
Development Fee Update

Land Use Assumptions

Public Report

Review Draft

Prepared by:

Curtis Lueck & Associates
Tucson, AZ

In collaboration with
Psomas
Norris Design

April 18, 2014



TABLE OF CONTENTS

INTRODUCTION..... 1
 Service Areas..... 1

EXISTING SOCIOECONOMIC CONDITIONS 3
 Population and Housing..... 3
 Employment..... 4

LAND USE ASSUMPTIONS, POPULATION PROJECTIONS, AND HOUSING FORECASTS 4

EMPLOYMENT FORECASTS 7

NON-RESIDENTIAL DEVELOPMENT FORECASTS 8

CONCLUSION..... 9

LIST OF EXHIBITS

Exhibit 1 Streets and Parks and Recreational Facilities Service Areas 2

Exhibit 2 Tucson Population and Housing Units Census Data (2010 and 2012) 3

Exhibit 3 Tucson Employment Data (2010)..... 4

Exhibit 4 Official Population Growth Rates 5

Exhibit 5 Official Population Forecast..... 5

Exhibit 6 New Housing Distribution to Service Areas per Plan Tucson 6

Exhibit 7 New Population Distribution to Service Areas per Plan Tucson 6

Exhibit 8 New Population by Service Areas per Plan Tucson 7

Exhibit 9 New Employment Projections and Distribution..... 8

Exhibit 10 Non-Residential Development Attributes 8

Exhibit 11 New Non-Residential Building Area (Square Feet x 1000)..... 9

Appendix

List of Preparers
Key Contributors, Land Use Assumptions

■ INTRODUCTION

The City of Tucson collects development fees to offset some of the infrastructure costs associated with growth. The City currently charges fees for four public services categories: streets, parks and recreational facilities, fire, and police. In order to continue assessing and collecting the fees, the City must update its development fee program to comply with Arizona Revised Statute ARS §9-463.05, as amended. Consequently, the City is preparing new development fee studies, project lists, fee schedules, and a new municipal ordinance.

The statute, which codifies Senate Bill 1525 from 2011, includes major changes in development fee assessment procedures and programs. The statute limits the types of “necessary public services” which development fees can fund. A municipality must prepare two preliminary documents prior to calculating the fees for each service category: a set of land use assumptions and an infrastructure improvements plan (IIP) for each fee category. As defined in ARS §9-463.05(T)(6), “ ‘Land use assumptions’ means projections of changes in land uses, densities, intensities and population for a specified service area over a period of at least ten years and pursuant to the general plan of the municipality.”

This report is the required document that identifies the land use assumptions to be applied in the IIPs for streets, parks and recreational facilities, fire and police, and the subsequent calculation of development fee rates. The land use assumptions are used to estimate the type and quantity of new development in the service areas within which development fees will be assessed, and are based on a 10-year planning horizon. These land use assumptions generally reflect the community’s general plan called “Plan Tucson”,¹ and the region’s official sub-allocation of population forecast to the City of Tucson municipality.

The report was prepared by a team of professional engineers, planners, and landscape architects consisting of City staff and the project consultants. Assistance was provided by City staff instrumental in preparing Plan Tucson, senior planners from the Pima Association of Governments, (PAG, the regional planning agency), and outside reviewers. A list of key participants and preparers is provided in the appendix.

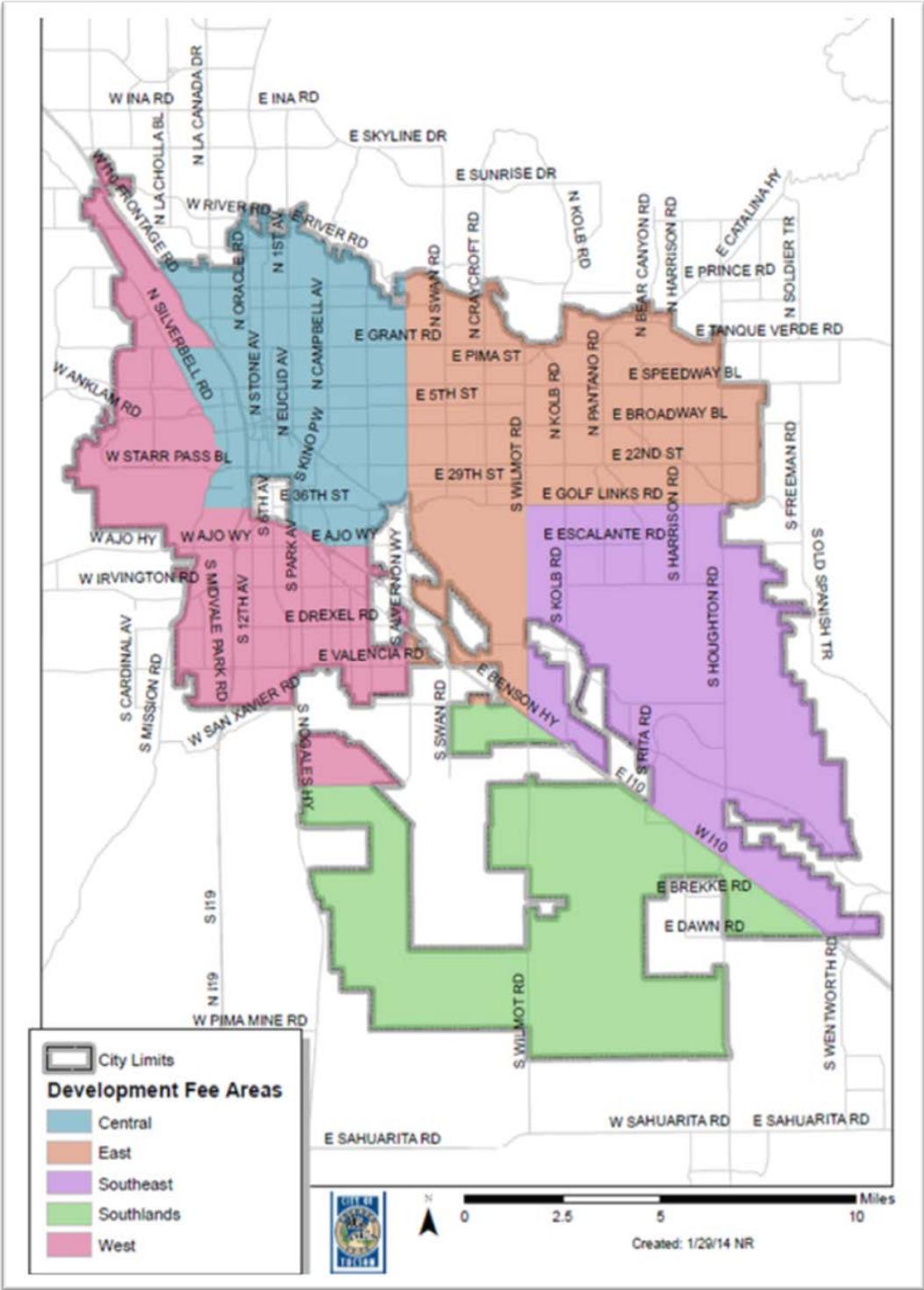
Service Areas

As defined in ARS §9-463.05 (T)(9), “ ‘Service area’ means any specified area within the boundaries of a municipality in which development will be served by necessary public services or facility expansions and within which a substantial nexus exists between the necessary public services or facility expansions and the development being served as prescribed in the infrastructure improvements plan.” The City will utilize the same service areas currently used, with minor adjustments for recent annexations (see Exhibit 1).

¹ Information about Plan Tucson, adopted November 5, 2013, is available at <http://cms3.tucsonaz.gov/plantucson>

Exhibit 1 Streets and Parks and Recreational Facilities Service Areas

Note: Fire and Police Facilities Service Areas are City-Wide



■ **EXISTING SOCIOECONOMIC CONDITIONS**

Population and Housing

Based on 2012 population data, Tucson is the 33rd largest City in the U.S. Like much of the country, Eastern Pima County, including the City of Tucson, has suffered economically from the recent depression. The historic growth rate, which has exceeded 2% per year, has declined to approximately 1.3%. Household size has increased as a measure of personal economy, housing and non-housing vacancy rates are up, and new home sales are substantially off their historic rates. These circumstances are expected to reverse, but not return to their historically high rates. Recent data show an uptick in the economy that is expected to indicate bettering conditions. A snapshot of existing population and housing conditions, as indicated by 2010 and 2012 data from the US Census Bureau, is summarized in Exhibit 2 below.

Exhibit 2 Tucson Population and Housing Units Census Data (2010 and 2012)

POPULATION DATA

	City of Tucson	All of Arizona
Population, 2012 estimate	524,295	6,551,149
Population, 2010 (April 1) estimate	520,116	6,392,015
Population, percent change, April 1, 2010 to July 1, 2012	0.80%	2.50%
Persons under 5 years, percent, 2010	6.90%	7.10%
Persons under 18 years, percent, 2010	23.30%	25.50%
Persons 65 years and over, percent, 2010	11.90%	13.80%
Female persons, percent, 2010	50.50%	50.3%

HOUSING DATA

Housing units, 2010	229,762	2,844,526
Homeownership rate, 2008-2012	51.70%	65.50%
Housing units in multi-unit structures, percent, 2008-2012	33.70%	20.60%
Households, 2008-2012	203,198	2,357,158
Persons per household, 2008-2012	2.46	2.66

Employment

Exhibit 3 shows employment data from the US Census Bureau.

Exhibit 3 Tucson Employment Data (2010)

Total Population	520,116	
Population 16 years and over	415,909	80.0%
In labor force (% Total Population)	258,549	49.7%
Not in labor force (% Total Population)	157,360	30.3%

Source: U.S. Census Bureau, 2008-2012 American Community Survey

■ LAND USE ASSUMPTIONS, POPULATION PROJECTIONS, AND HOUSING FORECASTS

The land use assumptions that underlie the forecasts are based on Plan Tucson, tempered by official population forecasts from the State Demographer’s Office located within the State of Arizona Department of Administration², PAG’s population analysis³, and other factors. The information was reviewed by a panel including City staff, regional planners, and the consulting team. The panel includes certified planners, registered engineers, landscape architects and allied professionals familiar with the region, its economy, and the preparation of forecasts. The participants are also experienced in the preparation of development fee studies, fee ordinances, and fee program administration.

The land use assumptions are used to estimate the increase in future population, the number of new homes, and the distribution of population and housing throughout the City, from 2014 through 2024. These data are shown graphically in Exhibits 4 through 8. The annual growth rate within the City limits varies from 0.98% to 1.48%, and averages about 1.3%, as projected by the State Demographer and the regional population committee. **Over the 10-year period, the projected population increase is 72,940, while the projected number of new housing units is 30,545.** The number of new homes was estimated based on the following average household sizes: 2.8 persons per single family residence (SFR), 1.9 persons per condo or townhome, and 1.7 persons per apartment.

² <http://www.workforce.az.gov/population-projections.aspx>

³ <http://www.pagnet.org/RegionalData/Demographics/PopulationProjections/tabid/588/Default.aspx>

In accordance with Plan Tucson, much of the population increase and new housing units are projected in the Houghton Corridor Area, within the Southeast (development fee) Service Area. A greater percentage of multi-family residential units and apartments is projected in and around the downtown area and the major corridors leading into downtown (the Central Service Area). Over the next ten years, little development is projected in the Southlands Service Area, as much of the land is owned by the Arizona State Land Department.

Exhibit 4 Official Population Growth Rates

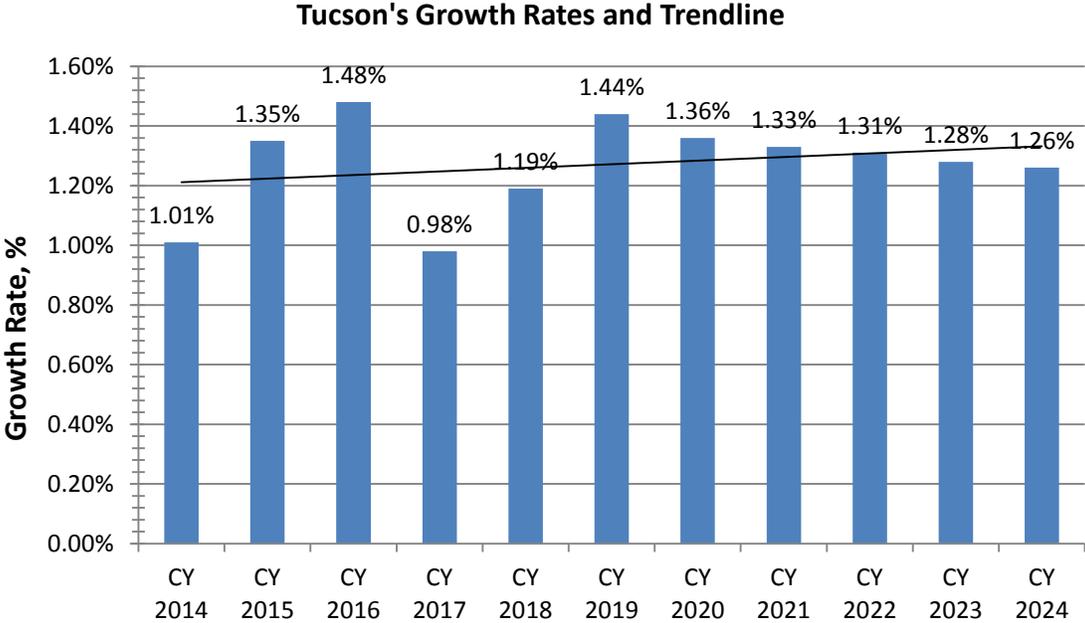


Exhibit 5 Official Population Forecast

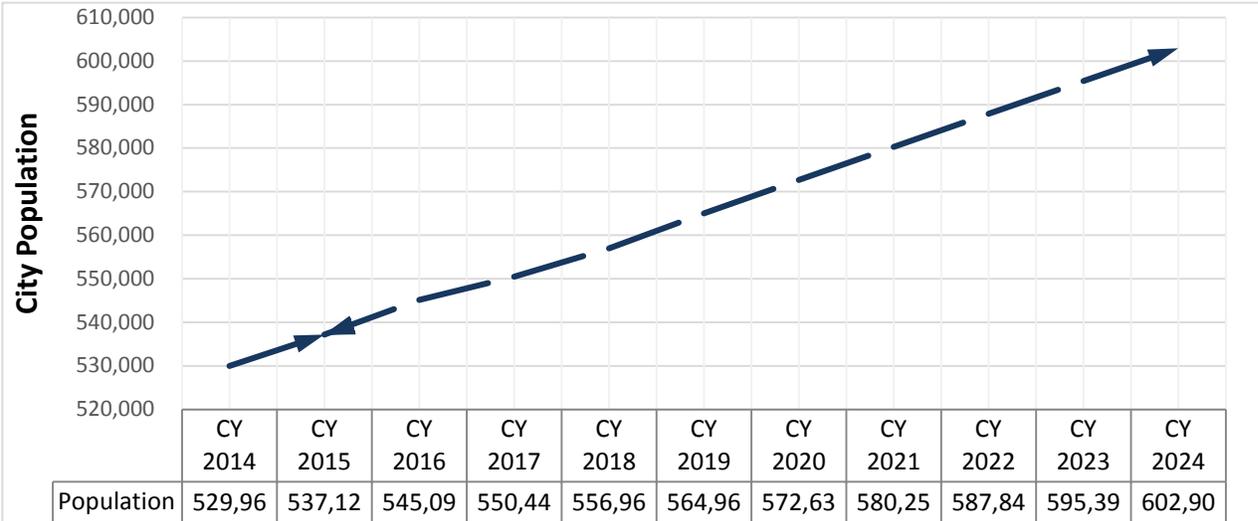


Exhibit 6 New Housing Distribution to Service Areas per Plan Tucson

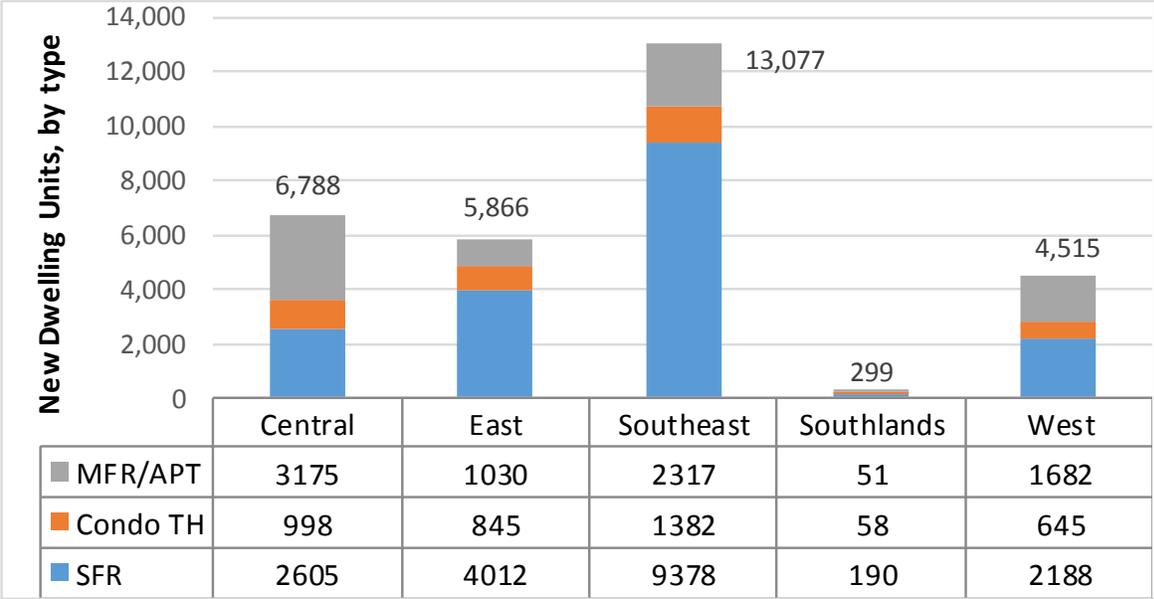


Exhibit 7 New Population Distribution to Service Areas per Plan Tucson

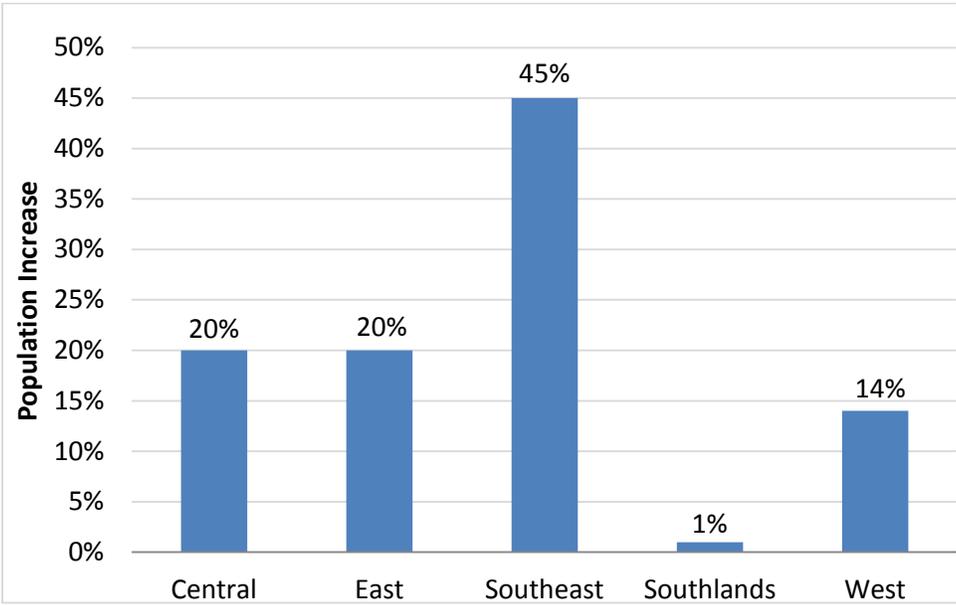
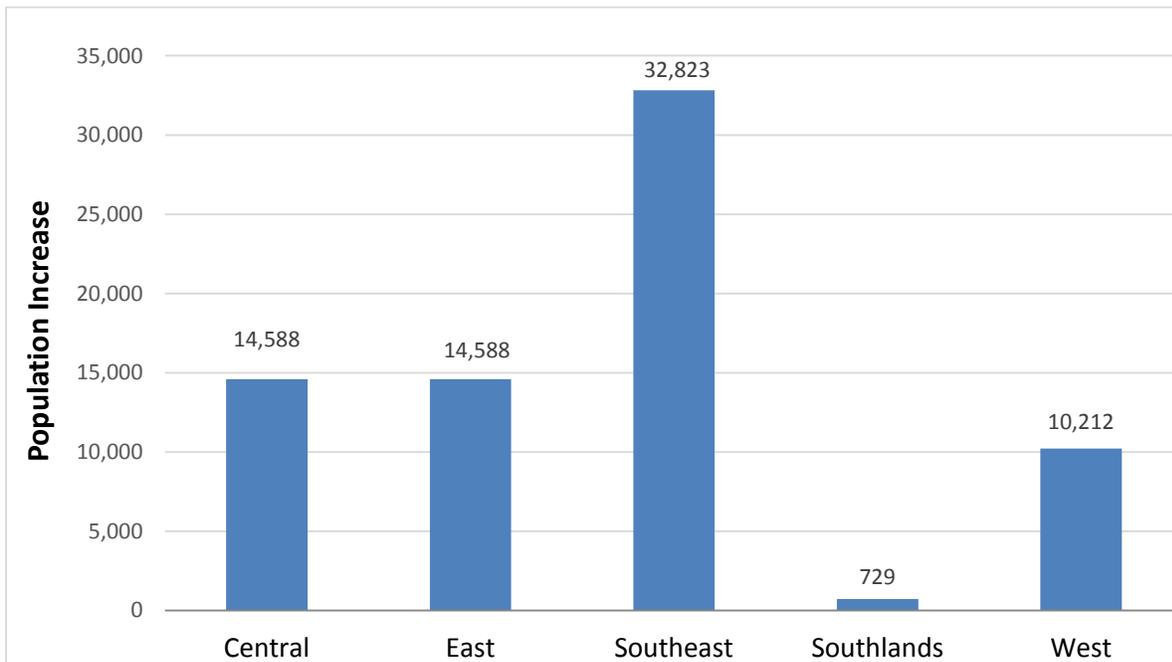


Exhibit 8 New Population by Service Areas per Plan Tucson



■ **EMPLOYMENT FORECASTS**

In addition to residential development forecasts, non-residential development projections are needed to estimate the amount of new infrastructure needed to serve all projected new development. While the typical service unit for residential development is a single-family residence, the typical service unit for non-residential development is 1000s of square feet (SF) of non-residential use.

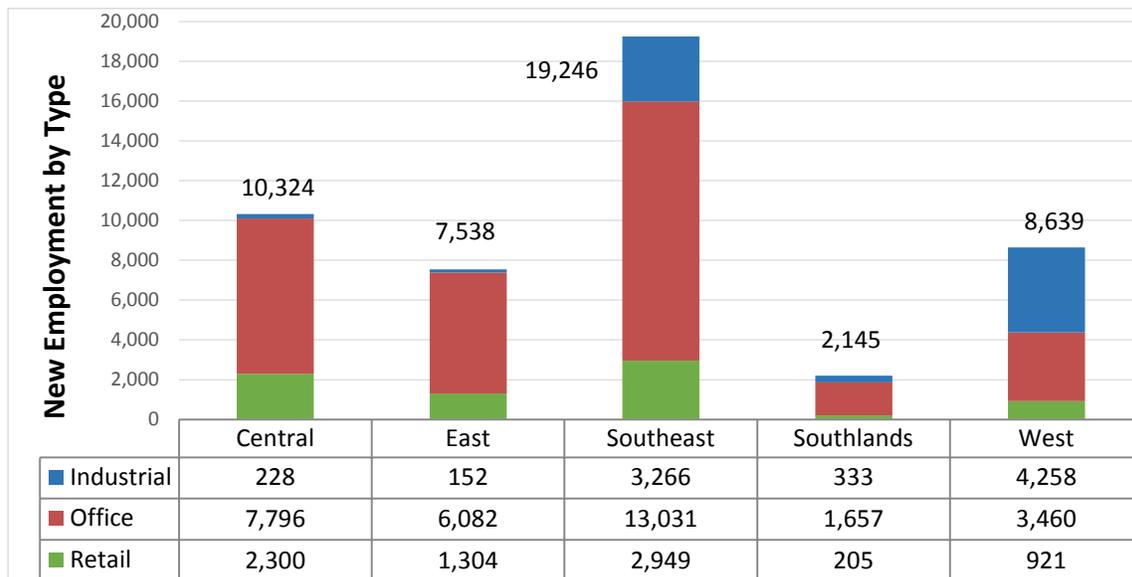
For the purposes of this study, three non-residential land use categories or sectors are utilized: retail, office and industrial. The number of new jobs projected in these sectors is calculated first. The projected new jobs are then distributed to the geographic service areas identified in Figure 1. Finally, the number of projected new jobs in each service areas is converted to new non-residential building area, in 1000s of square feet.

The employment forecasts are based on Plan Tucson assumptions, as modified below. Plan Tucson analyses included employment forecasts for an unconstrained time horizon buildout. For the expanded Plan Tucson population base, these forecasts indicate a much higher ratio of employees per capita than exists today. Currently, less than half the population is in the labor force, or just under 500 employed persons per 1000 population (see Exhibit 3). Plan Tucson

calls for almost one job per additional person, or about twice the current rate.⁴ The project team considered the higher rate aspirational and not readily achievable within the 10-year horizon of our forecasts. Accordingly, an interim rate of 0.66 jobs per new resident was utilized, which would allow the Plan Tucson goal to be achieved over a longer time period.

Also worth noting is that Plan Tucson indicates a higher percentage of employment in the office sector than exists today, and this is reflected in the non-residential growth projections. Exhibit 9 shows the adjusted employment increase by generalized category, for the five geographic service areas. **The projected new employment forecast for the 10-year period is 47,942.** The distribution of new jobs by type and service areas is consistent with Plan Tucson.

Exhibit 9 New Employment Projections and Distribution



■ **NON-RESIDENTIAL DEVELOPMENT FORECASTS**

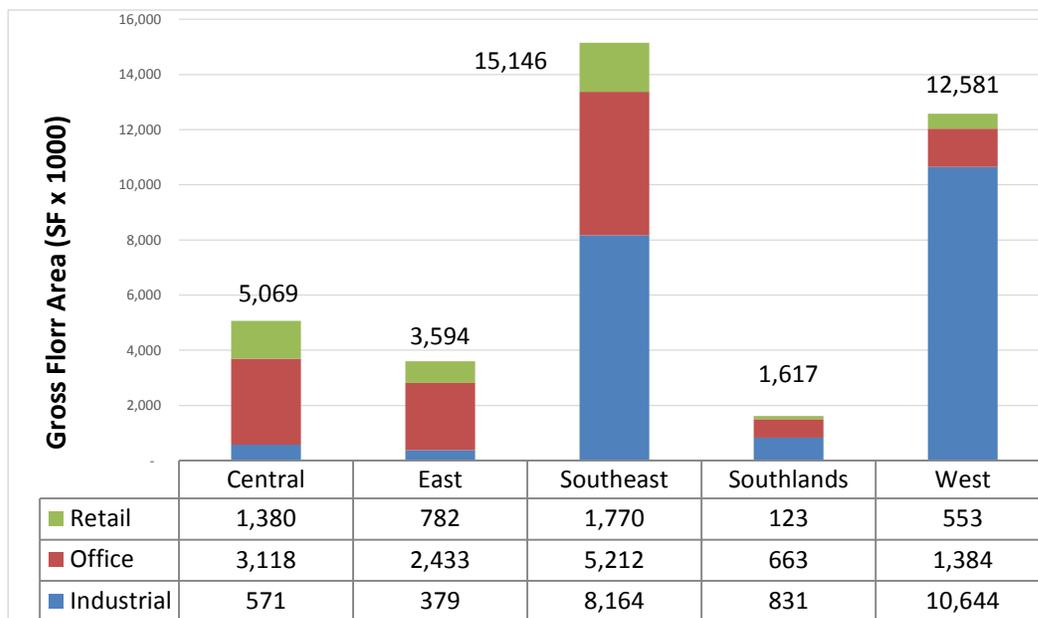
For each land use category, the employment forecasts are converted into gross square footage of building area based on the estimated building area attributes in Exhibit 10. The commercial development assumptions and employment estimates were based on a recent analysis conducted for Plan Tucson and information from other sources, including the Institute of Transportation Engineers’ Trip Generation manual. Exhibit 11 shows the projections of new non-residential building area for each land use category by geographic service area.

⁴ The higher employment rate projections in Plan Tucson support Tucson’s continuing and expanding role as a major employment center for the region, which has a current population of about 1 million.

Exhibit 10 Non-Residential Development Attributes

Land Use	Gross Building Area per Employee (SF)
Retail	600
Office	400
Industrial	2500

Exhibit 11 New Non-Residential Building Area (Square Feet x 1000)



■ CONCLUSION

This report provides growth projections for the City of Tucson, for the 10-year period between 2014 and 2024, for the purposes of the development fee study update. The data are summarized as follows (rounded to nearest 100):

- Population increase: approximately 72,900
- new housing units: approximately 30,500
- new jobs: approximately 47,900

These data will be used in the Infrastructure Improvements Plans reports to estimate the amount of new facilities needed to serve the projected new development. ARS §9-463.05 (D)(3) requires the land use assumptions to be updated at least every five years.

APPENDIX

List of Preparers

Curtis Lueck & Associates

Curtis C. Lueck, P.E., Ph.D.

Marcos U. Esparza, P.E.

Psomas

Alejandro Angel, P.E., PTOE, Ph.D.

Darlene Danehy, P.E., PTOE, LEED, AP

Norris Design

Stacey Weeks, RLA, LEED, AP

Hampton Uzzelle

Panel on Land Use Assumptions

City of Tucson Office of Integrated Planning

Nicole Ewing-Gavin, AICP, Director

Anna Sanchez, Administrator

Lynne Birkinbine, Program Manager

Joanne Hershenhorn, Project Coordinator

Pima Association of Governments/Regional Transportation Authority*

Aichong Sun, Ph.D., P.E., Transportation Modeling Manager

Josh Pope, GIS Manager

* Individual participation does not necessarily represent agency concurrence in the findings of this study.