INCOME TAX FEASIBILITY STUDY
JULY 2009



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## Income Tax Feasibility Study Executive Summary July 2009

#### **Project Objective**

The City of Ann Arbor, Michigan ("City") is conducting a study of the potential effects of instituting a city income tax in lieu of an operating property tax millage. The purpose of this study is to estimate whether an income tax is a feasible option for the City and to assess the potential burden shift between the different classes of taxpayers: residents, non-residents, and businesses.

The City's charter requires that the general operating property tax millage be eliminated if an income tax is implemented. Therefore, it is important to ensure that an income tax would generate enough revenue to offset the loss in general operating property tax revenue.

#### **Project Methodology**

To meet our objective, statistical information about the City's population, worker demographics, residential household income and business income from various sources was gathered. Sources included the City, United States Census Bureau, Michigan Department of Treasury, U.S. Bureau of Labor Statistics, employer surveys, surveys of other cities which assess income tax, and market research companies. Once the source data was obtained, certain assumptions were made in order to estimate the revenue that would be generated under an income tax system and to project revenues over the next five years.

Historical data about the current property tax system was compiled by the City. Using growth rate assumptions made by City personnel, we projected revenue that would be generated from the current property tax system over the next five years.

After preparing the income tax and the property tax models as described above, the results of each were compared. Not only the total revenue which would be generated from each system, but the percentage of each revenue type that would be paid by the different classes of taxpayers (residents, non-residents, and businesses) were compared.

The analysis has been developed using the best available information concerning financial and demographic trends and conditions. As mentioned above, each model was developed using certain key assumptions and should not be evaluated without a thorough understanding of those assumptions. The assumptions and the accompanying rationale are documented in later sections of this report.

All assumptions are the responsibility of the City of Ann Arbors' management based on their best judgment at the time of the study. It is possible that the forecasted results may not be achieved because events and circumstances frequently do not occur as expected.



Income Tax Feasibility Study
Executive Summary
July 2009

#### **Findings**

Based on the assumptions outlined in this report, an income tax using maximum tax rates allowed by Michigan law and a \$600 exemption allowance would generate approximately \$42 million, net of estimated administrative costs in fiscal year 2011. The City's operating property tax millage is estimated to generate approximately \$28 million of revenue in fiscal year 2011. Therefore, an income tax could generate sufficient revenue to replace the City's operating property tax millage as a revenue source.

For comparison purposes, we have calculated income tax revenue using alternative exemption levels of \$1,000, \$3,000 and \$3,500. See Appendix A for the results of these calculations.



## Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

#### **Property Tax System - Current State**

#### **Property Taxes and Millage Rates**

The City currently has a property tax system which generates revenue from property owners in the City limits. The revenue is calculated by multiplying the taxable value of property by the millage rates. The following millage rates have been approved by the City for the 2009 tax year:

Operating	6.1682
Benefits	2.0560
Refuse	2.4670
Debt service	0.4643
Street repair	1.9944
Parks development	1.0969
Parks acquisition	0.4779
AATA	2.0560
Total	16.7807

Under the City charter, if the City implements an income tax, it must eliminate the operating property tax millage (6.1682 mills). The City may continue to levy special-purpose millages; however, the operating millage must be reduced to zero. Since the special-purpose millage rates can only generate revenue to be used for specific expenditures, we have not included them in any aspect of this study. All discussion and reference to "property tax revenue" in the remainder of this report will refer only to the operating millage.

#### Significant Factors Affecting the Property Tax Model

The following factors have an affect on how the property tax is calculated and projected:

- Headlee Amendment
- Proposal A
- Tax Increment Financing District
- Administration Fee

Under State law, the Headlee Amendment and Proposal A have a significant impact on the rate of revenue growth that can be achieved through property taxes.



## Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

#### The Headlee Amendment

The Headlee Amendment limits the growth of property tax revenue by controlling how the City's maximum authorized millage rate is calculated. The maximum authorized millage rate is rolled back when growth on existing City property is greater than inflation, hence limiting the increase in revenue to the rate of inflation.

#### Proposal A

Proposal A limits the increase in taxable value of property to the lesser of inflation or five percent annually. While the state equalized value (SEV) continues to grow with the market, the taxable value is limited by Proposal A. When property is sold or transferred, the taxable value is reset to SEV in a process referred to as "uncapping." This process results in an increase in the taxable value base for the City, however, the uncapped values are factored into the Headlee calculation and can cause a rollback.

#### Tax Increment Financing District

Another matter which affects property tax revenue is the existence of a tax increment financing (TIF) plan for the City's Downtown Development Authority (DDA). Under the TIF plan, the DDA district is able to "capture" a portion of property taxes levied by the City. In other words, of the total property tax revenue collected by the City, the DDA will receive a portion of the revenue for its own use. The taxes captured by the DDA have been factored into the model.

#### Administration Fee

An additional source of revenue generated under the property tax system is an administration fee of 1% of the total taxes levied on every tax bill. Property taxes are charged not only by the City, but by other units of government, including Washtenaw County, Ann Arbor Public Schools, Washtenaw Community College, Ann Arbor Public Library and the Intermediate School District. The City acts as an agent for the other units of government by billing and collecting the property taxes on their behalf. This administrative fee is charged by the City to cover its costs of administering property taxes on behalf of the other units of government. In the event that the City's operating millage is eliminated, the related administrative fee on the operating millage would be eliminated as well.

#### Assumptions – Property Tax System

With assistance from personnel in the City's Assessing Department, we made certain assumptions about the growth of existing property, growth of new property, the rate of transfers of existing property, and the factors affecting the DDA capture. These assumptions



## Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

were necessary in order to estimate future revenues that would be generated if the current property tax system remains in effect.

The assumptions used in the property tax model relating to the ad valorem roll are summarized as follows:

Factor	Growth Rate Assumption by Tax Year
Existing real property	(8)% in 2010, (3)% in 2011 and 2% each year thereafter
Existing personal property	(13%) in 2010 and (2)% each year thereafter
New property, net of losses	1% per year
Rate of transfers of existing property	2% in 2010 & 2011, 3% each year thereafter
DDA capture	It is assumed the DDA taxable values will grow at the same
	rate as the existing real property of the city as a whole,
	discussed above.

We assumed no additions to, and no significant growth of, the industrial facilities tax roll (IFT).

The model begins with actual taxable values and state equalized values for the 2009 tax year and uses the assumptions to project revenue over the next five years. Effects of the Headlee Amendment and Proposal A are factored into the model.

#### Classes of Taxpayers

In order to calculate the portion of property taxes which are paid for residential use vs. business use (non-residents do not pay property taxes), we looked at the makeup of the 2009 taxable values between homestead and non-homestead properties. We further distinguished the non-homestead properties between non-owner occupied residential and non-owner occupied commercial. We assumed the taxable values of the homestead (54%) plus non-owner occupied residential properties (22%) drives the amount of City taxes paid for by residents (76%). This is based on an underlying assumption that currently landlords do not give a property tax break to tenants, and renters currently assume the property tax burden for non-owner occupied residential properties. We also assumed that the taxable values of the non-owner occupied commercial properties (24%) drives the amount of City taxes paid by businesses (i.e. corporate entities). We assumed this same breakdown for each year of the model.



# Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

#### Revenue Projections

Based on the above assumptions, we estimate that property taxes will generate the following revenues over the next several years, including the 1% administration fee on the operating millage:

2011 \$28,008,000 2012 28,654,000 2013 29,316,000 2014 29,996,000 2015 30,694,000

#### Affect on Downtown Development Authority

According to the current model, the DDA is projected to receive between \$674,000 and \$744,000 per year over the next several years from the City's operating property tax levy. In the event that the levy is eliminated in favor of an income tax system, the DDA would lose this revenue.



## Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

#### **Income Tax System - Proposed/Future State**

An income tax would be assessed on the taxable income of residents and corporations in the City, as well as the salaries and wages earned in the City of Ann Arbor by individuals who do not live in the City.

Under the State's Uniform City Income Tax Act (UCITA) (Public Act 284 of 1964, as amended) the voters must approve the imposition of an income tax. The maximum tax rates that can be assessed are 1% on residents and corporations and 1/2% on nonresident individuals. The rates can be lower; however, the nonresident rate cannot exceed 1/2 of the resident rate. This model was prepared using the maximum allowable rates, which are the most common rates among other cities which impose an income tax.

UCITA provides that a taxpayer is allowed a minimum deduction from income of \$600 for each personal and dependency exemption (as determined under the federal internal revenue code). Additional exemptions are allowed for taxpayers who meet certain qualifications, such as being 65 years of age or older, blind, deaf, or totally and permanently disabled. For comparison purposes, we have prepared four models using different exemption rates: \$600, \$1,000, \$3,000 and \$3,500.

Another provision of UCITA specifies that residents who pay income tax to another city be allowed a credit for the amount paid to that city. Given the City's location compared to other cities that impose an income tax, the model gives consideration to residents who work and pay income taxes in the City of Detroit.

In preparing the income tax model, taxpayers were segregated into the following categories:

- Individuals who live and work in the City of Ann Arbor
- Individuals who live in Ann Arbor, but work elsewhere (non-taxing City)
- Individuals who live in Ann Arbor, but work in Detroit (taxing City)
- Individuals who work in Ann Arbor, but live elsewhere ("commuters")
- Corporations

Since the City is the home of a large university, it is appropriate to point out that in other income tax cities, students are generally treated as non-residents. Their residency is where their permanent home is (the place they will return to whenever they go away). An exception to this treatment is if a student registers to vote in the City, in which case they would be treated as a resident for income tax purposes.



## Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

Data was gathered from the U.S. Census Bureau (2000 Census) in order to determine how many people were in each of the "individual" categories above. Once the number of individuals in each category was known, we estimated the amount of taxable income for each category.

#### Estimate of Taxable Income:

**Individuals who live in Ann Arbor**: Residents of the City are taxed on their taxable income, regardless of where it was earned. We obtained the amount of income subject to tax from the State of Michigan Department of Treasury. By multiplying the ratio of residents in each of the categories above by the income subject to tax for the entire City, we calculated the taxable income for each category of residents.

In addition, for the residents who work in the City of Detroit, an estimate of the credit for taxes paid to another city was made. The average salary for jobs in the Detroit area, based on data from the U.S. Bureau of Labor Statistics, was multiplied by the Detroit non-resident tax rate to calculate the average credit per worker. The average credit per worker was then multiplied by the number of residents who work in Detroit to determine the total credit for all residents who work in Detroit.

**Commuters**: Commuters are taxed on their salaries earned in the City. To estimate income subject to tax for commuters, the number of commuters was multiplied by estimated average salaries for jobs in the Ann Arbor area. Since the University of Michigan (U of M) is the largest employer in the City, the actual number of non-resident employees and estimated average salary earned was segmented for U of M based upon the midpoint of each salary range times the number of employees in each salary range and calculated separately. The remainder of estimated commuters (Total commuters minus U of M non-resident employees) was calculated and multiplied by the average salary for jobs in the Ann Arbor area, based on data from the U.S. Bureau of Labor Statistics.

**Businesses**: To assist in the estimation of income from corporations, we surveyed seven cities that impose an income tax. We requested statistical data about tax collections, the number of returns filed annually, the cost of administration, and the timing of collections. Four of the seven cities responded to our request. Using the data obtained from the surveys, combined with corporate sales data obtained from the marketing research company Claritas, Inc., we calculated the average tax collections as a percentage of sales. We then applied the ratio to corporate sales of the City of Ann Arbor to estimate income tax from corporations.

Note: Taxable Income Data was estimated based upon actual 2006 income subject to tax from the Michigan Department of Treasury. This information was escalated forward to 2009 based upon the actual annual increase in taxable income from 2002 to 2006 (2%) for 2007 and based



## Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

upon the U.S. Department of Commerce, Bureau of Economic Analysis – Ann Arbor region Metropolitan Statistical Area, and both State and National trends for 2008 (estimated at 2.5%).

#### **Estimate of Exemption Deductions:**

For each of the categories of individuals, an estimate was made about personal and dependency exemptions to be claimed. The number of individuals in each category was multiplied by the average family size, based on the 2000 census; the result was multiplied by exemption rate used in each model (\$600, \$1,000, \$3,000 and \$3,500).

An estimate of additional exemptions for individuals over 65 was also made. The percentage of senior residents who work was calculated using data from the 2000 Census and the Current Population Survey; this percentage was multiplied by the exemption rate used in each model (\$600, \$1,000, \$3,000 and \$3,500).

#### **Growth/Projection Assumptions**

In building the income tax model, the following assumptions were used in projecting income tax revenue over the next several years:

Data	Growth Rate Assumption	Source of Assumption
Population	1.18% over next 5 years	Claritas, Inc.
# jobs in Ann Arbor	1.0% per year	U.S. Bureau of Labor Statistics
Average annual salary	1.18% per year	Claritas, Inc.
Taxable income for residents	(1%) for 2009	U.S. Dept of Commerce
	0% for 2010-2011	Management Estimate
	1.18% for 2012-2015	Claritas, Inc.
Worker ratio (resident	Assumed stable ratio	N/A
workers, commuters, etc.)	throughout the model	

#### **Administration Costs**

As with any revenue-generating program, a variety of costs are associated with having an income tax. There are costs related to the start-up of the program, such as putting the issue out to vote, establishing an ordinance, and creating forms and instructions for each class of taxpayers. Ongoing administration costs include processing the annual returns and related payments/refunds, processing quarterly estimated tax payments, registering employers for withholding, and processing the related quarterly withholding returns. Additional costs should be considered for enforcing the income tax as well. The average administration cost for the cities that replied to our survey was 7.68% of collections.



## Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

#### Revenue Projections

Based on the above assumptions, we estimate that an income tax would generate the following revenues, net of administration costs, over the next several years (assuming a 1% resident/corporate tax rate, 0.5% non-resident and \$600 exemption level):

2011	42,250,000
2012	42,964,000
2013	43,690,000
2014	44,431,000
2015	45,184,000

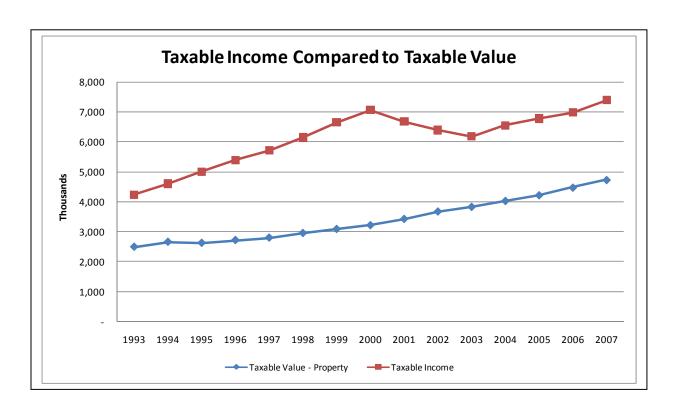


### Income Tax Feasibility Study Revenue Summary – Property Tax System July 2009

#### Historical Comparison: Tax Base

Moving to an income tax increases a community's dependence upon the health of the general economy. The chart on the following page compares the taxable value of property versus the taxable income of residents and non residents for the City of Ann Arbor. It is important to note that the business income is not included in the taxable income estimate.

Property taxable value was obtained from the City for years 1993-2002 and from Washtenaw County Equalization for 2003 - 2007. Taxable income was based on taking 2.99% of the State of Michigan AGI for the years of 1993 through 2007. State of Michigan AGI was provided by the Michigan Department of Treasury for years 1993 to 2002 and taken from the Tax Policy Center at the Urban Institute and Brookings Institution for years 2003 to 2007. The 2.99% value was determined by comparing the taxable value developed in the model to the State 2007 AGI.





### Income Tax Feasibility Study Revenue Summary - Cash Flow July 2009

Under the current property tax system, the City receives its operating millage once per year. However, under an income tax system, the City would receive its revenue stream throughout the year via payroll withholdings, estimated tax payments, and with income tax returns.

Due to the conversion from a property tax to an income tax for the current operating millage, there will be a "ramp up" period for collecting the majority of income taxes due over the first few years. Following are our assumptions for the first two years of cash flow for the conversion to an income tax, which are shown on the following page:

- Last levy of property tax operating millage July 2010 (full amount)
- Beginning of income tax January 2011
- Year 2011 revenue:
  - o 70% of total projected revenue
  - o Only withholdings revenue
  - o Monthly withholdings revenue 70% of total
  - o Quarterly withholdings revenue 30% of total
  - o Initial monthly withholdings received February 28, evenly distributed throughout the year
  - o Initial quarterly withholdings received April 30, 33% received April 30, July 31, and October 30
- Year 2012 revenue:
  - o 85% of total projected revenue
  - o Withholding, estimated tax and return revenues
    - Withholding 80%
    - Estimated tax 10%
    - Returns 10%
  - o Monthly withholdings revenue 70% of total withholding
  - o Quarterly withholdings revenue 30% of total withholding
  - o Initial monthly withholdings received January 31, evenly distributed throughout the year
  - o Initial quarterly withholdings received January 31, 25% received January 31, April 30, July 31, and October 30
  - Timing of estimated tax revenue 33% received April 30, June 30, September 30 (2012).
  - o Timing of return revenue 30% received in March and 70% received in April

Based on information obtained from other cities, the average "steady-state" cash flow for collection of income taxes would approximate the schedule on page 13 for years 2013 through 2015. Dollar amounts are based upon the \$600 exemption level.



## Income Tax Feasibility Study Revenue Summary – Cash Flow July 2009

	Year 2011									Year 2012		
	Property tax Income Tax		ncome Tax	Difference		Property tax		I	ncome Tax	Difference		
January	\$	173,300	\$	-	\$	(173,300)	\$	177,293	\$	4,219,264	\$	4,041,971
February		152,322		2,038,534		1,886,212		155,832	\$	1,845,928		1,690,096
March		-		2,038,534		2,038,534		-	\$	3,032,596		3,032,596
April		-		5,241,944		5,241,944		-	\$	8,306,676		8,306,676
May		-		2,038,534		2,038,534		-	\$	1,845,928		1,845,928
June		518,299		2,038,534		1,520,235		530,242	\$	3,164,448		2,634,206
July		15,443,372		5,241,944	(	(10,201,428)		15,799,230	\$	4,219,264	(	(11,579,966)
August		10,471,575		2,038,534		(8,433,041)		10,712,870	\$	1,845,928		(8,866,942)
September		452,494		2,038,534		1,586,039		462,921	\$	3,164,448		2,701,527
October		182,360		5,241,944		5,059,584		186,562	\$	4,219,264		4,032,702
November		124,547		2,038,534		1,913,987		127,417	\$	1,845,928		1,718,511
December		212,732		2,038,534		1,825,802		217,634	\$	1,845,928		1,628,294
Total	\$	27,731,000	\$	32,034,100	\$	4,303,100	<b>\$</b> 2	28,370,000	\$	39,555,600	\$	11,185,600

	Percent of Collections		2013	2014			2015
January	9.22%	\$	4,360,814	\$	4,434,719	\$	4,509,913
February	7.26%		3,433,284		3,491,469		3,550,670
March	7.11%		3,364,665		3,421,688		3,479,705
April	13.67%		6,466,688		6,576,281		6,687,788
May	7.48%		3,539,760		3,599,750		3,660,787
June	8.46%		4,001,160		4,068,969		4,137,962
July	7.55%		3,572,887		3,633,438		3,695,046
August	7.26%		3,433,284		3,491,469		3,550,670
September	8.69%		4,110,003		4,179,656		4,250,526
October	7.97%		3,769,277		3,833,156		3,898,151
November	7.08%		3,348,102		3,404,844		3,462,576
December	8.29%		3,923,076		3,989,561		4,057,206
Total	100.00%	<u>\$</u>	47,323,000	<u>\$</u>	48,125,000	<u>\$</u>	48,941,000



### Income Tax Feasibility Study Burden Shift & Effect on Individuals July 2009

#### **Burden Shift**

By segregating the population of taxpayers into categories, we can estimate the change in the share of tax burden if the City switched from a property tax system to an income tax system. Under the current property tax system, non-residents do not have a share of the burden, and we assume residents and corporations share the burden at 76% (\$21,286,000) and 24% (\$6,722,000), respectively.

Under an income tax system, the burden would be shifted to approximately 60.3% (\$27,605,000), 32.4% (\$14,818,000), and 7.3% (\$3,340,000) for residents, non-residents, and corporations, respectively.

Appendix A includes graphs to illustrate this comparison at the various exemption levels included in this analysis.

#### **Effect on Individuals**

Since the City's charter indicates that they may have either an income tax or an operating millage, we have prepared four tables that compare various property tax levels to income tax levels at the \$600, \$1,000, \$3,000 and \$3,500 exemption levels.

To use the chart, an individual would first identify the taxable value that best represents their property. The number below the taxable value is the amount of property tax that is paid for the operating millage currently at 6.1682 mills. To determine the estimated income tax that would be paid, an individual would review the taxable income column and select the row that best estimates their taxable income level. Moving to the right the amount of income tax is provided.

These charts can be found in Appendix B.



### Income Tax Feasibility Study Burden Shift & Effect on Individuals July 2009

#### **Example Scenarios**

In order to illustrate the potential impact on Ann Arbor taxpayers and City constituents, we have included seven different scenarios to demonstrate the impact of transitioning from a property tax to an income tax for the general operations of the City. The following scenarios are generated using various assumptions for property value, taxable property value, taxable income and rental pass-through for all four exemption levels (\$600, \$1,000, \$3,000 and \$3,500).

- Single Ann Arbor Resident, Property Owner
- Dual Income Ann Arbor Resident, Property Owner
- Single Ann Arbor Resident, Renter
- Dual Income Ann Arbor Resident, Renter
- Single Ann Arbor Resident (Senior), Property Owner
- Ann Arbor Resident (Senior Couple), Property Owner
- Single Ann Arbor Nonresident, Commuter (U of M Average Wage)

These items can be found in Appendix C.



## Income Tax Feasibility Study Listing of Michigan Income Tax Cities and Rates July 2009

2008 Tax Rates

			2008 Fax Rates		_
City	Year Adopted	Resident	Corporate	Non- Resident	2008 Exemption Amount
Albion	1972	1.00	1.00	0.500	\$ 600
Battle Creek	1967	1.00	1.00	0.500	\$ 750
Big Rapids	1970	1.00	1.00	0.500	\$ 600
Detroit	1962	2.05	0.20	1.025	\$ 600
Flint	1965	1.00	1.00	0.500	\$ 600
Grand Rapids	1967	1.30	1.30	0.650	\$ 750
Grayling	1972	1.00	1.00	0.500	\$ 3,000
Hamtramck	1962	1.00	1.00	0.500	\$ 600
Highland Park	1966	2.00	2.00	1.000	\$ 600
Hudson	1971	1.00	1.00	0.500	\$ 1,000
Ionia	1994	1.00	1.00	0.500	\$ 700
Jackson	1970	1.00	1.00	0.500	\$ 600
Lansing	1968	1.00	1.00	0.500	\$ 600
Lapeer	1967	1.00	1.00	0.500	\$ 600
Muskegon	1993	1.00	1.00	0.500	\$ 600
Muskegon Heights	1990	1.00	1.00	0.500	\$ 600
Pontiac	1968	1.00	1.00	0.500	\$ 600
Port Huron	1969	1.00	1.00	0.500	\$ 1,200
Portland	1969	1.00	1.00	0.500	\$ 1,000
Saginaw	1965	1.50	1.50	0.750	\$ 750
Springfield	1989	1.00	1.00	0.500	\$ 1,500
Walker	1988	1.00	1.00	0.500	\$ 750



## Income Tax Feasibility Study Appendix A-I July 2009

## CITY OF ANN ARBOR PROJECTION OF OPERATING PROPERTY TAX REVENUE JULY 2009

	Unaudited 2009	Estimated 2010	Estimated 2011	Estimated 2012	Estimated 2013	Estimated 2014	Estimated 2015
ASSUMPTIONS							•
Proposal A Limits:	<del>_</del>						
Assessment Cap Inflation Rate		1.30%	1.10%	1.30%	1.30%	1.30%	1.30%
Percent Increase in Real Property SEV		-8.00%	-3.00%	2.00%	2.00%	2.00%	2.00%
Percent Increase in Real Property TV							
(Cannot exceed lower of 5%, Inflation or SEV increase)		-8.00%	-3.00%	1.30%	1.30%	1.30%	1.30%
New Real Property Additions to TV / Net of Losses		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Expected Annual Real Property Transfer Rate		2.00%	2.00%	3.00%	3.00%	3.00%	3.00%
Personal Property Additions - Net		-13.00%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%
PROPERTY TAX SEV ESTIMATION							
Real SEV		5,611,482,300 \$	5,218,678,539 \$	5,114,304,968 \$	5,267,734,117 \$	5,425,766,140 \$	5,588,539,124
Personal SEV	309,364,700	264,834,300	230,405,841	225,797,724	221,281,770	216,856,135	212,519,012
Total Prior Year SEV	6,077,168,500	5,876,316,600	5,449,084,380	5,340,102,692	5,489,015,887	5,642,622,275	5,801,058,136
SEV Growth Before Additions	(212,520,500)	(448,918,584)	(156,560,356)	102,286,099	105,354,682	108,515,323	111,770,782
New Additions to Personal SEV / Net of Losses	(44,530,400)	(34,428,459)	(4,608,117)	(4,515,954)	(4,425,635)	(4,337,123)	(4,250,380)
New Additions to Real SEV / Net of Losses	56,199,000	56,114,823	52,186,785	51,143,050	52,677,341	54,257,661	55,885,391
Current Year SEV	5,876,316,600 \$	5,449,084,380 \$	5,340,102,692 \$	5,489,015,887 \$	5,642,622,275 \$	5,801,058,136 \$	5,964,463,929
PROPERTY TAX TV ESTIMATION (AD VALOREM ROLL)							
Real TV Subject to Per Parcel Assessment		4,629,242,106 \$	4,337,483,453 \$	4,231,949,622 \$	4,355,280,513 \$	4,482,431,226 \$	4,613,514,332
Personal TV	309,364,700	278,367,200	243,938,741	239,330,624	234,814,670	230,389,035	226,051,912
TV Subject to Prop. Transfer Assessment	-	94,474,329	88,520,070	130,885,040	134,699,397	138,631,894	142,686,010
Total Prior Year TV	4,898,327,457	5,002,083,635	4,669,942,264	4,602,165,286	4,724,794,580	4,851,452,155	4,982,252,254
Real TV Growth Before Additions	79,530,676	(370,339,369)	(130,124,504)	55,015,345	56,618,647	58,271,606	59,975,686
Real Property Transfer SEV Step Up ("Uncapped")	-	16,511,634	14,768,858	20,986,853	21,787,222	22,607,955	23,449,665
New Additions to Personal TV / Net of Losses	(30,997,500)	(34,428,459)	(4,608,117)	(4,515,954)	(4,425,635)	(4,337,123)	(4,250,380)
New Additions to Real TV / Net of Losses	55,223,002	56,114,823	52,186,785	51,143,050	52,677,341	54,257,661	55,885,391
Current Year TV	5,002,083,635	4,669,942,264	4,602,165,286	4,724,794,580	4,851,452,155	4,982,252,254	5,117,312,616
TIFA, LDFA and DDA capture	128,400,000	114,128,000	109,204,160	112,388,243	115,636,008	118,948,728	122,327,703
Taxable Value (ad valorem roll)	4,873,683,635 \$	4,555,814,264 \$	4,492,961,126 \$	4,612,406,337 \$	4,735,816,147 \$	4,863,303,526 \$	4,994,984,913



## Income Tax Feasibility Study Appendix A-I July 2009

MILLAGE RATE:										
Headlee Rollback Factor	_'	1.0000		1.0000	0.9965	0.9965		0.9964		0.9963
Maximum Operating Millage Rate:	6.1682	6.1682		6.1682	6.1469	6.1251		6.1030		6.0805
Millage Rate Levied (operating millage):	6.1682	6.1682		6.1682	6.1469	6.1251		6.1030		6.0805
AD VALOREM PROPERTY TAXES LEVIED - OPERATING MILLS	\$ 30,062,000	\$ 28,101,000	\$	27,713,000	\$ 28,352,000	\$ 29,008,000	\$	29,681,000	\$	30,372,000
IFT Roll	5,836,400	5,836,400		5,836,400	5,836,400	5,836,400	)	5,836,400		5,836,401
IFT Rate (1/2 of operating millage rate)	3.0841	3.0841		3.0841	 3.0734	3.0626	_	3.0515		3.0403
IFT Operating Levy	18,000	18,000		18,000	 18,000	18,000	_	18,000		18,000
Subtotal Ad Valorem and IFT operating levies	30,080,000	28,119,000		27,731,000	28,370,000	29,026,000	)	29,699,000		30,390,000
1% Administration Fee	300,800	281,000	_	277,000	 284,000	290,000	_	297,000	_	304,000
TOTAL PROPERTY TAX REVENUE FROM OPERATING MILLS	\$ 30,380,800	\$ 28,400,000	\$	28,008,000	\$ 28,654,000	\$ 29,316,000	\$	29,996,000	\$	30,694,000
Based on 2009 Tax Year, percentage of taxable value attributable										
to commercial use properties: 24.00%										
Property taxes paid for:										
Residential use		\$ 21,584,000		21,286,080	\$ 21,777,040			22,796,960	\$	23,327,440
Business use		6,816,000		6,721,920	 6,876,960	7,035,840	<u> </u>	7,199,040		7,366,560
		\$ 28,400,000	\$	28,008,000	\$ 28,654,000	\$ 29,316,000	\$	29,996,000	\$	30,694,000
DDA TAXABLE VALUES										
Growth Rates:										
Market Value Adjustment		-8.0%	<b>b</b>	-3.0%	2.0%	2.09	6	2.0%		2.0%
Taxable Value										
Total District **	\$178,400,000	\$164,128,000		\$159,204,160	162,388,243	165,636,008		168,948,728		172,327,703
Base Year **	50,000,000	50,000,000		50,000,000	 50,000,000	50,000,000		50,000,000		50,000,000
Capture **	\$128,400,000	\$ 114.128.000	\$	109.204.160	\$ 112.388.243	\$ 115.636.008	\$	118.948.728	\$	122.327.703
DDA Revenue		\$ 704,000	\$	674,000	\$ 691,000	\$ 708,000	\$	726,000	\$	744,000

<sup>\*\* -</sup> The City's DDA capture is not calculated traditionally. The DDA only captures on the "net new" properties as a percentage of total DDA. The "total district" figure above represents the amount of T.V. that the DDA captured for 2008



## Income Tax Feasibility Study Appendix A-2 July 2009

## CITY OF ANN ARBOR INCOME TAX FEASIBILITY STUDY ESTIMATED INCOME TAX EXPECTANCY - EXECUTIVE SUMMARY EXEMPTION LEVEL: \$600

	 2011	2012	2013	2014		2015
EXECUTIVE SUMMARY						
Resident income tax yield	\$ 27,605,000	\$ 27,939,000	\$ 28,276,000	\$ 28,617,000	\$	28,962,000
Non-Resident income tax yield	14,818,000	15,214,000	15,620,000	16,036,000		16,462,000
Corporate income tax yield	 3,340,000	 3,383,000	 3,427,000	 3,472,000		3,517,000
TOTAL INCOME TAX EXPECTANCY	45,763,000	46,536,000	47,323,000	48,125,000		48,941,000
Cost of administration - percent of total collections ** = 7.68%	 3,513,000	 3,572,000	 3,633,000	 3,694,000	_	3,757,000
INCOME TAX EXPECTANCY - NET OF ADMINISTRATION COST	\$ 42,250,000	\$ 42,964,000	\$ 43,690,000	\$ 44,431,000	<u>\$</u>	45,184,000
PROJECTED PROPERTY TAX REVENUE FROM OPERATING MILLAGE	\$ 28,008,000	\$ 28,654,000	\$ 29,316,000	\$ 29,996,000	\$	30,694,000
DIFFERENCE	\$ 14,242,000	\$ 14,310,000	\$ 14,374,000	\$ 14,435,000	\$	14,490,000

NOTE: This income tax projection is a forecast. Actual results may differ from projections due to events and circumstances which may not occur as expected. Certain factors which may affect actual results include, but are not limited to, the following:

- Significant changes in the economy
- Apportionment of income by non-residents and businesses
- Changes in the City's population
- Change in the number of jobs in the City's limits due to new business and/or relocation of businesses into or out of the City



<sup>\*\*</sup> Cost of administration as a percentage of collections is based on the average percentage experienced by other Michigan cities surveyed as part of this project.

# Income Tax Feasibility Study Appendix A-2 July 2009

## CITY OF ANN ARBOR INCOME TAX FEASIBILITY STUDY ESTIMATED INCOME TAX EXPECTANCY - DETAILED CALCULATION EXEMPTION LEVEL: \$600

		2011	2012	2013	2014	2015
Total Ann Arbor resident income subject to tax	(1)	\$ 3,430,891,951	\$ 3,471,376,476	\$ 3,512,338,719	\$ 3,553,784,316	\$ 3,595,718,970
RESIDENT - WORKS IN ANN ARBOR						
Total Number of Ann Arbor residents working in Ann Arbor	(2)	38,149	38,148	38,146	38,144	38,143
Divide: Total number of Ann Arbor residents who work	(2)	60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor residents working in Ann Arbor" to "total AA resident workers"		62.78%	62.78%	62.78%	62.78%	62.78%
Times: Total Income subject to tax		3,430,891,951	3,471,376,476	3,512,338,719	3,553,784,316	3,595,718,970
Income subject to tax - residents working in Ann Arbor		2,153,755,767	2,179,170,085	2,204,884,292	2,230,901,926	2,257,226,569
Less: Personal exemptions (Exemption Amt * # of Residents working in Ann Arbor						
* Average Family Size)		68,668,286	68,665,539	68,662,792	68,660,046	68,657,299
Less: Additional exemptions for Seniors		7,279,886	7,702,120	8,148,843	8,621,476	9,124,800
Taxable income before discount factor		2,077,807,595	2,102,802,426	2,128,072,657	2,153,620,405	2,179,444,470
Discount factor	(5)	85%	85%	85%	85%	85%
Estimated taxable income		1,766,136,455	1,787,382,062	1,808,861,758	1,830,577,344	1,852,527,799
Estimated tax yield (1.0%)		\$ 17,661,365	\$ 17,873,821	\$ 18,088,618	\$ 18,305,773	\$ 18,525,278
RESIDENT - WORKS IN DETROIT						
Total number of Ann Arbor residents commuting to Detroit	(2)	1,218	1,218	1,218	1,218	1,218
Divide: Total number of Ann Arbor residents who work	(2)	60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor residents commuting to Detroit" to "total AA workers"		2.00%	2.00%	2.00%	2.00%	2.00%
Times: Total Income subject to tax		\$ 3,430,891,951	\$ 3,471,376,476	\$ 3,512,338,719	\$ 3,553,784,316	\$ 3,595,718,970
Income subject to tax - residents working in Detroit  Less: Personal exemptions (Exemption Amt * # of Residents Commuting to Detroit		\$ 68,773,411	\$ 69,584,937	\$ 70,406,039	\$ 71,236,830	\$ 72,077,425
* Average Family Size)		2,192,706	2,192,618	2,192,530	2,192,442	2,192,355
Taxable income before discount factor & credit for income tax paid to another city		66,580,705	67,392,319	68,213,509	69,044,388	69,885,070
Discount factor	(5)	85.00%	85.00%	85.00%	85.00%	85.00%
Estimated taxable income before credit for income tax paid to another city	,	56,593,599	57,283,471	57,981,483	58,687,730	59,402,310
Estimated tax yield (1.0%) before credit for income tax paid to another city  Less: Credit for income tax paid to the City of Detroit (Average Salary in Detroit Area -  Exemptions * Detroit non-resident tax rate of 1.025% * Number of residents		565,936	572,835	579,815	586,877	594,023
commuting to Detroit)	(3)	632,103	639,647	647,279	655,001	662,814
Estimated tax yield after credit for taxes paid to another city		<u> -                                   </u>	<u>\$ - </u>	<u>\$ - </u>	<u>\$ - </u>	<u> -                                   </u>



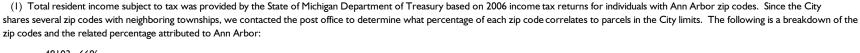
# Income Tax Feasibility Study Appendix A-2 July 2009

		2011	2012	2013	2014	2015
RESIDENT - WORKS IN NON-TAXING CITY						
Total number of Ann Arbor residents who work	(2)	60,771	60,768	60,766	60,763	60,761
Less: number of Ann Arbor residents working in Ann Arbor	(2) (2)	38,149 1,218	38,148	38,146	38,144 1,218	38,143
Less: number of Ann Arbor residents commuting to Detroit	(2)	1,218	1,218	1,218	1,218	1,218
Equals total number of City residents commuting to a non-taxing city		21,403	21,403	21,402	21,401	21,400
Divide: Total number of Ann Arbor residents who work		60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor resident commuters to non-taxing cities" to "total AA workers"		35.22%	35.22%	35.22%	35.22%	35.22%
Times: Total Income subject to tax		\$ 3,430,891,951		\$ 3,512,338,719		
Timos Potal mosmo subject to tan		<del>4 5,155,671,751</del>	<del>+ - 5,, 5 6, 6</del>	φ σ,σ.2,σσσ,π.π	<del>4 5,555,75 1,515</del>	<del>+ 1,513,113,113</del>
Income subject to tax - residents working in non-taxing city		\$ 1,208,362,774	\$ 1,222,621,455	\$ 1,237,048,388	\$ 1,251,645,559	\$ 1,266,414,976
Less: Personal exemptions (Exemption Amt * Number of residents commuting to non-taxing city						
* Average Family Size)		38,526,281	38,524,740	38,523,199	38,521,658	38,520,117
Taxable income before discount factor		1,169,836,493	1,184,096,714	1,198,525,189	1,213,123,901	1,227,894,859
Discount factor	(5)	85.00%	85.00%	85.00%	85.00%	85.00%
Estimated taxable income		994,361,019	1,006,482,207	1,018,746,410	1,031,155,315	1,043,710,630
Estimated tax yield (1.0%)		\$ 9,943,610	\$ 10,064,822	\$ 10,187,464	\$ 10,311,553	\$ 10,437,106
NON-RESIDENT - WORKS IN ANN ARBOR (COMMUTERS)  Number of commuters into Ann Arbor- estimated U of M commuters	(1)	20,952	20,952	20.952	20,952	20,952
Number of commuters into Ann Arbor- estimated 0 of Pi commuters  Number of commuters into Ann Arbor- estimated other commuters (balance)	(6)	54,301	55,437	56,583	57,742	58,912
Total number of commuters into Ann Arbor	(2)	75,253	76,389	77.535	78.694	79.864
Total number of confiniteers into Ann Arbot	(2)	73,233	70,307	77,555	70,074	77,004
Times: Average salary - U of M	(6)	60,809	61,526	62,252	62,987	63,730
Times: Average salary - Ann Arbor	(3)	51,802	52,413	53,031	53,657	54,290
Income subject to tax - non-resident workers in AA		\$ 4.086.946.612	\$ 4,194,689,819	\$ 4.305.008.083	\$ 4.417.960.352	\$ 4.533.606.900
Less: Personal exemptions (Exemption Amt * Number of commuters * Avg family size )		135,455,511	137,499,495	139,563,892	141,648,906	143,754,742
2000 / 0000 ma over-paorio (2001-paorio 11 anno 10 ann		,,		,		
Taxable income before discount factor		3,951,491,102	4,057,190,324	4,165,444,190	4,276,311,447	4,389,852,159
Discount factor	(5)	75.00%	75.00%	75.00%	75.00%	75.00%
Estimated taxable income		2,963,618,326	3,042,892,743	3,124,083,143	3,207,233,585	3,292,389,119
Estimated tax yield (.5%)		\$ 14,818,092	\$ 15,214,464	\$ 15,620,416	\$ 16,036,168	\$ 16,461,946
CORPORATE						
Estimated tax yield						
	(4)	\$ 3,340,002	\$ 3,383,422	\$ 3,427,407	\$ 3,471,963	\$ 3,517,098



## Income Tax Feasibility Study Appendix A-2 July 2009

#### **FOOTNOTE EXPLANATIONS**



48103 - 66% 48104 - 95% 48105 - 50% 48106 - 100% 48107 - 100% 48108 - 50% 48109 - 100% 48113 - 100%

The 2006 amounts were increased or decreased by the following percentages to update the amount to current year values - 2% for 2007, 2.5% for 2008, and (1%) for 2009.

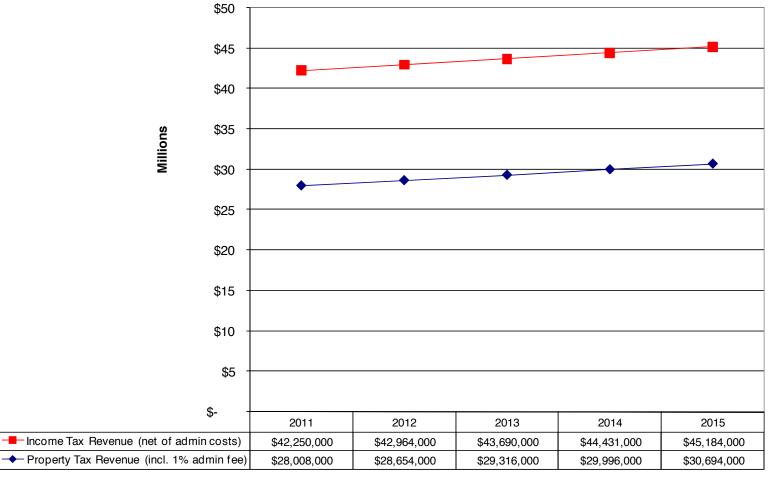
- (2) Source: 2000 Census (Residence MCD/County to Workplace MCD/County Flows for Michigan)
- (3) Average salary is based on Bureau of Labor Statistics Quarterly Census of Employment and Wages for the area specified. Source data is from 2007, updated to current levels assuming 1.18% increase per year.
- (4) Estimated tax yield from corporate sources was calculated based on experiences of other Michigan cities that levy income tax. The amount is calculated based on corporate taxes collected as a percentage of reported corporate sales for the City. Corporate sales was obtained from Claritas, Inc., a national organization which researches and accumulates consumer and business marketing data.
- (5) A discount factor was used to estimate income that may not be included in taxable income due to apportionment or non-compliance with filing requirements. The factor used was kept consistent from the 2004 income tax study. The factor was calculated based on results of the 2003 tax year as reported by other Michigan cities surveyed as part of the original project compared to our projection of tax revenue for those cities using this model. This discount factor is provided in the model to provide a level of conservatism in our estimates.
- (6) Information obtained from U of M. Number of non-resident employees were provided to us by salary range at the University. This number of employees was taken times the midpoint of each salary range and divided by the total number of employees to calculate the average U of M salary.



Income Tax Feasibility Study
Appendix A-2
July 2009

#### **CITY OF ANN ARBOR**

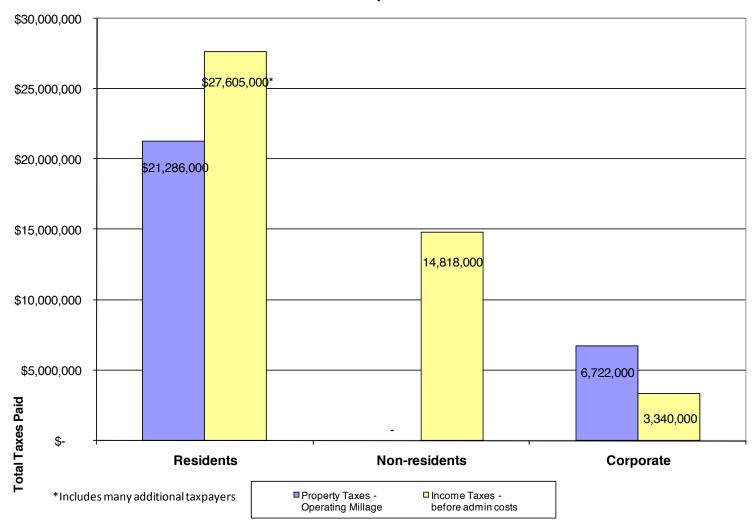
Projected Revenue
Property Tax (Operating Millage) Compared
to Income Taxes (\$600 Exemption Level)





Income Tax Feasibility Study
Appendix A-2
July 2009

### CITY OF ANN ARBOR Projected Shift of Tax Burden \$600 Exemption Level





## Income Tax Feasibility Study Appendix A-3 July 2009

## CITY OF ANN ARBOR INCOME TAX FEASIBILITY STUDY ESTIMATED INCOME TAX EXPECTANCY - EXECUTIVE SUMMARY EXEMPTION LEVEL: \$1000

		2011	 2012	 2013	 2014		2015
EXECUTIVE SUMMARY							
Resident income tax yield	\$	26,956,000	\$ 27,288,000	\$ 27,623,000	\$ 27,961,000	\$	28,303,000
Non-Resident income tax yield		14,479,000	14,871,000	15,272,000	15,682,000		16,103,000
Corporate income tax yield		3,340,000	 3,383,000	3,427,000	3,472,000		3,517,000
TOTAL INCOME TAX EXPECTANCY		44,775,000	45,542,000	46,322,000	47,115,000		47,923,000
Cost of administration - percent of total collections ** = 7.68%		3,437,000	3,496,000	 3,556,000	3,617,000		3,679,000
INCOME TAX EXPECTANCY - NET OF ADMINISTRATION COST	\$	41,338,000	\$ 42,046,000	\$ 42,766,000	\$ 43,498,000	\$	44,244,000
PROJECTED PROPERTY TAX REVENUE FROM OPERATING MILLAGE	<u>\$</u>	28,008,000	\$ 28,654,000	\$ 29,316,000	\$ 29,996,000	<u>\$</u>	30,694,000
DIFFERENCE	<u>\$</u>	13,330,000	\$ 13,392,000	\$ 13,450,000	\$ 13,502,000	\$	13,550,000

NOTE: This income tax projection is a forecast. Actual results may differ from projections due to events and circumstances which may not occur as expected. Certain factors which may affect actual results include, but are not limited to, the following:

- Significant changes in the economy
- Apportionment of income by non-residents and businesses
- Changes in the City's population
- Change in the number of jobs in the City's limits due to new business and/or relocation of businesses into or out of the City



<sup>\*\*</sup> Cost of administration as a percentage of collections is based on the average percentage experienced by other Michigan cities surveyed as part of this project.

# Income Tax Feasibility Study Appendix A-3 July 2009

## CITY OF ANN ARBOR INCOME TAX FEASIBILITY STUDY ESTIMATED INCOME TAX EXPECTANCY - DETAILED CALCULATION EXEMPTION LEVEL: \$1000

		2011	2012	2013	2014	2015
Total Ann Arbor resident income subject to tax	(1)	\$ 3,430,891,951	\$ 3,471,376,476	\$ 3,512,338,719	\$ 3,553,784,316	\$ 3,595,718,970
RESIDENT - WORKS IN ANN ARBOR						
Total Number of Ann Arbor residents working in Ann Arbor	(2)	38,149	38,148	38,146	38,144	38,143
Divide: Total number of Ann Arbor residents who work	(2)	60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor residents working in Ann Arbor" to "total AA resident workers"		62.78%	62.78%	62.78%	62.78%	62.78%
Times: Total Income subject to tax		3,430,891,951	3,471,376,476	3,512,338,719	3,553,784,316	3,595,718,970
Income subject to tax - residents working in Ann Arbor		2,153,755,767	2,179,170,085	2,204,884,292	2,230,901,926	2,257,226,569
Less: Personal exemptions (Exemption Amt $^*$ # of Residents working in Ann Arbor						
* Average Family Size)		114,447,143	114,442,565	114,437,987	114,433,410	114,428,832
Less: Additional exemptions for Seniors		12,133,144	12,836,866	13,581,405	14,369,126	15,208,000
Taxable income before discount factor		2,027,175,480	2,051,890,653	2,076,864,900	2,102,099,390	2,127,589,737
Discount factor	(5)	85%	85%	85%	85%	85%
Estimated taxable income		1,723,099,158	1,744,107,055	1,765,335,165	1,786,784,482	1,808,451,276
Estimated tax yield (1.0%)		\$ 17,230,992	\$ 17,441,071	\$ 17,653,352	\$ 17,867,845	\$ 18,084,513
RESIDENT - WORKS IN DETROIT						
Total number of Ann Arbor residents commuting to Detroit	(2)	1,218	1,218	1,218	1,218	1,218
Divide: Total number of Ann Arbor residents who work	(2)	60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor residents commuting to Detroit" to "total AA workers"		2.00%	2.00%	2.00%	2.00%	2.00%
Times: Total Income subject to tax		\$ 3,430,891,951	\$ 3,471,376,476	\$ 3,512,338,719	\$ 3,553,784,316	\$ 3,595,718,970
Income subject to tax - residents working in Detroit Less: Personal exemptions (Exemption Amt * # of Residents Commuting to Detroit		\$ 68,773,411	\$ 69,584,937	\$ 70,406,039	\$ 71,236,830	\$ 72,077,425
* Average Family Size)		3,654,509	3,654,363	3,654,217	3,654,071	3,653,925
Taxable income before discount factor & credit for income tax paid to another city		65,118,901	65.930.574	66,751,822	67,582,760	68,423,501
Discount factor	(5)	85.00%	85.00%	85.00%	85.00%	85.00%
Estimated taxable income before credit for income tax paid to another city	( )	55,351,066	56,040,988	56,739,049	57,445,346	58,159,975
Estimated tax yield (1.0%) before credit for income tax paid to another city  Less: Credit for income tax paid to the City of Detroit (Average Salary in Detroit Area -  Exemptions * Detroit non-resident tax rate of 1.025% * Number of residents		553,511	560,410	567,390	574,453	581,600
commuting to Detroit)	(3)	632,103	639,647	647,279	655,001	662,814
Estimated tax yield after credit for taxes paid to another city		\$ -	<u> </u>	<u> </u>	\$ -	<u>\$ - </u>



# Income Tax Feasibility Study Appendix A-3 July 2009

		2011	2012		2013	2014	2015
RESIDENT - WORKS IN NON-TAXING CITY							
Total number of Ann Arbor residents who work	(2)	60,771		,768	60,766	60,763	60,761
Less: number of Ann Arbor residents working in Ann Arbor Less: number of Ann Arbor residents commuting to Detroit	(2) (2)	38,149 1,218		,148 ,218	38,146 1,218	38,144 1,218	38,143 1,218
Less: number of Affil Arbor residents commuting to Detroit	(2)	1,210	-	,210	1,210	1,210	1,210
Equals total number of City residents commuting to a non-taxing city		21,403	2	,403	21,402	21,401	21,400
Divide: Total number of Ann Arbor residents who work		60,771	60	,768	60,766	60,763	60,761
		25.220/	35	220/	25 220/	35 330/	35 330/
Percent of "Ann Arbor resident commuters to non-taxing cities" to "total AA workers"		35.22%		22%	35.22%	35.22%	35.22%
Times: Total Income subject to tax		\$ 3,430,891,951	\$ 3, <del>4</del> /1,3/0	,4/6	\$ 3,512,338,719	\$ 3,553,784,316	\$ 3,595,718,970
Income subject to tax - residents working in non-taxing city		\$ 1,208,362,774	\$ 1,222,62	,455	\$ 1,237,048,388	\$ 1,251,645,559	\$ 1,266,414,976
Less: Personal exemptions (Exemption Amt * Number of residents commuting to non-taxing city							
* Average Family Size)		64,210,469	64,20	,900	64,205,332	64,202,764	64,200,196
Taxable income before discount factor		1 144 152 205	1.158.41	EE4	1 172 942 054	1 107 442 705	1 202 214 701
Discount factor	(5)	1,144,152,305 85.00%		,55 <del>4</del> 00%	1,172,843,056 85.00%	1,187,442,795 85.00%	1,202,214,781 85.00%
Estimated taxable income	(3)	972,529,459	984,65		996,916,597	1,009,326,376	1,021,882,564
Estimated taxable income		772,327,737	767,63	,321	770,710,377	1,007,326,376	1,021,002,304
Estimated tax yield (1.0%)		\$ 9,725,295	\$ 9,846	<u> 515</u>	\$ 9,969,166	\$ 10,093,264	\$ 10,218,826
NON-RESIDENT - WORKS IN ANN ARBOR (COMMUTERS)							
Number of commuters into Ann Arbor- estimated U of M commuters	(6)	20,952		,952	20,952	20,952	20,952
Number of commuters into Ann Arbor- estimated other commuters (balance)		54,301		,437	56,583	57,742	58,912
Total number of commuters into Ann Arbor	(2)	75,253	70	,389	77,535	78,694	79,864
Times: Average salary - U of M	(6)	60,809	6	,526	62,252	62,987	63,730
Times: Average salary - Ann Arbor	(3)	51,802	52	,413	53,031	53,657	54,290
la como cubica da como como constituir de como constituir de la co		¢ 4004044413	¢ 410470		¢ 4305.000.000	¢ 4417040350	¢ 4532707000
Income subject to tax - non-resident workers in AA		\$ 4,086,946,612		•	\$ 4,305,008,083	\$ 4,417,960,352	
Less: Personal exemptions (Exemption Amt * Number of commuters * Avg family size )		225,759,184	229,16	,826	232,606,487	236,081,509	239,591,236
Taxable income before discount factor		3,861,187,428	3,965,52	,994	4,072,401,595	4,181,878,843	4,294,015,664
Discount factor	(5)	75.00%	75	00%	75.00%	75.00%	75.00%
Estimated taxable income		2,895,890,571	2,974,142	,995	3,054,301,197	3,136,409,132	3,220,511,748
Estimated tax yield (.5%)		\$ 14,479,453	\$ 14,870	715	\$ 15,271,506	\$ 15,682,046	\$ 16,102,559
CORPORATE							
Estimated tax yield	(4)	\$ 3,340,002	\$ 3,383	422	\$ 3,427,407	\$ 3,471,963	\$ 3,517,098



## Income Tax Feasibility Study Appendix A-3 July 2009

#### **FOOTNOTE EXPLANATIONS**

(1) Total resident income subject to tax was provided by the State of Michigan Department of Treasury based on 2006 income tax returns for individuals with Ann Arb	or zip codes. Since the City
shares several zip codes with neighboring townships, we contacted the post office to determine what percentage of each zip code correlates to parcels in the City limits.	The following is a breakdown of the
zip codes and the related percentage attributed to Ann Arbor:	

48103 - 66% 48104 - 95% 48105 - 50% 48106 - 100% 48107 - 100% 48108 - 50% 48109 - 100% 48113 - 100%

The 2006 amounts were increased or decreased by the following percentages to update the amount to current year values - 2% for 2007, 2.5% for 2008, and (1%) for 2009.

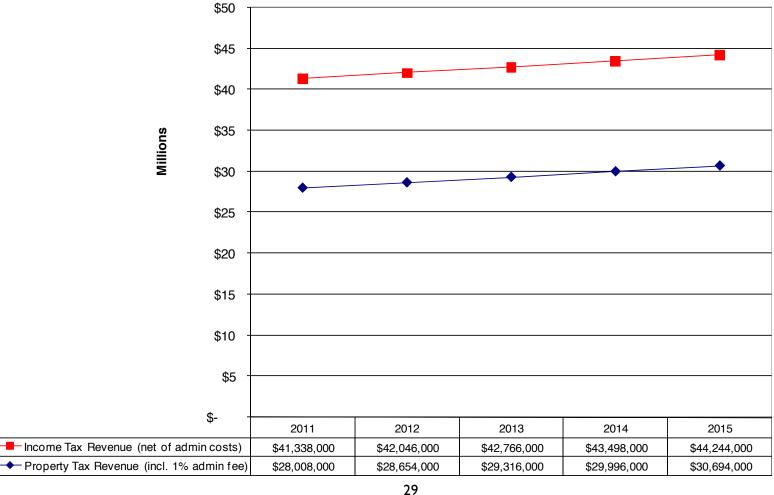
- (2) Source: 2000 Census (Residence MCD/County to Workplace MCD/County Flows for Michigan)
- (3) Average salary is based on Bureau of Labor Statistics Quarterly Census of Employment and Wages for the area specified. Source data is from 2007, updated to current levels assuming 1.18% increase per year.
- (4) Estimated tax yield from corporate sources was calculated based on experiences of other Michigan cities that levy income tax. The amount is calculated based on corporate taxes collected as a percentage of reported corporate sales for the City. Corporate sales was obtained from Claritas, Inc., a national organization which researches and accumulates consumer and business marketing data.
- (5) A discount factor was used to estimate income that may not be included in taxable income due to apportionment or non-compliance with filing requirements. The factor used was kept consistent from the 2004 income tax study. The factor was calculated based on results of the 2003 tax year as reported by other Michigan cities surveyed as part of the original project compared to our projection of tax revenue for those cities using this model. This discount factor is provided in the model to provide a level of conservatism in our estimates.
- (6) Information obtained from U of M. Number of non-resident employees were provided to us by salary range at the University. This number of employees was taken times the midpoint of each salary range and divided by the total number of employees to calculate the average U of M salary.



**Income Tax Feasibility Study Appendix A-3 July 2009** 

### **CITY OF ANN ARBOR**

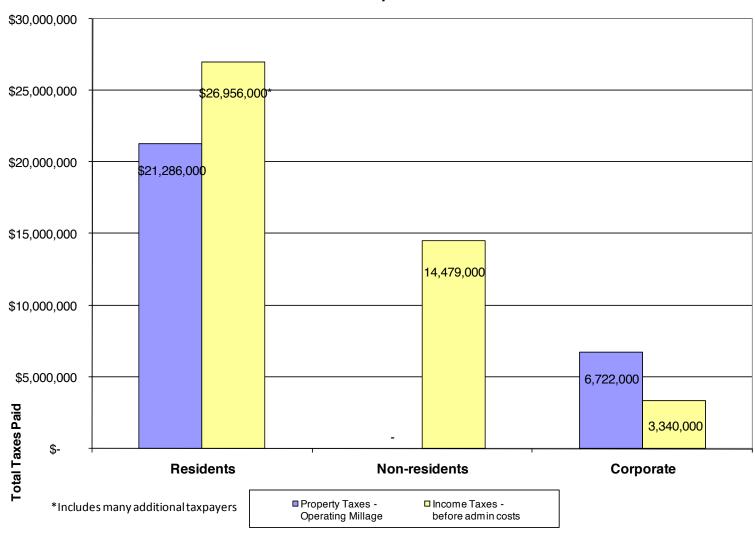
**Projected Revenue** Property Tax (Operating Millage) Compared to Income Taxes (\$1000 Exemption Level)





Income Tax Feasibility Study
Appendix A-3
July 2009

### CITY OF ANN ARBOR Projected Shift of Tax Burden \$1000 Exemption Level





## Income Tax Feasibility Study Appendix A-4 July 2009

## CITY OF ANN ARBOR INCOME TAX FEASIBILITY STUDY ESTIMATED INCOME TAX EXPECTANCY - EXECUTIVE SUMMARY EXEMPTION LEVEL: \$3000

		2011	 2012		2013		2014		2015
EXECUTIVE SUMMARY									
Resident income tax yield	\$	23,713,000	\$ 24,032,000	\$	24,355,000	\$	24,680,000	\$	25,008,000
Non-Resident income tax yield		12,786,000	13,152,000		13,527,000		13,911,000		14,306,000
Corporate income tax yield		3,340,000	 3,383,000		3,427,000		3,472,000		3,517,000
TOTAL INCOME TAX EXPECTANCY		39,839,000	40,567,000		41,309,000		42,063,000		42,831,000
Cost of administration - percent of total collections ** $= 7.68\%$		3,058,000	 3,114,000	_	3,171,000	_	3,229,000	_	3,288,000
INCOME TAX EXPECTANCY - NET OF ADMINISTRATION COST	<u>\$</u>	36,781,000	\$ 37,453,000	\$	38,138,000	\$	38,834,000	\$	39,543,000
PROJECTED PROPERTY TAX REVENUE FROM OPERATING MILLAGE	\$	28,008,000	\$ 28,654,000	\$	29,316,000	<u>\$</u>	29,996,000	<u>\$</u>	30,694,000
DIFFERENCE	\$	8,773,000	\$ 8,799,000	\$	8,822,000	\$	8,838,000	\$	8,849,000

NOTE: This income tax projection is a forecast. Actual results may differ from projections due to events and circumstances which may not occur as expected. Certain factors which may affect actual results include, but are not limited to, the following:

- Significant changes in the economy
- Apportionment of income by non-residents and businesses
- Changes in the City's population
- · Change in the number of jobs in the City's limits due to new business and/or relocation of businesses into or out of the City



<sup>\*\*</sup> Cost of administration as a percentage of collections is based on the average percentage experienced by other Michigan cities surveyed as part of this project.

## Income Tax Feasibility Study Appendix A-4 July 2009

## INCOME TAX FEASIBILITY STUDY ESTIMATED INCOME TAX EXPECTANCY - DETAILED CALCULATION EXEMPTION LEVEL: \$3000

			2011		2012		2013	_	2014		2015
Total Ann Arbor resident income subject to tax	(1)	\$	3,430,891,951	\$	3,471,376,476	\$	3,512,338,719	\$	3,553,784,316	\$ :	3,595,718,970
RESIDENT - WORKS IN ANN ARBOR											
Total Number of Ann Arbor residents working in Ann Arbor	(2)		38,149		38,148		38,146		38,144		38,143
Divide: Total number of Ann Arbor residents who work	(2)	-	60,771		60,768		60,766	_	60,763		60,761
Percent of "Ann Arbor residents working in Ann Arbor" to "total AA resident workers"			62.78%		62.78%		62.78%		62.78%		62.78%
Times: Total Income subject to tax			3,430,891,951		3,471,376,476		3,512,338,719		3,553,784,316	:	3,595,718,970
Income subject to tax - residents working in Ann Arbor			2,153,755,767		2,179,170,085		2,204,884,292		2,230,901,926	:	2,257,226,569
Less: Personal exemptions (Exemption Amt * # of Residents working in Ann Arbor											
* Average Family Size)			343,341,429		343,327,695		343,313,962		343,300,229		343,286,497
Less: Additional exemptions for Seniors			36,399,432		38,510,599		40,744,214	_	43,107,378		45,624,000
Taxable income before discount factor			1,774,014,906		1,797,331,791		1,820,826,116		1,844,494,319		1,868,316,072
Discount factor	(5)		85%		85%		85%	_	85%		85%
Estimated taxable income			1,507,912,670	_	1,527,732,022		1,547,702,199		1,567,820,171		1,588,068,661
Estimated tax yield (1.0%)		\$	15,079,127	\$	15,277,320	<u>\$</u>	15,477,022	<u>\$</u>	15,678,202	\$	15,880,687
RESIDENT - WORKS IN DETROIT											
Total number of Ann Arbor residents commuting to Detroit	(2)		1,218		1,218		1,218		1,218		1,218
Divide: Total number of Ann Arbor residents who work	(2)		60,771	_	60,768		60,766		60,763		60,761
Percent of "Ann Arbor residents commuting to Detroit" to "total AA workers"			2.00%		2.00%		2.00%		2.00%		2.00%
Times: Total Income subject to tax		\$	3,430,891,951	\$	3,471,376,476	\$	3,512,338,719	\$	3,553,784,316	\$ :	3,595,718,970
Income subject to tax - residents working in Detroit		\$	68,773,411	\$	69,584,937	\$	70,406,039	\$	71,236,830	\$	72,077,425
Less: Personal exemptions (Exemption Amt $^*$ # of Residents Commuting to Detroit											
* Average Family Size)			10,963,528		10,963,089		10,962,651	_	10,962,212		10,961,774
Taxable income before discount factor & credit for income tax paid to another city			57,809,883		58,621,848		59,443,389		60,274,618		61,115,651
Discount factor	(5)		85.00%		85.00%		85.00%		85.00%		85.00%
Estimated taxable income before credit for income tax paid to another city			49,138,401	_	49,828,571		50,526,880		51,233,426	_	51,948,304
Estimated tax yield (1.0%) before credit for income tax paid to another city  Less: Credit for income tax paid to the City of Detroit (Average Salary in Detroit Area -  Exemptions * Detroit non-resident tax rate of 1.025% * Number of residents			491,384		498,286		505,269		512,334		519,483
commuting to Detroit)	(3)		632,103	_	639,647	_	647,279	_	655,001	_	662,814
Estimated tax yield after credit for taxes paid to another city		\$	-	<u>\$</u>		\$		\$		\$	



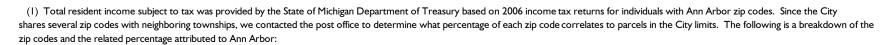
## Income Tax Feasibility Study Appendix A-4 July 2009

		2011	2012	2013	2014	2015
RESIDENT - WORKS IN NON-TAXING CITY						
Total number of Ann Arbor residents who work	(2)	60,771	60,768	60,766	60,763	60,761
Less: number of Ann Arbor residents working in Ann Arbor	(2)	38,149	38,148	38,146	38,144	38,143
Less: number of Ann Arbor residents commuting to Detroit	(2)	1,218	1,218	1,218	1,218	1,218
Equals total number of City residents commuting to a non-taxing city		21,403	21,403	21,402	21,401	21,400
Divide: Total number of Ann Arbor residents who work		60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor resident commuters to non-taxing cities" to "total AA workers"		35.22%	35.22%	35.22%	35.22%	35.22%
Times: Total Income subject to tax		\$ 3,430,891,951		\$ 3,512,338,719		\$ 3,595,718,970
· · · · · · · · · · · · · · · · · · ·		+ -,,	<del>+ -,,,</del>	<del></del>	<del>+ -,,,</del>	+ -,,,
Income subject to tax - residents working in non-taxing city		\$ 1,208,362,774	\$ 1,222,621,455	\$ 1,237,048,388	\$ 1,251,645,559	\$ 1,266,414,976
Less: Personal exemptions (Exemption Amt * Number of residents commuting to non-taxing city						
* Average Family Size)		192,631,406	192,623,701	192,615,996	192,608,291	192,600,587
Taxable income before discount factor		1,015,731,368	1,029,997,754	1,044,432,392	1,059,037,268	1,073,814,390
Discount factor	(5)	85.00%	85.00%	85.00%	85.00%	85.00%
Estimated taxable income		863,371,663	875,498,091	887,767,533	900,181,678	912,742,231
Estimated tax yield (1.0%)		\$ 8,633,717	<u>\$ 8,754,981</u>	<u>\$ 8,877,675</u>	\$ 9,001,817	\$ 9,127,422
NON-RESIDENT - WORKS IN ANN ARBOR (COMMUTERS)						
Number of commuters into Ann Arbor- estimated U of M commuters	(6)	20,952	20,952	20,952	20,952	20,952
Number of commuters into Ann Arbor- estimated other commuters (balance)		54,301	55,437	56,583	57,742	58,912
Total number of commuters into Ann Arbor	(2)	75,253	76,389	77,535	78,694	79,864
Times: Average salary - U of M	(6)	60,809	61,526	62,252	62,987	63,730
Times: Average salary - Ann Arbor	(3)	51,802	52,413	53,031	53,657	54,290
Income subject to tax - non-resident workers in AA		\$ 4,086,946,612		\$ 4,305,008,083	. , , ,	
Less: Personal exemptions (Exemption Amt * Number of commuters * Avg family size )		677,277,553	687,497,477	697,819,461	708,244,528	718,773,708
Taxable income before discount factor		3,409,669,059	3,507,192,343	3,607,188,621	3,709,715,824	3,814,833,192
Discount factor	(5)	75.00%	75.00%	75.00%	75.00%	75.00%
Estimated taxable income		2,557,251,794	2,630,394,257	2,705,391,466	2,782,286,868	2,861,124,894
Estimated tax yield (.5%)		\$ 12,786,259	\$ 13,151,971	\$ 13,526,957	\$ 13,911,434	\$ 14,305,624
CORPORATE						
Estimated tax yield	(4)	\$ 3,340,002	\$ 3,383,422	\$ 3,427,407	\$ 3,471,963	\$ 3,517,098



## Income Tax Feasibility Study Appendix A-4 July 2009

#### **FOOTNOTE EXPLANATIONS**



48103 - 66% 48104 - 95% 48105 - 50% 48106 - 100% 48107 - 100%

48108 - 50%

48109 - 100%

48113 - 100%

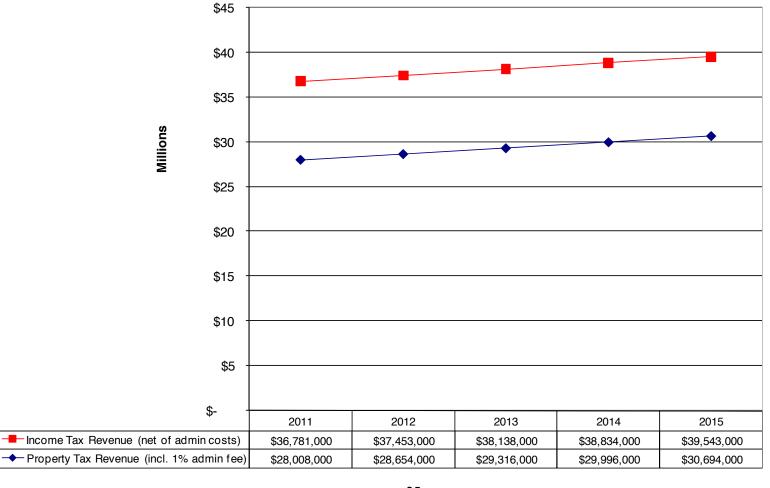
The 2006 amounts were increased or decreased by the following percentages to update the amount to current year values - 2% for 2007, 2.5% for 2008, and (1%) for 2009.

- (2) Source: 2000 Census (Residence MCD/County to Workplace MCD/County Flows for Michigan)
- (3) Average salary is based on Bureau of Labor Statistics Quarterly Census of Employment and Wages for the area specified. Source data is from 2007, updated to current levels assuming 1.18% increase per year.
- (4) Estimated tax yield from corporate sources was calculated based on experiences of other Michigan cities that levy income tax. The amount is calculated based on corporate taxes collected as a percentage of reported corporate sales for the City. Corporate sales was obtained from Claritas, Inc., a national organization which researches and accumulates consumer and business marketing data.
- (5) A discount factor was used to estimate income that may not be included in taxable income due to apportionment or non-compliance with filing requirements. The factor used was kept consistent from the 2004 income tax study. The factor was calculated based on results of the 2003 tax year as reported by other Michigan cities surveyed as part of the original project compared to our projection of tax revenue for those cities using this model. This discount factor is provided in the model to provide a level of conservatism in our estimates.
- (6) Information obtained from U of M. Number of non-resident employees were provided to us by salary range at the University. This number of employees was taken times the midpoint of each salary range and divided by the total number of employees to calculate the average U of M salary.



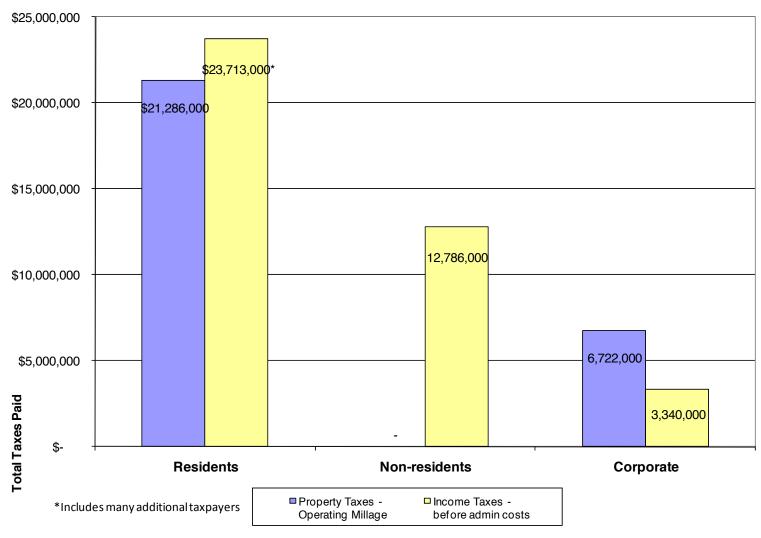
### **CITY OF ANN ARBOR**

Projected Revenue
Property Tax (Operating Millage) Compared
to Income Taxes (\$3000 Exemption Level)





## CITY OF ANN ARBOR Projected Shift of Tax Burden \$3000 Exemption Level





# CITY OF ANN ARBOR INCOME TAX FEASIBILITY STUDY ESTIMATED INCOME TAX EXPECTANCY - EXECUTIVE SUMMARY EXEMPTION LEVEL: \$3500

	 2011		2012		2013		2014		2015
EXECUTIVE SUMMARY									
Resident income tax yield	\$ 22,902,000	\$	23,218,000	\$	23,538,000	\$	23,860,000	\$	24,184,000
Non-Resident income tax yield	12,363,000		12,722,000		13,091,000		13,469,000		13,856,000
Corporate income tax yield	 3,340,000		3,383,000		3,427,000		3,472,000		3,517,000
TOTAL INCOME TAX EXPECTANCY	38,605,000		39,323,000		40,056,000		40,801,000		41,557,000
Cost of administration - percent of total collections ** = 7.68%	 2,963,000		3,019,000		3,075,000		3,132,000		3,190,000
INCOME TAX EXPECTANCY - NET OF ADMINISTRATION COST	\$ 35,642,000	\$	36,304,000	\$	36,981,000	\$	37,669,000	\$	38,367,000
PROJECTED PROPERTY TAX REVENUE FROM OPERATING MILLAGE	\$ 28,008,000	<u>\$</u>	28,654,000	<u>\$</u>	29,316,000	<u>\$</u>	29,996,000	<u>\$</u>	30,694,000
DIFFERENCE	\$ 7,634,000	\$	7,650,000	\$	7,665,000	\$	7,673,000	\$	7,673,000

NOTE: This income tax projection is a forecast. Actual results may differ from projections due to events and circumstances which may not occur as expected. Certain factors which may affect actual results include, but are not limited to, the following:

- Significant changes in the economy
- Apportionment of income by non-residents and businesses
- Changes in the City's population
- · Change in the number of jobs in the City's limits due to new business and/or relocation of businesses into or out of the City



<sup>\*\*</sup> Cost of administration as a percentage of collections is based on the average percentage experienced by other Michigan cities surveyed as part of this project.

# CITY OF ANN ARBOR INCOME TAX FEASIBILITY STUDY ESTIMATED INCOME TAX EXPECTANCY - DETAILED CALCULATION EXEMPTION LEVEL: \$3500

		2011	2012	2013	2014	2015
Total Ann Arbor resident income subject to tax	(1)	\$ 3,430,891,951	\$ 3,471,376,476	\$ 3,512,338,719	\$ 3,553,784,316	\$ 3,595,718,970
RESIDENT - WORKS IN ANN ARBOR						
Total Number of Ann Arbor residents working in Ann Arbor	(2)	38,149	,	38,146	38,144	38,143
Divide: Total number of Ann Arbor residents who work	(2)	60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor residents working in Ann Arbor" to "total AA resident workers"		62.78%	62.78%	62.78%	62.78%	62.78%
Times: Total Income subject to tax		3,430,891,951	3,471,376,476	3,512,338,719	3,553,784,316	3,595,718,970
Income subject to tax - residents working in Ann Arbor		2,153,755,767	2,179,170,085	2,204,884,292	2,230,901,926	2,257,226,569
Less: Personal exemptions (Exemption Amt * # of Residents working in Ann Arbor						
* Average Family Size)		400,565,000	, ,	400,532,956	400,516,934	400,500,914
Less: Additional exemptions for Seniors		42,466,004	44,929,032	47,534,916	50,291,941	53,228,000
Taxable income before discount factor		1,710,724,762	1,733,692,075	1,756,816,420	1,780,093,051	1,803,497,655
Discount factor	(5)	85%	85%	85%	85%	85%
Estimated taxable income		1,454,116,048	1,473,638,264	1,493,293,957	1,513,079,093	1,532,973,007
Estimated tax yield (1.0%)		\$ 14,541,160	\$ 14,736,383	\$ 14,932,940	\$ 15,130,791	\$ 15,329,730
RESIDENT - WORKS IN DETROIT						
Total number of Ann Arbor residents commuting to Detroit	(2)	1,218	1,218	1,218	1,218	1,218
Divide: Total number of Ann Arbor residents who work	(2)	60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor residents commuting to Detroit" to "total AA workers"		2.00%	2.00%	2.00%	2.00%	2.00%
Times: Total Income subject to tax		\$ 3,430,891,951		\$ 3,512,338,719	\$ 3,553,784,316	
Income subject to tax - residents working in Detroit		\$ 68,773,411	\$ 69,584,937	\$ 70,406,039	\$ 71,236,830	\$ 72,077,425
Less: Personal exemptions (Exemption Amt * # of Residents Commuting to Detroit		φ 00,775,411	φ 07,304,737	φ /0,400,03/	φ 71,230,030	φ /2,0//,423
* Average Family Size)		12,790,782	12,790,271	12,789,759	12,789,248	12,788,736
Taxable income before discount factor & credit for income tax paid to another city		55.982.628	56.794.666	57,616,280	58.447.583	59.288.689
Discount factor	(5)	85.00%		85.00%	85.00%	85.00%
Estimated taxable income before credit for income tax paid to another city	(0)	47,585,234		48,973,838	49,680,445	50,395,386
Estimated tax yield (1.0%) before credit for income tax paid to another city		475,852	482,755	489,738	496,804	503,954
Less: Credit for income tax paid to the City of Detroit (Average Salary in Detroit Area -		,,	,	,,,,,	,	,,_,
Exemptions * Detroit non-resident tax rate of 1.025% * Number of residents commuting to Detroit)	(3)	632,103	639,647	647,279	655,001	662,814
community to Detroit)	(3)	032,103	037,047	077,277	033,001	002,014
Estimated tax yield after credit for taxes paid to another city		<u> </u>	<u>\$ - </u>	<u> </u>	<u>\$</u> -	<u>\$ - </u>
		_	=	=	_	_



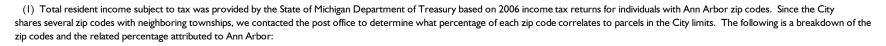
## Income Tax Feasibility Study Appendix A-5 July 2009

		2011	2012	2013	2014	2015
RESIDENT - WORKS IN NON-TAXING CITY		2011	2012	2013	2014	2013
Total number of Ann Arbor residents who work	(2)	60.771	60,768	60,766	60,763	60,761
Less: number of Ann Arbor residents working in Ann Arbor	(2)	38,149	38,148	38,146	38,144	38,143
Less: number of Ann Arbor residents commuting to Detroit	(2)	1,218	1,218	1,218	1,218	1,218
Less. Harriber of Author residents commuting to Detroit	(2)	1,210	1,210	1,210	1,210	1,210
Equals total number of City residents commuting to a non-taxing city		21,403	21,403	21,402	21,401	21,400
Divide: Total number of Ann Arbor residents who work		60,771	60,768	60,766	60,763	60,761
Percent of "Ann Arbor resident commuters to non-taxing cities" to "total AA workers"		35.22%	35.22%	35.22%	35.22%	35.22%
Times: Total Income subject to tax		\$ 3,430,891,951	\$ 3,471,376,476	\$ 3,512,338,719	\$ 3,553,784,316	
•		<del> </del>	<del></del>	<del></del>		<del> </del>
Income subject to tax - residents working in non-taxing city		\$ 1,208,362,774	\$ 1,222,621,455	\$ 1,237,048,388	\$ 1,251,645,559	\$ 1,266,414,976
Less: Personal exemptions (Exemption Amt * Number of residents commuting to non-taxing city		<b>,</b> ,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>,</b> ,,,,,	<b>,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>,</b> ,,,,,,
* Average Family Size)		224,736,640	224,727,651	224,718,662	224,709,673	224,700,684
, ,						
Taxable income before discount factor		983,626,134	997,893,804	1,012,329,726	1,026,935,886	1,041,714,292
Discount factor	(5)	85.00%	85.00%	85.00%	85.00%	85.00%
Estimated taxable income	` '	836,082,214	848,209,733	860,480,267	872,895,503	885,457,148
Estimated tax yield (1.0%)		\$ 8,360,822	\$ 8,482,097	\$ 8,604,803	\$ 8,728,955	\$ 8,854,571
				·		
NON-RESIDENT - WORKS IN ANN ARBOR (COMMUTERS)						
Number of commuters into Ann Arbor- estimated U of M commuters	(6)	20,952	20,952	20,952	20,952	20,952
Number of commuters into Ann Arbor- estimated other commuters (balance)		54,301	55,437	56,583	57,742	58,912
Total number of commuters into Ann Arbor	(2)	75,253	76,389	77,535	78,694	79,864
Times: Average salary - U of M	(6)	60,809	61,526	62,252	62,987	63,730
Times: Average salary - Ann Arbor	(3)	51,802	52,413	53,031	53,657	54,290
Income subject to tax - non-resident workers in AA		\$ 4,086,946,612				\$ 4,533,606,900
Less: Personal exemptions (Exemption Amt * Number of commuters * Avg family size )		790,157,145	802,080,389	814,122,705	826,285,283	838,569,326
Taxable income before discount factor		3,296,789,467	3,392,609,430	3,490,885,378	3,591,675,069	3,695,037,574
Discount factor	(5)	<u>75.00%</u>	<u>75.00%</u>	<u>75.00%</u>	<u>75.00%</u>	<u>75.00%</u>
Estimated taxable income		2,472,592,100	2,544,457,073	2,618,164,033	2,693,756,302	2,771,278,181
Estimated tax yield (.5%)		<u>\$ 12,362,961</u>	<u>\$ 12,722,285</u>	<u>\$ 13,090,820</u>	<u>\$ 13,468,782</u>	<u>\$ 13,856,391</u>
CORPORATE						
CORPORATE Estimated to wind	(4)	£ 2.240.000	¢ 2202.422	¢ 2.427.467	¢ 2.471.0/2	¢ 2517000
Estimated tax yield	(4)	\$ 3,340,002	\$ 3,383,422	\$ 3,427,407	\$ 3,471,963	\$ 3,517,098



# Income Tax Feasibility Study Appendix A-5 July 2009

#### **FOOTNOTE EXPLANATIONS**



48103 - 66% 48104 - 95% 48105 - 50% 48106 - 100% 48107 - 100% 48108 - 50% 48109 - 100% 48113 - 100%

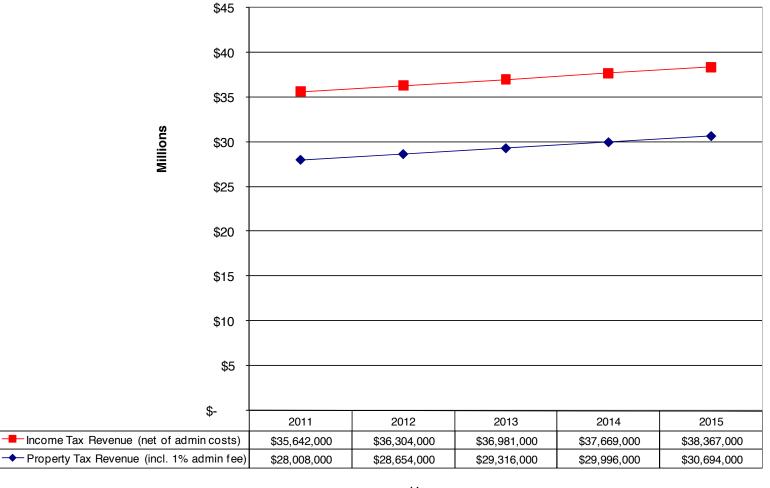
The 2006 amounts were increased or decreased by the following percentages to update the amount to current year values - 2% for 2007, 2.5% for 2008, and (1%) for 2009.

- (2) Source: 2000 Census (Residence MCD/County to Workplace MCD/County Flows for Michigan)
- (3) Average salary is based on Bureau of Labor Statistics Quarterly Census of Employment and Wages for the area specified. Source data is from 2007, updated to current levels assuming 1.18% increase per year.
- (4) Estimated tax yield from corporate sources was calculated based on experiences of other Michigan cities that levy income tax. The amount is calculated based on corporate taxes collected as a percentage of reported corporate sales for the City. Corporate sales was obtained from Claritas, Inc., a national organization which researches and accumulates consumer and business marketing data.
- (5) A discount factor was used to estimate income that may not be included in taxable income due to apportionment or non-compliance with filing requirements. The factor used was kept consistent from the 2004 income tax study. The factor was calculated based on results of the 2003 tax year as reported by other Michigan cities surveyed as part of the original project compared to our projection of tax revenue for those cities using this model. This discount factor is provided in the model to provide a level of conservatism in our estimates.
- (6) Information obtained from U of M. Number of non-resident employees were provided to us by salary range at the University. This number of employees was taken times the midpoint of each salary range and divided by the total number of employees to calculate the average U of M salary.



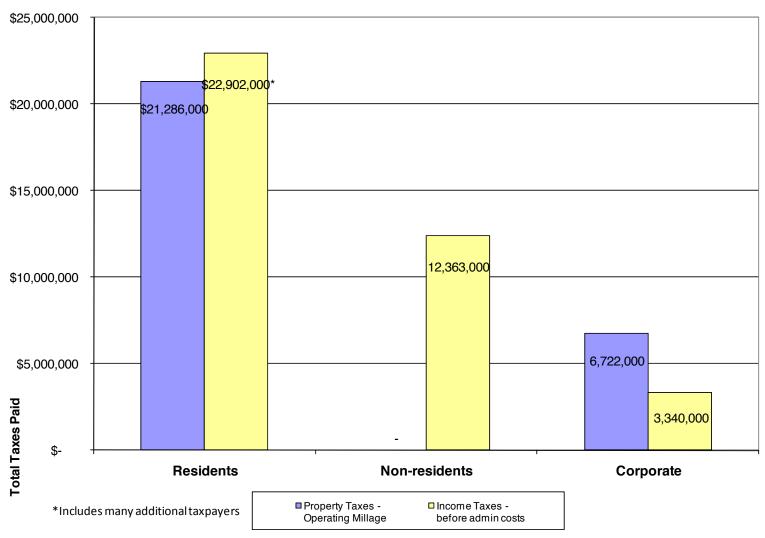
### **CITY OF ANN ARBOR**

Projected Revenue
Property Tax (Operating Millage) Compared
to Income Taxes (\$3500 Exemption Level)





## CITY OF ANN ARBOR Projected Shift of Tax Burden \$3500 Exemption Level





# Income Tax Feasibility Study Appendix B - \$600 Exemption July 2009

Taxable Value*	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000	\$200,000	\$250,000	\$300,000
City Property Tax	154	308	463	617	925	1,234	1,542	1,850
Taxable Income								
\$25,000	232	232	232	232	232	232	232	232
\$50,000	482	482	482	482	482	482	482	482
\$75,000	732	732	732	732	732	732	732	732
\$100,000	982	982	982	982	982	982	982	982
\$150,000	1,482	1,482	1,482	1,482	1,482	1,482	1,482	1,482
\$200,000	1,982	1,982	1,982	1,982	1,982	1,982	1,982	1,982
\$300,000	2,982	2,982	2,982	2,982	2,982	2,982	2,982	2,982
\$400,000	3,982	3,982	3,982	3,982	3,982	3,982	3,982	3,982
\$500,000	4,982	4,982	4,982	4,982	4,982	4,982	4,982	4,982

<sup>\*</sup>Taxable value is at most 50% of market value, possibly even less.

### **Assumptions**

City operating millage rate at 6.1682 mils \$600 deduction level per exemption Deduction based on ability to claim 3 exemptions



## Income Tax Feasibility Study Appendix B - \$1,000 Exemption July 2009

								• •
Taxable Value*	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000	\$200,000	\$250,000	\$300,000
City Property Tax	154	308	463	617	925	1,234	1,542	1,850
Taxable Income								
\$25,000	220	220	220	220	220	220	220	220
\$50,000	470	470	470	470	470	470	470	470
\$75,000	720	720	720	720	720	720	720	720
\$100,000	970	970	970	970	970	970	970	970
\$150,000	1,470	1,470	1,470	1,470	1,470	1,470	1,470	1,470
\$200,000	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970
\$300,000	2,970	2,970	2,970	2,970	2,970	2,970	2,970	2,970
\$400,000	3,970	3,970	3,970	3,970	3,970	3,970	3,970	3,970
\$500,000	4,970	4,970	4,970	4,970	4,970	4,970	4,970	4,970

<sup>\*</sup>Taxable value is at most 50% of market value, possibly even less.

### **Assumptions**

City operating millage rate at 6.1682 mils \$1,000 deduction level per dependent Deduction based on ability to claim 3 dependents



## Income Tax Feasibility Study Appendix B - \$3,000 Exemption July 2009

Taxable Value*	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000	\$200,000	\$250,000	\$300,000
City Property Tax	154	308	463	617	925	1,234	1,542	1,850
Taxable Income								
\$25,000	160	160	160	160	160	160	160	160
\$50,000	410	410	410	410	410	410	410	410
\$75,000	660	660	660	660	660	660	660	660
\$100,000	910	910	910	910	910	910	910	910
\$150,000	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410
\$200,000	1,910	1,910	1,910	1,910	1,910	1,910	1,910	1,910
\$300,000	2,910	2,910	2,910	2,910	2,910	2,910	2,910	2,910
\$400,000	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910
\$500,000	4,910	4,910	4,910	4,910	4,910	4,910	4,910	4,910

<sup>\*</sup>Taxable value is at most 50% of market value, possibly even less.

### **Assumptions**

City operating millage rate at 6.1682 mils \$3,000 deduction level per exemption Deduction based on ability to claim 3 exemptions



## Income Tax Feasibility Study Appendix B - \$3,500 Exemption July 2009

Taxable Value*	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000	\$200,000	\$250,000	\$300,000
City Property Tax	154	308	463	617	925	1,234	1,542	1,850
Taxable Income								
\$25,000	145	145	145	145	145	145	145	145
\$50,000	395	395	395	395	395	395	395	395
\$75,000	645	645	645	645	645	645	645	645
\$100,000	895	895	895	895	895	895	895	895
\$150,000	1,395	1,395	1,395	1,395	1,395	1,395	1,395	1,395
\$200,000	1,895	1,895	1,895	1,895	1,895	1,895	1,895	1,895
\$300,000	2,895	2,895	2,895	2,895	2,895	2,895	2,895	2,895
\$400,000	3,895	3,895	3,895	3,895	3,895	3,895	3,895	3,895
\$500,000	4,895	4,895	4,895	4,895	4,895	4,895	4,895	4,895

<sup>\*</sup>Taxable value is at most 50% of market value, possibly even less.

### **Assumptions**

City operating millage rate at 6.1682 mils \$3,500 deduction level per exemption Deduction based on ability to claim 3 exemptions



# Income Tax Feasibility Study Appendix C July 2009

Scenario I: Single Ann Arbor Resident, Property Owner

### Assumptions:

- Resident earns the average City of Ann Arbor Wage = \$51,802 (Source: Bureau of Labor Statistics, 2007, + 1.18% per year to 2009)
- Resident owns a home with an "average" property value of \$200,000
- Resident's taxable value is 50% of the property value = \$100,000

Current property tax scenario (general operating mills only):

- Property taxes are calculated as (Taxable Value / 1000) \* 6.1682 mills
- Property taxes are = (\$100,000/1,000) \* 6.1682 mills
- Property taxes are = \$617 per year

#### Future income tax scenario:

- Income taxes are calculated as 1% of taxable income
- Single resident qualifies for I exemption
- Taxable income is \$51,802

Exemption	\$600	\$1,000	\$3,000	\$3,500
Income Tax	\$512	\$508	\$488	\$483
Tax Savings	(\$105)	(\$109)	(\$129)	(\$134)

Note: Single residents with children would have a larger tax savings due to an increased number of exemptions.



# Income Tax Feasibility Study Appendix C July 2009

Scenario II: Dual Income Ann Arbor Resident, Property Owner

### Assumptions:

- Resident earns the average City of Ann Arbor Family Househld Income = \$104,034 (Source: Claritas, 2008, +1.18% per year to 2009)
- Resident owns a home with an "average" property value of \$200,000
- Resident's taxable value is 50% of the property value = \$100,000

Current property tax scenario (general operating mills only):

- Property taxes are calculated as (Taxable Value / 1000) \* 6.1682 mills
- Property taxes are = (\$100,000/1,000) \* 6.1682 mills
- Property taxes are = \$617 per year

Future income tax scenario:

- Income taxes are calculated as 1% of taxable income
- Dual income resident qualifies for 2 exemptions
- Taxable income is \$104,034

Exemption	\$600	\$1,000	\$3,000	\$3,500
Income Tax	\$1,028	\$1,020	\$980	\$970
Tax Increase	\$411	\$403	\$363	\$353

Note: Dual income residents with children would have a lower tax increase due to an increased number of exemptions.



# Income Tax Feasibility Study Appendix C July 2009

Scenario III: Single Ann Arbor Resident, Renter

#### Assumptions:

- Resident earns the average City of Ann Arbor Wage = \$51,802 (Source: Bureau of Labor Statistics, 2007, + 1.18% per year to 2009)
- Resident rents a home with an "average" property value of \$200,000
- Property's taxable value is 50% of the property value = \$100,000
- Currently landlord does not give a property tax break to the tenant
- It is not known whether rents will decrease if an income tax is approved. This example assumes market forces in the rental market will pass along 50% of the savings to renters.

### Current property tax scenario (general operating mills only):

- Property taxes are calculated as (Taxable Value / 1000) \* 6.1682 mills
- Property taxes are = (\$100,000/1,000) \* 6.1682 mills
- Property taxes are = \$617 per year
- Property taxes are = \$51.42 per month, included in rent payments
- Renter currently pays \$617 per year in property tax cost

#### Future income tax scenario:

- Income taxes are calculated as 1% of taxable income
- Single resident qualifies for I exemption
- Taxable income is \$51,802
- Renter still pays 1/2 of the property tax cost in rent = \$309

Exemption	\$600	\$1,000	\$3,000	\$3,500
Income Tax	\$512	\$508	\$ <del>4</del> 88	<b>\$483</b>
Property Taxes				
Paid Via Rent	\$309	\$309	\$309	\$309
Total Taxes	\$821	\$817	\$797	\$792
Tax Increase	\$204	\$200	\$180	\$175

Note: Single residents with children would have a lower tax increase due to an increased number of exemptions.



# Income Tax Feasibility Study Appendix C July 2009

#### Scenario IV: Dual Income Ann Arbor Resident, Renter

#### Assumptions:

- Resident earns the average City of Ann Arbor Family Househld Income = \$104,034 (Source: Claritas, 2008, +1.18% per year to 2009)
- Resident rents a home with an "average" property value of \$200,000
- Property's taxable value is 50% of the property value = \$100,000
- Currently landlord does not give a property tax break to the tenant
- It is not known whether rents will decrease if an income tax is approved. This example assumes market forces in the rental market will pass along 50% of the savings to renters.

### Current property tax scenario (general operating mills only):

- Property taxes are calculated as (Taxable Value / 1000) \* 6.1682 mills
- Property taxes are = (\$100,000/1,000) \* 6.1682 mills
- Property taxes are = \$617 per year
- Property taxes are = \$51.42 per month, included in rent payments
- Renter currently pays \$617 per year in property tax cost

#### Future income tax scenario:

- Income taxes are calculated as 1% of taxable income
- Dual income resident qualifies for 2 exemptions
- Taxable income is \$104,034
- Renter still pays 1/2 of the property tax cost in rent = \$309

Exemption	\$600	\$1,000	\$3,000	\$3,500
Income Tax	\$1,028	\$1,020	\$980	\$970
Property Taxes				
Paid Via Rent	\$309	\$309	\$309	\$309
Total Taxes	\$1,337	\$1,329	\$1,289	\$1,279
Tax Increase	\$720	\$712	\$672	\$662

Note: Dual income residents with children would have a lower tax increase due to an increased number of exemptions.



# Income Tax Feasibility Study Appendix C July 2009

Scenario V: Single Ann Arbor Resident (Senior), Property Owner

### Assumptions:

- Resident is on a fixed income and earns \$30,000 (estimate)
- Resident owns a home with an "average" property value of \$200,000
- Resident's taxable value is 50% of the property value = \$100,000

Current property tax scenario (general operating mills only):

- Property taxes are calculated as (Taxable Value / 1000) \* 6.1682 mills
- Property taxes are = (\$100,000/1,000) \* 6.1682 mills
- Property taxes are = \$617 per year

#### Future income tax scenario:

- Income taxes are calculated as 1% of taxable income
- Single resident (Senior) qualifies for 2 exemptions I for head of household and I for senior status
- Taxable income is \$30,000

Exemption	\$600	\$1,000	\$3,000	\$3,500
Income Tax	\$288	\$280	\$240	\$230
Tax Savings	(\$329)	(\$337)	(\$377)	(\$387)



# Income Tax Feasibility Study Appendix C July 2009

Scenario VI: Ann Arbor Resident (Senior Couple), Property Owner

### Assumptions:

- Residents are on a fixed income and earn \$40,000 (estimate)
- Resident owns a home with an "average" property value of \$200,000
- Resident's taxable value is 50% of the property value = \$100,000

Current property tax scenario (general operating mills only):

- Property taxes are calculated as (Taxable Value / 1000) \* 6.1682 mills
- Property taxes are = (\$100,000/1,000) \* 6.1682 mills
- Property taxes are = \$617 per year

#### Future income tax scenario:

- Income taxes are calculated as 1% of taxable income
- Resident couple (Senior) qualifies for 4 exemptions 2 for members in household and 2 for senior status
- Taxable income is \$40,000

Exemption	\$600	\$1,000	\$3,000	\$3,500
Income Tax	\$376	\$360	\$280	\$260
Tax Savings	(\$241)	(\$257)	(\$337)	(\$357)



Income Tax Feasibility Study
Appendix C
July 2009

Scenario VII: Single Ann Arbor Nonresident, Commuter (U of M Average Wage)

### Assumptions:

- Nonresident earns the average U of M Wage = \$60,809 (Source: University of Michigan - calculated average)

Current property tax scenario (general operating mills only):

- Nonresident currently does not pay into the City of Ann Arbor Property Tax System
- Property taxes are = \$0 per year

Future income tax scenario:

- Income taxes are calculated as 1/2% of taxable income
- Single nonresident qualifies for I exemption
- Taxable income is \$60,809

Exemption	\$600	\$1,000	\$3,000	\$3,500
Income Tax	\$301	\$299	\$289	\$287
Tax Increase	\$301	\$299	\$289	\$287

Note: Single nonresident commuters with children would have a lower tax increase due to an increased number of exemptions.

