DYNAMIC ECONOMIC EFFECTS OF CITY OF LOS ANGELES BUSINESS TAX REFORM SCENARIOS

Report to the City of Los Angeles

October 27, 2004

MBIA MuniServices Company

In association with
Burr Consulting

ACKNOWLEDGEMENTS

This report has been prepared under the auspices of the MBIA MuniServices Company (MMC). Beverly Burr and Natasha Chernyshoff of Burr Consulting conducted the research and modeling, and drafted the report. The authors would like to acknowledge the panel of economists who provided review, guidance, and discussion of the approach and the various methodological challenges in preparing dynamic estimates. The panel included the following individuals:

- Andrew Haughwout
- Edward Leamer
- Gary Painter
- Chris Thornberg
- Robert Wassmer

The opinions expressed in this report are solely those of the authors and do not necessarily represent the views of the University of California Los Angeles, University of Southern California, California State University—Sacramento, or the Federal Reserve Board. The opinions expressed in this report provide the perspective of municipal tax and economic experts and should not be considered a substitute for the policy deliberations and decisions to be made by the City of Los Angeles Mayor and Council.

This report builds upon prior research conducted by a panel of experts under the auspices of MMC. That research culminated in *Evaluation of Alternatives to the City's Gross Receipts Business Tax*, which was released on January 14, 2004. The expert panel included experts in accounting, law, tax administration, audit, and economics.

This report and the methodology also build upon previous research and tax modeling conducted by a team of experts in 1997 under the auspices of the Milken Institute. The Milken Institute research team included six economists—Beverly Burr, Stephyn Butcher, Paul Coomes, Elaine Reardon, Bruce Smith, and Benjamin Stevens.

This evaluation was aided by data provided by and research conducted by the Office of Finance, City Administrative Officer and the Business Tax Advisory Committee.

In addition to research conducted by the panel members, Cecelia Griego of Burr Consulting provided municipal tax policy and data research assistance.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

SUMMARY

The City of Los Angeles has reformed its business tax on a number of occasions in the last three decades: in 1985, 1991, 1993, 1995 and 1997. There were other instances when industries were reclassified into lower rate categories and when new exemptions were created.

Proposed changes in the business tax would have the following static revenue effects:

	Greuel-Garcetti	**BTAC 15%**	**BTAC 10%**
Static effect reducing revenues	$92.65 M	$70.35 M	$47.65
Offsetting compliance revenue	$10.8 - $39.8 M	$10.8 - $39.8 M	$10.8 - $39.8 M
Static effect to be financed by other measures	$52.9 - $81.9 M	$30.6 - $59.6 M	$7.1 - $36.1 M

If the City manages to grow at the same rate as the rest of the metropolitan area, macroeconomic growth is expected to generate additional business and sales tax revenue in the coming years. Growth is expected to increase business tax revenues from $373 million in FY 03-04 to $399 million in FY 05-06, and to $439 million by FY 07-08. Similarly, growth would increase sales tax revenues from $378 million in FY 03-04 to $403 million in FY 05-06 and to $444 million in FY 07-08. Caution should be exercised in relying on countywide macroeconomic forecasts to forecast City revenue streams. The City's sales tax revenue growth has historically failed to keep pace with countywide growth. Similarly, growth in the City's economic base has not kept pace with countywide growth. That said, growth in recent years has been substantial.

There is substantial evidence that reducing business tax rates would stimulate economic growth, and increase the size of the tax base. Generally, the City might expect that about 30 percent of the static cost of tax reform would return in the form of growth in the tax base as a result of rate reductions. That does not mean that tax reform can pay for itself through growth, but that it can partly pay for itself.

Although the City's business tax rates are substantially higher than in most neighboring jurisdictions, the City's electricity costs are substantially lower. On net, the City's costs are lower in retail, wholesale and manufacturing, but 29 percent higher for professional services. If business tax rates were reduced by 15 percent, the City's cost disadvantage would be eliminated with respect to Santa Monica but the City would remain at a cost disadvantage with respect to the other competitor cities. It should be noted that the cost analysis focused only on business tax and electric utility costs; it does not reflect inter-jurisdictional differences in water and sewer costs.

CHAPTER 1: BACKGROUND

EXISTING BUSINESS TAX

Under the existing business tax, businesses are required to keep track of their sales at each business site based on different tax calculation rules for as many as 59 different tax classifications. The portion of activity related to sales inside and outside the City limits must be tracked for each tax classifications. After calculating the amount due for each tax classification, the business makes additional computations to determine whether they are eligible to receive any special tax credits.

Each of the 59 different tax classifications has its own unique rules in terms of the tax base, tax calculations, and rules for apportionment of outside-City activity. Although most businesses pay taxes on gross receipts, the City uses a variety of other tax base measures for various tax classifications, including payroll[1], square footage, production costs, employees, seating capacity, flat rates, commissions, number of bowling lanes, and bus miles. For each tax classification, the business is required to monitor and to report on activity within that category, potentially needing to pay taxes on multiple categories. Each tax classification is enumerated in Table 1.

Businesses can and do pay taxes on multiple classifications. In tax year 2003, 26,000 taxpayers filed business taxes on multiple classifications, constituting 12 percent of taxpayers and 33 percent of business tax revenue. Single-classification filers constitute 69 percent of the tax base while start-ups and small businesses exempt from the tax account for 19 percent of taxpayers. Effective in tax year 2004, businesses may pay taxes on fewer tax classifications under the Single Primary Tax Classification Election reform. This reform relates only to annual gross receipts tax classifications, and businesses may only elect to pay under a single receipts classification if receipts under that classification constitute 80 percent or more of the taxpayer's total receipts. Single-category reform is expected to reduce the percent of taxpayers filing under multiple classifications from 12 percent to 10 percent of all taxpayers.

[1] Inside-City construction companies pay a hybrid tax measured on gross receipts as well as office payroll. The City does not refer to the tax as a payroll tax, but rather as a measure of gross receipts.

Table 1. Business Tax Rates by Tax Classification, 2004

Los Angeles Business Tax Categories, 2004							
Ordinance	**Fund/ Class**	**Description**	**Tax Base**	**Minimum Tax**	**Min Tax Threshold ($1000s)**	**Tax Rate**	**Payment Frequency**
GROSS RECEIPTS CATEGORIES							
21.166	L266	Wholesale Sales—Blind	receipts ($1000s)	$ -	$ -	$ 1.18	Annual
21.189.3	L489	Child Care Provider	receipts ($1000s)	$ 23.65	$ 20	$ 1.18	Annual
21.197	L197	Telephone Service	receipts ($1000s)	$ 70.95	$ 60	$ 1.18	Annual
21.143	L143	Tugboat Operators	receipts ($1000s)	$ 106.43	$ 18	$ 1.18	Annual
21.166	L166	Wholesale Sales	receipts ($1000s)	$ 118.25	$ 100	$ 1.18	Annual
21.188	L188	Contractor (Construction)	receipts ($1000s)	$ 177.38	$ 60	$ 1.18	Annual
21.167	L267	Retail Sales—Blind	receipts ($1000s)	$ -	$ -	$ 1.48	Annual
21.147	L147	Theater	admission fees ($1000s)	$ 66.52	$ 45	$ 1.48	Annual
21.102	L102	Laundry/Cleaner/Shoe Repair	receipts ($1000s)	$ 110.86	$ 75	$ 1.48	Annual
21.167	L167	Retail Sales	receipts ($1000s)	$ 110.86	$ 75	$ 1.48	Annual
21.98	L098	Commercial Rental	receipts ($1000s)	$ 110.86	$ 75	$ 1.48	Annual
21.99	L099	Hotel, Apartment	receipts ($1000s)	$ 110.86	$ 75	$ 1.48	Annual
21.189.2	L389	Radio/TV Broadcaster	receipts ($1000s)	$ 110.86	$ 75	$ 1.48	Annual
21.98.1	L298	Swap Meet Operator	receipts ($1000s)	$ 110.86	$ 75	$ 1.48	Annual
21.98.2	L498	Antique Show Promoter	receipts ($1000s)	$ 110.86	$ 75	$ 1.48	Annual
21.59	L059	Sporting Events	receipts ($1000s)	$ 106.43	$ 36	$ 2.96	Annual
21.65	L065	Vending Machines	receipts ($1000s)	$ 147.81	$ 25	$ 2.96	Annual
21.141	L141	Storage, Freight Forward	receipts ($1000s)	$ 177.38	$ 60	$ 2.96	Annual
21.192	L192	Personal Property Rental	receipts ($1000s)	$ 177.38	$ 60	$ 2.96	Annual
21.193	L193	Sale Real Property	receipts ($1000s)	$ 177.38	$ 60	$ 2.96	Annual
21.78	L078	Collection Agency	receipts ($1000s)	$ 886.88	$ 300	$ 2.96	Annual
21.80	L080	Telemarketing	receipts ($1000s)	$ 91.64	$ 25	$ 3.67	Annual
21.79	L079	Commission Broker	commissions ($1000s)	$ 91.64	$ 25	$ 3.67	Annual
21.189.1	L289	Miscellaneous Services	receipts ($1000s)	$ 49.67	$ 12	$ 4.14	Annual
21.190	L190	Independent Contractors	receipts ($1000s)	$ 106.43	$ 18	$ 5.91	Annual
21.191	L191	Health Maintenance	receipts ($1000s)	$ 106.43	$ 18	$ 5.91	Annual
21.167.1	L567	Retail Firearms	receipts ($1000s)	$ 106.43	$ 18	$ 5.91	Annual
21.56	L056	Auto Park	receipts ($1000s)	$ 177.38	$ 30	$ 5.91	Annual
RECEIPTS-RELATED CATEGORIES							
21.188	L288	Contractor—LA Business	payroll ($1000s)	$ -	$ -	$ 2.96	Annual
21.75(a)	L075	Carnival	ticket sales			Schedule	Daily
21.109	L109	Motion Picture Producers	production costs			Schedule	Annual
NON-RECEIPTS CATEGORIES: MISCELLANEOUS							
21.55	L055	Auctioneer	flat	$ 886.88	$ -	$ -	Annual
21.108	L108	Lending Money	flat	$ 2,660.63	$ -	$ -	Annual
21.65.1	L265	Coin-Operated Service Machines	machine	$ 22.17	$ -	$ 22.17	Annual
21.65.1	L465	Service Machine	machine	$ 22.17	$ -	$ 22.17	Annual
21.98.1	L398	Swap Meet Operator Space	space-days rented			$ 0.59	Monthly
21.98.2	L598	Antique Show Space	space-days rented			$ 0.59	Monthly
NON-RECEIPTS CATEGORIES: TRANSPORTATION							
21.187	L187	Common Carrier Bus	bus revenue miles	$ 14.78		$ 14.80	Annual or Quarterly
21.195(c2)	T195	Trucking/Hauling	days using a tractor			$ 0.78	Annual
21.196(c2)	L196	Miscellaneous Trucking	days using a tractor			$ 0.78	Annual
21.142	L142	Stevedores	employees	$ 106.43		$ 8.87	Annual
21.195(c1)	T195	Trucking/Hauling	pounds hauled per day	$ 88.69		Schedule	Annual
21.196(c1)	L196	Miscellaneous Trucking	pounds hauled per day	$ 88.69		Schedule	Annual
21.194	T194	Transporting Persons	seating capacity per day	$ 54.99		Schedule	Annual
21.194(g)	T194	School Buses—Special Events	seating capacity per day			Schedule	Annual

Los Angeles Business Tax Categories, 2004 (continued)							
Ordinance	Fund/Class	Description	Tax Base	Minimum Tax	Min Tax Threshold ($1000s)	Tax Rate	Payment Frequency
NON-RECEIPTS CATEGORIES: AMUSEMENT & RECREATION							
21.75(b)	L075	Carnival/Side Show	booths			Schedule	Daily
21.53	*L053*	*Amusement Park*	*flat*	*$ 923.83*		*$ -*	*Quarterly*
21.74(c)	L074	Circus--Permanent	flat	$ 887		$ -	Daily
21.85	*L085*	*Public Dance*	*flat*	*$ 177.38*		*$ -*	*Daily*
21.94	L094	Rides	flat	$ 443.44		$ -	Annual
21.169	L169	Christmas Trees	flat	$ 29.56		$ -	Quarterly
21.170	L170	Christmas Tree Deposit	flat	$ 200.00		$ -	Quarterly
21.63	L063	Amusement Machines	machine	$ 22.17		$ 22.17	Annual
21.64	L064	Music Machines	machine	$ 22.17		$ 22.17	Annual
21.62	L062	Billiards	machine	$ 106.43		$ 106.43	Annual
21.70	L070	Bowling Alleys, Skeeball	per lane or table	$ 54.99		$ 54.99	Annual
21.75(c)	*L275*	*Circus Parade*	*procession*	*$ 4,434.00*		*$ -*	*Daily*
21.74(b)	L174	Circus--Temporary	seats			Schedule	Daily
21.83	L083	Dance Hall	square feet			Schedule	Quarterly

Notes:

(1) Each business tax category reflects a unique category based on tax rate, minimum tax, definition of tax base, or reporting requirements.

(2) Ordinance refers to section in the Los Angeles Municipal Code, Article 1, Chapter 2

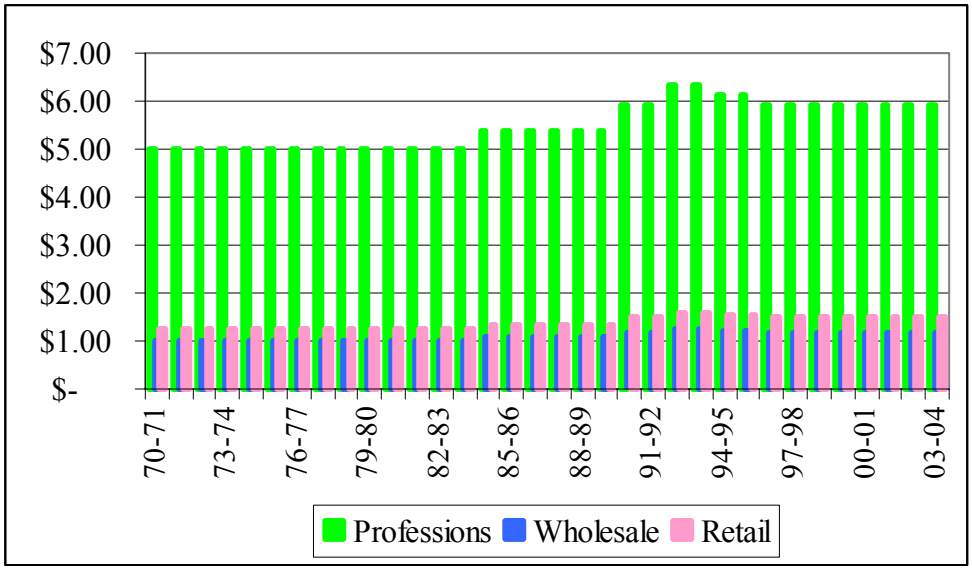
(3) Minimum tax threshold indicates the level of activity at or below which a taxpayer pays only the minimum tax.

(4) Tax rate applies to activity in excess of the minimum tax threshold.

PRIOR BUSINESS TAX REFORM

The City has changed its business tax rates five times in the last three decades.

Figure 2. Business Tax Rates, 1971-2004



In 1985, the City imposed a 7.5 percent surcharge.

In 1991, the City eliminated the 7.5 percent surcharge and raised tax rates by 18.25 percent. On net, the 1991 reform amounted to a 10 percent tax increase.

In 1993, the City re-imposed the 7.5 percent surcharge. In 1995, the City reduced the surcharge to 3.75 percent. The surcharge was eliminated shortly after Prop. 218 was passed in November 1996. Prop. 218 requires voter approval of all tax increases, and applied retroactively to general taxes imposed between January 1, 1995, and November 5, 1996.

In addition to changing rates, the City has reclassified various industries over the past three decades. A number of industries received a 30 percent tax cut in the 1970s through reclassifications. In 1973, the City created the Miscellaneous Services tax classification (at a rate of $4.14 per $1,000 in receipts) and began shifting certain industries that were previously paying the $5.91 rate into this classification.

Table 3. Business Tax Reform-Reclassifications, 1971-2004

Year	Reclassified Industries	Rate Change
Taxpayers Shifted into the Miscellaneous Services classification		
1974	Temporary help agencies, travel agencies, apparel subcontractors, public relations agencies, refuse contractors, metal platers, and heat treaters	-30%
1975	Advertising agencies, typesetters	-30%
1976	Mailing services, drapery subcontractors	-30%
1977	Aircraft support contractors, wire terminators	-30%
1985	Check cashing services, music teachers, shoe shine stands	-30%
1989	Ticket sellers	-30%
Taxpayers Shifted into the Commission Brokers rate category		
1997	Independent telemarketing agencies	-38%
Taxpayers Shifted into the Wholesale rate category		
1990	Child care providers	-80%
1997	Multimedia business	-80%

In more recent years, there have been significant rate reductions through reclassification of telemarketing, child care, and multimedia businesses.

Several reforms have occurred as a result of legal issues. In 1991, the City lost a case involving taxation of Savings & Loans, and stopped taxing these entities. In 2002, the City repealed its payroll expense tax, which had primarily affected entities like alcohol sellers with relatively high payroll and relatively low taxable receipts, in the wake of litigation against a similar tax formula in San Francisco.[2]

There have been other reforms as well, affecting minimum tax policies, apportionment, and exemptions for small business (<$5,000 in receipts) and start-ups. As discussed in the prior section, the single primary tax classification reform was implemented in 2004 offering simplification and relief to certain taxpayers.

Since the appointment of the Business Tax Advisory Committee (BTAC), there have been a number of administrative reforms recommended by BTAC that have been implemented. These reforms include an expedited appeals process, establishment of a Settlement Bureau in the City Attorney's Office to receive and respond more quickly to offers of settlement from taxpayers, the option of filing

[2] Prior to 2000, the business tax was levied as a multiple base hybrid involving payroll or gross receipts. The payroll expense tax primarily affected sellers of alcohol and others with sales that were exempt from gross receipts taxation. The tax was eliminated for legal reasons, reducing the taxes paid by such businesses.

on a fiscal year rather than calendar year basis, and exemption of inter-company transfers from the business tax.

TAX REFORM PROPOSALS

There are two business tax reform proposals being analyzed in this report: the Greuel-Garcetti proposal and the BTAC proposal. Both proposals include several common features:

1) across-the-board rate relief;
2) small business exemption for those with gross receipts of less than $100,000;
3) exemption for individuals in creative industries such as motion pictures with gross receipts of less than $300,000;
4) rate reduction for small and medium-sized motion picture producers;
5) cash-basis reporting would allow businesses to exclude bad debts (uncollected revenues) from the taxable base;
6) reduction in the penalty rate for late-filers from a maximum of 40 percent to 25 percent;
7) new compliance-related requirements that landlords report their commercial tenants and that all businesses report their subcontractors; and
8) enhanced resources for business tax discovery and tax collection activities.

The packages differ in several respects. The Greuel-Garcetti proposal offers a greater amount of across-the-board rate relief than does the BTAC package. The Greuel-Garcetti proposal also offers a pilot rate reclassification for certain industries affected by rate inequities, including web search portals, apparel subcontractors, employee leasing, architects, and stevedores. In addition, the Greuel-Garcetti proposal offers green energy incentives by excluding rebates for solar panel installation from the tax base.

The static revenue effects of the proposals vary as well. The static effects of the proposals were calculated by the Office of Finance as the simulated effects had the proposals been implemented and fully-phased-in in tax year 2003. As shown in Table 4, the Greuel-Garcetti proposal would offer approximately $99 million (FY 02-03 dollars) in tax relief by the end of the five-year phase-in period. This would represent tax relief of approximately 26 percent, as FY 02-03 business tax revenues were approximately $360 million. By comparison, the BTAC proposal would offer $48 to $71 million in tax relief. Before accounting for enhanced compliance revenue, the BTAC proposals would offer 13 to 20 percent in tax relief.

Table 4. Static Effects of Proposed Tax Reform Measures

Summary of evaluated measure	ESTIMATED STATIC REVENUE LOSS (FY 02-03 dollars)				Implement Timeframe
	Stand-alone Proposal	Greuel-Garcetti Proposal	BTAC Proposal	Same as BTAC except 10%	
Replacement of existing tax rates with 5 rates					
Eliminate the $3.67 Rate, reclassify to $2.96.	$0.27M	$0.26M	$0.26M	$0.26M	2006
Annual reduction of existing tax rates over a fixed period of time					
Includes Three versions - 1 - Reduce rates by 15% (Greuel-Garcetti) 2 - reduce total revenue by 15% (BTAC) 3 - reduce total revenue by 10% (requested) ALL assume Items E, G and K are already in effect	1 - $66.4M 2 - $44.1M 3 - $20.6M	$66.4M	$44.1M	$20.6M	2006 to 2010
Classification and taxation of businesses according to NAICS codes					
Greuel-Garcetti Pilot Rate which is a reduction measure that reclassifies several industries. Revenue loss from Consultant.	$5.83M	$5.83M	$0	$0	2006
Expand small business exemptions to all businesses generating $100,000 or less of gross receipts					
Raise small business exemption threshold from $5,000 to $100,000, retains requirement to register, timely.	$20.8M	$20.8M	$20.8M	$20.8M	2006 to 2010
Tax Relief for businesses in the entertainment and creative sectors					
Includes two elements: 1 - Exempt creative talent (individuals only) to $300,000 2 - reduce taxes for producers (change thresholds)	1 - $1.0M 2 - $2.0M	1 - $0.45M 2 - $2.0M	1 - $0.45M 2 - $2.0M	1 - $0.45M 2 - $2.0M	2006
Allowance of taxpayer reporting on cash-basis method and elimination of inclusion of bad debt in gross receipts					
Redefine Gross Receipts as refering to actual receipts, not billings.	$3.0M	$3.0M	$3.0M	$3.0M	2005
Green Energy Technology ***(ADDED BY LETTER RECEIVED SEPT 28, 2004)*** Provide incentive to solar panel manufacturers and installers. Revenue loss figures are from Consultant - not analyzed by OOF	$8,000 to $12,000	$8,000 to $12,000	0	0	2006
ADMINISTRATIVE CHANGES RECOMMENDED IN REFORM PROPOSALS					
Revision of tax reporting standards to assist City in locating non-compliant businesses					
Require businesses to identify vendors, subcontractors and commercial tenants.	n/a	n/a	n/a	n/a	2005
Revision of penalty rate applicable to delinquent and non-compliant taxpayers					
Reduce maximum penalty from 40% to 25%	$0.54M	$0.54M	$0.54M	$0.54M	2006
Effect of taxpayer reliance on prior audits and administrative statements re: tax liability					
Prospective application only of tax adjustments.	unknown	unknown	unknown	unknown	
Total By Proposal, NOT including Green Energy Technology	**N/A**	**$99.28M**	**$71.15M**	**$47.65M**	**Final Year 2010**
Totals By Proposal, ONLY Items: **1)Annual Rate Reduction** **2)$100,000 Small Bus. Exempt** **3)Two Entertainment proposals** **4) Bad Debt/Cash Basis**	**N/A**	**$92.65M**	**$70.35M**	**$46.85M**	**Final Year 2010**

Source: Office of Finance

In addition to the proposal components that would reduce City revenues (shown in Table 5), there are proposal components that would increase City revenues through enhanced compliance efforts. BTAC had estimated that tax revenues would increase by $19 to $40 million as a result of these proposals.[3] Office of Finance estimated that the compliance measures would yield an additional $11 to $15 million once fully implemented.[4] Further, Office of Finance estimated potential additional revenue of $5 to $14 million related to identifying out-of-City businesses, although this revenue estimate was regarded as speculative.

Table 5. Net Static Effect of Proposals (FY 02-03 dollars)

	Greuel-Garcetti Proposal	**BTAC Proposal**	**Same as BTAC except 10%**
Static revenue effect of tax relief measures	**$92.65M**	**$70.35M**	**$46.85M**
Static revenue effect of compliance measures			
BTAC estimate	$18.8 - $39.8 M	$18.8 - $39.8 M	$18.8 - $39.8 M
OOF estimate without outside-City	$10.8 - $15.4 M	$10.8 - $15.4 M	$10.8 - $15.4 M
OOF estimate with outside-City	$15.8 - $29.4 M	$15.8 - $29.4 M	$15.8 - $29.4 M
Static estimate of tax relief to be financed by other measures			
Consistent with BTAC estimate	$52.9 - $73.9 M	$30.6 - $51.6 M	$7.1 - $28.1 M
Consistent with OOF estimate #1	$77.3 - $81.9 M	$55.0 - $59.6 M	$31.5 - $36.1 M
Consistent with OOF estimate #2	$63.3 - $76.9 M	$41.0 - $54.6 M	$17.5 - $31.1 M
Percentage decrease in the net tax burden			
Consistent with BTAC estimate	15-21%	8-14%	2-8%
Consistent with OOF estimate #1	21-23%	15-17%	9-10%
Consistent with OOF estimate #2	18-21%	11-15%	5-9%
Sources: Office of Finance, BTAC			

Once the additional compliance revenue is considered, the net effect of the Greuel-Garcetti proposal is to decrease the business tax burden by 15-23 percent, with the variation relating to the variation in estimated compliance-related revenue. Similarly, the BTAC proposal would decrease the tax burden by 8-17 percent, and the alternative BTAC proposal would decrease the tax burden by 2-10 percent. These net effects also represent the net effect on the City's general fund.

From the perspective of honest taxpayers who would not be affected by the compliance measures, the proposals would have a greater effect than the net. From the perspective of non-compliant taxpayers, the proposals would increase the tax burden.

[3] BTAC Administrative/Compliance Subcommittee, May 20, 2004.

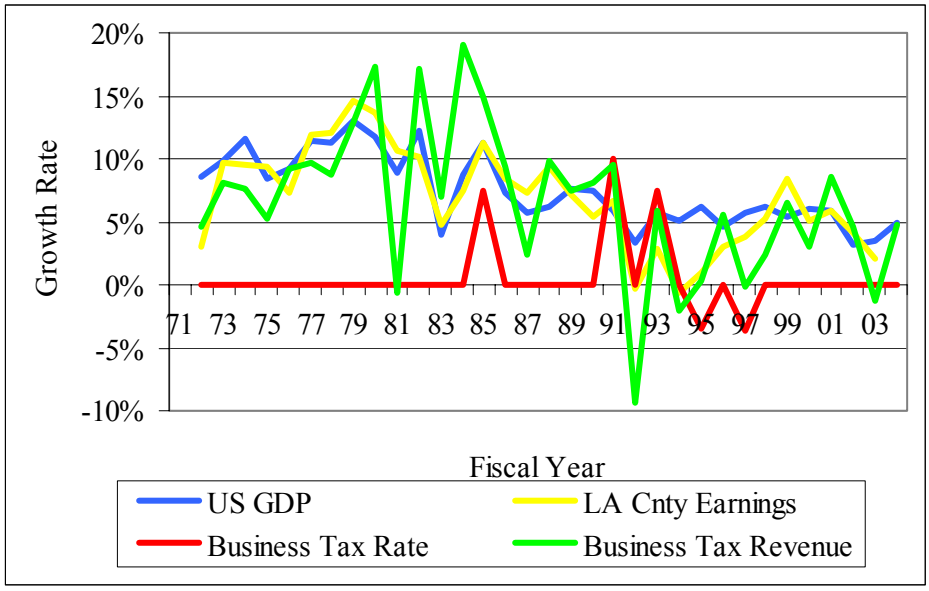
[4] Christovale, et al., October 21, 2004.

CHAPTER 2: MACROECONOMIC GROWTH

This chapter discusses the historical trend in City business tax revenue, available forecasts of economic growth, and applies those forecasts to project municipal tax revenues.

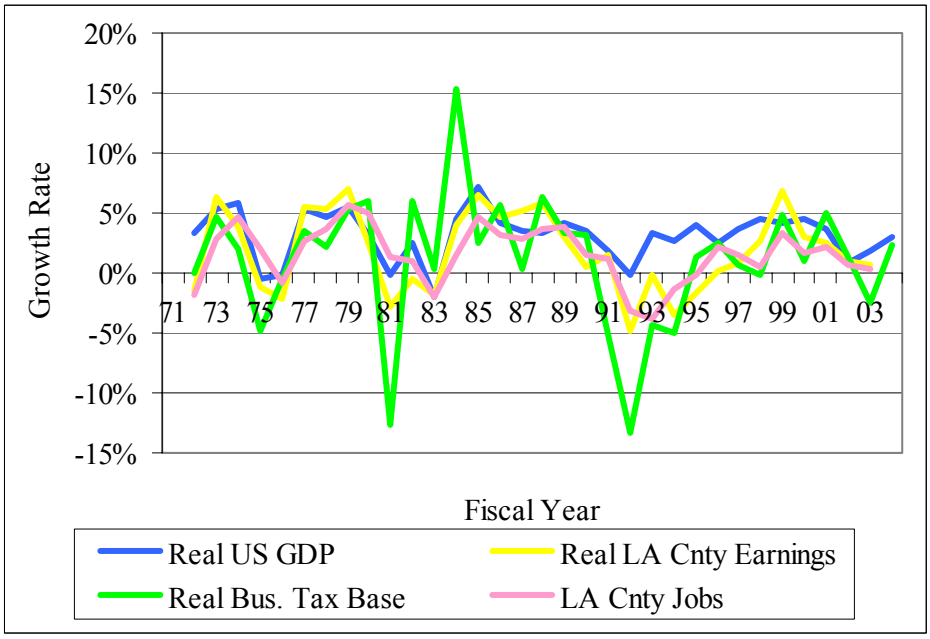
HISTORICAL TREND

Figure 6. Business Tax Revenue Growth Rate, FY 71-FY 04



Over the last three decades, the City's business tax revenues (nominal, i.e. in current dollars) grew at a median annual rate of seven percent. However, in the past decade, revenues grew at a median annual rate of four percent. Lower growth rates in more recent years reflect several factors, primarily a lower rate of inflation. The business tax rate also plays a role in revenue growth.

Figure 7. Real Business Tax Base Growth Rate, FY 71-FY 04



In order to focus on the real volatility in the City's revenues, it is important to correct both for inflation and for changes in the tax rates. After correcting for both inflation and changes in the tax rates, the City's business tax revenues tended to follow the trend in the national economy (real US GDP) in the past. However, during the protracted recession in the early 1990s and subsequent recovery, the business tax base has more closely

followed the trend in the metro area economy (County earnings) than national economic trends.

More formal tests of the relationship between the growth rate in the reported business tax base and various measures of economic activity indicate that growth in real local (County) earnings most closely approximates the business tax base growth rate over the last three decades. In the table below, the "root mean square error" represents the best measure of the degree to which growth in the various indicators approximates growth in the business tax base. Local indicators have consistently out-performed national indicators, and the trend in the business tax base is explained better by local growth than by changes in the national cost of living (CPI). Generally, the inflation trend accounts for much of the nominal growth in the business tax base. In more recent years, growth in local (County) payrolls and jobs have performed equally well in tracking the trend in the business tax base.

Table 8. Business Tax Base Growth Correlates

	Real Measures			Nominal Measures			
	LA County Earnings	LA County Jobs	USA GDP	LA County Earnings	LA County Jobs	USA GDP	USA CPI
Growth Rate for Business Tax Base (FY 70-FY 04)							
Mean Error	0.7%	0.4%	2.0%	0.1%	-5.0%	0.9%	-1.7%
Mean Absolute Error	3.2%	3.0%	3.6%	3.3%	5.8%	3.6%	4.6%
Root Mean Square Error	4.1%	4.6%	5.0%	4.3%	7.1%	4.7%	6.0%
Growth Rate for Business Tax Base (FY 94-FY 04)							
Mean Error	0.1%	-0.1%	2.2%	0.5%	-1.9%	2.2%	-0.4%
Mean Absolute Error	2.0%	1.6%	2.7%	2.4%	2.6%	3.3%	2.8%
Root Mean Square Error	2.2%	2.0%	3.4%	2.7%	3.2%	4.0%	3.2%

That said, neither the countywide nor the national measures correlate particularly well with growth in the business tax base. The average growth rate in the nominal (real) business tax base was seven (one) percent over the last three decades; since the 1994 earthquake, the average growth rate was three percent (nominal) and two percent (real). The City's growth trends have diverged from those in the rest of the metro area.

Figure 9. Job and Payroll Growth Rates, City v. Rest of County

The City was more heavily affected by the recession in the early 1990s than was the rest of the metro area on average, with a higher rate of job loss and a longer delay before the job base began to recover. The 1992 riot and 1994 earthquake undoubtedly played a role in the City's weaker economic performance in the early 1990s.

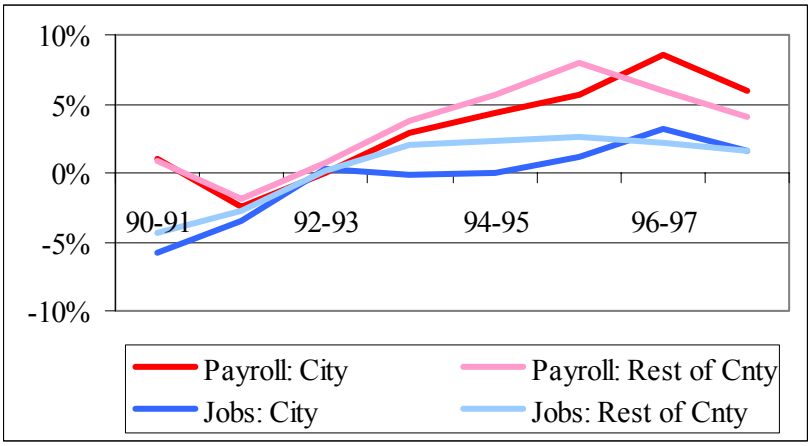
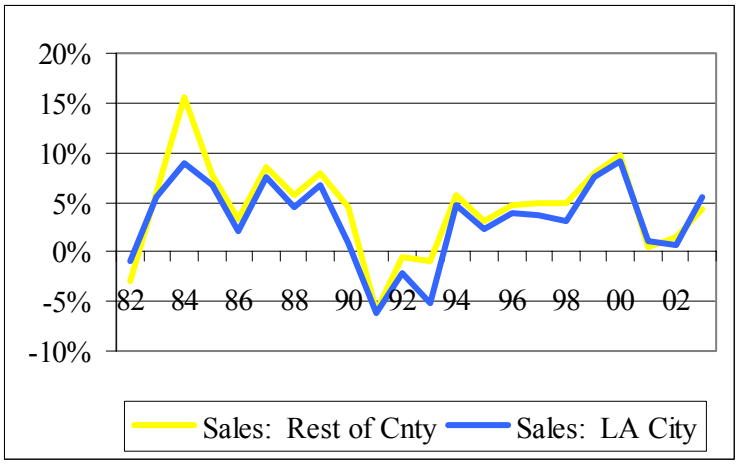


Figure 10. Taxable Sales Growth Rate, City v. Rest of County, 1981-2003

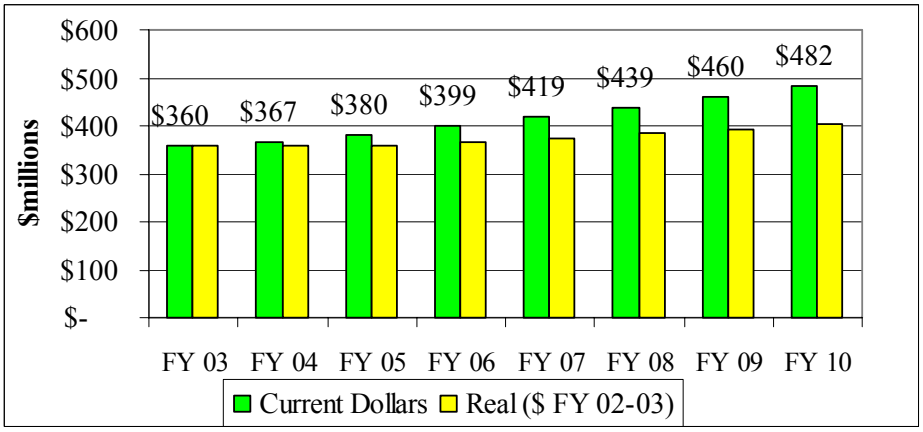
The City's retail sales growth has generally lagged behind the rest of the County, particularly in the mid-1980s and early 1990s. It appears that the City's economy may be more cyclical (i.e. sensitive to the business cycle) than the rest of the metro area economy. The weaker retail growth in the City has, over time, reduced the City's share of countywide sales and sales tax revenue from 35 percent in 1981 to 30 percent in 2003.



FORECASTS

There are several forecasts available for use in projecting how the gross receipts business tax base will grow in the future.

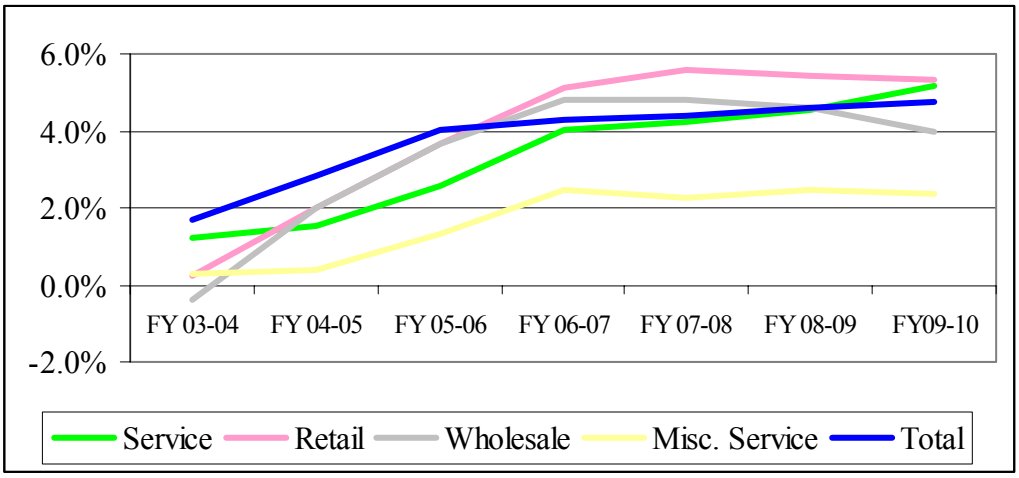
Figure 11. Projected Business Tax Revenue ($millions), FY03-FY10



Using the UCLA forecast for payroll growth by industry sector for Los Angeles County, the business tax revenue was projected through FY 09-10. Based on the projected payroll growth trend, nominal business tax revenue (current dollars) is projected to grow to $380 million in FY 04-05, and to surpass $450 million by FY 08-09. These projections are based simply on macroeconomic growth under existing policy, and do not account for proposed tax reform.

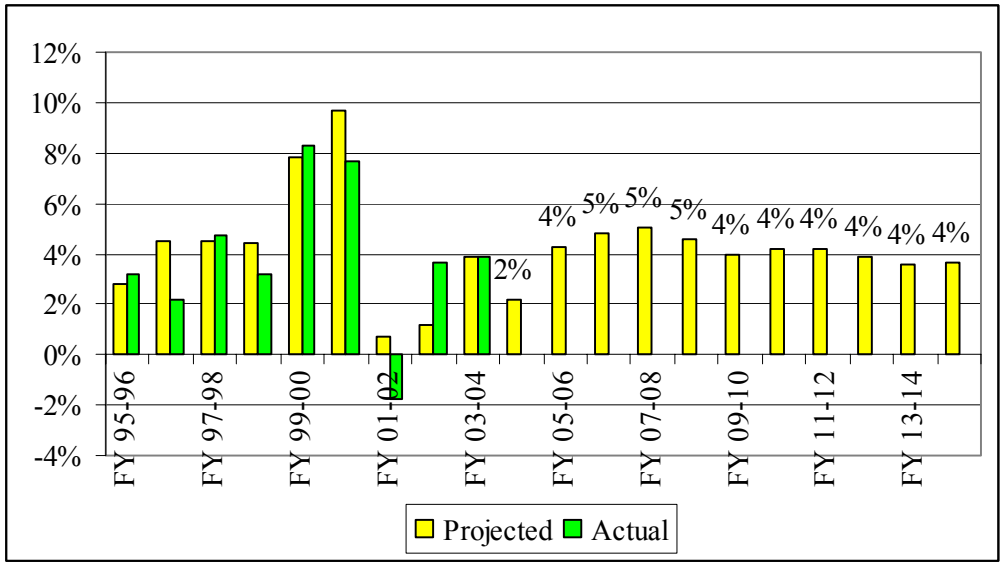
In real dollars, the business tax revenue base is projected to increase in the long-term, reaching $400 million in today's dollars by FY 09-10. The projection in real dollars provides a sense as to the financing available from this revenue stream in the future as the result of real growth in the economic base, if the City's expenditures increase at the rate of inflation (projected at 2.2 to 2.6 percent).

Figure 12. Projected Business Tax Revenue annual growth rate, FY03-FY10



UCLA is forecasting that the wholesale and retail sectors will experience the most rapid growth in payroll in the coming years. Figure 12 illustrates projected growth by primary tax classification. strong growth in the retail sector, beginning in FY 05-06, and weaker growth in the miscellaneous services classification.

Figure 13. Projected Sales Tax Revenue annual growth rate, FY03-FY15



In applying the countywide UCLA forecast to taxable sales in the City's retail sector, two issues are noteworthy. First, the City's past growth in taxable sales has not kept pace on average with countywide growth. Although the City's sales tax revenue has met or exceeded county growth trends in the current and preceding fiscal year, the projection assumes that the City will continue to match countywide growth. Please refer to the prior section for illustration of the City's historical growth in taxable sales; the City has generally lagged behind the rest of the County in this economic arena.

CHAPTER 3: TAX ELASTICITY

Economists use a concept called tax elasticity to measure the effects of a change in taxes on the City's economic base and its tax revenues. Intuitively, the tax elasticity measures responsiveness (or sensitivity) of the economic base to tax changes. Numerically, the tax elasticity represents the percentage change in the economic base induced by a percentage change in average tax rates. For example, an elasticity of (-0.25) means that the economic base would grow by 5 percent in response to a 20 percent reduction in average tax rates, ceteris paribus.

Now, it is important to introduce another term used by economists—ceteris paribus. This term means holding all other factors constant or, in other words, assuming that there were no changes in other factors affecting growth in the City's economic base.

We would like to emphasize that the tax elasticity assumes no changes in other factors that determine growth and business location decisions. There are a number of factors that influence local growth.

- Level of public goods and services provided by a city

  If the City reduces service levels for municipal services that are valued by the business community (e.g. street maintenance), this would tend to reduce the actual growth response.

- Tax rates in neighboring cities

  If neighboring cities were to make "copy-cat" reductions in their tax rates, this would also tend to reduce the actual growth response.

- Capitalization of tax differentials

  If lower level of taxes attracts more businesses to a city, the prices of land might go up, leading to an offsetting effect.

- Other factors

  A number of other factors independent of City policies could also affect growth in the City. These factors include business cycles, as well as economic events affecting industries like motion pictures and apparel that are concentrated in the City.

WHAT DO WE KNOW ABOUT TAX ELASTICITY?

Tax elasticities are much greater when measuring responsiveness to tax differences between cities within the same metropolitan area (i.e. intra-area elasticities) than when measuring responsiveness to tax differences between metropolitan areas (i.e. inter-area elasticities). This is consistent with empirical research indicating that most business re-locations involve moving relatively short distances. There are more cost differences between metro areas besides taxes, such as differences in labor costs and state taxes. Whereas, labor and state taxes tend not to vary within a metro area.

Tax elasticities tend to be greater for manufacturing and wholesale businesses than for retail and service businesses. Manufacturing businesses tend to produce for national and international markets; as a result, they tend to have greater flexibility in terms of locations. By comparison, many retail and service businesses sell to localized markets. The more localized the customer base, the fewer options a business has with respect to relocating to another city and the less likely the business is competing with businesses in other jurisdictions with lower taxes. Similarly, businesses serving a localized customer base tend to be competing against other businesses in the same city; hence, tax differentials would not tend to affect such businesses. In addition, since customers do not typically visit manufacturing and wholesale sites directly, these industries may be less sensitive to public service levels. It should be noted that certain service businesses like motion pictures and certain retail businesses like auto dealers tend to serve larger market areas, and would be expected to be more responsive to local taxes than would localized services like beauty parlors and localized retailers like convenience stores.

Service levels also affect tax elasticities. Among studies that control for differences in service levels, the tax elasticity tends to be of greater magnitude than among studies that fail to take service levels into account.

META-ANALYSES

Tax elasticity has been the subject of numerous, peer-reviewed studies. Several authors have independently conducted meta-analysis of the tax elasticity studies.[5] Meta-analysis involves calculating the range of tax elasticities that might be considered reasonable based on studies conducted independently by different authors, using different data sets, etc. The key advantage of meta-analysis is that it establishes a mainstream, reasonable range of conclusions. However, by way of caution, these meta-analyses rely on a large number of studies, including those relevant to the question at hand in Los Angeles and those that are not relevant. Further, the meta-analyses included some studies affected by measurement errors, and out-dated measurement approaches. Some of the underlying studies failed to take into account non-tax differences between jurisdictions,[6] while others were estimated using proxy variables (e.g. number of business starts) that do not correlate well with growth in the tax base.

The most comprehensive study of tax elasticities was conducted by Bartik (1991). He performed a meta-analysis of the estimated effects of taxes on business activity from a number of empirical studies. The measure of business activity varied across different studies. The examples of business activity include manufacturing employment, location of new branch plants, and labor intensity. Some studies estimate inter-metropolitan elasticity, where the question is about location decisions across different metropolitan areas (for example, Los Angeles and Philadelphia). Other studies estimate intra-metropolitan elasticity, where the main interest lies in business activity within the same metropolitan area, like Los Angeles County.

[5] Bartik, 1991; Phillips and Goss, 1995; Wasylenko, 1997.

[6] An econometric technique called "fixed effects", which corrects for growth-affecting characteristics unique to a jurisdiction, is one approach to this problem. Other approaches include estimation of separate econometric equations for each jurisdiction.

Table 14. Bartik Tax Elasticity Meta-Analysis Results

Tax Study Type	Percentage of Studies With at Least One Statistically Significant Negative Tax Effect	Mean Elasticity of Business Activity With Respect to Taxes	Range of Elasticity of Business Activity With Respect to Taxes
Intra-area Studies	57%	-1.48	-4.43 to 0.62
	14 studies	(s.e.=0.54)	(9 studies)
Intra-area studies using specific community data	70%	-1.91	-4.43 to 0.62
	(10 studies)	(s.e.=0.60)	(7 studies)
Inter-area studies	70%	-0.25	-1.40 to 0.76
	(57 studies)	(s.e.=-0.05)	(48 studies)
Inter-area studies with controls for "fixed effects"	92%	-0.44	-1.02 to 0
	(12 studies)	(s.e.=0.11)	11 studies
Inter-area studies with public service controls	80%	-0.33	-1.40 to 0.76
	(30 studies)	(s.e.=0.09)	(25 studies)

Bartik's meta-analysis also included studies that found insignificant effects of tax changes on business activity (the estimated coefficients are statistically indistinguishable from zero), as well as studies estimating elasticities that are consistent with a jurisdiction being on the backward-bending part of the Laffer Curve (i.e. economic growth results from tax cuts).

Bartik concluded that the long-run elasticity of business activity with respect to state and local taxes lies within the range of -.1 to -.6 for inter-metropolitan or interstate business location decisions, and -1.0 to -3.0 for intra-metropolitan business location decisions.

Phillips and Goss conducted a subsequent meta-analysis, and concluded that the average inter-metropolitan tax elasticity is -1.14, when public services and fixed effects are included in the analysis, and -0.4 when only taxes are included in the model.

In a subsequent meta-analysis of the tax elasticity literature, Wasylenko reviewed the literature as well. He concluded that for inter-regional growth, the median elasticity estimates cluster between 0.0 and -.26, indicating not much responsiveness of economic activity among regions to business taxes. For intra-regional growth, he found that nine of the 11 studies reported statistically significant tax elasticities, and that the median intra-regional elasticity is -1.85. He concluded that tax elasticities within a region appear to be at least four times higher than the inter-regional estimates. With other cost and market variables very similar among different locations within a region, fiscal differences within the region play a more significant role in location choice.

Table 15. Wasylenko Intra-Regional Tax Elasticity Meta-Analysis Results

Tax Study Type	Percentage of Studies With at Least One Statistically Significant Negative Tax Effect	Median Elasticity of Business Activity With Respect to Taxes	Range of Elasticity of Business Activity With Respect to Taxes
Total Employment	75% 4 studies	-1.85	-1.95 to -.81 (3 studies)
Manufacturing Employment	100% 1 study	-0.79	

Regarding tax reform, Wasylenko concludes that reductions in business taxes generally attract more capital-intensive firms, which pay higher wages, and that tax reform is unlikely to attract jobs for low-wage workers. Wasylenko cautions that: "Ad hoc tax reforms should not be used as a back-door remedy to systematic deficiencies in a tax or fiscal system or in the name of improving the business climate. A band-aid approach to tax reform creates more inequities and inefficiencies than it resolves…. Fiscal reform should move toward more efficient tax systems and expenditure accountability."[7]

CASE STUDIES

In this section, we focus on case studies of intra-regional tax elasticities. In the prior section, we discussed the results of tax elasticity meta-analyses.

PHILADELPHIA

The City of Philadelphia is one of the few jurisdictions that changed its tax rate extensively over the last three decades. The largest Philadelphia revenue sources are the property tax, wage tax, and Business Privilege Tax. We summarize the history of changes in these taxes and the estimated impact of theses changes.

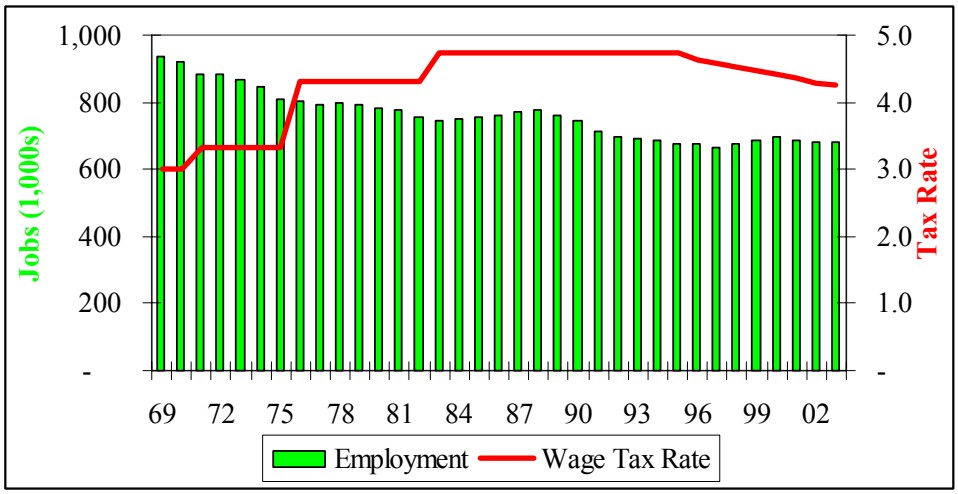
Wage Tax

Philadelphia imposed a wage tax in 1939. The tax is paid on wages by private businesses, on earnings by some government workers and on net profits by sole proprietorships. Further, the tax is owed on the wages of all resident wage earners in the City of Philadelphia whether or not they work in the City, and on the wages of non-residents who work in the City. Between 1952 and 1976, wage taxes increased from 1.25 percent to 4.3 percent. In 1983, the wage tax was increased to 4.96 percent only for residents and left at the previous level for non-residents. Beginning in 1996, the wage tax was decreased every year and now stands at 4.5 percent for residents and 3.9 percent for non-residents. The

[7] Wasylenko, 1997, page 49.

"blended" (or average) tax rate is 4.3 percent.[8] The current average wage tax based on this share is 4.2528 percent.

Figure 16. Philadelphia Wage Tax and Employment, 1969-2003



When the city wage tax rates were increasing, Philadelphia's job base constantly decreased. The trend was reversed in the late 1990s, when wage taxes were reduced every year. Data provided by the Bureau of Labor Statistics show that after nine straight years of decline, employment in Philadelphia finally increased by 30,000 jobs between 1997 and 2000.

Several authors conducted studies of the tax elasticity prior to the tax reforms in the late 1990s.

Inman estimated the impact of Philadelphia's four wage tax increases between 1970 and 1992 on Philadelphia's share of national employment. His statistical analysis indicated that a 20 percent increase in the city's average wage tax rate would reduce city employment by 12.7 percent or about 80,600 jobs at the 1992 Philadelphia employment level.

- Luce studied intra-metropolitan location decisions in the Philadelphia metropolitan area. He estimated that the wage tax elasticity was -0.6 over a ten-year period. In other words, increases in the Philadelphia wage tax rate from 3.0 percent in 1970 to 3.31 percent in 1973 and 4.31 percent in 1977 resulted in a cumulative impact of more than 20 percent of 1970 employment by 1985, or about 165,000 jobs.

Subsequent to the tax reform in the late 1990s, additional studies were conducted. According to the Office of the City Controller, despite the reductions in the wage tax rate, total wage tax collections increased by 18.8 percent between fiscal year 1995 and fiscal year 2001.[9] The Controller argues that, in good times, firms are not as worried about tax costs and not as responsive to the idea of relocation to minimize tax burdens, but when conditions worsen, firms are more inclined to consider relocation to reduce costs. The Controller concluded that, when the economy is weak, any tax reduction will stimulate growth and tax reduction is an effective means of generating revenues; however, when the economy is strong, tax reduction must be steep to create a market response that will maintain revenue

[8] According to Econsult Corporation, approximately 64 percent of wage tax revenues are collected from residents and 36 percent from non-residents. The non-resident share was relatively constant during the period of reform in the 1990s.

[9] City of Philadelphia, Office of the City Controller, *Tax Structure Analysis Report*. (undated).

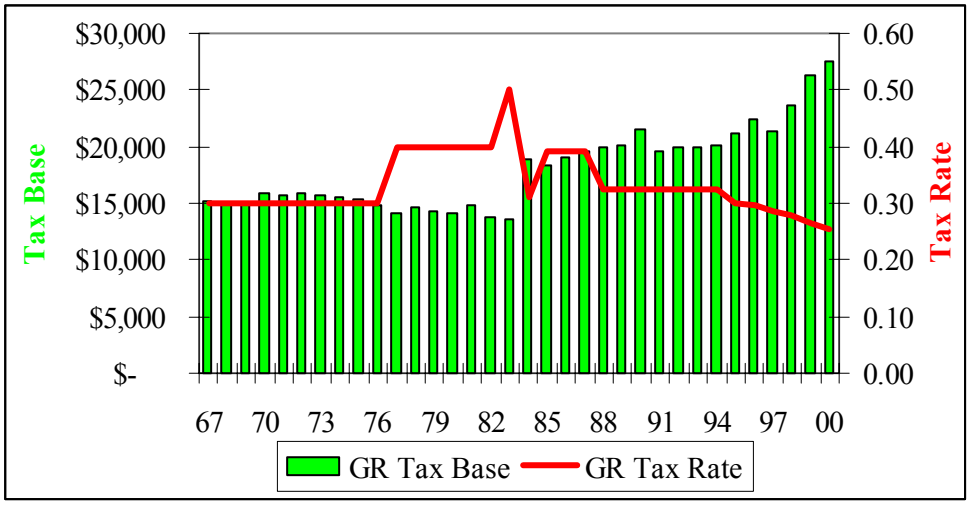
levels. According to the Controller, reducing taxes to encourage smart growth can have positive results that can help partially pay for tax reduction.

Econsult Corporation estimated the impacts of changes in Philadelphia taxes on the wage tax base.[10] The authors found a statistically significant negative effect, which implied that an increase in taxes reduces the size of the Philadelphia tax base. Their simulations showed that a permanent reduction of 0.5 percent in the wage tax lead to a $676.6 million increase in the wage tax base in the reform year and $2,610 million change after three fiscal years. The percentage of the tax cut regained through the supply-side effect was 19.0 percent in the base year and 60.36 percent after three years.

Mid-way through the wage tax relief period (FY 98), Haughwout and Inman simulated the Philadelphia economy in FY 1998 using an equilibrium model of an open city economy with mobile firms and resident workers. They found that the wage tax elasticity at that point was -0.34.[11]

Gross Receipts Tax

Figure 17. Philadelphia Gross Receipts Tax Rates and Tax Base, 1966-2000



Philadelphia's General Business Tax had been in effect since 1952. The tax was originally 0.1 percent of gross receipts. In 1968, this tax was changed to the lower of 0.2 percent of gross receipts or 2 percent of net income. In 1953, Philadelphia adopted the Mercantile License Tax. The tax was 0.3 percent of gross receipts in 1953, increased to 0.4 percent in 1977, 0.5 percent in 1983, and then fell to 0.4 in 1984. In 1985, the Business Privilege Tax was adopted; it eliminated the Mercantile License Tax and the General Business Tax. The change allowed businesses a choice of paying the gross receipts tax or a 2 percent net income tax. The gross receipts part of the Business Privilege Tax was 0.35 percent in 1985, but increased to 0.39 percent in 1986. The tax was reduced to 0.325 percent in 1989, where it stood until 1994, after which it was cut every year (the Rendell program of tax cuts). The current rate is 0.21.

[10] Econsult, 2002.

[11] Haughwout and Inman, 2001.

In general, an increase in the business privilege tax rate coincided with a decrease in business tax revenues. The gross receipts tax rate decreased by 14.4 percent from 1996 to 2000, at the same time gross receipts tax base increase by 23 percent in real terms (1994 dollars).

Arguably, other factors such as recession or decrease in public spending might have influenced the cycle of gross receipts. In order to account for these types of effects and isolate the effect of taxes on gross receipts, economists perform econometric estimations, where they regress the business tax base on tax rates and other variables that are thought to determine fluctuations in the tax base.

There were a number of studies that examined the effect of the gross receipts tax on the tax base in Philadelphia. Econsult Corporation conducted a study of Philadelphia tax rates and their relationship to tax bases and tax revenue in 2002. The authors of the study found that both the gross receipts and net income tax rates had negative impacts on the gross receipts tax base. The authors of the study also performed simulations of changes in the gross receipts tax rate on the tax base and revenues, and found that the share of revenue regained through the supply side (growth) effect was 16.51 percent in the first year, and rose to 36.62 percent by 2010. The gross receipts tax cut also had a positive effect on the wage tax base (but with a lag).

Haughwout and et al. (2003) provide estimates of the impact and long-run elasticity of Philadelphia's gross receipts tax base per resident with respect to gross receipts tax rate. The authors relate city tax rates to city tax bases and then to city revenues after removing the effect of tax rates on the ability of the city to provide public services. The authors estimated a statistically significant short-run tax elasticity of -0.19 and long-run elasticity of -0.27. The elasticity is calculated for the first year of the new tax rate as the "impact" or short-term elasticity and as the "longer-run" elasticity after three fiscal years of the new tax rate.

Inman found out that a one-percentage point increase in the weighted average business tax rate, from its 1992 level of 1.50 percent to 2.50 percent, would reduce the average business tax base by $3,471 per resident. The implied elasticity of the business tax rate with respect to the business tax base is -0.41.

NEW YORK CITY

New York City has made several tax reforms in recent years, although not on the same scale as in Philadelphia. New York City generates most of its tax revenue from four taxes: General Corporation Tax, Real Property Tax, Sales Tax and Personal Income Tax.

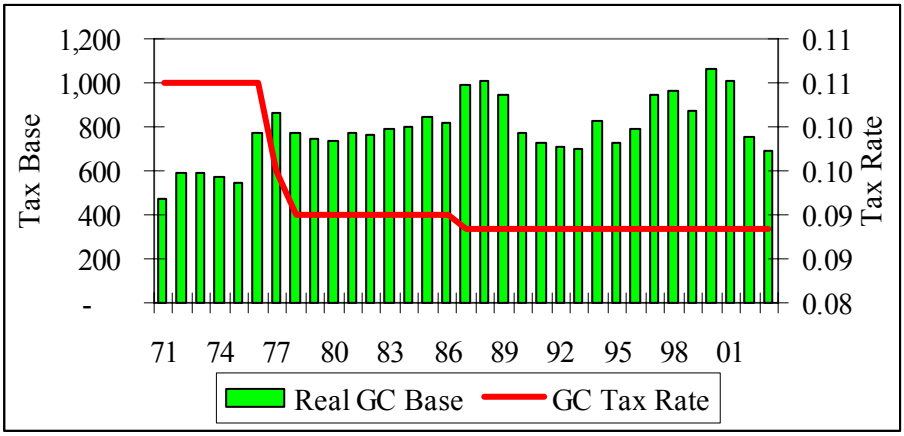
General Corporation Tax

New York has reduced its general corporation tax on two occasions—in 1997 and 1987.

New York City enacted the general corporation tax in 1966. It is imposed on all corporations, domestic and foreign, for the privilege of doing business, employing capital, owning or leading property or maintaining on office in the City of New York. In order to determine tax liability, a corporation is required to make three alternative calculations, and compare these to a fixed minimum tax of $300. The tax due is the largest of the four amounts. The three alternative calculations are:

(1) 8.85 percent of the firm's entire new income allocated to the City, (2) 2.655 percent of the sum of allocated new income plus compensation paid to all stockholders owning more than five percent of the taxpayer's issued capital stock and (3) 0.15 percent of the firm's business and investment capital allocated to the City. The vast majority—over 80 percent of revenues—is paid on the new income basis.[12]

Figure 18. NYC General Corporation Tax Base and Rates, 1971-2003



Prior to 1977, the tax rate on net corporate earnings was 10.05 percent. The rate was reduced to 9.5 percent in 1977, to 9 percent in 1978 and to 8.85 percent in 1987. In addition, New York City had altered the tax base a number of times by changing depreciation rules, amending the definitions of tax categories or elimination deductions. The revenues generated from the general corporations tax and the corresponding tax rate is depicted on the figure below. The revenues are calculated in 1984 dollars in order to adjust for inflation. Higher revenue levels are generally associated with lower taxes.

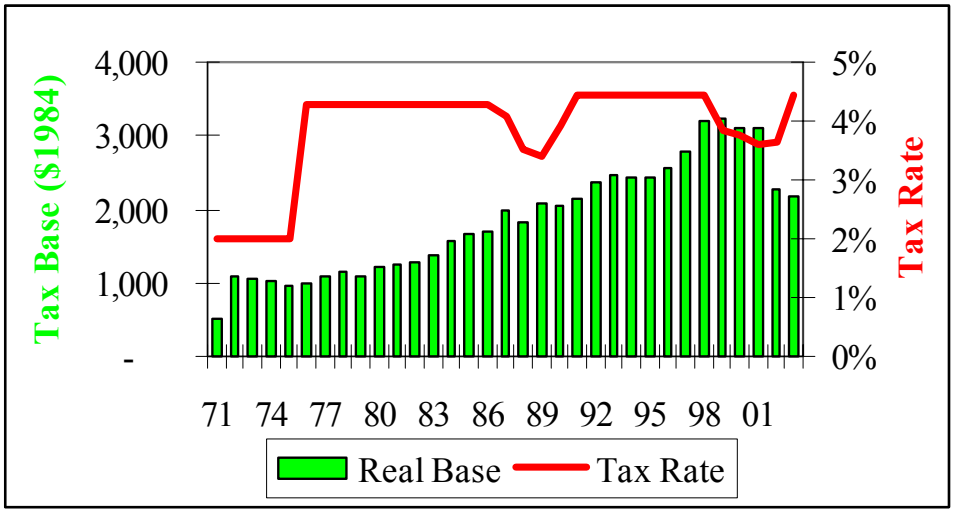
Personal Income Tax

The personal income tax is imposed on the taxable income of New York City residents, estates and trusts. The rates and brackets for the personal income tax have changed over the years. The current top rate is 4.45 percent..

From 1966 through 1970, a non-resident earnings tax was levied at 0.25 percent on wages and 0.375 percent on net earnings from self-employment. Nonresidents were taxed only on their New York City income. From 1971 through 1999 the tax rates were 0.45 percent on wages and 0.65 percent on net earnings from self-employment. In 1987, separate schedules for single, head of household and married taxpayers were introduced. The City's non-resident earnings tax was repealed for New York State residents on July 1, 1999. The commuter tax on New York State non-residents was repealed because the application of the City nonresident earnings tax to only New York State nonresidents posed constitutional problems. In the meantime, New York State nonresidents continue to pay the tax. The rate of the tax fell to 0.25 percent on wages and 0.375 percent on net earnings on January 2001. The rate was increased again in 2003.

[12] The City of New York Tax Revenue Forecasting Documentation: Financial Plan Fiscal Years 2004-2008.

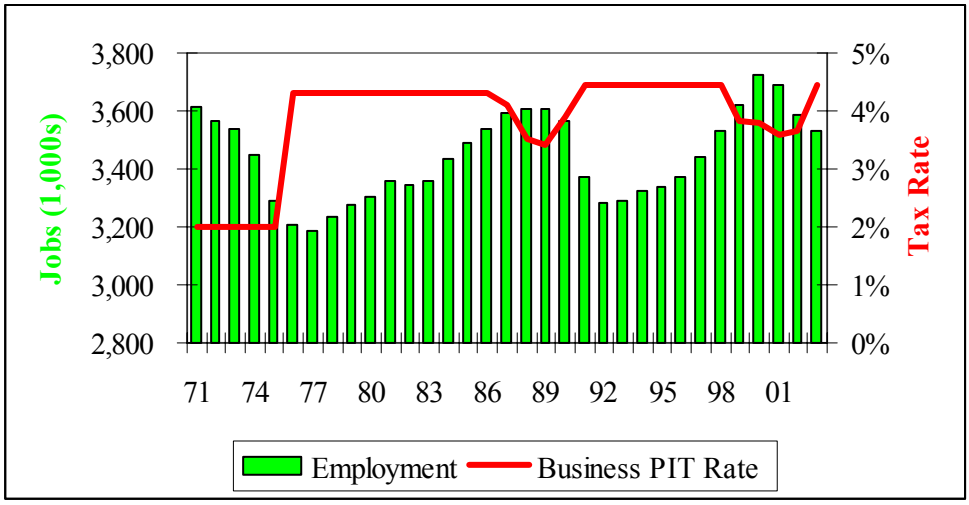
Figure 19. NYC Self-Employed Income Tax Base and Rates, 1971-2003



Tax cuts have generally coincided with increases in employment.

Haughwout, et al. (2003) estimated the short-term elasticity of personal income tax cuts on personal income tax base. An decrease in the tax rate by 1 percent was associated with an increase in the income tax base of 0.47 percent in the current year and 0.46 percent after three years.

Figure 20. NYC Employment and Self-Employed Income Tax Rate, 1971-2003



McMahon (2001) estimated the cumulative effect of personal income, sales, business and property tax cuts in New York City. He concluded that reductions in the City's personal income, sales, business and property taxes have generated more than 80,000 new jobs since 1997. Thanks to these additional jobs, New York City's job growth rate exceeded the national average – the first time that had happened during economic expansion since 1950. His model indicates that in the absence of tax cuts the City's private sector employment would have expanded by 7.8 percent from 1997 to 2000. However, jobs attributed to tax cuts pushed the City's private employment job growth to 9.1 percent, higher than the national growth rate of 8.3 percent. It should be noted that the McMahon report was issued in September 2001, and New York employment trends changed dramatically after that point due to the World Trade Center attacks.

LOCAL REVENUE HILLS

A recent study of four large U.S. cities—New York, Philadelphia, Houston, and Minneapolis—provides econometric estimates of "local revenue hills" or, in other words, the relationship between local taxes and economic growth.[13]

Table 21. Local Revenue Hills: Estimated Elasticities

Municipal Tax Base Elasticity to the Tax Rate		
Gross Receipts Tax	**Short-Run**	**Long-Run**
Philadelphia, 1970-2001	-0.19 *	-0.27 *
Sales Tax		
New York, 1961-2001	-0.47 *	-0.5 *
Income Tax		
New York, 1961-2001	-0.47 *	-0.46 *
Property Tax		
Houston, 1969-2001	-0.76 *	-1.13
Minneapolis, 1974-2001	-0.17 *	-0.36 *
New York, 1961-2001	-0.76 *	-0.9 *
Philadelphia, 1970-2001	-0.41 *	-0.8 *
Wage Tax		
Philadelphia, 1970-2001	-0.06	0.004
Municipal Employment Elasticity to the Tax Rate		
NYC Income Tax		
Manufacturing Jobs	-0.1 *	-0.31 *
Service Jobs	-0.4	-0.09
Philadelphia Wage Tax		
Manufacturing Jobs	-0.07	-0.14 *
Service Jobs	-0.39	-0.29 *
** indicates that result is statistically significant*		
Short-run is one-year period; Long-run is three-year period		

The study asks the question as to where on the Laffer Curve is each of the four taxing jurisdictions. A Laffer Curve depicts the relationship between the tax rate and the revenue yield. At a tax rate of zero, the revenue yield is zero. Similarly, at a tax rate of 100 percent, there is no incentive to engage in economic activity, and the revenue yield is also zero. At some point, taxes may be raised to such a high level that the tax discourages economic activity and does not produce additional revenue. Once a jurisdiction raises tax rates to the point at which economic activity is discouraged, that jurisdiction may actually increase revenues by reducing taxes, or conversely may reduce revenues by raising rates.

The study found that the Philadelphia gross receipts tax base is responsive to changes in the tax rate. Specifically, the study found that the Philadelphia tax base would grow by approximately 0.19-0.27 percent in response to a one percent reduction in the tax rate or, conversely, would contract by a similar amount in response to an increase. This result is the most relevant for the City of Los Angeles.

The study found that the New York City job growth rate was not as responsive to changes in the income tax as was reported income (i.e. the tax base). The income tax base elasticity of -.46 is greater in magnitude than the manufacturing jobs elasticity (-.31). However, in Philadelphia, the study found that the job growth rate was more sensitive to the employer-paid wage tax than was the reported tax base.

Generally, the elasticity of property values to changes in the property tax rate was relatively small in Minneapolis, where there is extensive tax-sharing among jurisdictions.

[13] Haughwout, Inman, Craig, and Luce, 2003.

LOS ANGELES

The authors of this report conducted an econometric analysis of the City of Los Angeles business tax base with respect to tax rates over the period covering FY 1970-71 through FY 2003-04. During this time period, there were five occasions when the City made significant changes in the effective tax rates charged: in 1985, 1991, 1993, 1995 and 1997. The City raised the tax rate (through a 7.5% surcharge) in 1985. In 1991, the City raised tax rates and eliminated the surcharge, resulting in a 10 percent effective increase. In 1993, the 7.5% surcharge was imposed again. In 1995, it was reduced to a 3.75% surcharge, and in 1997, the surcharge was eliminated.

In conducting the econometric analysis, the authors used the same approach as was used in the Local Revenue Hills study, and modified that approach based on comments received from the review panel. Generally, the econometric approach involves using "exogenous" variables (i.e. explanatory factors that are external to Los Angeles). In order to explain changes in the gross receipts tax base (per capita, in constant dollars), the Los Angeles study used explanatory variables including changes in the business tax rate in the current year, recent changes in the tax rate, state and federal grants to the City per capita, public safety staffing (sworn) per capita, national defense investment spending, the national unemployment rate trend, interest rates, and national average hourly earnings.[14]

The authors estimated that the short-run elasticity in Los Angeles is -.32. The 95 percent confidence interval for this estimate indicates that the short-run elasticity is between -.12 and -.52. Over the long-run, the elasticity is within the 95 percent confidence interval of -.21 and -1.39. Alternative statistical estimates were performed using a variety of specifications, and were generally similar to these estimates.

It should be noted that due to the inclusion of public safety staffing per capita as an explanatory variable, the elasticity should be interpreted to mean that tax relief would generate growth assuming that the public safety expenditure side of the budget equation is held constant. This means that public safety staffing changes are not consistent with the growth estimates implied by this elasticity. To elaborate, the growth effect assumes both that public safety spending cuts would not finance tax relief, and that revenue growth related to tax relief would not finance public safety spending growth.

In the alternative, another estimate of the elasticity was prepared without holding constant public safety staffing levels. That estimate relies on crime rates as an explanatory variable, as opposed to public safety staffing levels. The short-run elasticity implied by the alternate estimate is -.34 within a 95 percent confidence interval of -.6 and -.08. Similarly, the long-run elasticity falls within a fairly wide confidence interval.[15]

---

[14] All monetary variables were converted to a per capita basis, and adjusted for inflation. The actual regression analysis is based on differences between consecutive time periods, with all variables expressed in first-difference form. For detailed statistical results, please refer to the tables on the following pages.

[15] The authors conducted robustness tests to determine whether the 1992 riot, the 1971 and 1994 earthquakes affected the business tax rates. Had the result been positive, it would have indicated the overall results are not robust with respect to natural disasters. Instrumental variable analysis confirmed the negative coefficient on the elasticity.

Table 22. Los Angeles Tax Elasticity: Statistical Results with Constant Public Safety Staffing

Los Angeles Tax Elasticity Model: Short-Run and Long-Run Statistical Results

Dependent Variable	Real business tax base per capita		
Short-run Elasticity	(0.32)		
95% Confidence Interval	(0.52)	-	(0.12)
Long-run Elasticity	(0.80)		
95% Confidence Interval	(1.38)	-	(0.21)

Note: all variables are expressed as the difference between the value in the current year and prior year

	Coefficient	Robust Std. Err	t	P>|t|	[95% Conf.	Interval]
LA Business tax rate current year	-1231370	369030.7	-3.34	0.003	-1998811	-463928.9
LA Real state & federal grants per capita	0.6966225	1.255301	0.55	0.585	-1.913919	3.307164
AAA Corporate Bond Yield	-73.68265	141.5536	-0.52	0.608	-368.0594	220.6941
USA Real average hourly earnings	282.3254	338.323	0.83	0.413	-421.2557	985.9066
USA Unemployment Rate	-29029.45	11140.17	-2.61	0.017	-52196.69	-5862.2
LA Police & Fire Staffing per capita	514.9696	1175.051	0.44	0.666	-1928.682	2958.621
USA Real Defense Gross Investment per capita	1.57E+10	5.90E+09	2.67	0.014	3.46E+09	2.80E+10
Constant	109.1685	99.38608	1.1	0.284	-97.51618	315.8531
Number of obs	29					
F(7,21)	4.22					
Prob > F	0.0048					
R-squared	0.5533					
Root MSE	507.18					

	Coefficient	Robust Std. Err	t	P>|t|	[95% Conf.	Interval]
LA Business tax rate current year	-1319297	309999	-4.26	0	-1970581	-668013.2
LA Business tax rate lagged	-1680114	613417.7	-2.74	0.013	-2968856	-391371.1
LA Business tax rate lagged 2x	-810491.4	709133.4	-1.14	0.268	-2300325	679342.5
LA Business tax rate lagged 3x	735066.4	381140.5	1.93	0.07	-65679.98	1535813
LA real state & federal grants per capita	3.02419	2.391352	1.26	0.222	-1.999855	8.048235
AAA Corporate Bond Yield	-136.1513	179.2127	-0.76	0.457	-512.6632	240.3605
USA real average hourly earnings	365.1413	370.6507	0.99	0.338	-413.567	1143.85
USA unemployment Rate	-26139.02	9193.736	-2.84	0.011	-45454.34	-6823.692
LA Police & Fire Staffing per capita	-783.0719	1171.942	-0.67	0.512	-3245.23	1679.087
USA Real Defense Gross Investment per capita	1.36E+10	5.58E+09	2.44	0.025	1.88E+09	2.53E+10
Constant	146.7225	106.9557	1.37	0.187	-77.98317	371.4282
Number of obs	29	Joint Significance Test				
F(10, 18)	5.01	(1) tax_new=0				
Prob > F	0.0015	(2) tax_new_lag1 = 0				
R-squared	0.6831	(3) tax_new_lag2 = 0				
Root MSE	461.42	(4) tax_new_lag3 = 0				
		F(4,18) 5.9				
		Prob > F = 0				

Table 23. Los Angeles Tax Elasticity: Statistical Results with Variant Public Safety Staffing

Los Angeles Tax Elasticity Model #2: Short-Run and Long-Run Statistical Results

Dependent Variable	Real business tax base per capita		
Short-run Elasticity	(0.34)		
95% Confidence Interval	(0.60)	-	(0.08)
Long-run Elasticity	(1.06)		
95% Confidence Interval	(2.08)	-	(0.04)

Note: all variables are expressed as the difference between the value in the current year and prior year

	Coefficient	Robust Std. Err	t	P>|t|	[95% Conf.	Interval]
LA Business tax rate current year	-919582.7	341605.4	-2.69	0.01	-1623132	-216033.3
LA Real state & federal grants per capita	-0.1957807	1.262006	-0.16	0.88	-2.794932	2.40337
AAA Corporate Bond Yield	-60.56188	139.9461	-0.43	0.67	-348.7862	227.6625
USA Real average hourly earnings	656.948	294.1939	2.23	0.04	51.04432	1262.852
USA Unemployment Rate	-3.205975	3.298924	-0.97	0.34	-10.00024	3.588286
USA Violent Crime Rate	-22872.52	10498.72	-2.18	0.04	-44495.03	-1250.002
USA Real Defense Gross Investment per capita	8.64E+09	5.20E+09	1.66	0.11	-2.08E+09	1.94E+10
Constant	85.11717	88.12577	0.97	0.34	-96.38125	266.6156
Number of obs	33					
F(7, 25)	7.45					
Prob > F	0.0001					
R-squared	0.5858					
Root MSE	506.18					

	Coefficient	Robust Std. Err	t	P>|t|	[95% Conf.	Interval]
LA Business tax rate current year	-1076368	416387.7	-2.59	0.018	-1944938	-207798.5
LA Business tax rate lagged	-1448565	630724	-2.3	0.033	-2764233	-132898.2
LA Business tax rate lagged 2x	-404736	632082.8	-0.64	0.529	-1723238	913765.6
LA Business tax rate lagged 3x	729223	463222.3	1.57	0.131	-237041.9	1695488
LA Real state & federal grants per capita	1.497057	2.260085	0.66	0.515	-3.217397	6.211512
AAA Corporate Bond Yield	-65.3789	157.7897	-0.41	0.683	-394.5225	263.7647
USA Real average hourly earnings	700.2416	363.3273	1.93	0.068	-57.64591	1458.129
USA Unemployment Rate	-1.700244	3.834761	-0.44	0.662	-9.699416	6.298928
USA Violent Crime Rate	-23064.61	10465.8	-2.2	0.039	-44895.89	-1233.33
USA Real Defense Gross Investment per capita	1.42E+10	6.12E+09	2.32	0.031	1.45E+09	2.70E+10
Constant	80.5608	94.96023	0.85	0.406	-117.5228	278.6444
Number of obs	31	Joint Significance Test				
F(10, 20)	4.87					
Prob > F	0.0013	(1) tax_new=0				
R-squared	0.7033	(2) tax_new_lag1 = 0				
Root MSE	476.32	(3) tax_new_lag2 = 0				
		(4) tax_new_lag3 = 0				
		F(4, 20) 2.4				
		Prob>F 0.1				

CHAPTER 4: OTHER CONSIDERATIONS

GROWTH POTENTIAL

CITY GOALS

The City's long-term growth strategy involves planning to accommodate as many as 2.3 million jobs by 2010. The City's goal is to emphasize growth in the job base in order to promote fiscal stability, to finance improvements in service levels, to recover jobs lost during the 1990s, and to have sufficient job opportunities for residents.[16]

When the strategy was adopted in 2001, the City had not yet replaced the jobs lost during the prior decade. Although the goal originally involved growing at an annual rate of 0.9 percent, it would require an annual growth rate of nearly 2.5 percent during the current decade for the City to reach its original goal for 2010. The plan recognized that there was adequate capacity for the City to grow at the targeted pace. Moreover, the plan indicated that there was sufficient office and retail capacity for "over 100 years even at optimistic, pre-recession, market growth rates". The plan indicates that the City is unlikely to reach capacity (i.e. its "theoretical build-out" state), because many commercial properties are not developed to their maximum permitted densities. By way of example, the plan indicates that less than five percent of the City's commercial properties had been developed to full density.

The specific steps outlined in the plan to accommodate job creation are to do the following:

1) Retain industrial land uses for emerging industries;
2) Permit small and information-age businesses to occupy industrially-zoned areas;
3) Promote reuse and recycling of deteriorated commercial and industrial districts;
4) Provide bonus densities to mixed-use developments;
5) Establish incentives for industrial development adjacent to the Port of Los Angeles, the rail corridor in the San Fernando Valley, and the South Central area;
6) Market the City to emerging industries, expand job training, and conduct ongoing assessment of land use requirements for business growth;
7) Streamline development approval and reduce development fees; and
8) Devise an aggressive business retention and outreach program.

[16] City of Los Angeles, General Plan Framework Element, 2001.

GROWTH AREAS AND TAX CONSIDERATIONS

The City's growth strategy is "focus density"—concentrating commercial development in particular areas with available infrastructure and transportation facilities, and away from single-family neighborhoods. The plan identifies 26 regional centers throughout the City for commercial growth. Several growth areas—the Wilshire Boulevard corridor west of downtown, the Figueroa corridor near USC, the Hollywood-Highland area, Encino along the Ventura Boulevard corridor, Van Nuys, and Northdidge—are located in the interior of the City. But the majority of the growth areas are located adjacent to or in the vicinity of other jurisdictions, including:

- Burbank: Universal City area;
- Calabasas: Woodland Hills area;
- Beverly Hills: Century City and the Wilshire Boulevard corridor east of Beverly Hills;
- Santa Monica: several smaller focus areas in Venice and Brentwood;
- Marina del Rey (unincorporated): Playa Vista;
- Culver City: the Centinela/Sepulveda area near Fox Hills Mall;
- Carson: the vicinity of the 110-405 interchange;
- El Segundo: the Century Boulevard corridor near LAX; and
- Baldwin Hills (unincorporated): the Baldwin Hills-Crenshaw Plaza.

In assessing whether business tax relief is likely to lead to economic growth, it is important to consider the extent to which the proposals would make Los Angeles a cost-competitive location in comparison with significant employment centers and, particularly, jurisdictions adjacent to the growth areas.

Table 24. Pre-Reform Competitor Cities Business and Electric Costs as % of LA City, FY 2004-05

	Retail	Wholesale	Professional	Manufacturing
Average	**109%**	**109%**	**71%**	**128%**
Minimum	**75%**	**59%**	**32%**	**72%**
Maximum	**129%**	**136%**	**133%**	**157%**
Beverly Hills	119%		133%	
Burbank	124%	130%	64%	157%
Carson	103%	111%		137%
Commerce		111%		137%
Culver City	127%			
El Segundo		136%	49%	
Glendale	85%	101%	32%	130%
Long Beach	110%	118%		145%
Pasadena	75%		36%	
San Fernando	113%			
Santa Monica	129%		93%	
Torrance	111%	119%		147%
Vernon		59%		72%
West Hollywood	108%		60%	

Generally, the City business tax rates are substantially higher than in the competitor cities neighboring the City. However, in contrast to previous research, we find that the City's electricity costs are substantially lower than in neighboring cities and that the City's electricity cost advantage counterbalanced the City's business tax cost disadvantage. With the

exception of professional services, the combined costs in the neighboring cities are 9 to 28 percent higher than in Los Angeles.

Table 25. Post-Reform Competitor Cities Business and Electric Costs as % of LA City, FY 2004-05

	Retail	Wholesale	Professional	Manufacturing
Average	**113%**	**115%**	**72%**	**136%**
Minimum	**77%**	**62%**	**34%**	**74%**
Maximum	**133%**	**142%**	**144%**	**162%**
Beverly Hills	123%		144%	
Burbank	128%	136%	69%	162%
Carson	107%	116%		141%
Commerce		116%		141%
Culver City	131%			
El Segundo		142%	53%	
Glendale	88%	106%	34%	134%
Long Beach	113%	124%		150%
Pasadena	77%		39%	
San Fernando	117%			
Santa Monica	133%		101%	
Torrance	115%	124%		152%
Vernon		62%		74%
West Hollywood	111%		65%	

With a 15 percent across-the-board reduction in business taxes, the City's cost disadvantage for professional services would be modestly reduced. The City would become a cheaper location than Santa Monica. However, the City would remain at a cost disadvantage with respect to the other competitor cities.

It should be noted that this analysis does not take into account differences in water and sewer costs between the jurisdictions.

FINANCING APPROACH

Another consideration is the approach taken to financing a tax reform package. There are several potential approaches:

1) compliance enhancements,
2) economic stimulus leading to an expanded tax base,
3) expenditure cuts through service reductions, and
4) expenditure cuts through management efficiencies.

These approaches each have different implications both in terms of economic effects and in terms of reliability.

As discussed in the section on elasticity, the growth effect associated with tax relief is significant when public safety staffing is held constant. The anticipated growth effect associated with tax reform while changing public safety staffing is much more modest.

The financing approach that is most consistent with economic stimulus involves expenditure cuts through management efficiencies. One example of such an approach involves management of city expenditures in such a way as to prevent expenditures from increasing over time in excess

of inflation. If the City could manage to keep expenditure growth in line with inflation, this would promote additional financing opportunities, as the business tax revenue base is projected to grow at a faster rate than inflation after FY 05-06.

Financing through compliance enhancements would tend to reduce the stimulus effect of tax reform as a result of effects on formerly non-compliant taxpayers. Those taxpayers may indeed have a negative reaction in terms of growth and business location decisions as a result of enhanced enforcement.

REFERENCES

ARTICLES, REPORTS AND BOOKS

Bartik, Timothy. *Who Benefits from State and Local Economic Development Policies?* Kalamazoo: W.E. Upjohn Institute for Employment Research, 1991.

Belkin, David. *Taxing Metropolis: Tax Capacity and Tax Effort in Large U.S. Cities*. New York: New York City Independent Budget Office, February 2000.

Burr, Beverly, Elaine Reardon, and Paul Coomes with Benjamin Stevens, Bruce Smith and Stephyn G. W. Butcher. *The City of Los Angeles Tax Policy Model: User's Guide and Revenue Scenarios*. Report to the City of Los Angeles. Santa Monica: Milken Institute, September 1997.

Burr, Beverly and Michael Cragg. *City of Los Angeles Economic Base and Taxes*. Report to the City of Los Angeles. Santa Monica: Milken Institute, September 15, 1997.

Burr, Beverly. *Los Angeles Business Migration and Growth*. Report to the City of Los Angeles. Santa Monica: Milken Institute, June 27, 1997.

Business Tax Advisory Committee (BTAC), Administrative/Compliance Subcommittee. *Report on Increasing Los Angeles City Business Tax Revenue*. May 20, 2004.

Christovale, Antoinette, et al. *Office of Finance Analysis of Tax Proposals*. Report to the City of Los Angeles, Ad Hoc Business Tax Reform Committee, October 21, 2004.

Congressional Budget Office. *The Budget and Economic Outlook: An Update*. Washington, DC: Congressional Budget Office, September 2004.

Congressional Budget Office. *CBO's Economic Forecasting Record*. Washington, DC: Congressional Budget Office, September 2004.

Econsult Corporation. *Philadelphia Tax Rates and Their Relationship to Tax Bases and Tax Revenues*. Report to the Pennsylvania Economy League, February 2002.

Haughwout, Andrew F. and Robert P. Inman. *Fiscal Policies In Open Cities With Firms And Households*. Regional Science and Urban Economics 31 (2001): 147-180.

Haughwout, Andrew F., Robert P. Inman, Steven Craig, and Thomas Luce. *Local Revenue Hills: Evidence from Four U.S. Cities*. Working Paper 9686. Cambridge: National Bureau of Economic Research, May 2003.

Helms, L. Jay. *The Effect of State and Local Taxes on Economic Growth: A Time Series-Cross Section Approach*. Review of Economics and Statistics 67 (February 1985): 574-582.

Inman, Robert. *Can Philadelphia Escape Its Fiscal Crisis with Another Tax Increase?* Business Review-Federal Reserve Bank of Philadelphia, Sep/Oct 1992.

Loveman, Charles E., Jr., and Timothy Sales. *Taxes and Fees in Los Angeles: A Survey of Competitor Cities*. Report to the City of Los Angeles. Los Angeles: Landmark Partners, January 1997.

Luce Thomas. *Local Taxes, Public Services, and the Intra-metropolitan Location of Firms and Households*. Public Finance Quarterly 22:2, April 1994, pages 139-167

McMahon, Edmund J. *What New York Has Gained from Tax Cuts*. Civic Report No. 20. New York: Manhattan Institute for Policy Research, 2001.

MBIA MuniServices Company, et al. *Evaluation of Alternatives to the City's Gross Receipts Business Tax*. Report to the City of Los Angeles. January 14, 2004.

Phillips, Joseph M. and Ernest Goss. *The Effect of State and Local Taxes on Economic Development: A Meta-Analysis*. Southern Economic Journal (October 1995) 62:2, pages 320-333.

Reardon, Elaine. *Taxes and Fees in Los Angeles: A Comparison across Residents and Businesses.* Report to the City of Los Angeles. Santa Monica: Milken Institute, January 1997.

San Francisco Chamber of Commerce. *The Impact of the Payroll Tax in San Francisco*. June 2001.

Wasylenko, Michael. *Taxation and Economic Development: The State of the Economic Literature*. New England Economic Review March/April 1997, pages 37-52.

DATA SOURCES

LOCAL AND REGIONAL DATA

Demographics and Population

California Department of Finance, January 1 population estimates, 1971-1989.

U.S. Census Bureau, decennial census and annual population estimates, 1970-2002.

Employment

California Employment Development Department, Labor Market Information Division

Southern California Association of Governments (SCAG), RTP 2004

U.S. Census Bureau, Economic Censuses, 1967-1997

FBI Index Crime Levels

U.S. Department of Justice, Federal Bureau of Investigation, Bureau of Justice Statistics

Forecasts

City of Los Angeles, Budget and Revenue Outlook, FY 2004-05.

Los Angeles Economic Development Corporation (LAEDC) Forecast for Los Angeles County, 2003.

Southern California Association of Governments (SCAG), Regional Transportation Plan 2004 Forecasts, 2004.

UCLA Anderson Forecast for Los Angeles County, September 2004.

Growth Constraints

City of Los Angeles General Plan, Adopted Aug. 8, 2001.

Income

U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System

Input-Output Data and Model

Minnesota IMPLAN Group

Municipal Staffing

City of Los Angeles, City Administrative Office

U.S. Census Bureau, Census of Governments

Real Estate Market Vacancy and Absorption Rates

CB Richard Ellis

Marcus & Millichap

Revenue Data

City of Los Angeles, City Administrative Office, Budgets and Preliminary Financial Reports, FY 1970-71 through FY 2004-05.

California State Controller's Office, Annual Cities Report, FY 1997-98 through FY 2001-02.

Taxpayer Data

City of Los Angeles, Office of Finance, Tax and Permit System, Tax Year 2003 data as of May 2004.

County of Los Angeles, Urban Research Division, geo-coding of City of Los Angeles taxpayer data.

MBIA MuniServices Company, GRIP database

Tax Rates

Municipal Codes of the various jurisdictions

Philadelphia: Professor Robert P. Inman

NATIONAL DATA

Average Hourly Earnings, Consumer Price Index, Employment, Producer Price Index, Payroll, Unemployment

U.S. Bureau of Labor Statistics

Business Expenses

U.S. Bureau of the Census, Economic Census 1997

Cost of Goods Sold, Bad Debts, Cash/Accrual Basis Filing

U.S. Internal Revenue Service, Statistics of Income

Defense Spending, GDP

U.S. Department of Commerce, Bureau of Economic Analysis

FBI Index Crime Levels

U.S. Department of Justice, Federal Bureau of Investigation, Bureau of Justice Statistics

Forecasts

Congressional Budget Office

U.S. Bureau of Labor Statistics

Interest Rates

Board of Governors of the Federal Reserve System

Population

U.S. Department of Commerce, Census Bureau