

2005-2040 TAZ Dataset Overview

BACKGROUND: Pima Association of Governments (PAG) is charged with running the regional travel model as part of its federally mandated Metropolitan Planning Organization (MPO) duties. The PAG travel model requires socioeconomic data at the traffic analysis zone (TAZ) geography for the base year and forecast year for every model run. Variables include characteristics of population, housing, household, group quarters, employment, special traffic generator sites, and school enrollment. There are 859 TAZs in the travel model modeling area, which covers eastern Pima County (east of the Tohono O’Odham Nation) and parts of southern Pinal County. The 2040 dataset was developed as the forecast year for the PAG 2040 Regional Transportation Plan (RTP) effort.

In general, the methodology asks, what will an area look like in 2040? Will its current land-use composition, residential/employment densities, and market segment stay the same or differ? Will it have a rural character, an urban character, a suburban character, or a mix? What will the households look like in terms of occupancy, income levels, persons per household? Will it look like present-day Rita Ranch, Picture Rocks, Green Valley, central Tucson, or something different? Depending on our decision, which was based on today’s comprehensive plans, general plans, specific plans, and input from jurisdictional planning staff, we used known employment and residential densities and land use composition to determine future socioeconomic characteristics.

METHODOLOGY SUMMARY:

- Extensive use of GIS software and data
- Control totals for population and employment based on The University of Arizona EBR Forecasting Project, Third Quarter 2007 forecast.
- The overall approach is top down; regional population and employment are shared among the TAZs based on the 2030 share, the 2005 share, a preliminary SAM-IM forecast, and known development plans.
- Determining the scale, timing, and market share of known development projects was difficult. In general, PAG assumed known projects (e.g., Mission Peaks, Arroyo Grande) would develop at planned densities by 2040. This approach “gives priority” to areas with plans in place today, to the “detriment” of areas with no present-day plans.
- Household variables: Total population, group quarters population, and persons per household are the “driver” variables. All other household-related variables are derived from these three, primarily using Census 2000 relationships.
- Employment variables: Total employment is the “driver” variable. Sector level employment was determined by the 2005 composition and known plans. In areas where little or no employment currently exists, retail and service sectors are prioritized.

- Comments and information from jurisdictions' planning departments and POPTAC committee are incorporated into the dataset.

If you require a more detailed methodology of the individual variables please contact PAG Data Services.

Table 1: TAZ Dataset Variables.

TAZ	TAZ ID
AREA_1	Area of TAZ in square miles)
TOTPOP	Population (household population + group quarters population)
HHPOP	Household population (population in occupied housing units)
PPHH	Average persons per household (persons per occupied housing unit)
OCCRATE	Occupancy Rate (households/ housing units), max value = 1.0)
HU	Number of housing UNITS (occupied or vacant)
SFHU	Number of single family housing units (1-4 dwelling units)
MFHU	Number of multi family housing units (defined as 5 or more dwelling units)
HH	Number of households (occupied housing units)
HH1	Number of one person households
HH2	Number of two person households
HH3	Number of three person households
HH4	Number of four person households
HH5	Number of five person households
HH6	Number of six person households
HH7	Number of households with 7 or more persons
HH3PLUS	Number of households with 3 or more persons
GQPOP	Total population in group quarters
INST_POP	Institutional population in group quarters
CORREC_POP	Correctional Population in group quarters
NURSHM_POP	Nursing home population in group quarters
OTHERINST	Other Institutional GQ population (excludes nursing home and correctional)
NONINST_PO	Noninstitutional group quarters
DORM_POP	Dormitory Population (UA dorms and also large sorority and fraternity housing)
MLTRY_POP	Military Population (on base only?)
OTHRNONINS	Other noninstitutional GQ population (excludes dormitory and military)
RETL_EMP	Employment in retail
WHLSL_EMP	Employment in wholesale activity
FIRE_EMP	Employment in FIRE
IND_EMP	Employment in industry

SERV_EMP	Employment in service sector
PUBSRV_EMP	Employment in public service activity
NONSPCGENE	Total Non Special Generator Employment
DMAFB_EMP	DMAFB employment (Spec gen)
EMP_OTHRSP	Other Special generator Employment
TOTSPCGENE	Total special generator employment
EMP_TOTAL	Total Employment INCLUDING special generator
REGSHP_SQF	Square footage of regional shopping centers (thousands)
TIA_FLTS	TIA flights per day
UA_STDS	University of Arizona - Number of Students
PCC_STDS	Pima Community College - Number of Students
HOSP_BEDS	Number of hospital beds
PRISON_POP	Prison population
CASINO_SQF	Square footage of casinos (thousands)
SCHOOL1_8	School enrollment, grades 1-8
SCHOOL9_12	School enrollment, grades 9-12
MEANINC	TAZ mean income, 1999 dollars

Datum/Coordinate System

North American Datum of 1983 (NAD83)