



DEVELOPMENT
FINANCIAL
ECONOMIC
RESEARCH
CONSULTING
SERVICES

SOUTHWEST LOOP 202 FISCAL,
ECONOMIC AND SOCIAL IMPACTS TO
THE CITY OF PHOENIX, ARIZONA

December 2004

TABLE OF CONTENTS

Starts On Or After Page

EXECUTIVE SUMMARY

- ✓ Table 1: Summary of Impacts
- ✓ Chart A: Graphical Depiction of Findings

1.0 STUDY PURPOSE AND APPROACH 1

- 1.1 General Background, Study Area and Proposed Alternative Alignments..... 1
- 1.2 Methodology..... 1

2.0 LAND USE AND VALUATION ASSUMPTIONS AND PROJECTIONS..... 2

- 2.1 Land Use Projections 2
- 2.2 Development Valuation 4
- 2.3 Development Phasing 5

3.0 FINANCIAL AND BENEFITS CALCULATIONS 6

- 3.1 Sales Tax Impacts..... 6
- 3.2 Permitting, Development and Impact Fees 8
- 3.3 Property Tax Impacts 9
- 3.4 Economic Impacts 9

4.0 SOCIAL IMPACTS 10

- 4.1 Current Area Conditions..... 10
- 4.2 Impacts of Planned Alignment..... 11
- 4.3 Impacts of Alternative Alignments 14

5.0 SUMMARY OF FINDINGS 16

- 5.1 Fiscal, Economic and Social Impacts..... 16
- 5.2 Social Impacts..... 17
- 5.3 Report Conclusions 18

6.0 APPENDIX..... 19

- ✓ 59th Avenue Land Use Map At Area Build-Out
- ✓ 75th Avenue Land Use Map At Area Build-Out
- ✓ 97th Avenue Land Use Map At Area Build-Out
- ✓ Table 2A: Residential Assumptions
- ✓ Table 2B: Commercial & Industrial Assumptions
- ✓ Table 3A: Sales Tax Impacts For 75th Alignment Compared With 59th
- ✓ Table 3B: Sales Tax Impacts For 97th Alignment Compared With 59th
- ✓ Table 4: Property Tax Impacts
- ✓ Table 5: Economic Impacts



RICHARD CRYSTAL
PRINCIPAL

CRYSTAL & COMPANY
7146 VIA DE ALEGRIA
SCOTTSDALE, ARIZONA 85258-3823
(480) 998-2790
(480) 998-7017 FAX

DEVELOPMENT
FINANCIAL
ECONOMIC
RESEARCH
CONSULTING
SERVICES

EXECUTIVE SUMMARY MEMORANDUM

TO: Mr. Roberto Franco, Director
Phoenix Community & Economic Development Department

FROM: Richard Crystal, Principal
©Crystal & Company

Rick Brammer, Partner
Applied Economics

DATE: December 7, 2004

SUBJECT: Fiscal, Economic and Social Impacts of Alternative Southwest Loop 202 Freeway Alignments

The purpose of this memorandum is to present the fiscal, employment and social impacts to the City of Phoenix for the long-planned, north/south South Mountain Loop freeway alignment along 59th Avenue when compared with two alternative alignments along 75th and 97th Avenues. This memo summarizes research findings. Also refer to a more detailed companion report that documents the study approach as well as conveys findings.

METHODOLOGY

The research approach entailed the generation of projected build-out acreage by type for each alignment alternative for the study area that runs west from 43rd avenue to 107th and south from I-10 to the city's southern border and the bordering portion of the Gila River Community (GRIC). Build out acreage by type were generated from a detailed review of study area land ownership, current development plans, zoning and real estate market data. Net build-out acreage by type of land use was generated for the 59th Avenue alignment compared with (1) the 75th Avenue alignment alternative and (2) the 97th Avenue alternative. The fiscal and economic impacts were determined from net acreage by land use using a computer model. Information in the model included: (1) net land uses by type in the study area and the probable improvements to be made by build-out; (2) the projection of property valuations and revenue streams based on reasonable industry standards; and, (3) the application of property and sales tax rates that would be imposed by the City of Phoenix. The cost (capital and operations & maintenance) of providing required services by the City of Phoenix were not projected in this study. The social impacts were determined by analyzing the socio-economic characteristics of residents in areas impacted by alternative freeway alignments in light of the implications the (1) 59th Avenue alignment and (2) alternative alignments would have on the social condition of affected residents in the city. All assumptions are subject to change and refinement over time.

TAX AND EMPLOYMENT ASSUMPTIONS

The following tax and employment assumptions were used:

- **Sales Taxes** - The City of Phoenix sales tax of 1.8% or 1.9% on gross rental revenues, 2.7% on power consumption, 1.8% on retail sales and 1.8% on construction materials was applied. Detailed assumptions and estimates of construction costs, power consumption, residential and multi-family leasing revenues

and retail sales are contained in Sections 2.0 and 3.0 of the companion full report. The sales tax on construction materials is a one-time, non-recurring fee, while benefits derived from commercial leasing revenues, retail sales and power consumption are continual or recurring annually. State shared sales tax revenues to Phoenix were estimated by calculating the relevant statutory distribution share (by sales tax class) and then applying this to the 25% shared with cities and towns per statute and then applying this to the city's share of state population in the 2000 census (25.7%).

- **Property Taxes** - Arizona imposes a property tax on both real and personal property. Detailed assumptions and estimates of valuation levels (construction and land costs) are presented in Section 2.2 of the full report. Calculations were then made by multiplying the total valuation (aka market valuation) by 80% to estimate the full cash value and then by 95% to estimate the limited value. The limited value was then multiplied by the applicable assessment ratio to establish the assessed valuation level. The city's property tax rate of \$1.82 per \$100 of assessed value was then applied to estimate recurring property tax proceeds.
- **Employment Generation** – Direct employment was projected by applying accepted standards of employees required per building square foot. The standards used ranged from 600 building square feet per employee for retail, 350 for office, 1,000 for warehousing/distribution and 500 for general industrial. Standards were established using a weighted average when uses warranted. Direct and indirect construction employment was also calculated.

REPORT FINDINGS: LAND USE, FISCAL & ECONOMIC IMPACTS

Presented on Table 1 (Summary of Findings) and Chart A (Graphical Depiction of Findings) attached, the 75th Avenue alignment is constructed it is anticipated to result in the following net land use and fiscal implications to the city when compared with the 59th Avenue alternative (in constant 2004 dollars):

- ✓ An increase of 1,376 single family and townhome/condominium units, a loss of 1,810 apartments and a loss of 5,242,103 in retail, industrial and office building square footage.
- ✓ At build-out of the study area, these land uses will result in a net loss of \$16.10 million in annually recurring sales, property and state shared revenues, a loss of \$3.08 million in non-recurring sales tax and state shared revenues, a loss of \$86.9 million in city assessed valuation, and a loss of 10,242 in direct employment. These fiscal and economic consequences are direct in nature and the indirect implications of further losses from multiplier effects have not been estimated. The loss of city assessed valuation ultimately affects its future capacity to issue and retire bonded debt.
- ✓ A loss of 242 in direct and indirect construction employment.

Also presented on Table 1 (Summary of Findings) and Chart A (Graphical Depiction of Findings) attached, if the 97th Avenue alignment is constructed it is anticipated to result in the following net land use and fiscal implications to the city when compared with the 59th Avenue alternative (in constant 2004 dollars):

- ✓ An increase of 1,921 single family and townhome/condominium units, a loss of 1,003 apartments and a loss of 4,585,750 in retail, industrial and office building square footage.

- ✓ At build-out of the study area, these land uses will result in a net loss of \$14.35 million in annually recurring sales, property and state shared revenues, a loss of \$1.42 million in non-recurring sales tax and state shared revenues, a loss of \$58.8 million in city assessed valuation, and a loss of 8,756 in direct employment. These fiscal consequences are direct in nature and the indirect implications of further losses from multiplier effects have not been estimated. The recurring fiscal losses represent a reduction of 18% of the entire 59th avenue alignment scenario when built-out, and 10% of total projected employment.
- ✓ A loss of 144 in direct and indirect construction employment.

REPORT FINDINGS: SOCIAL IMPACTS

Several Urban Villages in Phoenix will be affected by the construction of the Southwest Loop 202 as follows: (1) impacted residents in the study area who reside in the Laveen and Estrella Villages; and, (2) affected citizens, who reside in portions of the Central City and South Mountain Urban Villages. These regions are generally quite distressed as evidenced by the information contained on the following table.

INDICATORS OF AREA DISTRESS	The Regional Standards		Study Area Residents		Impacted Urban Villages		Other Cities	
	Maricopa County	City of Phoenix	Laveen Village	Estrella Village	South Mountain Village	Central City Village	City of Tolleson	City of Avondale
Total Population	3,072,149	1,321,045	8,981	43,351	46,699	66,495	4,974	35,883
% of Population In Poverty	11.70%	15.60%	19.20%	32.60%	26.10%	44.70%	13.70%	13.80%
% of Families In Poverty	8.00%	11.50%	15.40%	28.00%	22.00%	39.40%	9.90%	10.30%
% Single Females In Poverty With Children	2.80%	9.90%	11.60%	24.70%	18.30%	15.50%	31.80%	n/a
% Minority Population	34.00%	45.00%	63.00%	79.00%	83.00%	84.20%	81.00%	55.00%
% Hispanic Population	24.80%	34.10%	56.00%	71.00%	62.00%	73.00%	78.00%	46.20%
Unemployment Rate	4.70%	5.70%	4.80%	10.30%	8.60%	14.70%	2.70%	4.30%
Persons Over 25 With No H.S. Diploma	17.50%	22.50%	42.00%	57.00%	46.00%	59.00%	45.50%	29.00%
Average Household Size	2.67	2.79	3.49	3.87	3.54	3.31	3.47	3.36
Average Family Size	3.32	3.39	3.99	4.46	4.24	4.38	3.83	3.66
Average Household Income	\$59,655	\$55,408	\$52,441	\$34,247	\$40,731	\$28,401	\$46,100	n/a
% Overcrowded Housing Units	8.50%	12.50%	16.00%	36.00%	25.00%	34.00%	20.00%	13.00%
Average Home Value	\$166,098	\$146,525	\$124,443	\$74,808	\$96,034	\$77,214	n/a	n/a
Average Gross Rent/Month	\$689	\$643	\$423	\$502	\$569	\$410	n/a	n/a

Source: 2000 Census.

About 65% of the population was of Hispanic origin. Rates of poverty were at least twice that evident for Maricopa County, while the incidence of single females in poverty with children, persons over 25 with no High School diploma and overcrowded housing units tended to be at least 3 times the county average if not more. The average income in all Villages but Laveen ranged from 48% to 68% of the county average, while average gross rent and home values followed suit. While sustained growth or redevelopment has occurred in Laveen, the

Central City and South Mountain since 2000, these regions all retain their ethnically diverse flavor and include some of the most modestly priced dwellings in the city's corporate limits.

The Loop 202 freeway, as it is planned along the 59th Avenue alignment, is anticipated to result in the following implications for portions of the Estrella, Laveen, Central City and South Mountain Villages areas:

- ✓ It will create thousands of new jobs that would be highly accessible to persons in poverty or 'at risk'.
- ✓ The jobs created will expand the range of employment opportunities by virtue of the wide array of planned non-residential development. These jobs would create wealth, and will have a positive impact on both unemployment and poverty rates.
- ✓ The current planned land use also includes a new commercial node north of the Salt River along the Loop 202. This northern employment node would create additional jobs in the area, and provide needed services to businesses in adjacent industrial areas and directly benefit the residents of Estrella Village, the most distressed region in the study area.
- ✓ This synergy created by the combination of industrial and commercial development in the area would help provide the impetus for additional multifamily housing. Planned duplex, townhouse and apartment developments along the Salt River will also result in improved housing quality, mitigate overcrowding and foster affordability for workers in the area.
- ✓ The urban core that would be created along the freeway between Baseline Road and Dobbins Road would emphasize density, urban features and pedestrian access to further support the core concept. This could have a positive impact on the population in the area as it creates a stronger community, and provides quality opportunities for work and play.
- ✓ Most of the relocation required for the 59th Avenue alignment will be businesses in an eroding industrial area near the north end of the proposed freeway. These businesses will likely benefit from the relocation and the city from the redevelopment and revitalization implications to Estrella Village.

The social implications of both the 97th and 75th freeway alignments compared to the existing 59th alignment are highlighted below:

- ✓ As result of the freeway being shifted westward to either the 75th or 97th Avenue alignments, there will likely be a reduction in the number of jobs accessible to persons residing in the area of Phoenix south of McDowell Road between 7th Avenue and the planned 59th Avenue alignment. About 34 percent of these residents lived in poverty in 2000, which is nearly triple the Maricopa County average of about 12 percent. This level of poverty severely limits their ability to travel to employment, thereby reducing the benefit of jobs that may be created in alternative corridors further to the west. In addition, the reduction of commercial development in the 59th Avenue corridor will likely be off-set by an increase in single family development, while reducing demand for affordable, multifamily projects.
- ✓ The reduction in accessible jobs is fueled by a net decline in the potential employment levels (8,750-10,250 employment loss), and an increase in the distance to the jobs that likely will be created. The overall net decrease in the future employment in the area will be driven by the fact that most of what would be potential sites for commercial development along the alternative corridors is already developed and/or designated for other purposes.
- ✓ Alternative freeway alignments are also pushed west to where they do not cross Baseline Road, the key east-west arterial in the area, until around 75th Avenue. This reduces the potential market capture from emerging residential development south of the Salt River, and hence the demand for commercial space by retailers and other future population-serving tenants.

- ✓ Both the proposed 75th Avenue and 97th Avenue alignments would cause disruption in new subdivisions containing about 900 units as the freeway continues northwest up the border with the Gila River Indian Community. North of the Salt River, the 75th Avenue corridor would impact new subdivisions containing about 500 new homes. Depending on the exact route chosen, the 97th Avenue corridor would impact subdivisions containing between 600 and 900 new homes. Both of the alternative alignments pass through land that is actively developing at present. Therefore, the number of homes and families that will be impacted is continuing to increase daily. Significant delays in determination of the final alignment could result in significantly more new homes being impacted.

REPORT CONCLUSIONS

The findings in this report clearly indicate that the long planned, 59th Avenue alignment offers the most significant land-use, fiscal, employment and social benefits to the City of Phoenix.

Please contact me for questions, comments or further information associated with this study at 480.998.2790. Thank you.

Attachments

- (1) Table 1 (Summary of Findings)
- (2) Chart A (Graphical Depiction of Findings)

Cc:

Mr. Washington, City of Phoenix Managers Office
Mr. Nordvold, City of Phoenix Intergovernmental Programs
Mr. Katsenes, City of Phoenix Community & Economic Development Dept.
Ms. Joy Mee, City of Phoenix Planning Dept.
Ms. Bridget Schwartz-Manock, City of Phoenix Intergovernmental Programs
Mr. Kahland, City of Phoenix Community & Economic Development Dept.
File

Run Date:
4-Dec-04



TABLE 1.
SOUTHWEST LOOP 202
FISCAL & SOCIAL IMPACT ANALYSIS
OVERVIEW AT AREA BUILD-OUT
(In Constant 2004 Dollars)

POSITIVE FIGURES INDICATE A GAIN, WHILE FIGURES IN (PARENTHESIS) DENOTE A LOSS

	Single Family (Units)	Multi-Family (Units)	Strip Retail Non-Anchored (Bldg. Sq. Feet)	Neighb. Retail Grocery Anchor (Bldg. Sq. Feet)	Community Retail Non-Groc. Anchor (Bldg. Sq. Feet)	Power Center (Bldg. Sq. Feet)	Light Industrial (Bldg. Sq. Feet)	Commerce Park - Industr. (Bldg. Sq. Feet)	Business Park Office or R&D (Bldg. Sq. Feet)
PROJECTED STUDY AREA LAND USES AT BUILD-OUT									
Projected 59th Ave. Alignment Development Activity	38,878	12,287	647,936	2,010,271	1,972,258	5,057,950	38,285,910	5,784,004	4,116,675
Projected 75th Ave. Alignment Development Activity	40,417	10,314	668,438	2,464,469	1,560,556	2,272,750	38,233,298	5,400,720	2,032,670
Projected 97th Ave. Alignment Development Activity	40,962	11,121	822,038	2,409,748	1,735,006	2,073,950	36,365,303	7,933,139	1,950,070
Net of 75th Compared to 59th Ave. Alignment	1,539	(1,973)	20,502	454,198	(411,702)	(2,785,200)	(52,612)	(383,284)	(2,084,005)
Net of 97th Compared to 59th Ave. Alignment	2,084	(1,166)	174,102	399,477	(237,252)	(2,984,000)	(1,920,607)	2,149,135	(2,166,605)

PROJECT BENEFITS TO PHOENIX AT BUILD-OUT	Single Family	Multi-Family	Strip Retail Non-Anchored	Neighb. Retail Grocery Anchor	Community Retail Non-Groc. Anchor	Power Center	Light Industrial	Commerce Park - Industr.	Business Park Office or R&D	TOTAL
Net of 75th Compared to 59th Ave. Alignment										
Total Recurring Sales Tax Receipts/Annum 1/	\$45,771	(\$333,662)	\$97,245	\$2,175,089	(\$2,089,645)	(\$13,005,316)	(\$5,202)	(\$132,532)	(\$1,272,595)	(\$14,520,846)
Total One-Time Sales Tax Receipts 1/	\$2,819,993	(\$1,522,527)	\$17,462	\$386,859	(\$325,616)	(\$2,202,823)	(\$35,209)	(\$287,983)	(\$1,927,180)	(\$3,077,025)
Recurring Property Tax Receipts/Annum	\$410,987	(\$217,079)	\$10,988	\$172,605	(\$132,305)	(\$793,380)	(\$14,041)	(\$143,763)	(\$876,309)	(\$1,582,295)
Total Recurring Sales & Property Tax Receipts/Annum	\$456,758	(\$550,741)	\$108,233	\$2,347,695	(\$2,221,949)	(\$13,798,696)	(\$19,243)	(\$276,295)	(\$2,148,904)	(\$16,103,142)
Job Generation (direct, non-construction)	0	0	34	757	(686)	(4,642)	(70)	(613)	(5,022)	(10,242)
Job Generation (direct & indirect, construction)	156	(84)	1	28	(24)	(160)	(3)	(21)	(140)	(246)
Assessed Valuation Added	\$22,581,728	(\$11,927,440)	\$603,733	\$9,483,816	(\$7,269,489)	(\$43,592,300)	(\$771,486)	(\$7,899,039)	(\$48,148,835)	(\$86,939,313)
Net of 97th Compared to 59th Ave. Alignment										
Total Recurring Sales Tax Receipts/Annum 1/	\$63,899	(\$183,645)	\$825,803	\$1,913,038	(\$1,204,202)	(\$13,933,600)	(\$189,886)	\$743,129	(\$1,323,035)	(\$13,288,499)
Total One-Time Sales Tax Benefits 1/	\$3,246,611	(\$933,365)	\$148,290	\$340,251	(\$187,643)	(\$2,360,055)	(\$1,285,320)	\$1,614,770	(\$2,003,564)	(\$1,420,025)
Recurring Property Tax Receipts/Annum	\$473,163	(\$133,361)	\$67,449	\$152,129	(\$76,524)	(\$857,119)	(\$537,978)	\$729,639	(\$888,259)	(\$1,070,862)
Total Recurring Sales & Property Tax Receipts/Annum	\$537,062	(\$317,007)	\$893,252	\$2,065,168	(\$1,280,726)	(\$14,790,719)	(\$727,864)	\$1,472,768	(\$2,211,294)	(\$14,359,361)
Job Generation (direct, non-construction)	0	0	290	666	(395)	(4,973)	(2,561)	3,439	(5,221)	(8,756)
Job Generation (direct & indirect, construction)	179	(52)	11	25	(14)	(172)	(93)	117	(146)	(144)
Assessed Valuation Added	\$25,997,966	(\$7,327,540)	\$3,705,992	\$8,358,759	(\$4,204,628)	(\$47,094,445)	(\$29,559,250)	\$40,090,035	(\$48,805,457)	(\$58,838,568)
Total For 59th Ave. Alignment										
Total Recurring Sales Tax Receipts/Annum	\$1,437,483	\$1,465,531	\$3,073,299	\$9,626,900	\$10,010,441	\$23,617,779	\$3,785,243	\$1,999,996	\$2,513,843	\$57,530,514
Total One-Time Sales Tax Benefits	\$67,566,475	\$11,155,041	\$551,874	\$1,712,232	\$1,559,865	\$4,000,348	\$25,621,915	\$4,345,857	\$3,806,888	\$120,320,496
Recurring Property Tax Receipts/Annum	\$9,847,176	\$1,604,595	\$250,833	\$779,432	\$630,538	\$1,513,000	\$10,723,980	\$1,971,208	\$1,682,201	\$29,002,962
Total Recurring Sales & Property Tax Receipts/Annum	\$11,284,659	\$3,070,126	\$3,324,132	\$10,406,332	\$10,640,979	\$25,130,779	\$14,509,222	\$3,971,203	\$4,196,044	\$86,533,477
Job Generation (direct, non-construction)	0	0	1,080	3,350	3,287	8,430	51,048	9,254	9,920	86,369
Assessed Valuation Added	\$541,053,652	\$88,164,560	\$13,782,022	\$42,825,926	\$34,644,952	\$83,131,853	\$589,229,645	\$108,308,118	\$92,428,633	\$1,593,569,362

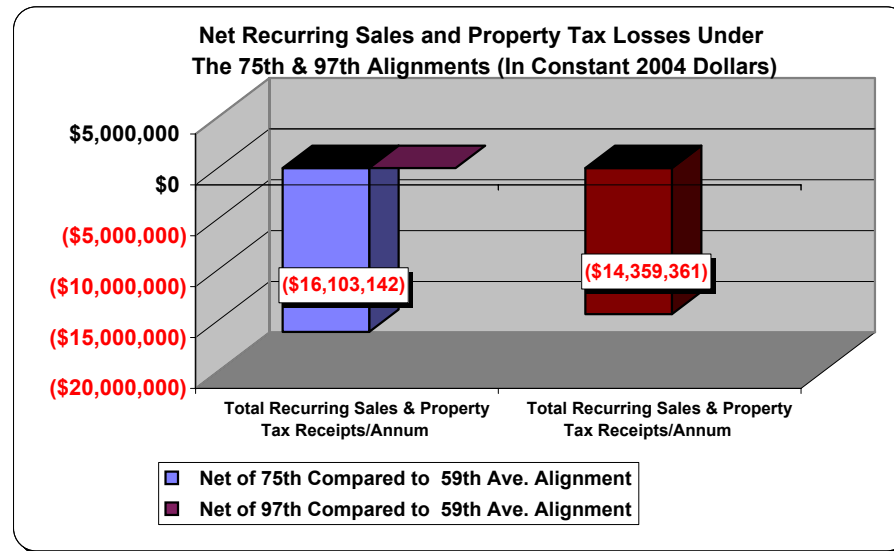
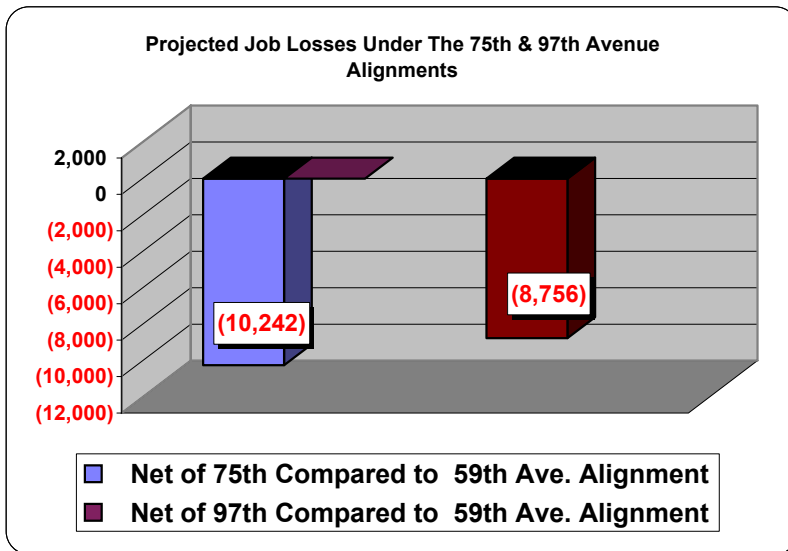
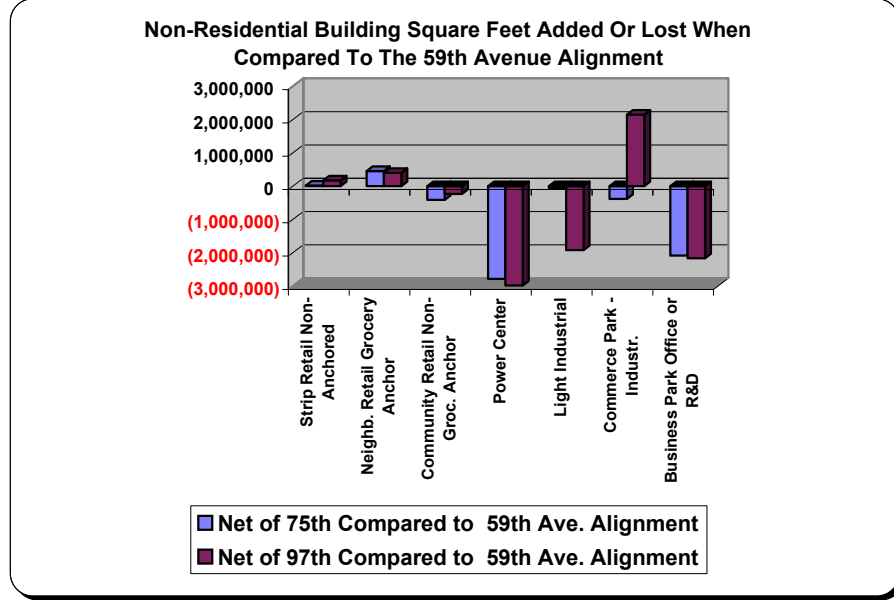
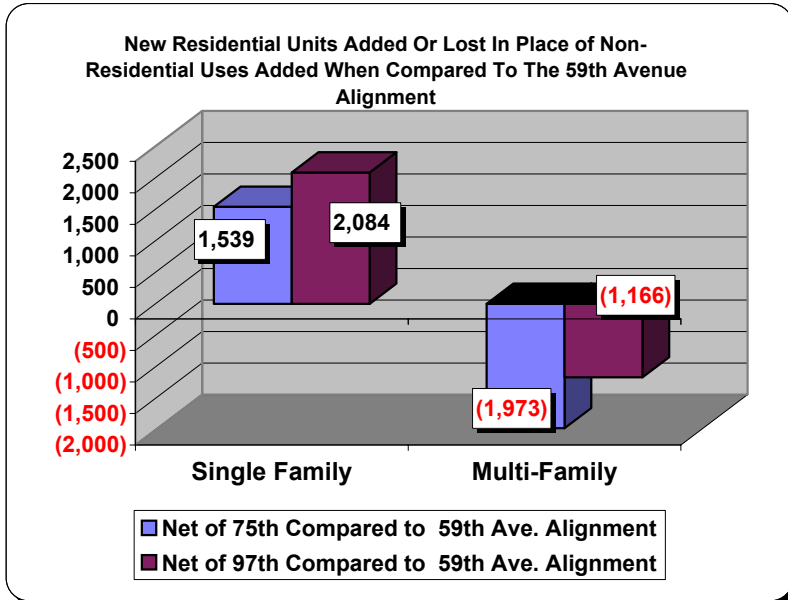
1/ Includes State shared sales tax revenues.

Run Date:
4-Dec-04



CHART A.
SOUTHWEST LOOP 202
FISCAL & SOCIAL IMPACT ANALYSIS
SUMMARY OF FINDINGS

POSITIVE FIGURES INDICATE A GAIN, WHILE FIGURES IN (PARENTHESIS) DENOTE A LOSS



1.0 STUDY PURPOSE AND APPROACH

1.1 General Background, Study Area and Proposed Alternative Alignments

This report was prepared by ©Crystal & Company and Applied Economics. The purpose of this report is to present selected, direct environmental impacts associated with land use, development, fiscal, employment and social effects to the City of Phoenix for the long-planned, north/south South Mountain Loop freeway alignment along 59th Avenue when compared with alternative alignments along 75th and 97th Avenues. The research approach entailed the generation of projected build-out acreage by land-use for each alignment alternative for the study area that runs west from 43rd avenue to 107th and south from I-10 to the city's southern border and the bordering portion of the Gila River Community (GRC).

This report highlights and documents the findings of the land use analysis and impact model developed. Section 2 of this report presents the findings and approach undertaken to generate the projected acreage by land use at build-out for the freeway alignment comparisons studied as well as the residential units and building square feet projected. Section 3 highlights the assumptions used in generating revenue streams and valuation by land-use, as well as the method employed to calculate the sales tax, property tax and employment impacts in the model. Section 4 assesses the social impacts of alternative freeway alignments, while Section 5 highlights the fiscal, economic and social impacts to the City of Phoenix from varying alignments.

1.2 Methodology

The net fiscal and economic effects from net acreage by land use were determined using a computer model. Build-out acreage by type were generated from a detailed review of study area land ownership, current development plans, zoning and real estate market data. Net build-out acreage by type of land use was generated for the 59th Avenue alignment compared with (1) the 75th alignment alternative and (2) the 97th alternative. These net acreages by type of use were then translated into direct, fiscal, employment and social effects to the City of Phoenix. Information in the model included: (1) net land uses by type in the study area and the probable improvements to be made by build-out; (2) the projection of property valuations and revenue streams based on reasonable industry standards; and, (3) the application of tax rates that would be imposed by the City of Phoenix. The cost (capital and operations & maintenance) of providing required services by the City of Phoenix were not projected in this study.

The identification and quantification of the net fiscal, economic and social effects for the two alignment comparisons can be useful in understanding the relevant costs and benefits that would accrue to Phoenix at the build-out of the study area. This analysis projected the following direct benefits to the City of Phoenix in current dollars at study area build-out:

- ✓ Net recurring (retail sales, leasing revenues, state shared revenues, power sales) and one-time sales tax proceeds (construction sales);
- ✓ Net recurring property tax proceeds;
- ✓ Net employment creation;
- ✓ Other fiscal and employment impacts to the city.



2.0 LAND USE AND VALUATION ASSUMPTIONS AND PROJECTIONS

2.1 Land Use Projections

The net change in acreage and associated dwelling units and commercial building square footage are presented below for the alignments studied, and depicted on the land use maps at build-out enclosed in the Appendix. The numbers in parenthesis represent a loss versus the 59th Avenue alignment alternative while positive numbers denote a gain.

STUDY AREA LAND USE BY ACREAGE AT BUILD-OUT

PROJECTED STUDY AREA LAND USE	59th Avenue Alignment Vs. 75th Avenue	59th Avenue Alignment Vs. 97th Avenue
Single Family .1-2 dwelling units per acre	105	(11)
Single Family 2.01-3.5 dwelling units per acre	353	136
Single Family 3.51-4.5 dwelling units per acre	131	114
Single Family 4.51-6.0 dwelling units per acre	(166)	95
Single Family 6.01 dwelling units per acre & Over	2	(5)
Residential S/F Subtotal	425	329
Multi-Family to 12 dwelling units per acre	(12)	(12)
Multi-Family 12 dwelling units per acre & Over	(137)	(90)
Residential M/F Subtotal	(149)	(102)
Strip Retail (Non-anchored)	5	21
Neighborhood Retail (Grocery Anchor)	52	46
Community Retail (Anchored, non-grocery)	(48)	(28)
Power Center	(202)	(225)
Retail Subtotal	(193)	(186)
Light Industrial	(3)	(147)
Commerce Park, industrial oriented	(42)	165
Industrial Subtotal	(45)	18
Business Park, Office or R&D oriented	(202)	(189)

Source: Applied Economics, September 2004.



**STUDY AREA DWELLING UNITS AND BUILDING
SQUARE FOOTAGE AT BUILD-OUT**

PROJECTED LAND USE	59th Avenue Alignment Vs. 75th Avenue	59th Avenue Alignment Vs. 97th Avenue
Single Family .1-2 du/ac (dwelling units)	100	(127)
Single Family 2.01-3.5 du/ac (dwelling units)	889	143
Single Family 3.51-4.5 du/ac (dwelling units)	880	852
Single Family 4.51-6.0 du/ac (dwelling units)	(453)	1,142
Single Family 6.01 du/ac & Over (dwelling units)	123	74
Residential S/F Subtotal (dwelling units)	1,539	2,084
Multi-Family to 12 du/ac (dwelling units)	(163)	(163)
Multi-Family 12 du/ac & Over (dwelling units)	(1,810)	(1,003)
Residential M/F Subtotal (dwelling units)	(1,973)	(1,166)
Strip Retail (Non-anchored) (gross bldg. square footage)	20,502	174,102
Neighborhood Retail (Grocery Anchor) (gross bldg. square footage)	454,198	399,477
Community Retail (Anchored, non-grocery) (gross bldg. square footage)	(411,702)	(237,252)
Power Center (gross bldg. square footage)	(2,785,200)	(2,984,000)
Retail Subtotal (gross bldg. square footage)	(2,722,202)	(2,647,673)
Light Industrial (gross bldg. square footage)	(52,612)	(1,920,607)
Commerce Park, industrial oriented (gross bldg. square footage)	(383,284)	2,149,135
Industrial Subtotal (gross bldg. square footage)	(435,896)	228,528
Business Park, office or R&D oriented (gross bldg. square footage)	(2,084,005)	(2,166,605)

Source: Applied Economics.

Baseline projections for the 59th Avenue alignment were derived from the Phoenix General Plan and actual development plans either filed or at some stage of construction. This basis provided the means to view both the reality of development as planned or actually occurring, along with the conceptual land uses expected and desired by the city for the Estrella and Laveen Villages.

Since the 59th Avenue freeway corridor is an existing part of the land use plan in the city of Phoenix, development plans filed also assumed that corridor, so specific land uses and configurations are based accordingly. There are, in fact, plans filed for nearly all vacant property as far south as Elliot Road. Therefore, the estimated development projections are felt to carry a high level of reasonableness and accuracy since they are largely based on actual development plans.

The land use projections for the alternative alignments along 75th and 97th Avenues mandated a divergence from current plans while attempting to maintain the underlying concepts regarding mixtures and intensities of land use. Each alternative incorporated a transfer of development intensity to that freeway corridor while decreasing development intensity in the planned 59th Avenue corridor, including the alteration of currently filed development plans. This impact is manifested by the change in land uses since a freeway attracts larger amounts of non-residential uses as well as by the intensity of development. The presence of the freeway would also tend to inflate land prices, thereby raising housing densities and non-residential floor area ratios.

Crystal & Company, Scottsdale, Arizona. 480.998.2790



Baseline projections for the 75th and 97th Avenue alternative alignments were also derived from development plans and the Phoenix General Plan with adjustments made to reflect a lack of an alignment on 59th Avenue. The expected land uses and intensity of development have accordingly been transferred to the alternate alignments. This provides an equivalent basis of origin while maintaining the conceptual aspects of the General Plan.

Land adjacent to the 75th and 97th Avenue alignments is often constricted by existing land uses and properties under development currently, or that will likely be under development prior to a selection of any alternative transportation scenario. The freeway can be expected to affect an increased level of non-residential development, and the Phoenix General Plan foresees a level of such development to serve the area. The restrictions posed along the alternative alignments and the large amount of non-residential demand expected, may result in a portion of such development being shifted to the Gila River Indian Community (GRIC) where adequate vacant land is available. This shift is made more likely by the freeway following the border with the GRIC north to Baseline Road.

Land uses and thus fiscal impacts are subject to refinement over time. Land use assumptions do not accommodate the prospective construction of the 1-10 reliever, and this is material since it would change future land uses.

2.2 Development Valuation

In order to develop estimates of the valuation for the various classes of improved real and personal property presumed to be within the study area, a number of assumptions were made concerning the cost of development in constant 2004 dollars. These assumptions are presented below and noted on Tables 2A (Residential Assumptions) and Table 2B (Commercial & Industrial Assumptions) and are conservative estimates.

- 1) Single family and multi-family (ownership condos or townhomes) residential was assumed to have the following values per unit based on development currently occurring within the study area derived from Meyers Associates for the 2nd Quarter of 2004. Land was assumed to represent 22% of total residential valuation levels.
 - ❑ Single family 1-2 du/ac\$245,000
 - ❑ Single family 2.01-3.5 du/ac\$207,500
 - ❑ Single family 3.51-4.5 du/ac\$166,000
 - ❑ Single family 4.51-6 du/ac\$167,500
 - ❑ Single family 6+ du/ac\$146,000
 - ❑ Multi-family to 12 du/ac.....\$130,000
- 2) Multi-family (12+ du/ac) rentals were assumed at \$75,000 per unit derived from relevant sales derived from 'The Metro Phoenix Multi-Family Sales Report' prepared by Colliers International for the 2nd Quarter of 2004. Land was assumed to comprise 20% of the total development cost.
- 3) Strip Retail and Neighborhood Retail (with a grocery anchor) were assumed at \$70 per building square foot for improvements (including TIs) and \$8/square foot for land. Information was derived from a CB Richard Ellis broker selling retail in southwest Phoenix.
- 4) Community Retail (Non Grocery Anchor) and Power Center uses were assumed at \$65 per building square foot for improvements (and TIs) and \$5.50/square foot



for land. Information was derived from a CB Richard Ellis broker selling retail in southwest Phoenix.

- 5) Light Industrial (50% manufacturing and 50% warehouse/distribution) was assumed at \$55 per building square foot for improvements (and TIs) and \$3.75/square foot for land. Information was derived from a CB Richard Ellis broker selling industrial in southwest Phoenix, a review of 2nd QTR '04 Grubb & Ellis listings in- and out- of the study area and conversations with a Phoenix architect.
- 6) Commerce Park Industrial (70% light industrial, 25% office and 5% retail) was assumed at \$61.75 per building square foot for improvements (and TIs) and \$6/square foot for land. Information was derived from a CB Richard Ellis broker selling commercial in southwest Phoenix, a review of 2nd QTR '04 Grubb & Ellis listings in- and out- of the study area and a review of major commercial brokerage activity in- and out- of the study area.
- 7) Business Park Office or Research & Development (10% light industrial, 10% retail and 80% office) was assumed at \$76.00 per building square foot for improvements (and TIs) and \$6.00/square foot for land. Information was derived from a CB Richard Ellis broker selling commercial in southwest Phoenix, a review of 2nd QTR '04 commercial brokerage market reports in- and out- of the study area.

2.3 Development Phasing

The timing of future development in the study area was not considered in this report. The fiscal, economic and social impacts outlined in this report are all based on the build-out of the study area, assumed to occur at some future date. A twenty year build-out is not unreasonable.



3.0 FINANCIAL AND BENEFITS CALCULATION

This section highlights and documents the results of the financial benefits calculations executed and refers to Tables 3A & 3B (Sales Tax Impacts), Table 4 (Property Tax Impacts) and Table 5 (Employment Impacts) in the Appendix.

3.1 Sales Tax Impacts

Tables 3A (Sales Tax Impacts for 75th Compared to 59th) and 3B (Sales Tax Impacts for 97th Compared to 59th) presents the results of calculations made concerning Sales Tax impacts to the City of Phoenix. The specific taxes covered in this table are highlighted below, all generally subject to the 1.8% city tax rate. These assumptions are subject to refinement.

- **Non-Recurring Construction Sales Tax** - Includes the estimated non-recurring taxes resulting from material costs associated with real property development and personal property machinery purchases. Construction costs are noted in detail in Section 2.2 of the report. Non-recurring sales tax proceeds were calculated by applying the relevant 1.8% rate to 65% of estimated construction costs in order to remove labor charges, which are not taxed in Arizona.

- **Recurring Multi-Family and Commercial Sales Tax Leasing Revenues** - Leasing revenues and vacancy rates were assumed for selected commercial (NNN) and multi-family uses and they were derived from a review of: (1) 2nd Quarter 2004 Grubb & Ellis commercial listings in Southwest Phoenix; (2) 2nd Quarter 2004 market information from Grubb & Ellis, CB Richard Ellis, Colliers International, Cushman & Wakefield, Trammel Crow Company and NAI Horizon for southwest Phoenix where feasible, and (3) information from the 'Dollars & Cents Of Shopping Centers, 2002' for the western United States prepared by the Urban Land Institute. The following rate levels were used in the study and are depicted on Tables 2A & 2B:
 - ❑ Multi-family residential – average of \$725/month per unit
 - ❑ Strip Commercial - \$17.50 (NNN)
 - ❑ Neighborhood Retail (Grocery Anchor) - \$20 (NNN)
 - ❑ Community Retail (Non-Grocery Anchor) - \$17.50 (NNN)
 - ❑ Power Center \$24 (NNN)
 - ❑ Light Industrial (50% warehousing/distribution, 50% general industrial /manufacturing) - \$5.04 (NNN)
 - ❑ Commerce Park – Industrial (25% office, 5% retail, 70% light industrial) - \$7.50 (NNN)
 - ❑ Business Park Office or R&D (10% light industrial, 80% office, 10% retail) - \$14 (NNN)

Assumptions were also made for the incidence of a given land use to be leased out. All retail were assumed to be 100% leased, with light industrial, commerce park and business park assumed at 60%, 80% and 80%, respectively. Calculations were then made by multiplying net building square footage by land use times the assumed incidence of tenancy for a given land use, times the



assumed leasing rate times the area vacancy rate to estimate gross leasing revenues. These figures were multiplied by the applicable Phoenix sales tax rate of 1.8 or 1.9% to generate recurring sales tax leasing proceeds.

- **Recurring Retail Sales Tax Revenues** – Noted on Table 3A & 3B, assumed levels of retail sales per building square foot were estimated based on standards derived from ‘Dollars & Cents Of Shopping Centers, 2002’ for the western United States prepared by the Urban Land Institute, as indicated below: *These estimates should be viewed as conservative.*
 - Strip Retail – Set at \$250 per building square.
 - Neighborhood Retail (Grocery Anchor) – Set at a rate of \$250 per building square foot. The City of Phoenix does not apply its sales tax rate of 1.8% on the direct sale of food. As a result, the western average of \$323 per square foot for neighborhood centers was deflated to accommodate no tax on food.
 - Community Retail (Non-Grocery Anchor) – Set at \$250 per building square foot based on a slight offset from the \$269 average for western community shopping centers to accommodate the sale of grocery and an understanding that department store sales generally range from the \$220 to \$260 level.
 - Power Centers – Set at \$239 per building square foot. Power centers are large and can range from 750,000 to 1,000,000 square feet. A power center can draw extensively in an urban area. The Urban Land Institute notes that power centers are a type of super community center that contain at least four category specific, off-price anchors of 20,000 square feet or more. Anchors typically emphasize consumer electronics, sporting goods, office supplies, home furnishings, home improvement, bulk foods, drugs, health and beauty aids, toys, etc. Accordingly, many of the aforementioned uses for the western US community shopping centers were used to establish the standard.
 - Light Industrial – no retail sales were assumed.
 - Commerce Park – Industrial – Approximately 5% of building square feet was assumed for retail uses at a level of \$240 per building square foot (restaurant uses).
 - Business Park Office or R&D – Approximately 10% of building square feet were assumed for retail uses at a level of \$240 per building square foot (restaurant uses).
- **Recurring Sales Tax Proceeds On Power Usage** – Noted on Table 2A & 2B, assumed levels of power sales per square foot were used to establish recurring city sales tax proceeds. Power usage per square foot were derived from discussion with Salt River Project, and generally ranged from \$.89 to \$2.00 per square foot based on the specific commercial use in question. Annual average power sales of \$1,2000 per single family or townhome unit and \$900 per multi-family unit were also used. Calculations were then made by multiplying net commercial building square footage or residential units times the applicable occupancy factor times the relevant power sales per square foot to estimate the total power sales volume. These figures were then multiplied by the city sales tax rate of 1.8% to estimate annually recurring receipts at build-out.



- **Recurring State-Shared Sales Tax Revenue Estimates** – The State of Arizona annually rebates a portion of the sales tax proceeds it collects to cities and towns. The state annually allocates 25% of the applicable distribution share to cities and towns based on population drawn from the latest Census ('00). Noted on Tables 2A & 2B, the distribution share was calculated as follows per sales tax class:

- State Retail Sales Tax Base – State sales tax collections on a 5.6% rate were multiplied by 40% (distribution share) by 25% to estimate the amount annually rebated at build-out.
- State Construction Sales Tax Base - State sales tax collections on a 5.6% rate were multiplied by 20% (distribution share) by 25% to estimate the amount annually rebated at build-out.
- State Leasing Sales Tax Base - State sales tax collections on a 3% rate were multiplied by 66% (distribution share) by 25% to estimate the amount annually rebated at build-out.
- State Power Sales Tax Base - State sales tax collections on a 5.6% rate were multiplied by 20% (distribution share) by 25% to estimate the amount annually rebated at build-out.

The aforementioned estimates were then multiplied by 25.7% (the city share of total state population from the '00 Census) to estimate state-shared revenues to Phoenix.

If the 75th Avenue alignment is constructed, it is anticipated to result in a net loss of \$14.5 million in recurring and \$3.08 million in non-recurring sales tax receipts to the city of Phoenix versus the planned 59th alignment, while construction of the 97th alignment would result in losses of \$13.3 in recurring and \$1.42 million in non-recurring sales tax receipts to the city.

While the sales tax impacts to the State of Arizona and Maricopa County have not been specifically calculated in this study, taxable sales revenues have been estimated. The volume of these revenues would generally suggest that state and county sales tax proceeds would generally follow a similar pattern to the City of Phoenix, subject to the application of different tax rates and relevant geographic jurisdiction.

Note on Sales Tax: The Arizona Department of Revenue indicated that state sales taxes are due from private business concerns (non-tribal) on tribal land (excluding tribal members).

3.2 Permitting, Development and Impact Fees

Building permit, plan check, development and impact fees will be collected by the City of Phoenix for the land uses itemized in the report. These fees are enterprise in nature and the fees charged are generally established to recover a pro-rata share of the services and capital expenses rendered to the development entity by the City of Phoenix. These fees have not been estimated in the study. It is reasonable to say that the fees to be collected by the city will be of consequence and absorb the requisite share of capital & O&M expenses funded by relevant impact fees, building safety services and plan/project reviews and water/sewer charges.



3.3 Property Tax Impacts

Arizona imposes a property tax on both real and personal property and estimates for the study area are presented on Table 4. Detailed assumptions and estimates of valuation levels (construction and land costs) are presented in Section 2.2. For light industrial, commerce and business park land uses, machinery was assumed to account for 20% of the total valuation levels for such uses. This is consistent with the ratio of personal property to real property for all commercial and industrial uses indicated in the State and County Abstract of the Assessment Roll in 2004 published by the Arizona Department of Revenue.

Calculations were then made by multiplying the total valuation (aka market valuation) by 80% to estimate the full cash value and then by 95% to estimate the limited value. The limited value was then multiplied by the applicable assessment ratio to establish the assessed valuation level. The city's property tax rate of \$1.82 per \$100 of assessed value was then applied to estimate recurring property tax proceeds.

If the 75th Avenue alignment is constructed, it is anticipated to result in a net loss of \$1.6 million in recurring property tax receipts and \$87 million in assessed valuation to the city of Phoenix versus the planned 59th alignment, while construction of the 97th alignment would result in losses of \$1.07 million in recurring property tax receipts to the city and \$59 million in assessed valuation at build-out.

While property tax impacts for other relevant ad-valorem taxing jurisdictions have not been calculated, the assessed valuation levels projected suggests that property tax receipts for them would generally follow the same pattern evident for the City of Phoenix, subject to their specific geographic jurisdiction and applicable tax rates.

Note on Property Tax: Research was also conducted as to whether Tribal land leased to a private concern (non-tribal owner) is required to pay property taxes (not to local governments). The answer is no on land value and maybe on improvements. Recent and previous court action is apparently instructive on this subject to attain a desired result.

3.4 Employment Impacts

Depicted on Table 5, employment at build-out was projected for each land use. The standards used ranged from 600 building square feet per employee for retail, 350 for office, 1,000 for warehousing/distribution and 500 for general industrial. Standards were established using a weighted average when uses warranted. Calculations entailed dividing the net building square foot to be developed by the estimated employees required per land use. If the 75th Avenue alignment is constructed, Phoenix is projected to lose 10,242 in direct employment (at build-out) compared with 59th Avenue, while lose 8,756 in direct employment under the 97th Avenue alignment scenario. Further indirect multiplier affects are anticipated, but have not been projected in this study.

Assuming a 20-year term for build-out, it is estimated that Phoenix will lose 246 direct, indirect and induced employment from construction related activities if the 75th alignment is built compared to the planned 59th alignment, and 144 under the 97th alignment scenario.



4.0 SOCIAL IMPACTS

This section of the report addresses some of the potential social impacts of re-aligning the north-south portion of the planned Loop-202 through southwest Phoenix. It begins by describing existing economic and demographic conditions in the study area. After describing existing conditions, the focus is on the type of development planned along and around the proposed Loop-202 freeway, and its potential impact on the social condition of the population in the impacted area. Finally, the potential impacts of changing the alignment to either the 75th or 97th Avenue alignments are presented.

4.1 Current Area Conditions

Several Urban Villages in Phoenix will be affected by the construction of the Southwest Loop 202 as follows: (1) impacted residents in the study area who reside in the Laveen and Estrella Villages; and, (2) affected citizens, who reside in portions of the Central City and South Mountain Urban Villages. These regions are generally quite distressed as evidenced by the information contained on the following table.

INDICATORS OF AREA DISTRESS	The Regional Standards		Study Area Residents		Impacted Urban Villages		Other Cities	
	Maricopa County	City of Phoenix	Laveen Village	Estrella Village	South Mountain Village	Central City Village	City of Tolleson	City of Avondale
Total Population	3,072,149	1,321,045	8,981	43,351	46,699	66,495	4,974	35,883
% of Population In Poverty	11.70%	15.60%	19.20%	32.60%	26.10%	44.70%	13.70%	13.80%
% of Families In Poverty	8.00%	11.50%	15.40%	28.00%	22.00%	39.40%	9.90%	10.30%
% Single Females In Poverty With Children	2.80%	9.90%	11.60%	24.70%	18.30%	15.50%	31.80%	n/a
% Minority Population	34.00%	45.00%	63.00%	79.00%	83.00%	84.20%	81.00%	55.00%
% Hispanic Population	24.80%	34.10%	56.00%	71.00%	62.00%	73.00%	78.00%	46.20%
Unemployment Rate	4.70%	5.70%	4.80%	10.30%	8.60%	14.70%	2.70%	4.30%
Persons Over 25 With No H.S. Diploma	17.50%	22.50%	42.00%	57.00%	46.00%	59.00%	45.50%	29.00%
Average Household Size	2.67	2.79	3.49	3.87	3.54	3.31	3.47	3.36
Average Family Size	3.32	3.39	3.99	4.46	4.24	4.38	3.83	3.66
Average Household Income	\$59,655	\$55,408	\$52,441	\$34,247	\$40,731	\$28,401	\$46,100	n/a
% Overcrowded Housing Units	8.50%	12.50%	16.00%	36.00%	25.00%	34.00%	20.00%	13.00%
Average Home Value	\$166,098	\$146,525	\$124,443	\$74,808	\$96,034	\$77,214	n/a	n/a
Average Gross Rent/Month	\$689	\$643	\$423	\$502	\$569	\$410	n/a	n/a

Source: 2000 Census.

According to the 2000 Census, about 65% of the population is of Hispanic origin. Rates of poverty were at least twice that evident for Maricopa County, while the incidence of single females in poverty with children, persons over 25 with no high school diploma and overcrowded housing units tended to be at least 3 times the county average if not more. The average income in all Villages but Laveen ranged from 48% to 68% of the

Crystal & Company, Scottsdale, Arizona. 480.998.2790



county average, with average gross rent and home values following suit. While sustained growth or redevelopment has occurred in Laveen, the Central City and South Mountain since 2000, these regions all retain their ethnically diverse flavor and often include some of the most affordably priced housing stock in the city's corporate limits.

The portion of the City of Phoenix that will be impacted by the construction of the Loop-202 freeway between Elliot Road and Interstate 10 is an area of diversity and distress, which is beginning a long period of metamorphosis. There was relatively little development between this group, and the group of farm and ranchette owners who inhabited the Laveen area. This gap persisted for decades, while the growth of Phoenix was directed northward, and around the south side of South Mountain through Awatukee.

The pattern of ethnic diversity and distress of the population in the area is illustrated on the next page in maps depicting the non-white share of the population, and the share of the population in poverty from the 2000 Census.

4.2 Impacts of Planned Alignment

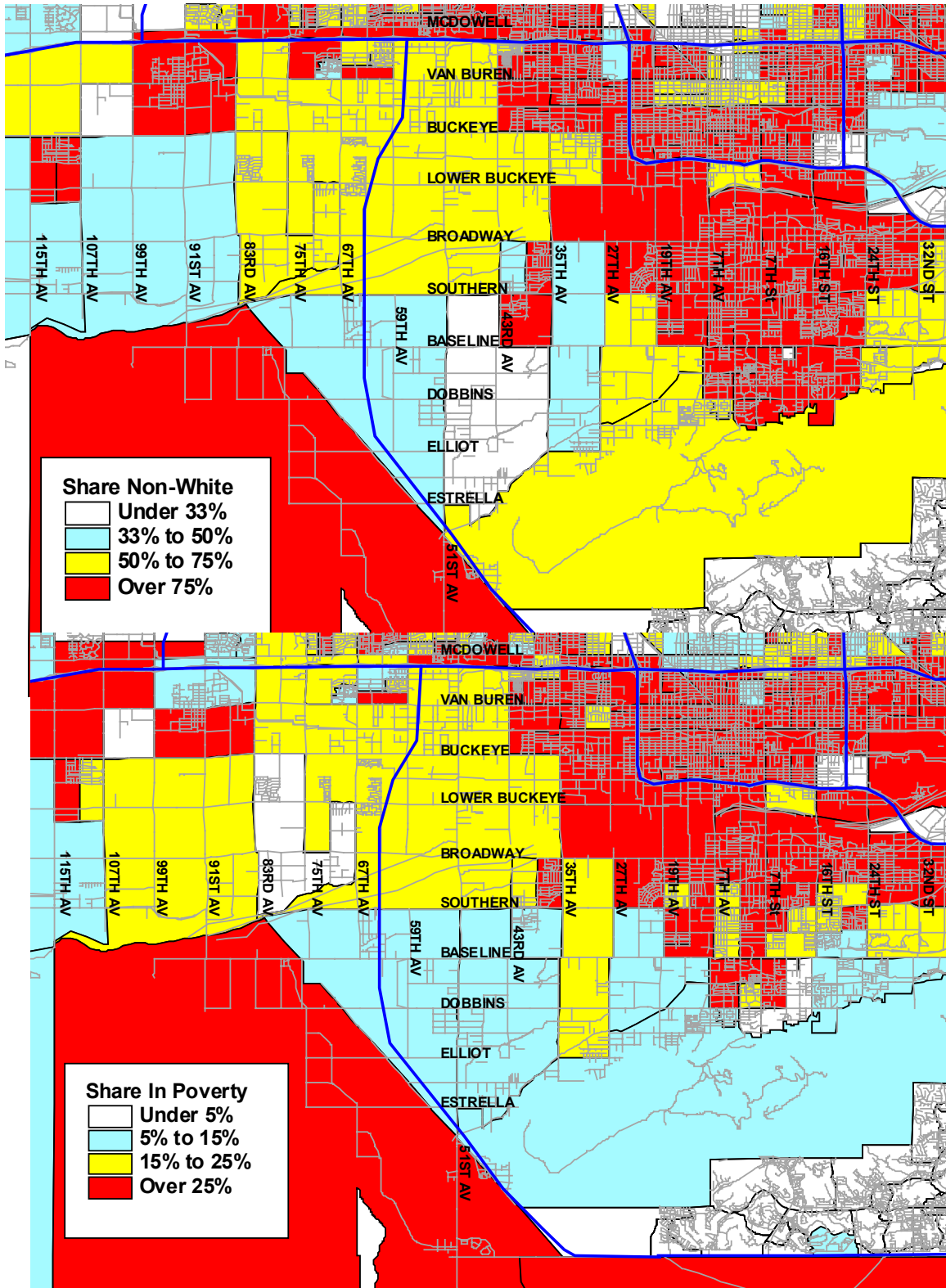
In recent years as market pressures have increased, and various public and private sector investments have been made, the area between the core population in south Phoenix and the enclave of Laveen has come alive with residential development activity. This activity has already caused some commercial development to emerge, but nothing on the scale of what is anticipated along the Loop 202 corridor, as shown on the map following the Ethnic Diversity and Distress Impact Map.

The Loop 202 freeway, as it is planned along the 59th Avenue alignment, could support the development of a major mixed-use employment node in southwest Phoenix, while other the alignments may shift this elsewhere outside the city. It could create thousands of new jobs that would be highly accessible to people in the economically challenged portion of south Phoenix. The jobs that would be created would not only be accessible to this population, they would expand the range of employment opportunities by virtue of the wide array of planned non-residential development. These jobs would create wealth in the immediate area, and may have a positive impact on both unemployment and poverty rates.

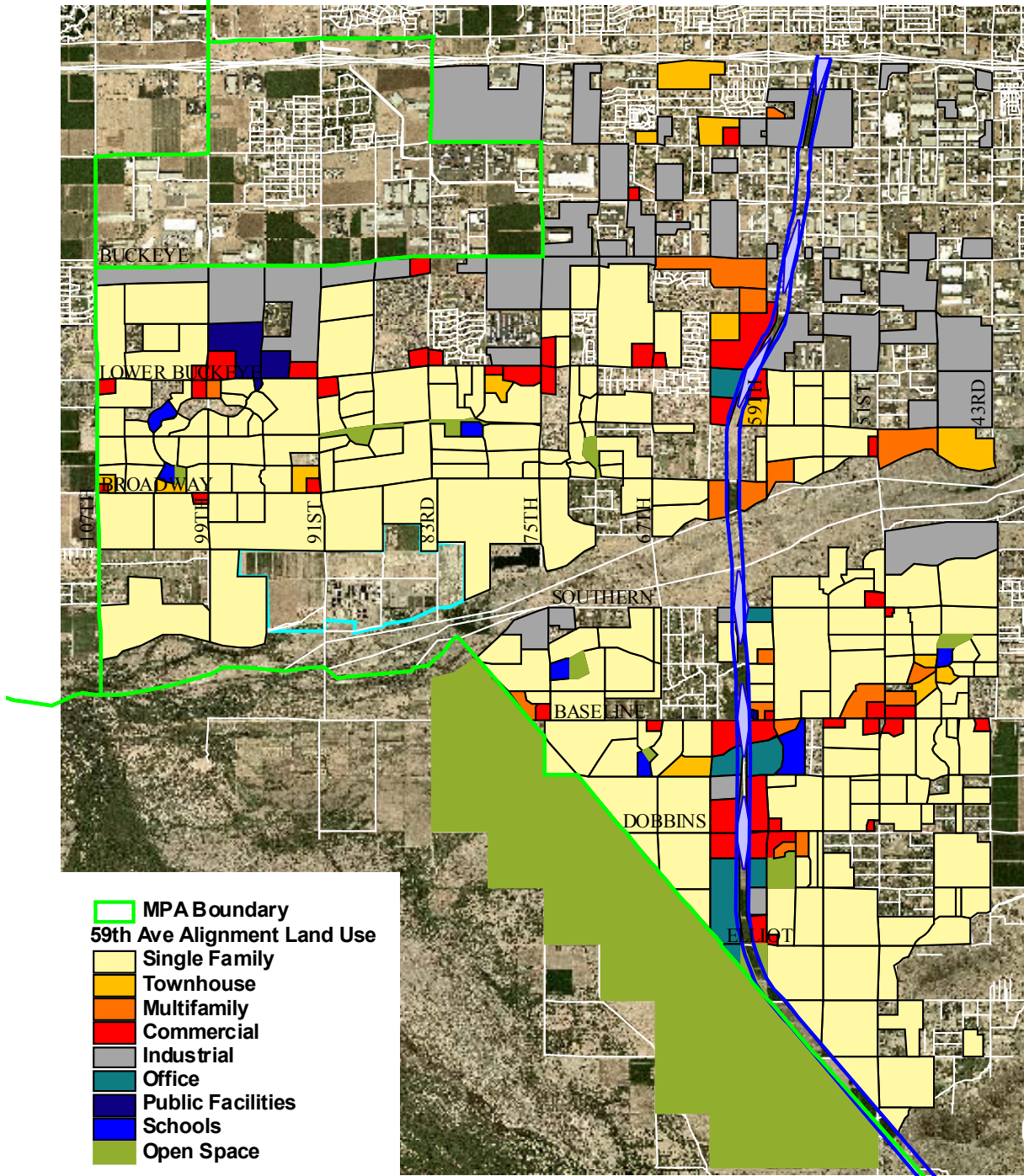
The current planned land use also includes a new commercial node north of the Salt River along the Loop 202. This northern employment node would create additional jobs in the area, and provide needed services to businesses in adjacent industrial areas. This synergy created by the combination of industrial and commercial development in the area would help provide the impetus for additional multifamily housing. Planned duplex, townhouse and apartment developments along the Salt River could result in improved housing quality and affordability for workers in the area.



ETHNIC DIVERSITY AND DISTRESS IN THE LOOP-202 IMPACT AREA



PLANNED LAND USE IN THE LOOP-202 CORRIDOR



Due to its location near the center of the currently developing portion of the south Phoenix, development along the Loop 202 also has the potential for creating an identity and sense of place for current and future residents of the southwest Phoenix. The urban core that would be created along the freeway between Baseline Road and Dobbins Road would emphasize density, urban features and pedestrian access to further support the core concept. This could have a positive impact on the population in the area as it creates a stronger community, and provides quality opportunities for work and play.

4.3 Impacts of Alternative Alignments

The primary difference between either of the alternative alignments being considered, and the planned 59th Avenue alignment is that the freeway would continue northwest along the border with the Gila River Indian Community before turning northward to intercept with Interstate 10. While on the surface this change seems relatively minor, the corresponding land use impacts could have a significant impact on the future condition of the population in south Phoenix.

As a result of the freeway being shifted westward to either the 75th or 97th Avenue alignments, there will likely be a reduction in the number of jobs accessible to disadvantaged persons living in south Phoenix, and in the availability and quality of affordable housing. Reduction of commercial development in the 59th Avenue corridor will likely be off-set by an increase in single family development, while reducing demand for affordable, multifamily projects.

The area of Phoenix south of McDowell Road between 7th Avenue and the proposed 59th Avenue alignment of the Loop 202 represents the population that could benefit most from the approximately 86,000 jobs that could be generated in the corridor. As of the 2000 Census, the area contained nearly 90,000 persons, 82 percent of whom were non-white compared with the County average of about 34 percent. About 34 percent of these residents lived in poverty, which is nearly triple the Maricopa County average of about 12 percent. This level of poverty severely limits their ability to travel to employment, thereby reducing the benefit of jobs that may be created in alternative corridors further to the west.

The area contained a labor force of about 30,000 people, about 11 percent of whom were unemployed in 2000. This was more than double the County unemployment rate of about 4.7 percent. Of the approximately 26,500 employed persons in the area, about 42 percent worked in construction, retail trade, administrative service and hospitality service industries. These industries would comprise the majority of the new jobs that would be created in the 59th Avenue corridor. In particular, about 4,800 or nearly 18 percent of worked were employed in the construction industry compared to about 8.5 percent countywide. As a result, new construction in the 59th Avenue corridor would have an especially large impact on the resident population of the area.

The occupational breakdown of the areas workforce reflects much the same pattern. Of the approximately 26,500 workers in the area, nearly 50 percent worked in service, office and administrative support and construction occupations, compared to about 35 percent in Maricopa County overall. This included a 35 percent higher concentration of persons in service occupations, and a 180 percent higher concentration of persons in



construction trades occupations. All of these workers would benefit from the new jobs that would be created in the nearby 59th Avenue corridor for the Loop-202.

The reduction in accessible jobs is fueled by a net decline in the potential employment levels, and an increase in the distance to the jobs that likely will be created. The overall net decrease in the future employment in the area will be driven by the fact that most of what would be potential sites for commercial development along the alternative corridors is already developed and/or designated for other purposes. Alternative freeway alignments are also pushed west to where they do not cross Baseline Road, the key east-west arterial in the area, until around 75th Avenue. This reduces the potential market capture from emerging residential development south of the Salt River, and hence the demand for commercial space by retailers and other future population-serving tenants. The alternative alignments would cause a net loss of 10,242 jobs in the 75th Avenue corridor, and 8,756 jobs in the 97th Avenue corridor alignment versus the proposed 59th Avenue alignment. Not only would there be a net reduction in the number of jobs, the jobs created would be shifted further west, limiting the ability of disadvantaged persons from reaching them.

As mentioned, both of the alternative alignments would have a greater impact on existing development, since planning and development have proceeded on the assumption of the freeway on the 59th Avenue alignment. Both the proposed 75th Avenue and 97th Avenue alignments would cause disruption in new subdivisions containing about 900 units as the freeway continues northwest up the border with the Gila River Indian Community. North of the Salt River, the 75th Avenue corridor would impact new subdivisions containing about 500 new homes. Depending upon the exact route chosen, the 97th Avenue corridor would impact subdivisions containing between 600 and 900 new homes. Both of the alternative alignments pass through land that is actively developing at present. Therefore, the number of homes and families that will be impacted is continuing to increase daily. Not only will these relocations be costly, they will inflict considerable emotional distress on residents, and will tear apart newly formed neighborhoods in ethnically diverse areas. Significant delays in determination of the final alignment could result in significantly more new homes being impacted.

Under the planned 59th Avenue alignment, this situation has been preempted by 20 years of careful planning. Most of the relocation required for the 59th Avenue alignment will be businesses in an eroding industrial area near the north end of the proposed freeway. These businesses can relocate much easier than families, and many will likely benefit from the relocation. Surrounding commercial properties will also benefit from these relocations as existing development within the planned corridor has become somewhat blighted.



5.0 SUMMARY OF FINDINGS

5.1 Fiscal and Economic Impacts

Table 1 (Summary of Findings) attached to the Executive Summary at the beginning of this report summarizes the fiscal and economic impacts of varying Loop 202 freeway alignments at the build-out of the study area, while Chart A offers a graphical depiction. To reiterate, the study area includes a portion of southwest Phoenix that runs west from 43rd avenue to 107th and south from I-10 to the city's southern border and the bordering portion of the Gila River Community (GRC). All fiscal estimates are in constant 2004 dollars. Assumptions are subject to change and refinement over time.

If the 75th Avenue alignment is constructed, it is anticipated to result in the following net land use and fiscal implications to the city when compared with the 59th Avenue alternative (in constant 2004 dollars):

- ✓ An increase of 1,376 single family and townhome/condominium units, a loss of 1,810 apartments and a loss of 5,242,103 in retail, industrial and office building square footage.
- ✓ At build-out of the study area, these land uses will result in a net loss of \$16.10 million in annually recurring sales, property and state shared revenues, a loss of \$3.08 million in non-recurring sales tax and state shared revenues, a loss of \$86.9 million in city assessed valuation, and a loss of 10,242 in direct employment. These fiscal and economic consequences are direct in nature and the indirect implications of further losses from multiplier effects have not been estimated. The loss of city assessed valuation ultimately affects its future capacity to issue and retire bonded debt.
- ✓ A loss of 242 in direct and indirect construction employment.

If the 97th Avenue alignment is constructed, it is anticipated to result in the following net land use and fiscal implications to the city when compared with the 59th Avenue alternative (in constant 2004 dollars):

- ✓ An increase of 1,921 single family and townhome/condominium units, a loss of 1,003 apartments and a loss of 4,585,750 in retail, industrial and office building square footage.
- ✓ At build-out of the study area, these land uses will result in a net loss of \$14.35 million in annually recurring sales, property and state shared revenues, a loss of \$1.42 million in non-recurring sales tax and state shared revenues, a loss of \$58.8 million in city assessed valuation, and a loss of 8,756 in direct employment. These fiscal consequences are direct in nature and the indirect implications of further losses from multiplier effects have not been estimated. The recurring fiscal losses represent a reduction of 18% of the entire 59th avenue alignment scenario when built-out, and 10% of total projected employment.
- ✓ A loss of 144 in direct and indirect construction employment.



5.2 Social Impacts

In 2000, there were over 52,000 persons in the study area (Laveen and Estrella Villages), and approximately 113,000 persons in the South Mountain and Central City Urban Villages where a portion of the populous are impacted. About 65% of the population was of Hispanic origin. Rates of poverty were at least twice that evident for Maricopa County, while the incidence of single females in poverty with children, persons over 25 with no High School diploma and overcrowded housing units tended to be at least 3 times the county average if not more. The average income in all Villages but Laveen ranged from 48% to 68% of the county average, while average gross rent and home values following suit. While sustained growth or redevelopment has occurred in Laveen, the Central City and South Mountain since 2000, these regions all retain their ethnically diverse flavor and includes some the most modestly priced dwellings in the city's corporate limits.

The Loop 202 freeway, as it is planned along the 59th Avenue alignment, is anticipated to result in the following implications for the Estrella and Laveen, and western portions of the South Mountain and Central City Village areas:

- ✓ It will create thousands of new jobs that would be highly accessible to persons in poverty or 'at risk'.
- ✓ The jobs created will expand the range of employment opportunities by virtue of the wide array of planned non-residential development. These jobs would create wealth, and will have a positive impact on both unemployment and poverty rates.
- ✓ The current planned land use also includes a new commercial node north of the Salt River along the Loop 202. This northern employment node would create additional jobs in the area, and provide needed services to businesses in adjacent industrial areas and directly benefit the residents of Estrella Village, the most distressed region in the study area.
- ✓ This synergy created by the combination of industrial and commercial development in the area would help provide the impetus for additional multifamily housing. Planned duplex, townhouse and apartment developments along the Salt River will also result in improved housing quality, mitigate overcrowding and foster affordability for workers in the area.
- ✓ The urban core that would be created along the freeway between Baseline Road and Dobbins Road would emphasize density, urban features and pedestrian access to further support the core concept. This could have a positive impact on the population in the area as it creates a stronger community, and provides quality opportunities for work and play.
- ✓ Most of the relocation required for the 59th Avenue alignment will be businesses in an eroding industrial area near the north end of the proposed freeway. These businesses will likely benefit from the relocation and the city from the redevelopment and revitalization implications to Estrella Village.

The social implications of both the 97th and 75th freeway alignments compared to the existing 59th alignment are highlighted below:

- ✓ As result of the freeway being shifted westward to either the 75th or 97th Avenue alignments, there will likely be a reduction in the number of jobs accessible to persons residing in the area of Phoenix south of McDowell Road between 7th



Avenue and the planned 59th Avenue alignment. About 34 percent of these residents lived in poverty in 2000, which is nearly triple the Maricopa County average of about 12 percent. This level of poverty severely limits their ability to travel to employment, thereby reducing the benefit of jobs that may be created in alternative corridors further to the west. In addition, the reduction of commercial development in the 59th Avenue corridor will likely be off-set by an increase in single family development, while reducing demand for affordable, multifamily projects.

- ✓ The reduction in accessible jobs is fueled by a net decline in the potential employment levels (8,750-10,250 employment loss), and an increase in the distance to the jobs that likely will be created. The overall net decrease in the future employment in the area will be driven by the fact that most of what would be potential sites for commercial development along the alternative corridors is already developed and/or designated for other purposes.
- ✓ Alternative freeway alignments are also pushed west to where they do not cross Baseline Road, the key east-west arterial in the area, until around 75th Avenue. This reduces the potential market capture from emerging residential development south of the Salt River, and hence the demand for commercial space by retailers and other future population-serving tenants.
- ✓ Both the proposed 75th Avenue and 97th Avenue alignments would cause disruption in new subdivisions containing about 900 units as the freeway continues northwest up the border with the Gila River Indian Community. North of the Salt River, the 75th Avenue corridor would impact new subdivisions containing about 500 new homes. Depending on the exact route chosen, the 97th Avenue corridor would impact subdivisions containing between 600 and 900 new homes. Both of the alternative alignments pass through land that is actively developing at present. Therefore, the number of homes and families that will be impacted is continuing to increase daily. Significant delays in determination of the final alignment could result in significantly more new homes being impacted.

5.3 Report Conclusions

The findings in this report clearly indicate that the long planned, 59th Avenue alignment offers the most significant land-use, fiscal, employment and social benefits to the City of Phoenix.



6.0 REPORT APPENDIX

In the order provided:

59th Avenue Land Use Map At Area Build-Out

75th Avenue Land Use Map At Area Build-Out

97th Avenue Land Use Map At Area Build-Out

Table 2A: Residential Assumptions

Table 2B: Commercial & Industrial Assumptions

Table 3A: Sales Tax Impacts For 75th Alignment Compared With 59th

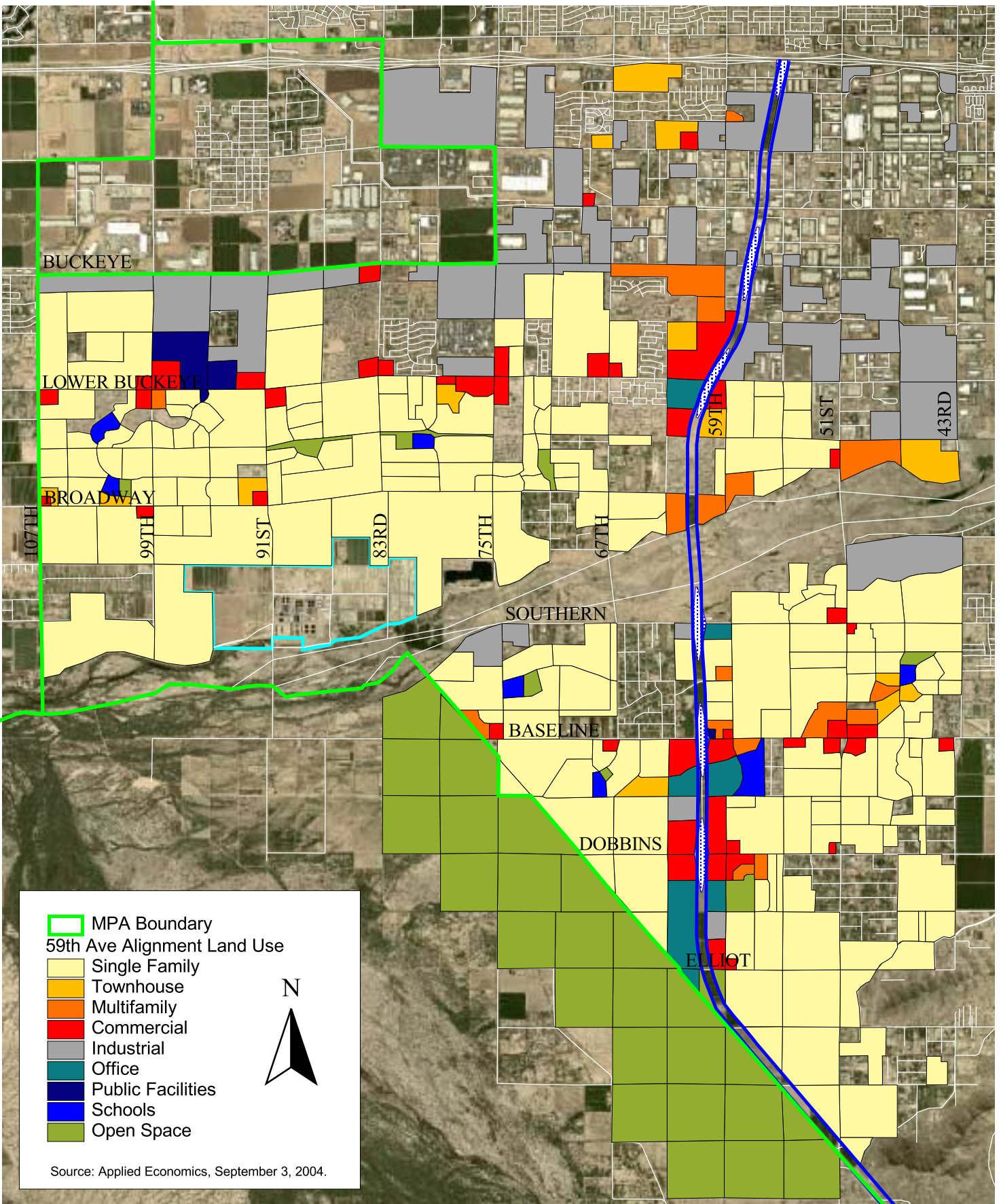
Table 3B: Sales Tax Impacts For 97th Alignment Compared With 59th

Table 4: Property Tax Impacts

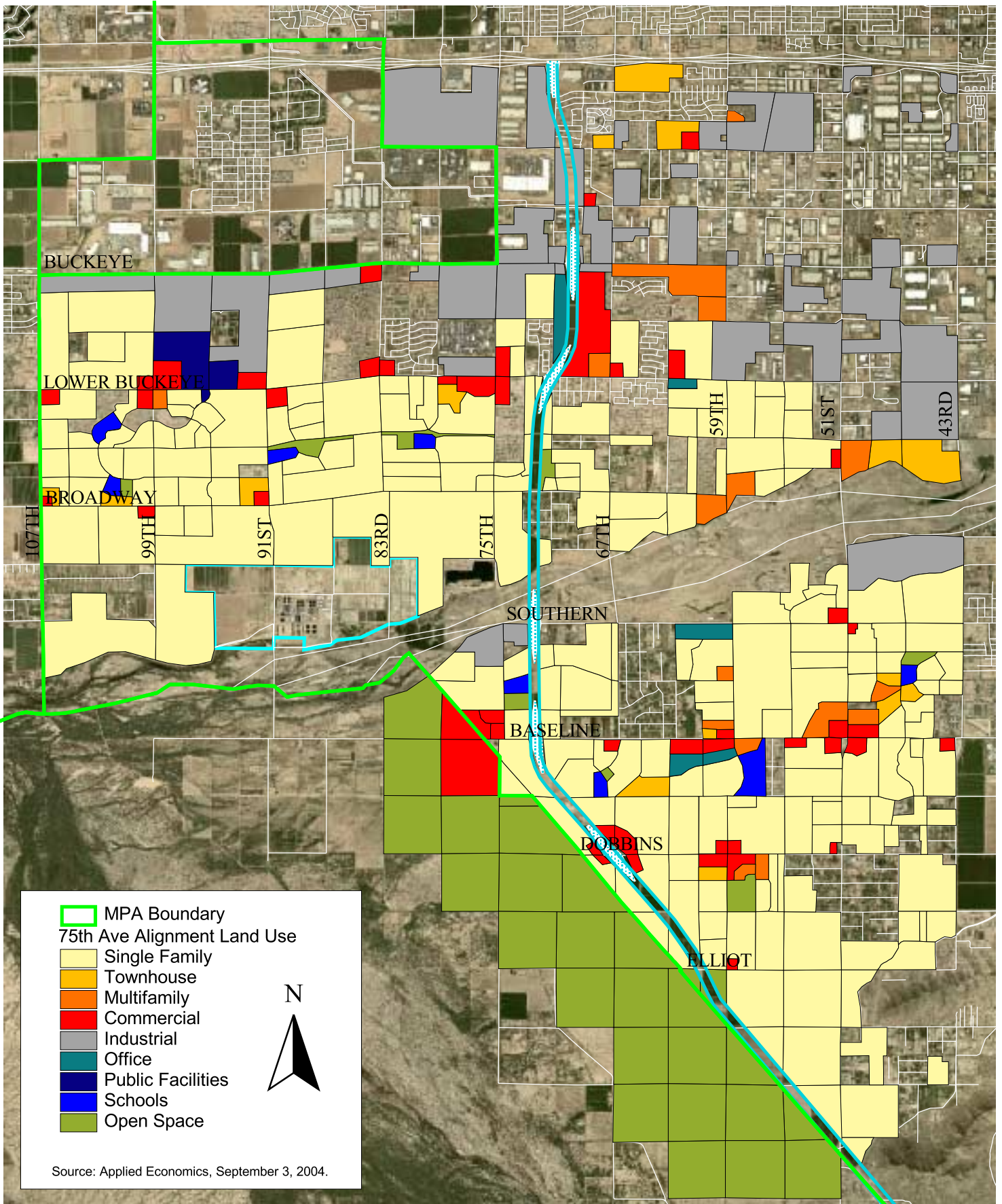
Table 5: Economic Impacts



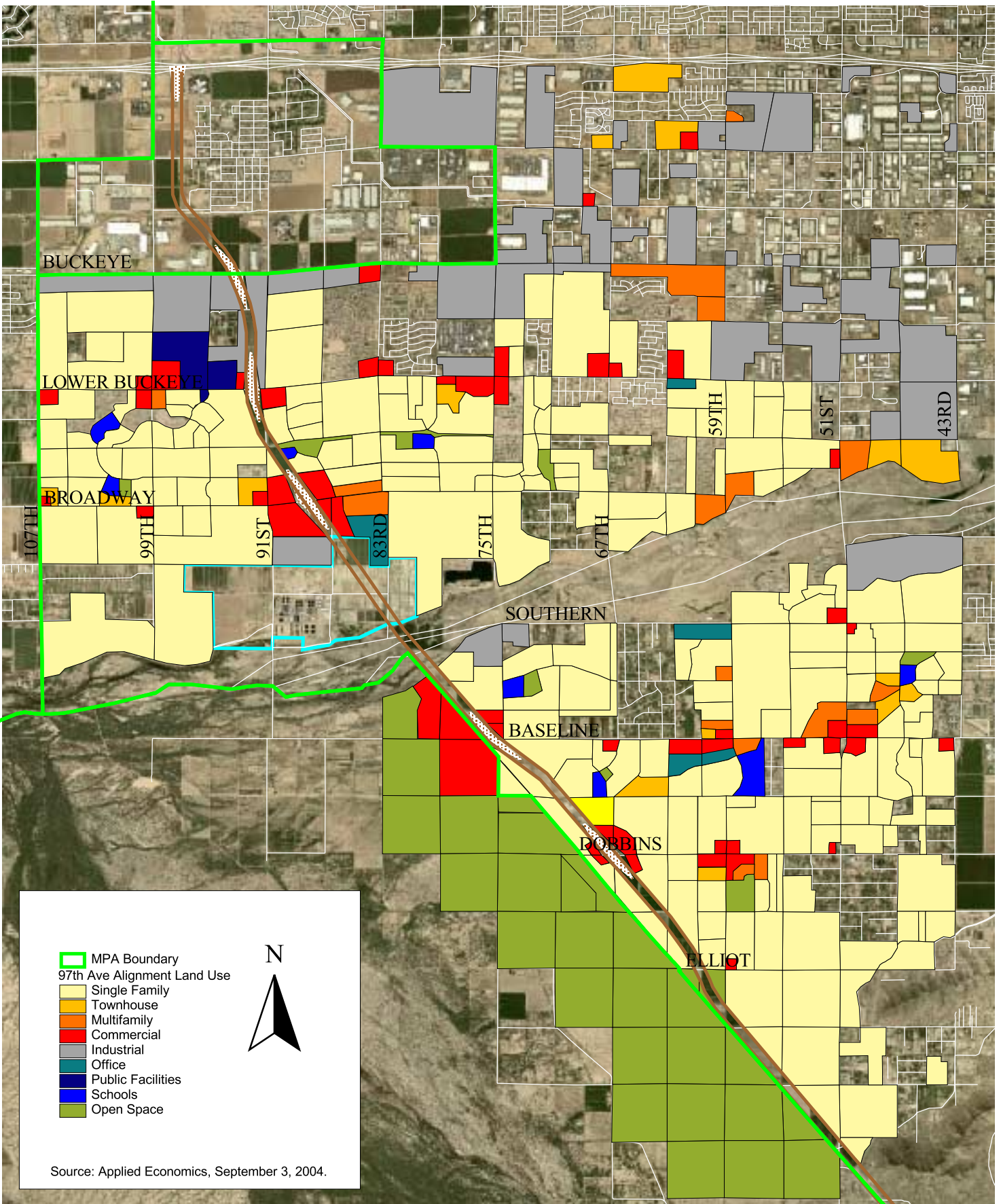
CITY OF PHOENIX - SW LOOP 202 ALIGNMENT IMPACT ANALYSIS
 59TH AVENUE ALTERNATIVE



CITY OF PHOENIX - SW LOOP 202 ALIGNMENT IMPACT ANALYSIS
 75TH AVENUE ALIGNMENT ALTERNATIVE



CITY OF PHOENIX - SW LOOP 202 ALIGNMENT IMPACT ANALYSIS
 97TH AVENUE ALIGNMENT ALTERNATIVE



- █ MPA Boundary
- 97th Ave Alignment Land Use**
- Single Family
- Townhouse
- Multifamily
- Commercial
- Industrial
- Office
- Public Facilities
- Schools
- Open Space

Source: Applied Economics, September 3, 2004.

Run Date:
4-Dec-04



TABLE 2A.
SOUTHWEST LOOP 202
FISCAL & SOCIAL IMPACT ANALYSIS
RESIDENTIAL STUDY AREA BUILD-OUT ASSUMPTIONS
(In Constant 2004 Dollars)

POSITIVE FIGURES INDICATE A GAIN, WHILE FIGURES IN (PARENTHESES) DENOTE A LOSS

ASSUMPTION	Single Family .1-2 du/ac	Single Family 2.01-3.5 DU/AC	Single Family 3.51-4.5 DU/AC	Single Family 4.51-6 DU/AC	Single Family 6+ DU/AC	Multi-Family To 12 DU/AC	Multi-Family 12+ DU/AC	TOTAL
Residential Acreage For 59th Alignment	2,353	3,643	3,473	2,092	470	498	529	13,058
Total Units To Be Constructed	3,608	10,374	10,902	10,684	3,310	4,337	7,950	51,165
Residential Acreage For 75th Alignment	2,458	3,996	3,604	1,926	472	486	392	13,334
Total Units To Be Constructed	3,708	11,263	11,782	10,231	3,433	4,174	6,140	50,731
Residential Acreage For 97th Alignment	2,342	3,779	3,587	2,187	465	486	439	13,285
Total Units To Be Constructed	3,481	10,517	11,754	11,826	3,384	4,174	6,947	52,083
Net of 75th Versus 59th Ave. Alignment								
Net Residential Acreage To Be Developed	105	353	131	(166)	2	(12)	(137)	276
Net Residential Units To Be Developed	100	889	880	(453)	123	(163)	(1,810)	(434)
Net of 97th Avenue Versus 59th Ave Alignment								
Net Residential Acreage To Be Developed	(11)	136	114	95	(5)	(12)	(90)	227
Net Residential Units To Be Developed	(127)	143	852	1,142	74	(163)	(1,003)	918
Assumed Development Cost/Unit	\$245,000	\$207,500	\$166,000	\$167,500	\$146,000	\$130,000	\$75,000	
Improvement Value/Unit	\$191,100	\$161,850	\$129,480	\$130,650	\$113,880	\$101,400	\$60,000	
Land Value/Unit	\$53,900	\$45,650	\$36,520	\$36,850	\$32,120	\$28,600	\$15,000	
Assumed Average Monthly Rent Levels	n/a	n/a	n/a	n/a	n/a	n/a	\$725	
Occupancy Factor	n/a	n/a	n/a	n/a	n/a	n/a	95.0%	
Net of 75th Ave. Versus The 59th Ave. Alignment								
Construction Costs	\$19,110,000	\$143,884,650	\$113,942,400	(\$59,184,450)	\$14,007,240	(\$16,528,200)	(\$108,600,000)	\$106,631,640
Land Value	\$5,390,000	\$40,582,850	\$32,137,600	(\$16,693,050)	\$3,950,760	(\$4,661,800)	(\$27,150,000)	\$33,556,360
Total Development Cost	\$24,500,000	\$184,467,500	\$146,080,000	(\$75,877,500)	\$17,958,000	(\$21,190,000)	(\$135,750,000)	\$140,188,000
Net of 97th Ave. Versus The 59th Ave. Alignment								
Construction Costs	(\$24,269,700)	\$23,144,550	\$110,316,960	\$149,202,300	\$8,427,120	(\$16,528,200)	(\$60,180,000)	\$190,113,030
Land Value	(\$6,845,300)	\$6,527,950	\$31,115,040	\$42,082,700	\$2,376,880	(\$4,661,800)	(\$15,045,000)	\$55,550,470
Total Development Cost	(\$31,115,000)	\$29,672,500	\$141,432,000	\$191,285,000	\$10,804,000	(\$21,190,000)	(\$75,225,000)	\$245,663,500

Sources: Meyers & Associates, Applied Economics, Colliers International, SRP, Crystal & Company.

Run Date:
4-Dec-04



TABLE 2B.
SOUTHWEST LOOP 202
FISCAL & SOCIAL IMPACT ANALYSIS
COMMERCIAL & INDUSTRIAL STUDY AREA BUILD-OUT ASSUMPTIONS
(In Constant 2004 Dollars)

POSITIVE FIGURES INDICATE A GAIN, WHILE FIGURES IN (PARENTHESES) DENOTE A LOSS

ASSUMPTION	Strip Retail Non-Anchored	Neighborhood Retail Grocery Anchor	Community Retail Non-Groc. Anchor	Power Center	Light Industrial	Commerce Park - Industr.	Business Park Office or R&D	TOTAL
Floor Area Ratio Assumed (FAR)	0.19	0.19	0.20	0.26	0.33	0.29	0.27	
Commercial/Industrial Acreage For 59th Alignment	78	243	226	454	2,930	451	354	4,736
Total Building Square Footage To Be Constructed	647,936	2,010,271	1,972,258	5,057,950	38,285,910	5,784,004	4,116,675	57,875,004
Commercial/Industrial Acreage For 75th Alignment	83	295	178	252	2,927	409	152	4,296
Total Building Square Footage To Be Constructed	668,438	2,464,469	1,560,556	2,272,750	38,233,298	5,400,720	2,032,670	52,632,901
Commercial/Industrial Acreage For 97th Alignment	99	289	198	229	2,783	616	165	4,379
Total Building Square Footage To Be Constructed	822,038	2,409,748	1,735,006	2,073,950	36,365,303	7,933,139	1,950,070	53,289,254
Net of 75th Versus 59th Ave. Alignment								
Net Commercial/Industrial Acreage To Be Developed	5	52	(48)	(202)	(3)	(42)	(202)	(440)
Net Building Square Footage To Be Constructed	20,502	454,198	(411,702)	(2,785,200)	(52,612)	(383,284)	(2,084,005)	(5,242,103)
Net of 97th Avenue Versus 59th Ave Alignment								
Net Commercial/Industrial Acreage To Be Developed	21	46	(28)	(225)	(147)	165	(189)	(357)
Net Building Square Footage To Be Constructed	174,102	399,477	(237,252)	(2,984,000)	(1,920,607)	2,149,135	(2,166,605)	(4,585,750)
Average Construction Costs per Sq. Ft. (including TIs)	\$70.00	\$70.00	\$65.00	\$65.00	\$55.00	\$61.75	\$76.00	
Annual Commercial Leasing Revenues Per Sq. Ft. (NNN)	\$17.50	\$20.00	\$17.50	\$24.00	\$5.04	\$7.50	\$14.00	
Estimated Land Value Per Square Foot	\$8.00	\$8.00	\$5.50	\$5.50	\$3.75	\$6.00	\$6.00	
Occupancy Factor	90%	90%	90%	90%	90%	88%	85%	
Average Building Square Footage Per Center	60,000	150,000	250,000	900,000	200,000	350,000	450,000	
Average Percent of Property Leased To Tenants	100%	100%	100%	100%	60%	80%	80%	
Average Power Expenditures Per Square Foot (SRP Services)	\$2.00	\$2.00	\$2.00	\$2.00	\$1.75	\$1.45	\$0.89	
Estimated Retail Sales Per Building Square Foot	\$250.00	\$250.00	\$269.00	\$239.00	\$0	\$240	\$240	
Estimated Building Square Footage Per Employee	600	600	600	600	750	625	415	
Net of 75th Ave. Versus The 59th Ave. Alignment								
Construction Costs	\$1,435,140	\$31,793,860	(\$26,760,630)	(\$181,038,000)	(\$2,893,660)	(\$23,667,787)	(\$158,384,380)	(\$359,515,457)
Land Value	\$1,742,400	\$18,120,960	(\$11,499,840)	(\$48,395,160)	(\$490,050)	(\$10,977,120)	(\$52,794,720)	(\$104,293,530)
Total Project Cost (excl machinery & equip taxed as personal prop	\$3,177,540	\$49,914,820	(\$38,260,470)	(\$229,433,160)	(\$3,383,710)	(\$34,644,907)	(\$211,179,100)	(\$463,808,987)
Personal Property (Machinery and Equipment) (% of Project Cos	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	
Total Project Cost Incl. Land, Improvements and Machinery/Equip	\$3,177,540	\$49,914,820	(\$38,260,470)	(\$229,433,160)	(\$4,060,452)	(\$41,573,888)	(\$253,414,920)	(\$513,650,530)
Net of 97th Ave. Versus The 59th Ave. Alignment								
Construction Costs	\$12,187,140	\$27,963,390	(\$15,421,380)	(\$193,960,000)	(\$105,633,385)	\$132,709,086	(\$164,661,980)	(\$306,817,129)
Land Value	\$7,318,080	\$16,030,080	(\$6,708,240)	(\$53,905,500)	(\$24,012,450)	\$43,124,400	(\$49,397,040)	(\$67,550,670)
Total Project Cost (excl machinery & equip taxed as personal prop	\$19,505,220	\$43,993,470	(\$22,129,620)	(\$247,865,500)	(\$129,645,835)	\$175,833,486	(\$214,059,020)	(\$374,367,799)
Personal Property (Machinery and Equipment) (% of Project Cos	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	
Total Project Cost Incl. Land, Improvements and Machinery/Equip	\$19,505,220	\$43,993,470	(\$22,129,620)	(\$247,865,500)	(\$155,575,002)	\$211,000,184	(\$256,870,824)	(\$407,942,073)

Sources: Urban Land Institute Dollars & Cents of Shopping Centers 2002, Applied Economics, CB Richard Ellis, Grubb & Ellis, Colliers International, Trammel Crow, Cushman & Wakefield, SRP, Crystal & Company.

Run Date:
4-Dec-04



TABLE 3A.
SOUTHWEST LOOP 202
FISCAL & SOCIAL IMPACT ANALYSIS
SALES TAX IMPLICATIONS
(In Constant 2004 Dollars)

Net Of 75th Versus 59th Ave. Alignments
POSITIVE FIGURES INDICATE A GAIN, WHILE FIGURES IN (PARENTHESIS) DENOTE A LOSS

ITEM	Tax Rate	Single Family	Multi-Family	Strip Retail Non-Anchored	Neighb. Retail Grocery Anchored	Community Retail Non-Groc. Anchored	Power Center	Light Industrial	Commerce Park - Industr.	Business Park Office or R&D	TOTAL
RETAIL SALES TAX											
Net Leaseable Building Square Feet		n/a	n/a	18,452	408,778	(370,532)	(2,506,680)	(47,351)	(16,769)	(177,140)	(2,691,242)
Phoenix Retail Sales Volume		n/a	n/a	\$4,612,950	\$102,194,550	(\$99,673,054)	(\$599,096,520)	\$0	(\$4,024,482)	(\$42,513,702)	(\$638,500,258)
Est. Retail Sales Tax Receipts	1.80%	\$0	\$0	\$83,033	\$1,839,502	(\$1,794,115)	(\$10,783,737)	\$0	(\$72,441)	(\$765,247)	(\$11,493,005)
CONSTRUCTION SALES TAX											
Construction Sales Tax Base	65.00%	\$150,643,896	(\$81,333,330)	\$932,841	\$20,666,009	(\$17,394,410)	(\$117,674,700)	(\$1,880,879)	(\$15,384,062)	(\$102,949,847)	(\$164,374,481)
Est. Constr. Sales Tax Receipts	1.80%	\$2,711,590	(\$1,464,000)	\$16,791	\$371,988	(\$313,099)	(\$2,118,145)	(\$33,856)	(\$276,913)	(\$1,853,097)	(\$2,958,741)
COMMERCIAL & RESID. LEASING SALES TAX											
Net Annual Leasing Revenues		\$0	(\$14,959,650)	\$322,907	\$8,175,564	(\$6,484,307)	(\$60,160,320)	(\$143,189)	(\$2,012,241)	(\$19,839,728)	(\$95,100,963)
Phoenix Comm'l or Resid. Rental Sales Tax	varies	n/a	1.80%	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%	
Resid. & Commercial Rental Sales Tax Receipts		\$0	(\$269,274)	\$6,135	\$155,336	(\$123,202)	(\$1,143,046)	(\$2,721)	(\$38,233)	(\$376,955)	(\$1,791,959)
SALES TAX ON POWER CONSUMPTION											
Gross Power Expenditures		\$1,651,200	(\$1,629,000)	\$36,904	\$817,556	(\$741,064)	(\$5,013,360)	(\$82,864)	(\$486,292)	(\$1,576,550)	(\$7,023,469)
Est. Sales Tax on Power Consumption	2.70%	\$44,582	(\$43,983)	\$996	\$22,074	(\$20,009)	(\$135,361)	(\$2,237)	(\$13,130)	(\$42,567)	(\$189,634)
STATE SHARED SALES TAX REVENUES											
State Retail Sales Tax Base (5.6% @ 40% @25%)		\$0	\$0	\$25,833	\$572,289	(\$558,169)	(\$3,354,941)	\$0	(\$22,537)	(\$238,077)	(\$3,575,601)
State Construction Sales Tax Base (5.6% @ 20% @25%)		\$421,803	(\$227,733)	\$2,612	\$57,865	(\$48,704)	(\$329,489)	(\$5,266)	(\$43,075)	(\$288,260)	(\$460,249)
State Leasing Sales Tax Base (3% at 66.67% @25%)		\$0	(\$74,836)	\$1,615	\$40,898	(\$32,438)	(\$300,952)	(\$716)	(\$10,066)	(\$99,248)	(\$475,743)
State Power Sales Tax Base (5.6% @ 20% @25%)		\$4,623	(\$4,561)	\$103	\$2,289	(\$2,075)	(\$14,037)	(\$232)	(\$1,362)	(\$4,414)	(\$19,666)
Total Distribution Share		\$426,426	(\$307,130)	\$30,163	\$673,342	(\$641,386)	(\$3,999,419)	(\$6,215)	(\$77,040)	(\$629,999)	(\$4,531,258)
Assumed Phoenix Annual Share	25.7%	\$109,592	(\$78,932)	\$7,752	\$173,049	(\$164,836)	(\$1,027,851)	(\$1,597)	(\$19,799)	(\$161,910)	(\$1,164,533)
TOTAL SALES TAXES											
Total Recurring City Benefits/Yr. (includes state shared)		\$45,771	(\$333,662)	\$97,245	\$2,175,089	(\$2,089,645)	(\$13,005,316)	(\$5,202)	(\$132,532)	(\$1,272,595)	(\$14,520,846)
Total Non-Recurring City Benefits (includes state shared)		\$2,819,993	(\$1,522,527)	\$17,462	\$386,859	(\$325,616)	(\$2,202,823)	(\$35,209)	(\$287,983)	(\$1,927,180)	(\$3,077,025)
Total City Benefits		\$2,865,764	(\$1,856,189)	\$114,708	\$2,561,949	(\$2,415,261)	(\$15,208,139)	(\$40,411)	(\$420,516)	(\$3,199,775)	(\$17,597,871)

Sources: City of Phoenix General Obligation Bond Official Statement, March 3, 2004,
Arizona Department of Revenue - Divisions of Property and Sales Tax, Crystal & Company.

Run Date:
4-Dec-04



TABLE 3B.
SOUTHWEST LOOP 202
FISCAL & SOCIAL IMPACT ANALYSIS
SALES TAX & DEVELOPMENT FEE IMPLICATIONS AT AREA BUILD-OUT
(In Constant 2004 Dollars)

Net Of 97th Versus 59th Ave. Alignment
POSITIVE FIGURES INDICATE A GAIN, WHILE FIGURES IN (PARENTHESES) DENOTE A LOSS

ITEM	Rate/ Factor	Single Family	Multi- Family	Strip Retail Non-Anchored	Neighb. Retail Grocery Anchor	Community Retail Non-Groc. Anchor	Power Center	Light Industrial	Commerce Park - Industr.	Business Park Office or R&D	TOTAL
RETAIL SALES TAX											
Net Leaseable Building Square Feet		n/a	n/a	156,692	359,529	(213,527)	(2,685,600)	(1,728,546)	94,025	(184,161)	(4,201,589)
Phoenix Retail Sales Volume		n/a	n/a	\$39,172,950	\$89,882,325	(\$57,438,709)	(\$641,858,400)	\$0	\$22,565,918	(\$44,198,742)	(\$591,874,659)
Est. Retail Sales Tax Receipts	1.80%	\$0	\$0	\$705,113	\$1,617,882	(\$1,033,897)	(\$11,553,451)	\$0	\$406,187	(\$795,577)	(\$10,653,744)
CONSTRUCTION SALES TAX											
Construction Sales Tax Base	65.00%	\$173,433,800	(\$49,860,330)	\$7,921,641	\$18,176,204	(\$10,023,897)	(\$126,074,000)	(\$68,661,700)	\$86,260,906	(\$107,030,287)	(\$75,857,664)
Est. Constr. Sales Tax Receipts	1.80%	\$3,121,808	(\$897,486)	\$142,590	\$327,172	(\$180,430)	(\$2,269,332)	(\$1,235,911)	\$1,552,696	(\$1,926,545)	(\$1,365,438)
COMMERCIAL & RESID. LEASING SALES TAX											
Net Annual Leasing Revenues		n/a	(\$8,289,795)	\$2,742,107	\$7,190,586	(\$3,736,719)	(\$64,454,400)	(\$5,227,124)	\$11,282,959	(\$20,626,080)	(\$81,118,466)
Phoenix Comm'l or Resid. Rental Sales Tax	varies	n/a	1.80%	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%	n/a
Resid. & Commercial Rental Sales Tax Receipts		\$0	(\$149,216)	\$52,100	\$136,621	(\$70,998)	(\$1,224,634)	(\$99,315)	\$214,376	(\$391,896)	(\$1,532,961)
SALES TAX ON POWER CONSUMPTION											
Gross Power Expenditures		\$2,305,200	(\$857,565)	\$313,384	\$719,059	(\$427,054)	(\$5,371,200)	(\$3,024,956)	\$2,726,715	(\$1,639,037)	(\$5,255,454)
Est. Sales Tax on Power Consumption	2.70%	\$62,240	(\$23,154)	\$8,461	\$19,415	(\$11,530)	(\$145,022)	(\$81,674)	\$73,621	(\$44,254)	(\$141,897)
STATE SHARED SALES TAX REVENUES											
State Retail Sales Tax Base (5.6% @ 40% @25%)		\$0	\$0	\$219,369	\$503,341	(\$321,657)	(\$3,594,407)	\$0	\$126,369	(\$247,513)	(\$3,314,498)
State Construction Sales Tax Base (5.6% @ 20% @25%)		\$485,615	(\$139,609)	\$22,181	\$50,893	(\$28,067)	(\$353,007)	(\$192,253)	\$241,531	(\$299,685)	(\$212,401)
State Leasing Sales Tax Base (3% at 66.67% @25%)		\$0	(\$41,470)	\$13,717	\$35,971	(\$18,693)	(\$322,433)	(\$26,149)	\$56,443	(\$103,182)	(\$405,795)
State Power Sales Tax Base (5.6% @ 20% @25%)		\$6,455	(\$2,401)	\$877	\$2,013	(\$1,196)	(\$15,039)	(\$8,470)	\$7,635	(\$4,589)	(\$14,715)
Total Distribution Share		\$492,069	(\$183,480)	\$256,144	\$592,219	(\$369,612)	(\$4,284,887)	(\$226,871)	\$431,977	(\$654,969)	(\$3,947,410)
Assumed Phoenix Annual Share ('00 Census % of AZ Pop)	25.7%	\$126,462	(\$47,154)	\$65,829	\$152,200	(\$94,990)	(\$1,101,216)	(\$58,306)	\$111,018	(\$168,327)	(\$1,014,484)
TOTAL SALES TAXES											
Total Recurring City Benefits/Yr. (includes state shared)		\$63,899	(\$183,645)	\$825,803	\$1,913,038	(\$1,204,202)	(\$13,933,600)	(\$189,886)	\$743,129	(\$1,323,035)	(\$13,288,499)
Total Non-Recurring City Benefits (includes state shared)		\$3,246,611	(\$933,365)	\$148,290	\$340,251	(\$187,643)	(\$2,360,055)	(\$1,285,320)	\$1,614,770	(\$2,003,564)	(\$1,420,025)
Total City Benefits		\$3,310,511	(\$1,117,011)	\$974,093	\$2,253,289	(\$1,391,845)	(\$16,293,655)	(\$1,475,206)	\$2,357,899	(\$3,326,599)	(\$14,708,524)

Sources: City of Phoenix General Obligation Bond Official Statement, March 3, 2004,
Arizona Department of Revenue - Divisions of Property and Sales Tax, Crystal & Company.

Run Date:
4-Dec-04



TABLE 4.
SOUTHWEST LOOP 202
FISCAL & SOCIAL IMPACT ANALYSIS
PROPERTY TAX IMPACTS AT AREA BUILD-OUT
(In Constant 2004 Dollars)

POSITIVE FIGURES INDICATE A GAIN, WHILE FIGURES IN (PARENTHESIS) DENOTE A LOSS

ITEM	Tax Rate	Single Family	Multi-Family	Strip Retail Non-Anchored	Neighb. Retail Grocery Anchor	Community Retail Non-Groc. Anchor	Power Center	Light Industrial	Commerce Park - Industr.	Business Park Office or R&D	TOTAL
NET OF 75TH AVENUE VERSUS THE 59TH ALIGNMENT											
Construction Value		\$231,759,840	(\$125,128,200)	\$1,435,140	\$31,793,860	(\$26,760,630)	(\$181,038,000)	(\$2,893,660)	(\$23,667,787)	(\$158,384,380)	(\$252,883,817)
Land Value		\$65,368,160	(\$31,811,800)	\$1,742,400	\$18,120,960	(\$11,499,840)	(\$48,395,160)	(\$490,050)	(\$10,977,120)	(\$52,794,720)	(\$70,737,170)
Total Project Value		\$297,128,000	(\$156,940,000)	\$3,177,540	\$49,914,820	(\$38,260,470)	(\$229,433,160)	(\$3,383,710)	(\$34,644,907)	(\$211,179,100)	(\$323,620,987)
Personal Property		\$0	\$0	\$0	\$0	\$0	\$0	(\$676,742)	(\$6,928,981)	(\$42,235,820)	(\$49,841,543)
Full Cash Value at 80% of Market Value	80.0%	\$237,702,400	(\$125,552,000)	\$2,542,032	\$39,931,856	(\$30,608,376)	(\$183,546,528)	(\$3,248,362)	(\$33,259,111)	(\$202,731,936)	(\$298,770,024)
Limited Value at 95% of Full Cash Value	95.0%	\$225,817,280	(\$119,274,400)	\$2,414,930	\$37,935,263	(\$29,077,957)	(\$174,369,202)	(\$3,085,944)	(\$31,596,155)	(\$192,595,339)	(\$283,831,523)
Project Assessment Ratio		10.00%	10.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	
Estimated Assessed Valuation		\$22,581,728	(\$11,927,440)	\$603,733	\$9,483,816	(\$7,269,489)	(\$43,592,300)	(\$771,486)	(\$7,899,039)	(\$48,148,835)	(\$86,939,313)
City of Phoenix Receipts/Yr 1/	\$1.82	\$410,987	(\$217,079)	\$10,988	\$172,605	(\$132,305)	(\$793,380)	(\$14,041)	(\$143,763)	(\$876,309)	(\$1,582,295)
NET OF 97TH AVENUE VERSUS THE 59TH ALIGNMENT											
Construction Value		\$266,821,230	(\$76,708,200)	\$12,187,140	\$27,963,390	(\$15,421,380)	(\$193,960,000)	(\$105,633,385)	\$132,709,086	(\$164,661,980)	(\$116,704,099)
Land Value		\$75,257,270	(\$19,706,800)	\$7,318,080	\$16,030,080	(\$6,708,240)	(\$53,905,500)	(\$24,012,450)	\$43,124,400	(\$49,397,040)	(\$12,000,200)
Total Project Cost		\$342,078,500	(\$96,415,000)	\$19,505,220	\$43,993,470	(\$22,129,620)	(\$247,865,500)	(\$129,645,835)	\$175,833,486	(\$214,059,020)	(\$128,704,299)
Personal Property		\$0	\$0	\$0	\$0	\$0	\$0	(\$25,929,167)	\$35,166,697	(\$42,811,804)	(\$33,574,274)
Full Cash Value at 80% of Market Value	80.0%	\$273,662,800	(\$77,132,000)	\$15,604,176	\$35,194,776	(\$17,703,696)	(\$198,292,400)	(\$124,460,002)	\$168,800,147	(\$205,496,659)	(\$129,822,858)
Limited Value at 95% of Full Cash Value	95.0%	\$259,979,660	(\$73,275,400)	\$14,823,967	\$33,435,037	(\$16,818,511)	(\$188,377,780)	(\$118,237,002)	\$160,360,139	(\$195,221,826)	(\$123,331,715)
Project Assessment Ratio		10.00%	10.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	
Estimated Assessed Valuation		\$25,997,966	(\$7,327,540)	\$3,705,992	\$8,358,759	(\$4,204,628)	(\$47,094,445)	(\$29,559,250)	\$40,090,035	(\$48,805,457)	(\$58,838,568)
City of Phoenix Receipts/Yr 1/	\$1.82	\$473,163	(\$133,361)	\$67,449	\$152,129	(\$76,524)	(\$857,119)	(\$537,978)	\$729,639	(\$888,259)	(\$1,070,862)

Sources: City of Phoenix General Obligation Bond Official Statement, March 3, 2004,
Arizona Department of Revenue - Divisions of Property and Sales Tax, Crystal & Company.

1/ Excludes homeowner credits.

Run Date:
4-Dec-04



TABLE 5.
SOUTHWEST LOOP 202
FISCAL & SOCIAL IMPACT ANALYSIS AT AREA BUILD-OUT
EMPLOYMENT GENERATION

POSITIVE FIGURES INDICATE A GAIN, WHILE FIGURES IN (PARENTHESIS) DENOTE A LOSS

ITEM	Single Family	Multi-Family	Strip Retail Non-Anchored	Neighb. Retail Grocery Anchor	Community Retail Non-Groc. Anchor	Power Center	Light Industrial	Commerce Park - Industr.	Business Park Office or R&D	TOTAL
Total Bldg. Area Sq. Ft.										
Net of 75th Versus 59th Ave. Alignment	n/a	n/a	20,502	454,198	(411,702)	(2,785,200)	(52,612)	(383,284)	(2,084,005)	(5,242,103)
Net of 97th Versus 59th Ave. Alignment	n/a	n/a	174,102	399,477	(237,252)	(2,984,000)	(1,920,607)	2,149,135	(2,166,605)	(4,585,750)
Bldg. Square Feet Required Per Employee	n/a	n/a	600	600	600	600	750	625	415	
Estimated Total Direct Operating Employment										
Net of 75th Versus 59th Ave. Alignment	n/a	n/a	34	757	(686)	(4,642)	(70)	(613)	(5,022)	(10,242)
Net of 97th Versus 59th Ave. Alignment	n/a	n/a	290	666	(395)	(4,973)	(2,561)	3,439	(5,221)	(8,756)
Construction Employment (Direct, indirect & induced) 1/										
Net of 75th Versus 59th Ave. Alignment	156	-84	1	28	(24)	(160)	(3)	(21)	(140)	(246)
Net of 97th Versus 59th Ave. Alignment	179	-52	11	25	(14)	(172)	(93)	117	(146)	(144)

Sources: Applied Economics, Crystal & Company.

1/ Generated by Applied Economics.