

EXCEL EXERCISE # 1 Market Area Analysis

EXCEL EXERCISE # 2 Economic Base and the Employment Multiplier

What is the income/employment multiplier for the Sacramento PSMA? What are the export oriented sectors of the Sacramento PSMA? How did you determine the answers to the two above questions?

Be sure to read pages 140-147 for background and pages 153-157.

EXERCISE # 3 Input-Output Analysis

Read pages 157-161 for background and answer questions (13) through (15) found on pages 174-175. Also read E.S. Mills, "The Misuse of Regional Economic Models," CATO JOURNAL, Spring/Summer 1993 pp. 29-38.

You are to access the following website:

www.bea.doc.gov/bea/ARTICLES/REGIONAL/PERSINC/METH/rims2.pdf

This website will provide you with the Bureau of Economic Analysis publication, REGIONAL MULTIPLIERS

EXERCISE # 4 Fiscal Impact Analysis

A fiscal impact analysis handout can be obtained on the class website. Use an excel spreadsheet to answer the following three questions.

Per Capita Multiplier Method Problem

A 100 unit single-family development is proposed in a California community of 10,000 residents and 2,500 public school pupils. The development will be composed of 20 two-bedroom single family homes, 40 three-bedroom homes and 40 four-bedroom homes. The community spends the following amounts for public services:

MUNICIPAL		SCHOOL DISTRICT	
Operating Costs		Operating Costs	\$ 4,500,000
General Govt	\$ 150,000	Debt Service	500,000
Public Safety	\$ 500,000	Total	\$ 5,000,000
Public Works	\$ 500,000		
Health & Welfare	\$ 120,000		
Recreation & Culture	\$ 80,000		
Total	\$ 1,500,000		

Estimated per household size and child per household for the development are as follows:

2 bedroom 2.536 .288
3 bedroom 3,776 1.111
4 bedroom 4, 655 1,911

What impact will the 100 unit development have on municipal and school district expenditures? Assume for calculation purposes that (1) all children from the development will attend public schools and that \$ 300,000 of the \$ 1,500,000 municipal expenditures are occasioned by local nonresidential uses.

Service Standard Method Problem

A 200-unit townhouse development is proposed in a California community of 30,000 residents and 10,000 public school pupils. Forty percent of the townhouses are two bedroom units and sixty percent are three bedroom units. The community has the following annual operating costs for different public service employees:

PUBLIC SERVICE FUNCTIONS	OPERATING COST/EMPLOYEE
Municipal	
General Government	
Financial Administration	\$ 16,000
General Control	13,500
Public Safety	
Police	20,000
Fire	18,000
Public Works	
Highways	18,000
Sewerage	15,000
Sanitation	14,000
Water Supply	14,000
Recreation & Culture	
Parks & Recreation	12,000
Libraries	13,500
School District	
Primary & Secondary	20,000

It is estimated that the townhouses will have a population of 666 and 184 school age children. Manpower ratios for regional population size groups (per 1000) are as follows:

Financial Administration	.00052
General Control	.00053
Police	.00201
Fire	.00164
Highway	.00100
Sewerage	.00053
Sanitation	.00144
Water Supply	.00099
Parks & Recreation	.0082
Schools	.07800
Financial Administration	.00052

The capital-to-output ratios for regional population size groups (per 1000) are as follows:

Financial Administration	.008
General Control	.008
Police	.051
Fire	.022
Highways	.284
Sewerage	.345
Sanitation	.064
Water Supply	.386
Parks & Recreation	.124
Libraries	.000
Schools	.073

What impact will the 200 unit development have on municipal and school district expenditures? Assume that 90 percent of the development's school age children will attend public school.

Revenue Projection Problem

A 100 unit single-family residential development is proposed for a California community. Each residential unit will have an assessed valuation of \$ 140,000. The property tax rate on assessed valuation is .01. Each residential unit is expected to generate annually \$ 6,500 in taxable retail sales. The sales tax rate on taxable retail sales is .0775; .05 is returned to the community. The developer will pay the community \$ 6,500 in fees and permits for each unit built. How much tax revenue will this development generate for the California community?