



**AZ-SMART DATA – FACTORS AND METHODS  
– PART 2: SPECIAL POPULATIONS**

Arizona’s Socioeconomic Modeling, Analysis, & Reporting Toolbox

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MAG POPULATION AND TECHNICAL ADVISORY COMMITTEE  
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**AZ-SMART DATA – FACTORS AND METHODS  
PART 2**

- ✘ AZ-SMART – New simulation model system
- ✘ Many familiar concepts and datasets
  - + Special Populations
- ✘ Data, data sources, assumptions, methods used to project special populations for the travel model
- ✘ Part 3 (later): more assumptions and methods involved in simulation

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**AZ-SMART DATA – FACTORS AND METHODS  
PART 2**

#	Method/Dataset/Assumption	Information and Discussion or Approval
1	Airport Originations	Approval
2	School Enrollment	Approval
3	Group Quarters Populations	Approval
4	Transient Population	Approval
5	Seasonal Population	Approval

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### AIRPORT ORIGINATIONS

- ✦ **Definition:** average daily originations for the transportation model
- ✦ **Categories:** Sky Harbor, Phoenix-Mesa Gateway
- ✦ **Base Year Data:** from airport master plan updates
- ✦ **Projections:** from airport master plan updates
  - + Sky Harbor: daily enplanements converted to daily originations (used previously recommended factor of 0.6)
  - + Phoenix-Mesa Gateway: annual originations converted to daily originations (0.00274 or 1/365)

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### SCHOOL ENROLLMENT - "TOP DOWN" METHODOLOGY

- ✦ **Definition:** Population enrolled in school, primary activity is a student
- ✦ **Categories:** K-12, Post High School
- ✦ **Base Year Data:** use participation rates by age cohort for population
- ✦ **Projections:** same as base year
  - + Apply participation rates by age cohort
  - + Allocate to school locations

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### GROUP QUARTERS POPULATIONS

- ✦ **Definition:** residents not living in households
- ✦ **Categories:** Military, Prisons/Jails, College Dormitories, Nursing Homes, Other
- ✦ **Base Year Data:** from the 2010 Census
- ✦ **Projections:** mostly calculated as a percentage of a particular age cohort of the total population projection
  - + Military group quarters: Held constant @927
  - + Prison and Jail: 1.4 to 1.8% of the age cohort 20 - 44
  - + College dormitory: 11% of the age cohort 18 - 19
  - + Nursing home: 3.9 to 3.732% of the age cohort 75+
  - + Other (e.g. group homes): 0.3% of the entire population

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### TRANSIENT POPULATION

- ✦ **Definition:** residents of the region for less than 2 weeks, average daily overnight visitors
- ✦ **Categories:** Hotels/Motels/Resorts, Single/Multi-Family Housing
- ✦ **Base Year Data:** AZ Office of Tourism (AOT) average annual visitors: 14 million
- ✦ **Projections:** Tourism correlated with Food Services, Leisure, and Hospitality Employment
  - + See next slide

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### SEASONAL POPULATION

- ✦ **Definition:** residents of the region for 2 weeks to 6 months of the year
- ✦ **Categories:** Single/Multi-Family Housing, Mobile Homes, Recreational Vehicle Parks
- ✦ **Base Year Data:** #DUs (by type) \* Seasonal Vacancy rate (by type) = Seasonal HH \* 1.9 PPHH
- ✦ **Projections:** same as base, with projected data, see next slide

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### QUESTIONS?

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