel/Conference Center (rooms)</u>	125	125		
assessed value	\$12,500,000	\$12,500,000		
jobs	46	46		
average earnings per job	\$17,692	\$17,692		
<u>Retail (square feet)</u>	300,000	300,000	900,000	
average value per square foot	\$125	\$125	\$100	
retail jobs	600	600	1,800	
average earnings per job	\$20,919	\$20,919	\$20,919	
Total new taxable property	\$629,765,122	\$1,118,335,000	\$895,085,000	\$863,500,000
Total jobs	11,446	11,446	4,500	600
Total annual payroll	\$470,350,809	\$470,350,809	\$151,901,171	\$25,388,131
Property tax revenues				
Oldham County Public Schools	\$4,093,473	\$7,269,178	\$5,818,053	\$5,612,750
Oldham County general government	\$566,789	\$1,006,502	\$805,577	\$777,150
Oldham County health department	\$125,953	\$223,667	\$179,017	\$172,700
Oldham County libraries	\$144,846	\$257,217	\$205,870	\$198,605
City of LaGrange	\$1,322,507	\$2,348,504	\$1,879,679	\$1,813,350
La Grange Fire District	\$629,765	\$1,118,335	\$895,085	\$863,500
KY state government	\$806,099	\$1,431,469	\$1,145,709	\$1,105,280
City insurance premiums taxes***	\$570,228	\$857,534	\$596,400	\$539,424
Total local tax revenues, annual	\$8,259,660	\$14,512,404	\$11,525,388	\$11,082,759
<i>plus potential</i>				
Occupational tax revenues (1% rate)	\$4,703,508	\$4,703,508	\$1,519,012	\$253,881

* office space as recommended by feasibility analysis, Anderson Economic Group, LLC, 2006

** based on similar large developments in Oldham County

*** using new tax rate of 10% on premiums; 2007 rate in LaGrange was 6%.

estimates in terms of 2005 dollars

The second scenario varies from the first in that it assumes the Master Plan for residential development is abandoned in favor of maximum legal density throughout the 1,000 acres. This leads to 1,700 more homes and an additional \$6.2 million in property tax revenues. However, it would also lead to much higher public costs, as the school system, as well as

police, fire, EMS, sanitation, and other local government services would need to be significantly expanded. Moreover, this intensive residential development would change the character of the site, eliminating much of the natural beauty, and generating a much greater traffic flow. Given the large amount of land for conventional subdivisions elsewhere in the County, as well as the value for office and retail uses at this site adjacent to the interstate highway, it seems preferable to retain the unique campus character outlined in the Master Plan, and not encourage more rooftops.

The maximum number of housing units possible (though not approved under the Master Plan) can be estimated using acreages, land uses, and gross densities. The Plan has four different residential uses identified: single-family low density, single-family medium density, single-family specialty, and mixed use neighborhood center. The Planning Commission approved certain gross development densities for each tract, and these are used to estimate the number of housing units possible. Using assumptions on the average value per unit, as shown in the table, I estimate that 2,595 units would be built, with a total taxable value of about \$700 million.

The third scenario provides estimates of economic and fiscal activity if the more intensive office usage is abandoned due to market conditions or local preferences. Subsequent to the Master Plan approval, consultants recommended less office space and much more retail space.⁴ Here we reduce the office square footage by a factor of four and triple the retail square footage. We also simulate the more intensive residential development outlined in the second scenario. The scenario allows for big box retailers, but of course this would change the nature of the development. The development would become more of a shopping center, with relatively heavy traffic, longer operating hours, bright lighting, large parking lots, and less of a campus feel. As expected, this type of build-out would result in more property tax revenues than the first scenario, but fewer office jobs, lower average pay per job, and less in potential occupational tax revenues.

Finally, in the fourth scenario, I assume that the original commercial vision is abandoned, that Rawlings remains the only office tenant, and that the remaining land fills in with housing. If the remainder of the 900 acres were developed as small lot single-family subdivisions (R-2A), the area could support 3,140 units, based on a 60% maximum residential density and 7,500 square feet per lot. Assuming an average home value of \$275,000, the total taxable value, including the Rawlings property, would be \$863.5 million. The increase in the number of homes is sufficient to offset the reduction in office and retail space, in terms of new property tax revenues. However, the County would lose the advantages of the office jobs, with their higher pay, and potential occupational tax receipts.

What is most striking from this exercise is that local governments receive the same rough magnitude of additional annual revenues regardless of the development mix. This is due to the governments' reliance on property taxes, with no direct gain in tax revenues due to the jobs and payrolls associated with commercial development. The main advantage of

⁴ "Market Strategy, Oldham County Business Campus, LaGrange Kentucky: Final Technical Report", Anderson Economic Group, East Lansing Michigan, 2006, 49 pages.

commercial development under existing tax policy, particularly for offices, is that it provides the County with an employment center for highly paid professionals.

Typically, there are more property tax revenues generated from office and retail activity than from residential use. Offices and retail operations tend to locate in accessible high traffic areas, for the convenience of workers, customers, and vendors. They bid up the value of land near interstate highways, on major thoroughfares, and in downtowns. Offices are typically multi-story, full of equipment, and generally more expensive per square foot to build than a home. And the value of retail space gets bid up as demand develops. By contrast, homes tend to be built farther away from major transportation nodes and thus on less expensive land. Moreover, homes generate more demand for schools, police, fire, libraries and other public services than does the activity in most commercial buildings.

We can make a rough estimate of the (local) public costs per home by organizing recent budget figures from the City of LaGrange, the Oldham County Fiscal Court, and Oldham County Public Schools. I have pulled out expense items that are most linked to households, aggregated them, and divided by the number of households. This yields an average local government cost of around \$3,000 per household.

Rough Estimate of Annual Public Costs per Household			
	City of LaGrange	Oldham County-wide	Combined
Demographics			
Population, 2007e	6,271	55,962	
Number of Households, 2007e	2,422	18,004	
Allocatable Annual Costs to Local Government *			
Police, sheriff	\$1,256,751	\$3,692,449	\$4,949,200
Fire	\$445,000		\$445,000
Public works	\$831,778		\$831,778
Administration, general	\$924,304	\$2,814,336	\$3,738,640
Health and sanitation		\$840,321	\$840,321
Social services		\$38,100	\$38,100
Ambulance, 911		\$987,819	
Libraries		\$1,173,124	\$1,173,124
Parks, aquatic, community center	\$190,000	\$867,000	\$1,057,000
Debt service	\$100,000	\$1,176,055	\$1,276,055
Public schools		\$39,480,504	\$39,480,504
Subtotal	\$3,747,833	\$51,069,708	\$54,817,541
Costs per household	\$1,548	\$2,837	\$3,045

* excludes dollars transferred in from Kentucky state and the federal government

This estimate is crude, because it implicitly assumes that all the police, fire, and sanitation budgets are spent on households - ignoring businesses. However, most of the county businesses are there because of homes, so there is some indirect justification for

this. Finally, even if the average really is about \$3,000 per household, it is a stretch to say that the next 100 households will cost local government $100 \times \$3,000$. There are no doubt economies of scale to many of the services, which would tend to lower the marginal cost of growth. On the other hand, I am not accounting for the capital costs of a new school, which would be needed once the number of new residences passed a threshold where existing school capacity is reached.

Given these caveats, the crude estimate of local public costs per household can be a guide in making decisions about the mixture of real estate development in the County. For Oldham Reserve, the difference between a focused office park with limited residential development and a more laissez faire development with conventional subdivisions is between 1,700 and 2,300 households. Using our rule of thumb, this implies additional local public costs of between \$8 and \$10 million annually. This is also approximately the amount of new local tax revenues that the households would generate.

IMPACT 2. More private sector employment opportunities for County residents

There are only a few major private employers in Oldham County. The Kentucky Economic Development Cabinet compiles a listing of manufacturing and supportive services firms by county, and a table of Oldham County's entries is provided below. The largest employer is Carriage House in Buckner, with 350 jobs. There are a few other major employers in the County, but these exist primarily to serve the local population (as opposed to a national market). The largest is Baptist Northeast Hospital, with over 400 employees, and it does serve a multi-county market. Most of the other private sector jobs

Oldham County: Major Business & Industry (Manufacturing & Supportive Service Firms Only)

Firm	Product(s)/Service(s)	Employment
<i>Buckner</i>		
Carriage House Companies Inc	Mexican salsas, barbeque steak sauces, chocolate & pancake syrups, jams & jellies	350
Fastline Publications	Monthly magazine publishing	155
OCTA Inc	Tube specialist - cutting, bending, forming, etc. (I.e., copper, aluminum, etc.)	30
Pearce Brothers Ready-Mix Concrete & Supply Co	Ready-mixed concrete	25
Hartlage Manufacturing	Injection molded plastic parts	15
Clayton & Lambert Manufacturing Co	Grain bins, storage silos, stainless steel panels for in ground pools and spas & pool structures, outdoor poster panels, standing seam roofs, above ground containment basins	9
Tri County Steel Inc	Sheet, structural & ornamental steel fabricating	9
Toolcraft Co	Foil container dies, special machinery, precision CNC machining, tool & die, jigs & fixtures, cutting, boring, drilling, grinding, lathe & mill work	8
<i>Crestwood</i>		
Oldham County Stone Co	Crushed limestone producer. Crushed stone for all construction purposes. Also produce graded Rip Rap and agricultural lime.	25
Marketing Specialties Inc	Offset printing & advertising specialties	20
Nemeth Engineering Associates Inc	Dielectric & induction heating equipment, microwave drying systems, wood gluing equipment & presses	18
Microdry Inc	Industrial microwaves, magnetrons, parts and service for industrial microwaves	12
Quanics Inc	Waste water septic system filters, distribution, product development and marketing.	10
<i>La Grange</i>		
Lesco Design & Manufacturing Co Inc	Steel fabricators: conveyors, cranes & vehicle loading ramps	130
Northland Corp	Kiln dried hardwood lumber	100
Parts Unlimited Inc	Headquarters & warehouse/sales center; manufacture interior for muscle cars, automotive padded interior seats, door panels, headliners	60
Allstate Ready-Mix	Ready-mix concrete	28
Jenner Co	Stationery engraving, thermography, lithography & foil stampings	23
Oldham Era Inc	Weekly newspaper publishing	14
Safai Enterprises Inc	Roaster, packager, and distributor of specialty coffee products	10

Source: Kentucky Cabinet for Economic Development (8/21/2007).

are in banking, retail, construction, real estate, ambulatory health care, law offices, and other services that cater to the local population.

This is a small industrial base for a county with a population of 55,000. Moreover, as discussed in the Background section, average pay per job in the County’s private industry is relatively low. An office campus can host much higher paying professional jobs. Employment in the office sector is growing rapidly in the region and the nation, whereas employment is declining in manufacturing. Rawlings, the development’s first tenant, is now the largest private sector employer in the County.

IMPACT 3. Reduce the commuting time for some residents of Oldham County

According to the 2000 Census, Oldham County’s employed persons spent an average of 52.2 minutes getting to work and back. This is over five minutes more than the average for all workers in the 13-county Louisville MSA, and eight to nine minutes more than workers living in the most central counties of Jefferson, Clark, and Floyd⁵. While that

does not sound like a big difference, compounded over a year it is a significant cost to Oldham County workers (who of course choose to live far from their places of work). Assuming 250 work-days per year, Oldham County employed persons spend 250,000 more hours commuting than they would if their commuting time equaled the MSA average. Economists estimate that people value time spent traveling at between one-third and one-half of their hourly wage rate. Using Oldham County’s per capita income, and assuming 2,000 work hours per year, that means workers value their lost time commuting at between \$1.5 and \$2.3 million annually.

Commuting Time, 2000 Census		
County/area	Average travel time to work, in minutes, each way	Employed Persons
Jefferson	21.9	334,938
Clark	22.2	49,327
Floyd	21.5	35,899
Bullit	25.9	30,901
Oldham	26.1	22,003
Nelson	26.5	17,961
Harrison	30.5	17,600
Shelby	24.7	16,953
Washington	28.4	13,181
Meade	31.1	10,713
Henry	30.9	7,208
Spencer	32.6	5,952
Trimble	30.7	3,752
Louisville MSA	23.4	566,388
Kentucky state	23.5	1,798,264
United States - metros	26.1	105,526,814

Source: Census 2000, Economic Profiles: <http://censtats.census.gov/cgi-bin/pct/pctProfile.pl>

⁵ Shelby County makes for an interesting comparison to Oldham. Both counties are adjacent to Jefferson County, are growing rapidly, are on an interstate highway, and have many residents who commute to work in Louisville. However, Shelby County has many more industries and major employers than Oldham. The result is a shorter average commute time.

The cost of extra gasoline and car maintenance, as well as the value of their lost time for the long commute, is an indirect measure of the value Oldham residents place on living in a more pastoral setting, of having a larger home, and of their assessment of the quality of County schools and other public services. Those residents commuting to Jefferson County also are not liable for the 0.75 percent occupational tax they would have to pay to Jefferson County Public Schools if they instead resided in Jefferson County. This is worth \$450 to someone earning \$60,000 per year.

We can use such calculations to estimate how much it would be worth to a County resident to work closer to home. As an illustration, consider the person who commutes from his or her home near Buckner to an office in central Louisville or at a suburban office in the Hurstbourne corridor. Assume the commute each way is 26.1 minutes, the average for all workers in Oldham County. This worker could cut his or her commute by 20 minutes and perhaps fifteen miles each way if the place of work was the office campus in LaGrange. This is due both to the much shorter distance, but also to the lack of congestion for an eastern commute. That worker would save about \$3,000 per year in auto mileage expenses, plus about 167 hours per year in commuting time. They would value that gained leisure at between \$1,000 and \$1,500 per year. As an added bonus, assuming Oldham does not levy a similar tax, workers would not have to pay the 1.45 percent occupational tax levied on all workers in Jefferson County, a savings of \$870 annually to someone earning \$60,000 per year.

Companies also benefit from a location closer to their employees. Economic studies have found that employers can attract the same worker for less pay if they locate the place of work closer to the residences of employees. People are willing to work for a bit less if they can reduce their commutes, consistent with the time valuation just discussed. The lack of an occupational tax in Oldham County also benefits employers, as they can offer up to 1.45 percent less to a worker without affecting their net pay relative to working in Jefferson County. This lower pay makes the company more competitive in its industry, thus helping the company grow and employ even more workers.

Thus, having a nearby office campus that employs professional persons helps the County in two ways. It reduces the commuting costs (and tax burden) for some workers in the County, giving them a direct economic benefit. And it helps companies located in the office campus obtain workers at a lower cost than they would have to incur if the office were located in the center of the metropolitan area. These economic benefits only accrue in this case because so many professional people live in Oldham County and work in Jefferson County.

IMPACT 4. New sales for vendors, restaurants and other businesses in the County.

A fully developed office campus will create many business opportunities for support firms and local retail establishments. I have made two types of estimates⁶. The first are from an input-output modeling system, which predicts the amount of spinoff activity from growth in any industry in the County. This does not mean the extra economic activity is new to the Louisville metropolitan area, but it is new to Oldham County. That is, much if not all the extra business in the County is simply a displacement from elsewhere in the regional economy. Nevertheless, the new business is very real to companies located in Oldham County.

The second type of estimate is based on some assumptions about how workers will change the geographic distribution of their retail spending, given more office-type jobs in Oldham County than we would see without the office campus development. There is no cost-effective way to precisely predict how these new workers will spend their incomes, but it is useful to make some calculations based on plausible assumptions.

I have used the IMPLAN modeling system to build a regional input-output model of Oldham County. Simply put, these models estimate how much each business and household purchases from every other business inside and outside the County, and based on that table can predict the local spin-off effects of expansions in any industry. Because Oldham County now has such a small industrial base, the industrial linkages (purchases from local vendors) are not great. Moreover, the County does not have much in the way of big box retail stores or specialty shops, so much of the disposable income of residents is spent outside the County. This is why the multiplier effects predicted here are so low compared to those the reader may have seen regarding impacts at places like the Ford plants, UPS, or Humana.

Predicted Spin-off activity due to Office Park

type of office activity	Assumed Office Jobs and Payrolls at Park			Economic Multipliers for Oldham County**		Total County-wide Impacts	
	Jobs	Average annual wages and salaries*	Annual wages and salaries	Jobs	Employee compensation	Jobs	Employee compensation
Third party administration of insurance claims...	700	\$38,604	\$27,023,134	1.314	1.194	920	\$32,256,732
Architectural and engineering services	200	\$45,015	\$9,003,064	1.435	1.370	287	\$12,336,133
Custom computer programming services	100	\$43,063	\$4,306,312	1.354	1.201	135	\$5,173,595
Management consulting services	100	\$51,274	\$5,127,416	1.501	1.314	150	\$6,737,148
Environmental and other technical consulting	100	\$51,274	\$5,127,416	1.642	1.411	164	\$7,235,220
Management of companies and enterprises	300	\$51,274	\$15,382,248	1.504	1.204	451	\$18,524,426
Office administrative services	500	\$56,022	\$28,011,209	1.428	1.423	714	\$39,864,544
Total	2,000	\$46,990	\$93,980,799			2,822	\$122,127,797

* Source: US Census Bureau, 2002 Economic Census, figures for Louisville MSA; excludes fringe benefits.

** IMPLAN input-output modeling system, 2007, MIG Group.

⁶ A third likely impact, not quantified here, is that more local job opportunities will accelerate the growth in the number of Oldham County residents. This will of course lead to more homes, a larger residential property tax base, and more demand for local public and private services.

Assume that the office campus ultimately hosts 2,000 office workers who would've otherwise worked in Jefferson County. Further assume that these workers are distributed across several office industry categories as shown in the table. We can use historical data on pay per job by industry, as well as our input-output model of the County, to predict the total job and payroll impacts in the County. The office firms at the campus would have an annual payroll of about \$94 million. The firms have some linkages with local suppliers, and the new employees spend some of their income in the County. The net result is a total of 2,822 jobs and \$122 million in payroll county-wide.

Again, this predicted economic activity is new to Oldham County, but not likely new to the Louisville economy. It primarily represents a displacement of activity from Jefferson to Oldham County. To the extent the office campus attracts firms looking for an exurban location in a pastoral part of a large metropolitan area, and is shopping among other similar markets in the US, then the impacts are indeed new to our regional economy (and are bigger than those predicted here).

Next, I consider employee spending scenarios that are more anecdotal, though plausible. Assume that the 2,000 office campus workers would've otherwise been sited in downtown Louisville or one of the suburban office parks in Jefferson County. Working at the Oldham office campus means they will have the daily opportunity to spend some (more) of their income in Oldham County. Likely candidates include: gasoline stations, grocery stores, restaurants, hardware stores, banks, dry cleaners, video stores, clothing stores, dentists, optometrists, barber and beauty shops. We can roughly predict how much an office worker spends annually on such retail and service items, as well as how much more they are likely to spend inside Oldham County if they commuted to work locally rather than to Jefferson County. See table.

Simulated New Sales in County per Office Worker

	Demand for Commodities per Household, with income \$50,000 to \$75,000	increase in 'capture' rate due to office employment center	extra sales in County per office worker
Food services and drinking places	\$3,752	25%	\$938
Offices of physicians- dentists- and other health care providers	\$3,416	25%	\$854
Food and beverage stores	\$1,106	10%	\$111
General merchandise stores	\$948	10%	\$95
Legal services	\$687	10%	\$69
Building material and garden supply stores	\$686	20%	\$137
Clothing and clothing accessories stores	\$626	10%	\$63
Gasoline stations	\$446	50%	\$223
Sporting goods- hobby- book and music stores	\$259	20%	\$52
Drycleaning and laundry services	\$111	50%	\$55
Fitness and recreational sports centers	\$111	50%	\$55
Household goods repair and maintenance	\$108	20%	\$22
Subtotal	\$12,257		\$2,673

Demand per household from IMPLAN input-output modeling system, 2007; which in turn were developed from the US Consumer Expenditure Survey conducted by the national Bureau of Labor Statistics.

The first column of the table is based on detailed household spending diaries kept by a large sample of the US population. These estimates are published by household income bracket, and I use those for the \$50,000 to \$75,000 income cohort that is most prevalent in Oldham County. I have pulled out detailed spending estimates on commodities that are most likely to be purchased while commuting to or from work, or on a lunch break. For example, I include 'Food services and drinking places', aka restaurants, but do not include items like hospital services, hotel expenditures, or cable TV services that are linked more to place of residence. Note that the total annual expenditure per household on the twelve commodities listed is over \$12,000. Presumably, residents of Oldham County now commuting to office jobs in Jefferson County spend much of that total outside Oldham.

There is no way to precisely predict how much more Oldham County residents would spend in the County were they to instead commute to work inside Oldham. The ultimate outcome depends on the spatial distribution of households around Oldham, road corridor improvements, commercial real estate development allowed, and the like. To develop some plausible estimates, I make some assumptions about the increased 'capture' rate of these expenditures and apply them to the annual spending profile. For example, I assume that an office worker (actually, their household) would spend 25 percent more of their annual restaurant business, and 10 percent more of their grocery business, inside the County were they to also work in the County. It seems that the increase in the capture rate would be greatest for those things that are most part of the daily commute, such as gasoline, drycleaning, and fitness centers. Under this scenario, the average office worker would spend \$2,673 more per year in the County than they would commuting to work in Jefferson County. Assuming 2,000 new office workers, the total increase in revenues to these businesses would be \$5.3 million annually. This additional retail and service spending in Oldham County would support about 100 more jobs in the County (based on average business revenue per job in each category).

IMPACT 5. Diversify the County's tax base.

Refer again to the table on page 13. One can see from the four scenarios that there is little fiscal benefit to developing office and commercial space, relative to simply developing more residential subdivisions, given the **current** tax structure of local governments in Oldham County. This is due to the tax structure of local governments in Oldham County. With no occupational or net profits tax, the governments are reliant on property and insurance premiums taxes. Housing units generate great flows of both of these, due to their expensive homes and their policies for homeowners' and car insurance.

This is only one side of the coin, however. More housing units means more families with children, and that requires more schools and other services. I estimated that the *average* local public cost per household is around \$3,000 annually, independent of large one-time capital costs for more school buildings when population growth puts pressure on school capacity. Office buildings generate property taxes, but in and of themselves do not generate more demand for schools.