

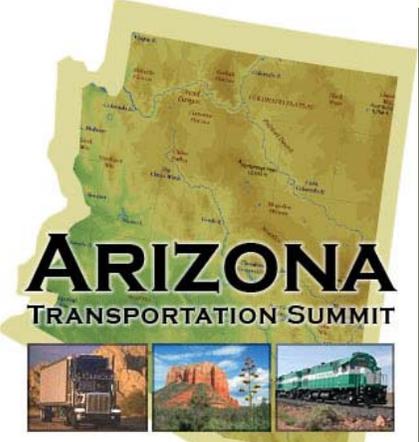
ARIZONA'S MEGAPOLITAN

The Sun Corridor



This Presentation

- What is a Megapolitan?
- Regional and Arizona Data
- Findings and Action Items
- Megapolitan Math
- Panel Discussion



ARIZONA
TRANSPORTATION SUMMIT

Exploring Arizona's
Transportation Future

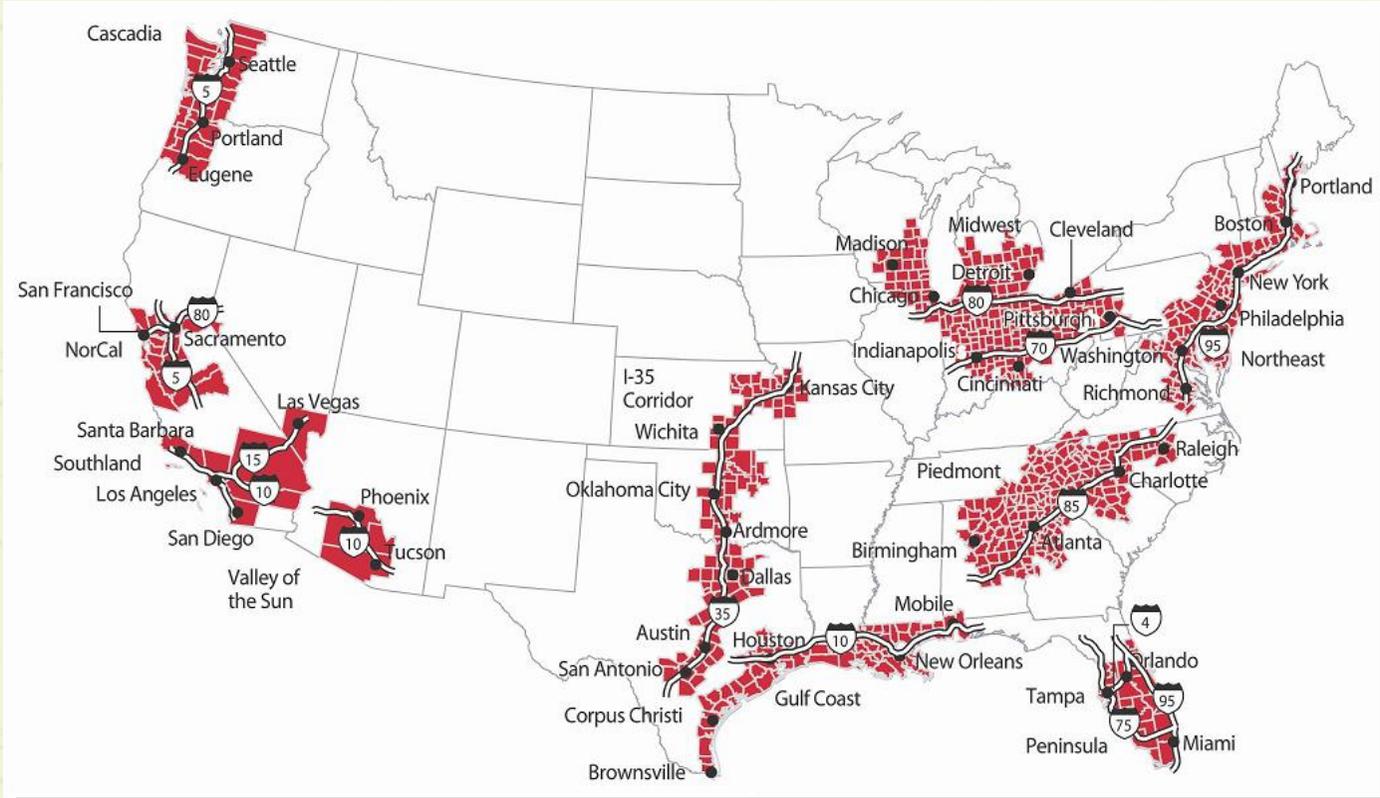
SAVE THE DATE!
May 29, 2008
Wigwam Golf Resort & Spa
Litchfield Park, AZ



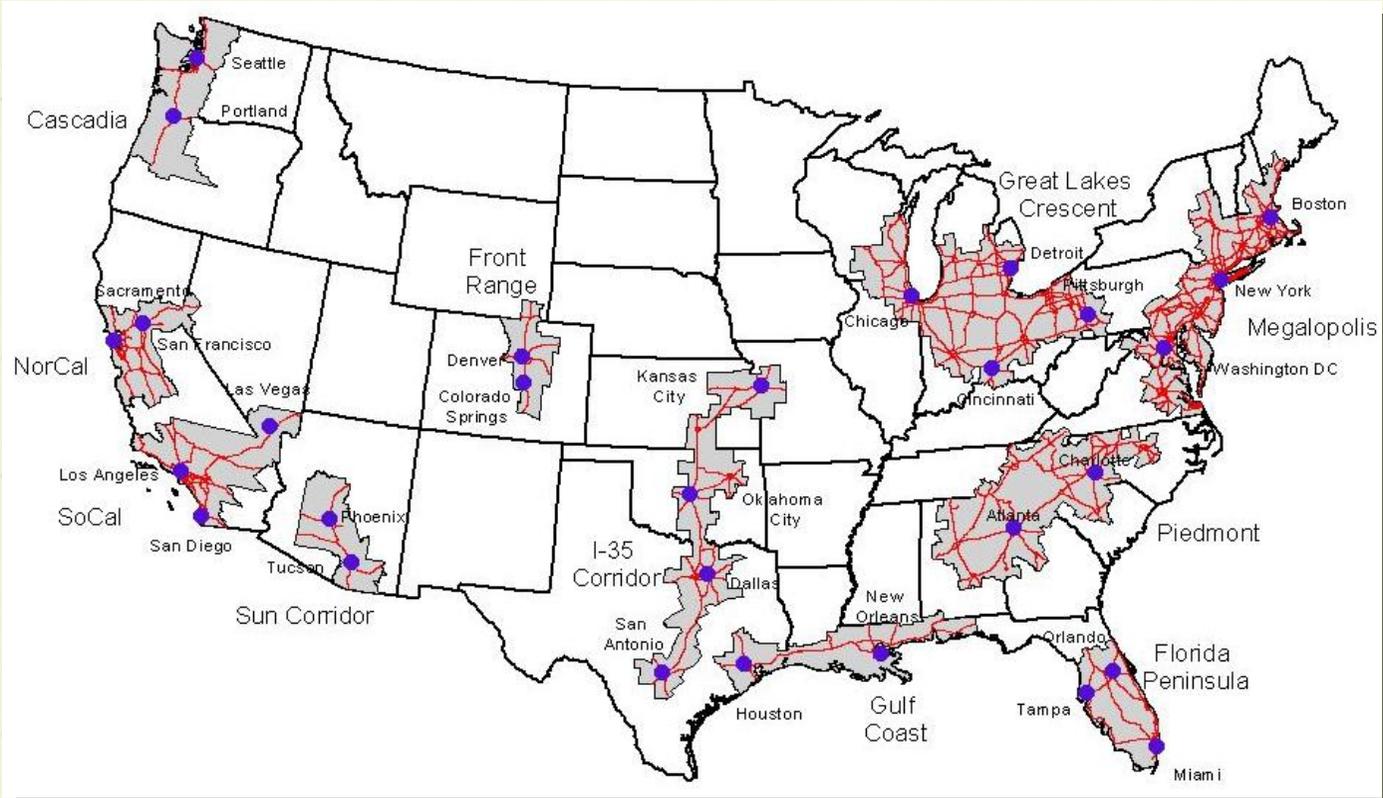
What is a Megapolitan?



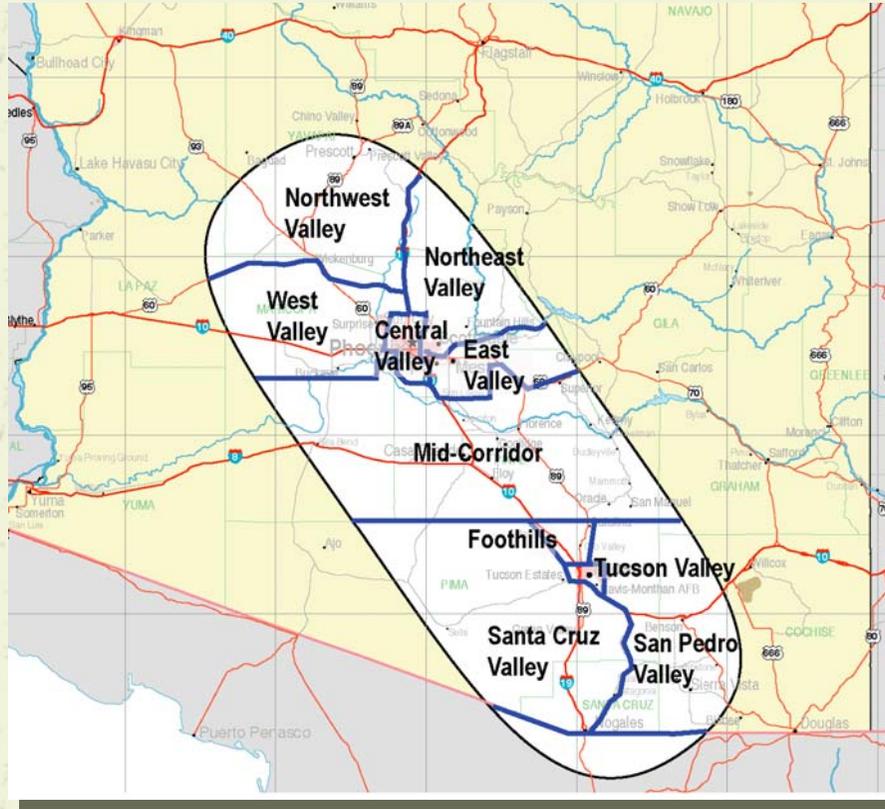
2005 Megapolitan Geography



“Megapolitan 2.0” Geography



The Sun Corridor



Sun Corridor

Types of Urban Realms

Types	Description	Realms
Urban Core	Original core of metropolitan development. Cores are dense and often built out.	Central Valley Tucson Valley
Favored Quarter	The most affluent realm containing upscale housing, retail, and office space.	Northeast Valley Foothills
Maturing Suburbs	Rapidly developing suburbs with mature older sections and booming edges.	East Valley West Valley
Emerging Exurbs	The most scattered and detached urban development in the region. Exurbs contain the most affordable housing.	Mid Corridor Northwest Valley Santa Cruz Valley San Pedro Valley

The Sun Corridor's "Trillion Dollar Question"

Projection	By 2040	Change
Population	10.3 million	110%
Employment	4.9 million	93%
Housing Units	3.7 million	146%
Commerical/Public (s.f.)	2.4 billion	226%
Housing	--	\$541.1 billion
Commercial/Public	--	\$482.3 billion

Source: Arthur C. Nelson, Metropolitan Institute, Virginia Tech University

Regional and Arizona Data

from the Statewide Mobility Reconnaissance Study



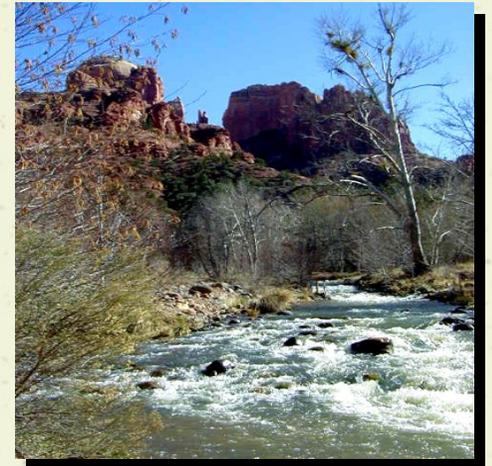
ARIZONA COG AND MPO ASSOCIATION



What is bqAZ?

COGS AND MPOs ADDRESSING ARIZONA'S GROWTH

- “**Building a Quality Arizona”
 - Initiated by the Association in 2006
 - Addresses long-term growth
 - Studies methods for addressing rapidly shrinking infrastructure funds
 - Started with the Statewide Mobility Reconnaissance Study in May 2007**



Transportation Partners

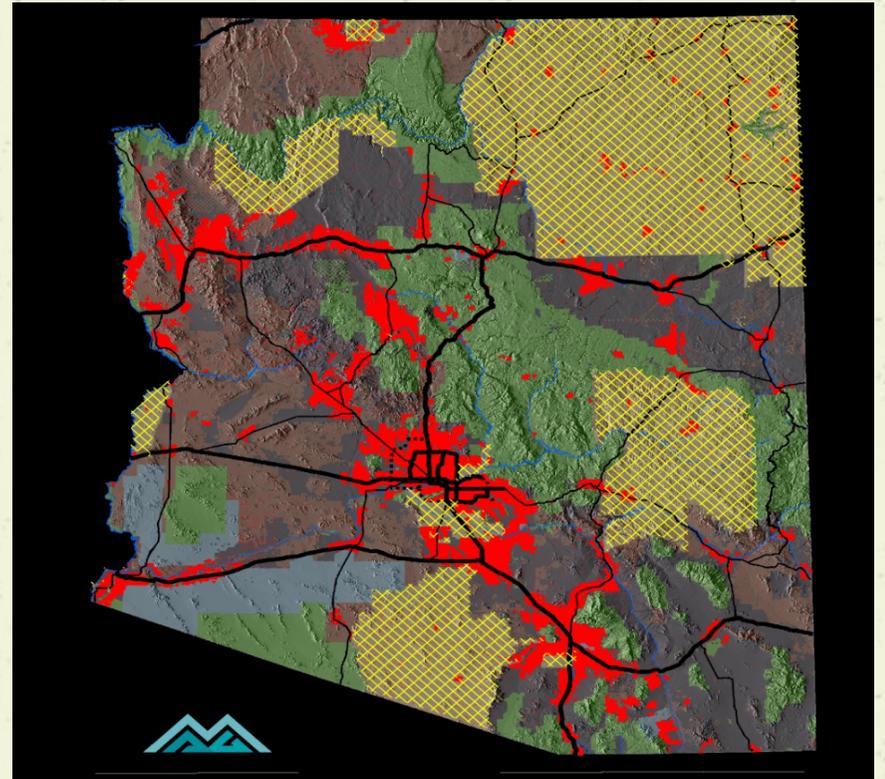


- Nine MPOs and COGs
- Arizona DOT
- Tribal Communities
- Governor's Office
- Legislative Transportation Committees
- Business Community (TIME Coalition)

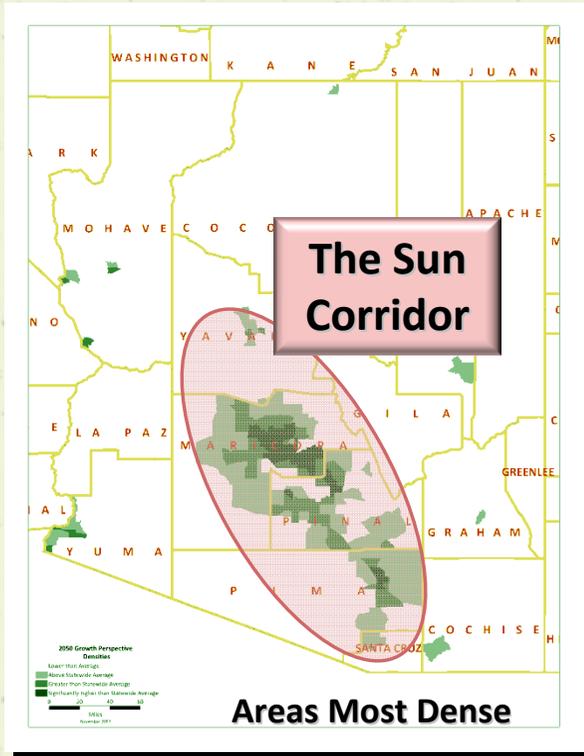
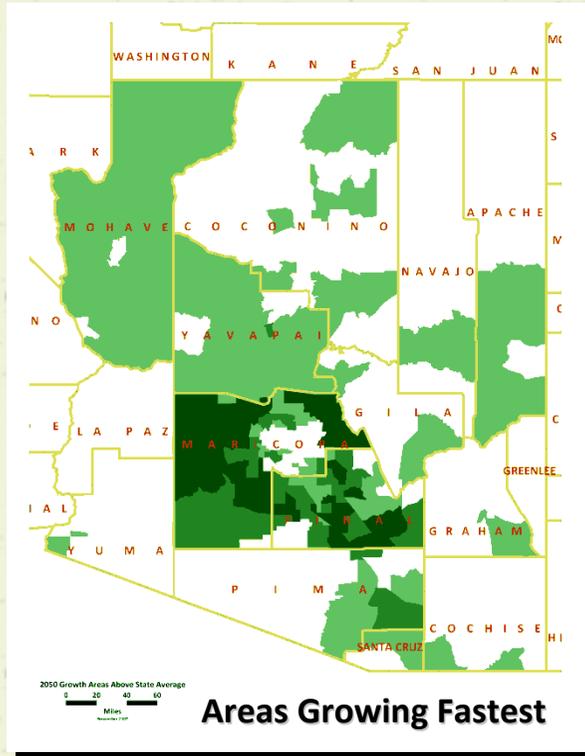
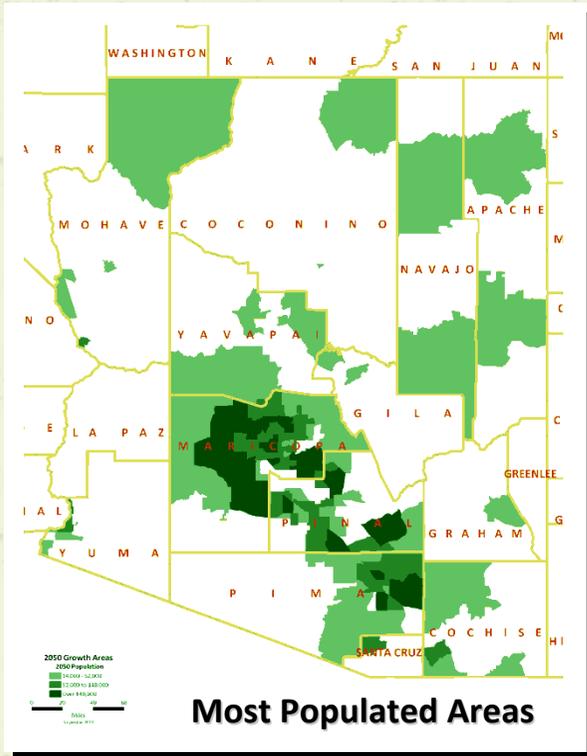
Arizona Projections

Source: Arizona Department of
Employment Security and
COG/MPO Planning Agencies

County	2005	2030	2050
Apache	74,600	93,500	104,200
Cochise	134,800	187,700	212,800
Coconino	132,800	173,800	198,200
Gila	55,100	70,000	78,300
Graham	35,900	44,600	49,900
Greenlee	8,300	8,300	9,100
La Paz	21,500	28,100	30,900
Maricopa	3,700,000	6,100,000	8,100,000
Mohave	194,900	330,600	401,000
Navajo	112,700	165,600	192,400
Pima	921,500	1,600,000	1,700,000
Pinal	276,000	1,300,000	2,200,000
Santa Cruz	45,300	71,000	84,700
Yavapai	212,700	355,400	418,700
Yuma	195,500	316,100	377,600
State of Arizona	6,100,000	11,000,000	14,100,000

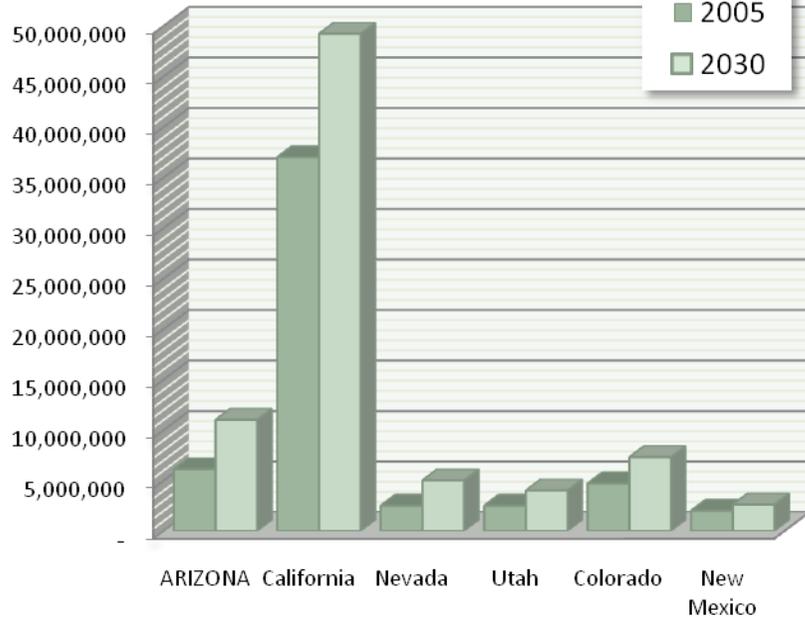


Arizona in 2050



Bordering State Population Projections

BY 2030 THE AMERICAN SOUTHWEST MAY BE HOME TO 80 MILLION PEOPLE

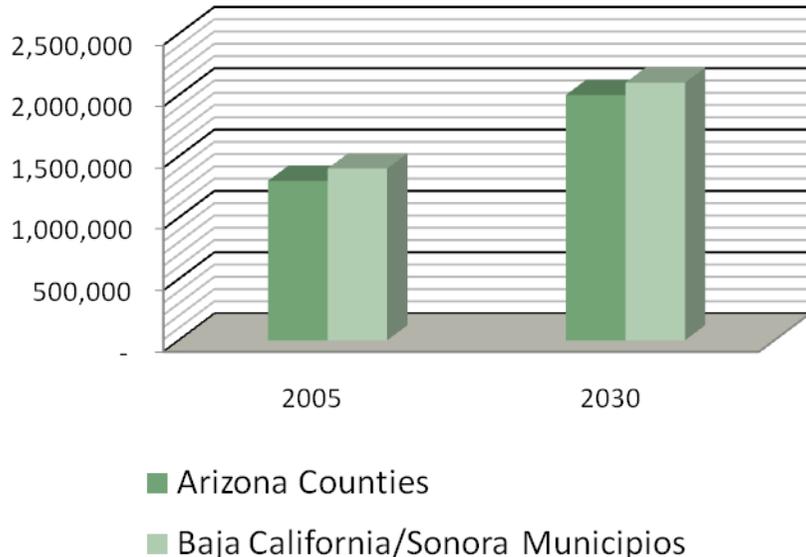


	2005	2030
ARIZONA	6,100,000	11,000,000
California	37,000,000	49,200,000
Nevada	2,500,000	5,000,000
Utah	2,500,000	4,000,000
Colorado	4,700,000	7,300,000
New Mexico	2,000,000	2,600,000

Source: Respective State Demographer Offices

Border Population Projections

ARIZONA'S COUNTIES AND BAJA CALIFORNIA/SONORA'S MUNICIPIOS



- Arizona's Border Counties:
 - Yuma
 - Pima
 - Santa Cruz
 - Cochise
- Border Population to exceed 4 million by 2030

Source: Arizona DES and Southwest Consortium for Environmental Research and Policy, San Diego State University

Notable Trends

AND THEIR POTENTIAL IMPACTS ON ARIZONA

- **California's Southland**
 - 20.5m in 2005
 - 30.4m in 2050 (+ 10million)
- **Nevada's Las Vegas**
 - 1.5m in 2005
 - 3.3m in 2050 (220% growth)
- **Utah's Washington County**
 - 130,000 in 2005
 - 610,000 in 2050 (470% growth)
- **New Mexico's Albuquerque**
 - 595,000 in 2005
 - 900,000 in 2030 (150% growth)



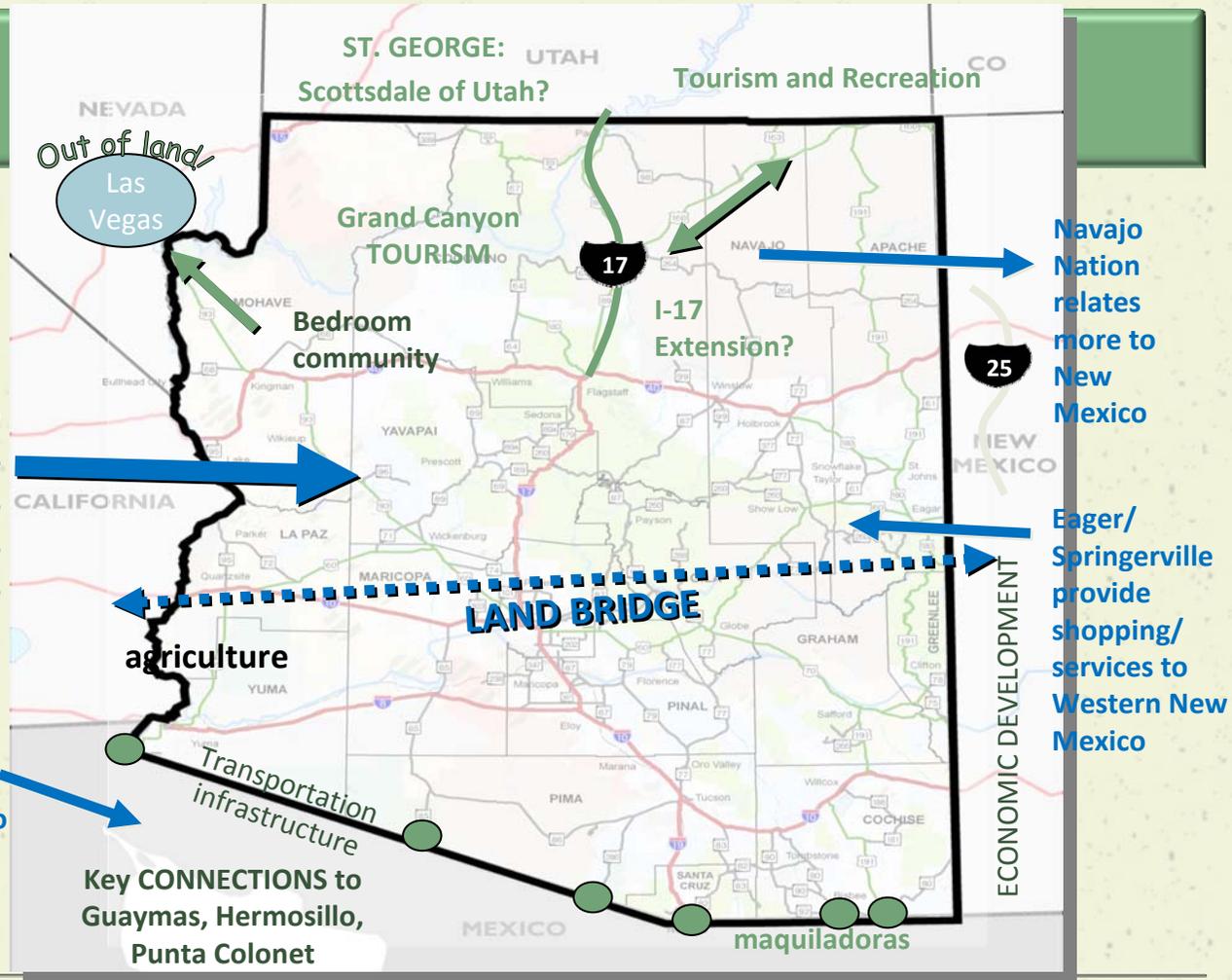
Bordering States

COG/MPO DISCUSSIONS

California
Population:
60 M by 2050!

People
Businesses
Second homes
Tourists
Commercial Vehicles

Mexico's fastest
growing states are in
the north (Sonora,
Chihuahua, and Nuevo
Leon)



Arizona

COG/MPO DISCUSSIONS



Commercial Trucking

- Distribution throughout Southwest USA
- Elevation in Central Arizona (SR-89/SR-69)
- US-95/SR-95 Corridor
- CANAMEX

Natural Resources

- Copper in Safford Area

Emerging Industries

- Wellton Oil Refinery
- Warehousing

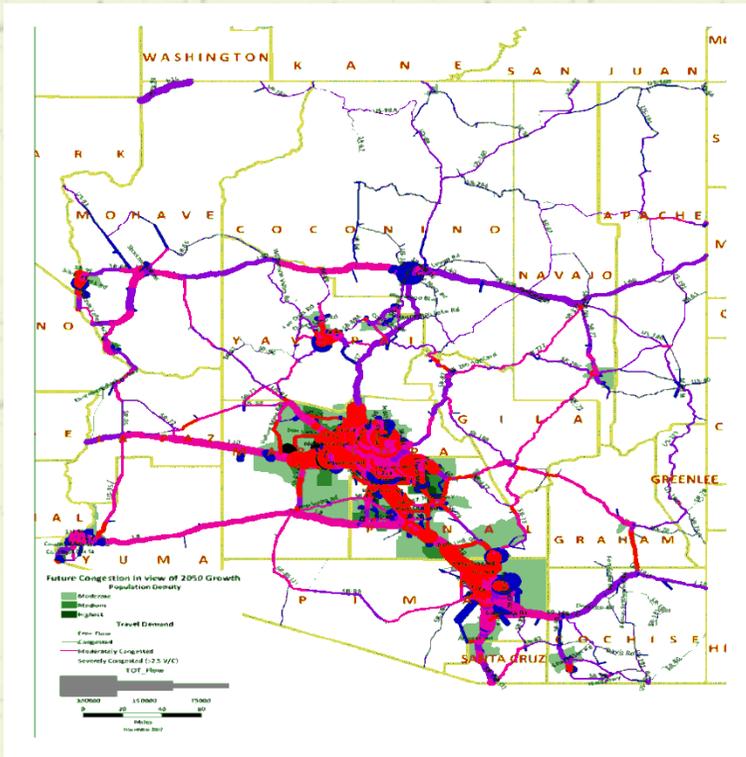
Sun Corridor Megapolitan

- Prescott
- Phoenix
- Tucson

Recreation and Tourism

In 2050 . . .

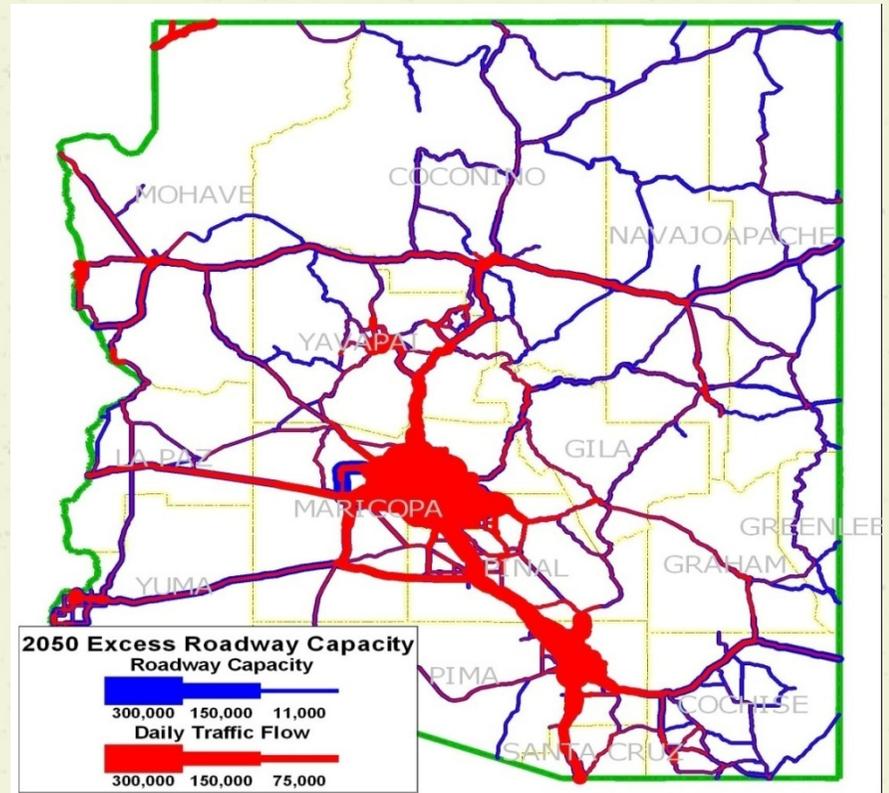
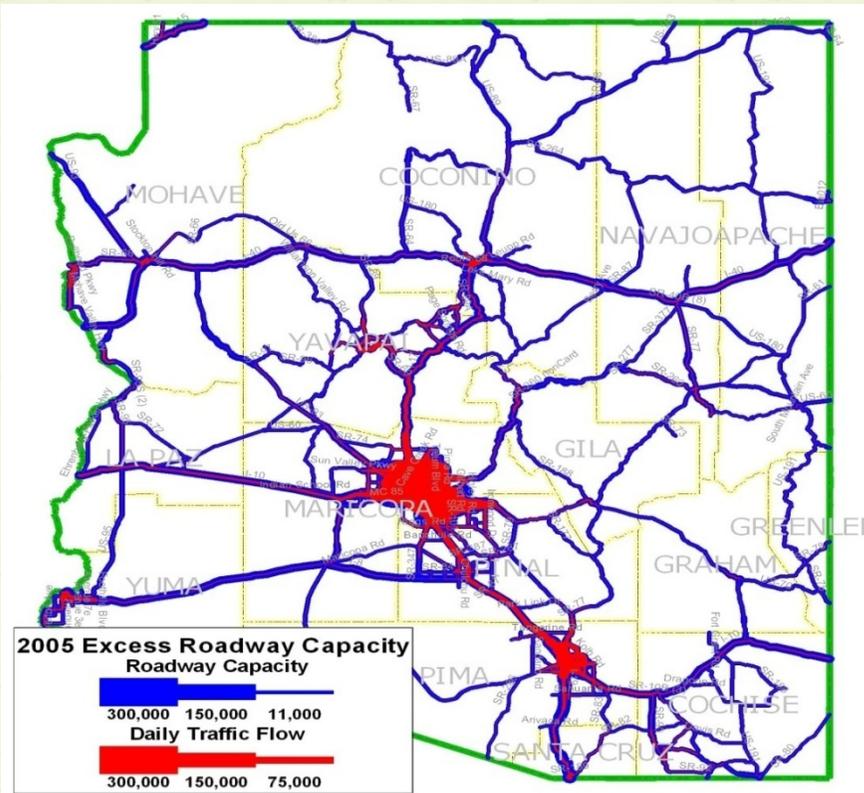
DEMAND ESTIMATES FROM RECONNAISSANCE STUDY STATEWIDE PLANNING TOOL



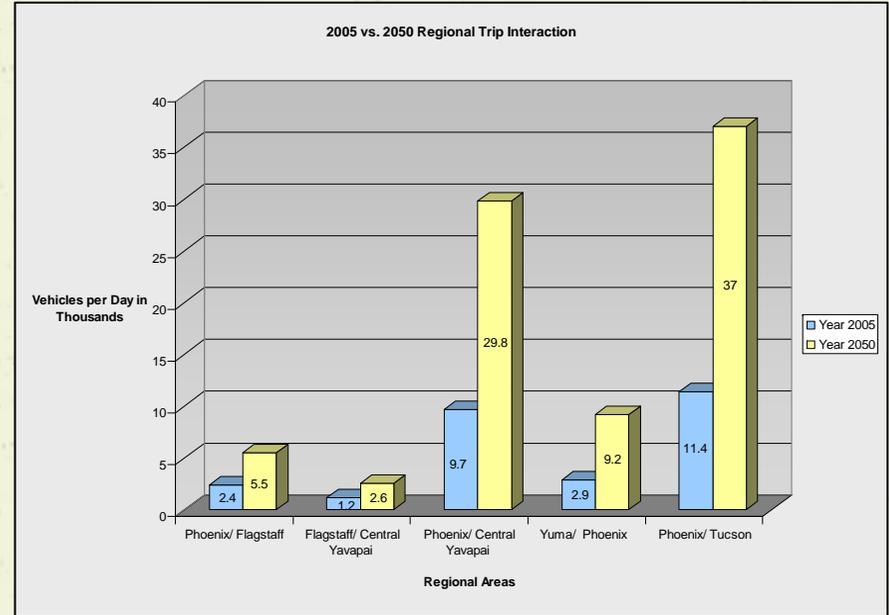
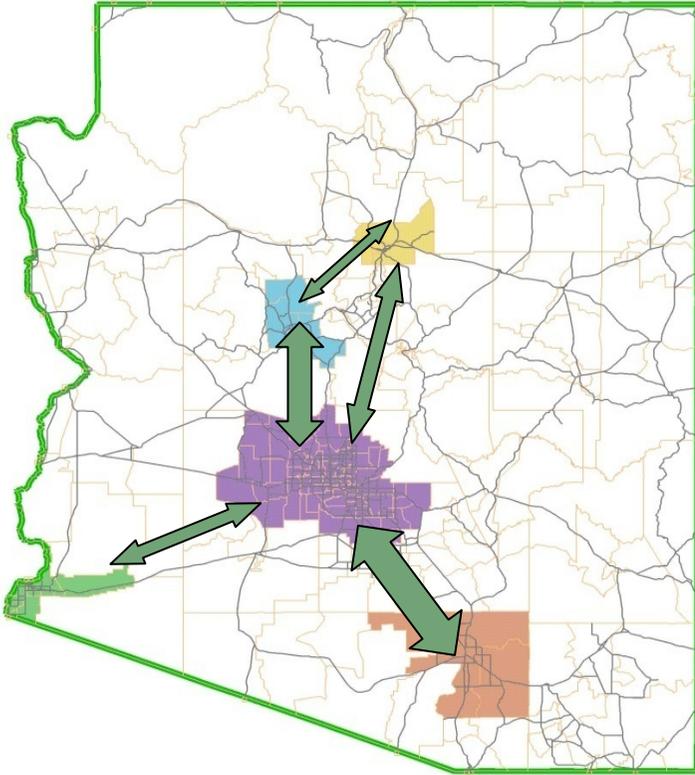
- **750,000 vpd** on I-10, west of SR-51 and Loop 202 (+231%)
- **660,000 vpd** on I-10 at the Broadway Curve (+224%)
- **490,000 vpd** on I-17, north of Dunlap Ave (+217%)
- **395,000 vpd** on US-60, east of Loop 101 (+190%)
- **400,000 vpd** on I-10, west of Loop 101 (+227%)
- **215,000 vpd** on I-10, east of Riggs Rd (+457%)

Vpd = vehicles per day

Visual Volume-to-Capacity Ratio



Statewide Travel Trends



What's missing from the future ...

STATEWIDE MOBILITY RECONNAISSANCE STUDY



- New Transportation Corridors
 - Connections to emerging population centers
 - Alternate routes around congestion
 - Multi-modal options for commuting
 - Facilities for increasing commercial vehicle demand

In summary, what have we learned?

Key Findings and Action Items



ARIZONA COG AND MPO ASSOCIATION

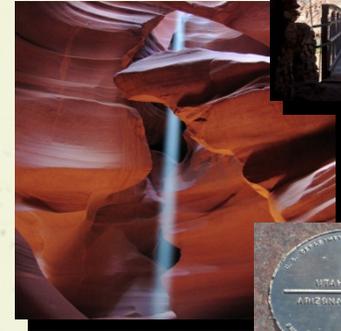


Unique Opportunity

FIRST FINDING – CONDUCT COLLABORATIVE PLANNING TO SHAPE GROWTH AND TRANSPORTATION FOR FUTURE GENERATIONS

Action Items:

- Establish sufficiently funded planning platform inclusive of all levels of stakeholders and government
- Invest in data tools
- Develop planning framework coalition with California, Nevada, Utah, Colorado, New Mexico, Sonora, and Baja California
- Improve border connections to facilitate a growing \$14.5 billion in trade with Mexico
- Produce initiatives that develop transportation plans with 50-year horizons



Increased Investment

SECOND FINDING – MEET GROWING
TRANSPORTATION DEMAND AND KEEP
ARIZONA COMPETITIVE IN THE WORLD
ECONOMY

Action Items:

- Identify new transportation corridors and provide alternate routes
- Continue to invest in existing corridors
- Establish network of primary and secondary freight corridors for air, rail, and surface travel



Strategic Transportation Investments

FOURTH FINDING – ENSURE ADEQUATE MOBILITY AND ECONOMIC PROSPERITY FOR ALL ARIZONA RESIDENTS

Action Items:

- Develop a permanent transportation funding program:
 - Predictable
 - Reliable
 - Affordable
 - Multi-modal
 - Multi-source
- Improve the corridor definition process through environmental streamlining to allow advance right-of-way preservation

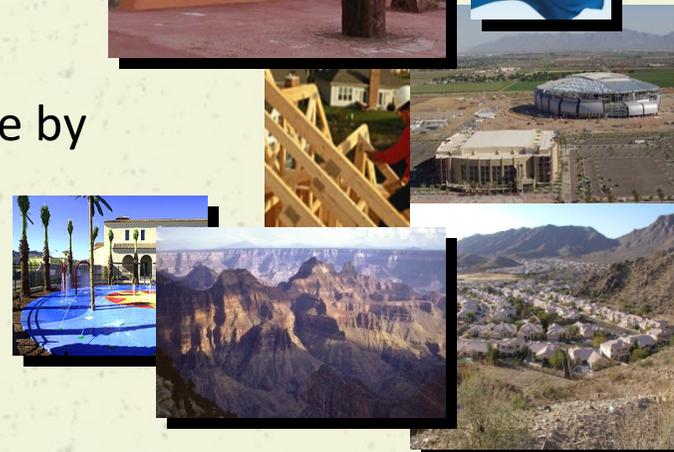


Coordinated and Collaborative Planning

FIFTH FINDING – PLAN LAND-USE AND TRANSPORTATION TO ACCOMMODATE ARIZONA'S SHARE OF 120 MILLION NEW AMERICAN CITIZENS BY 2050

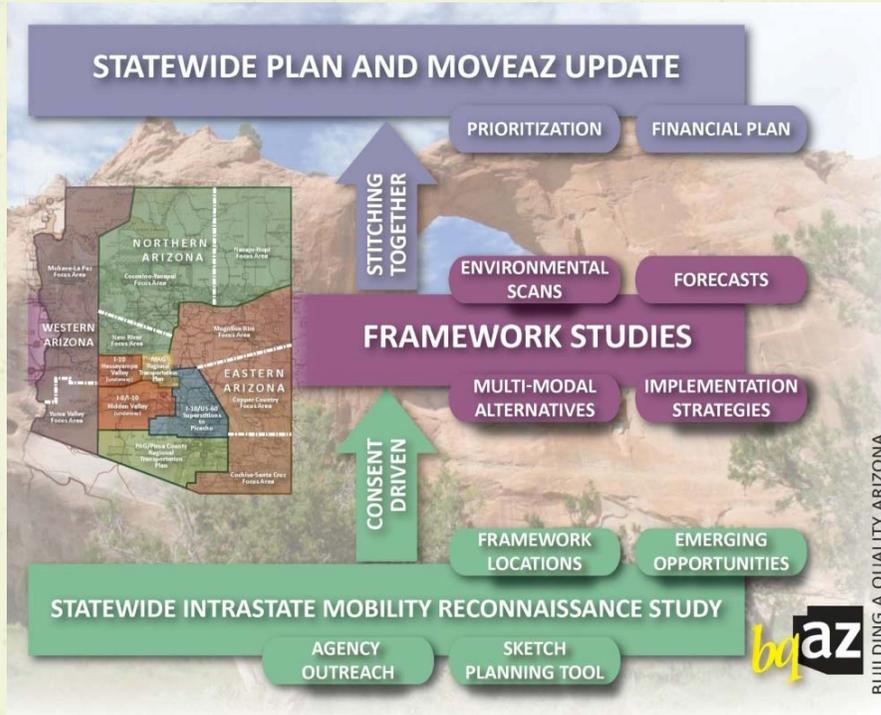
Action Items:

- Institute a statewide planning framework
- Expand Growing Smarter to weigh land use decisions regionally and statewide
- Reform decision-making for State Lands
- Expand the ability to incorporate decisions made by resource agencies, such as BLM, Bureau of Reclamation, USFS, USNP, and AZ State Parks



A Continuing Process

A Cooperative Effort among Arizona's
10 COGs and MPOs with the Arizona
Department of Transportation



- Reconnaissance Study Complete
- All Frameworks Underway – completion by December 2008
- Statewide Framework and MoveAZ Update by Summer 2009

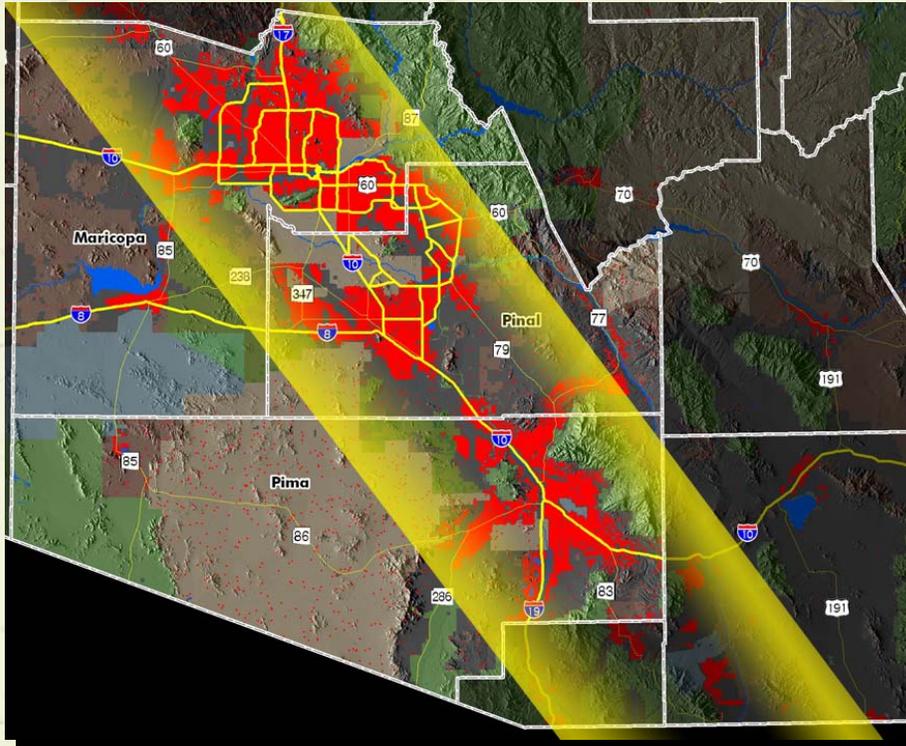
Megapolitan Math

Out of Many, One . . . It's the Economy
The Sun Corridor



Arizona's Megapolitan Area

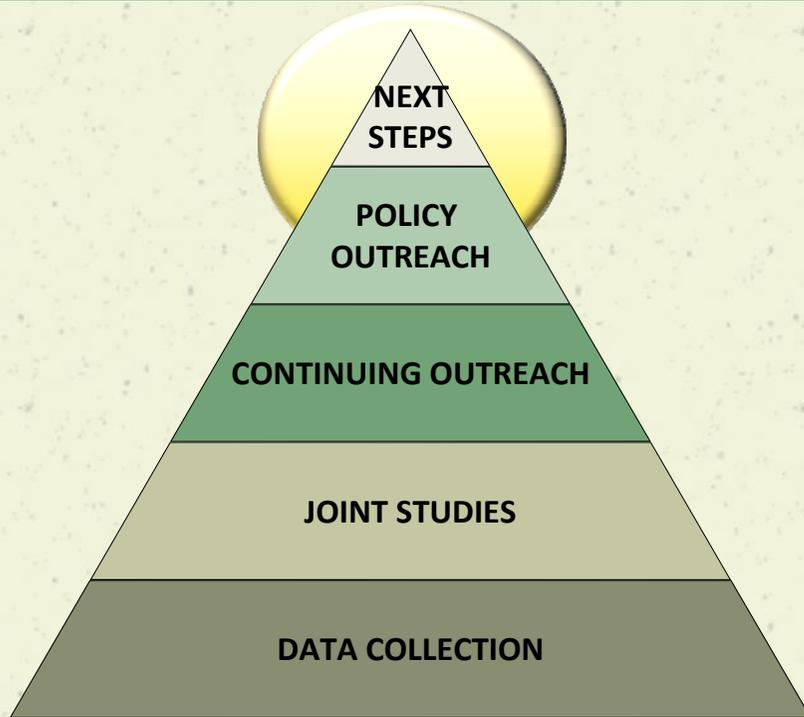
Out of Many, One
It's the Economy



- The Sun Corridor
 - Phoenix-Tucson Regions
 - Continuing Coordination

Hierarchy of Coordination

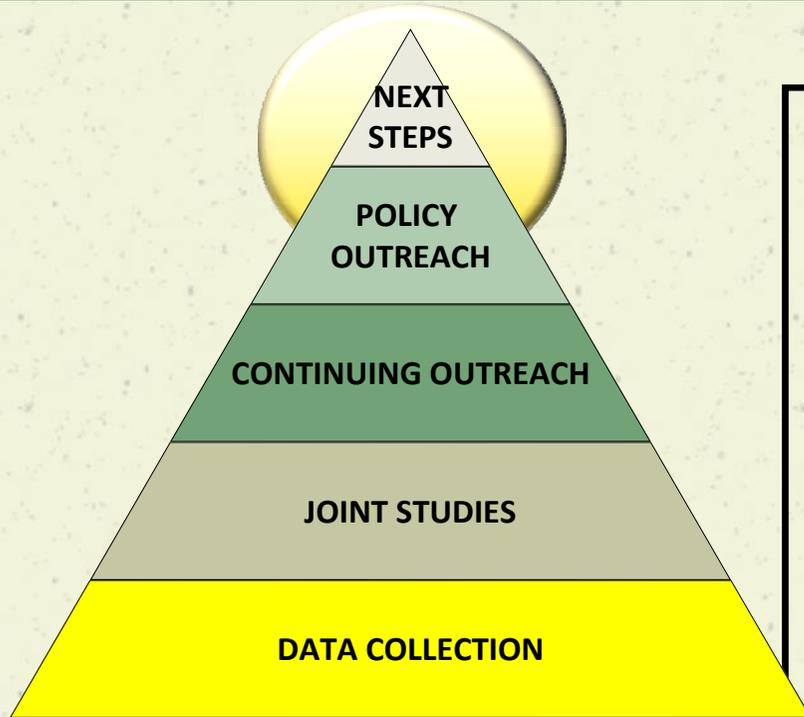
Out of Many, One
It's the Economy



- From the Base Up
 - Data Collection
 - Joint Studies
 - Continuing Outreach
 - Policy Outreach
 - Next Steps

Data Collection

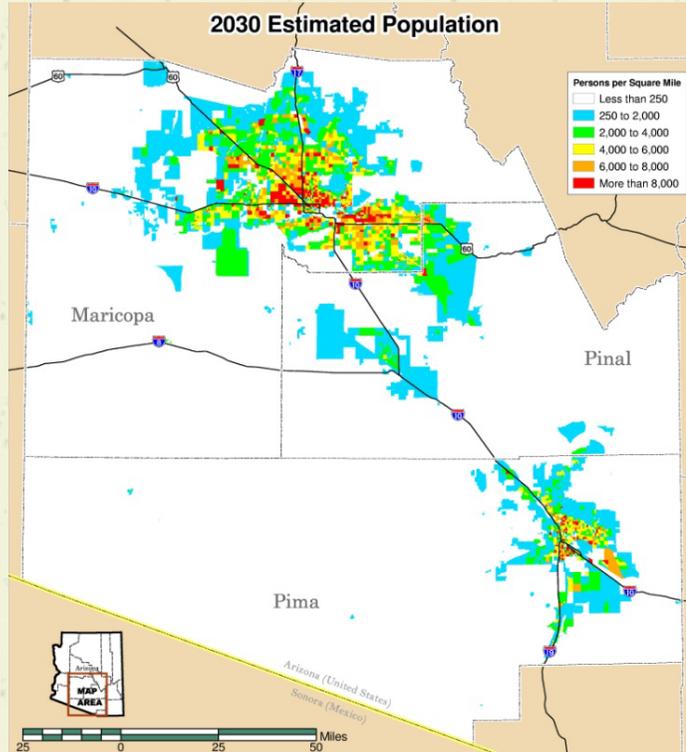
Out of Many, One
It's the Economy



- Socioeconomic Data
- Population Data
- Census Data
- Traffic Analysis Zones
- Street Network

Socioeconomic Data

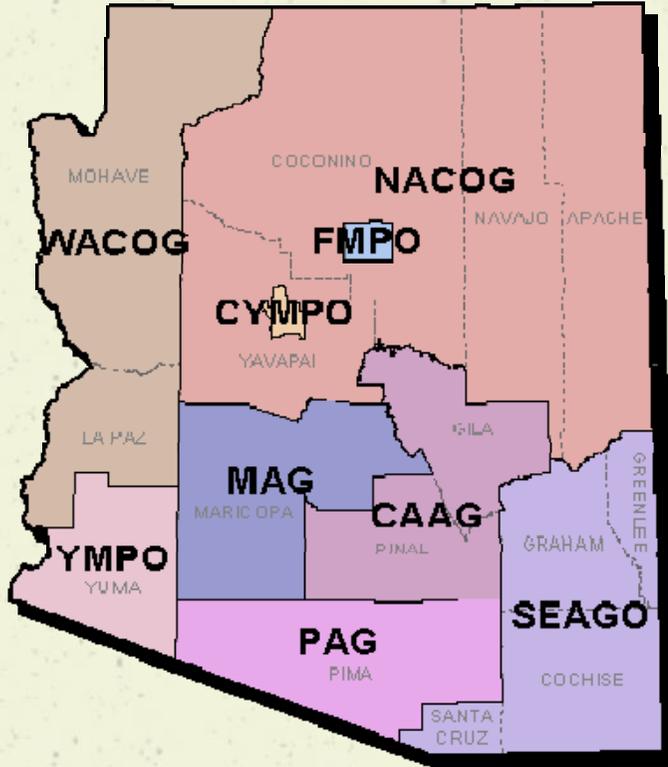
Out of Many, One
It's the Economy



- Socioeconomic Modeling and Data
 - Building a common approach to socioeconomic modeling and data development

Survey of Arizona COGs

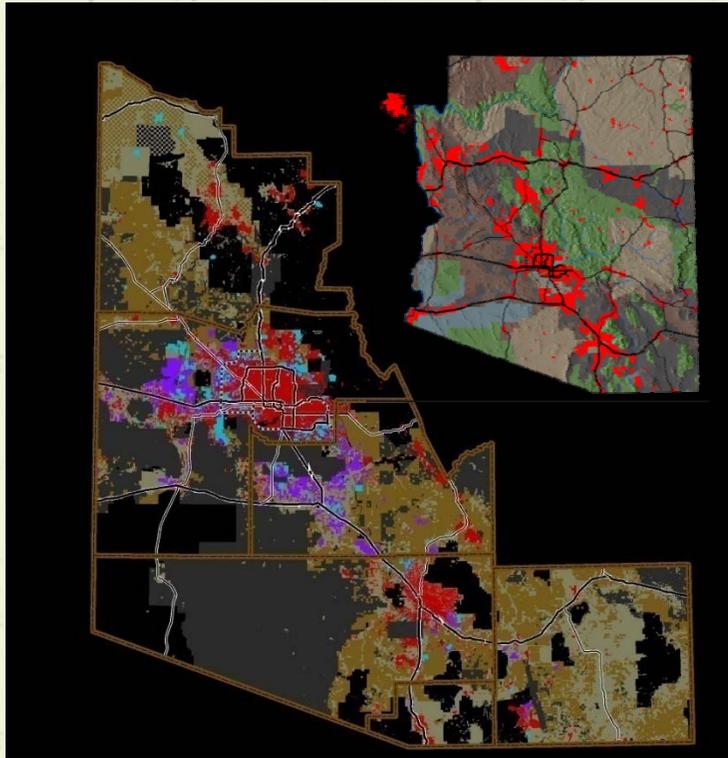
Out of Many, One
It's the Economy



- What are your current and anticipated data needs?
- How do you use this information?
- What levels of geography do you work with?
- Who requests information from your agency?
- What information do you need but don't currently have?

Population Data

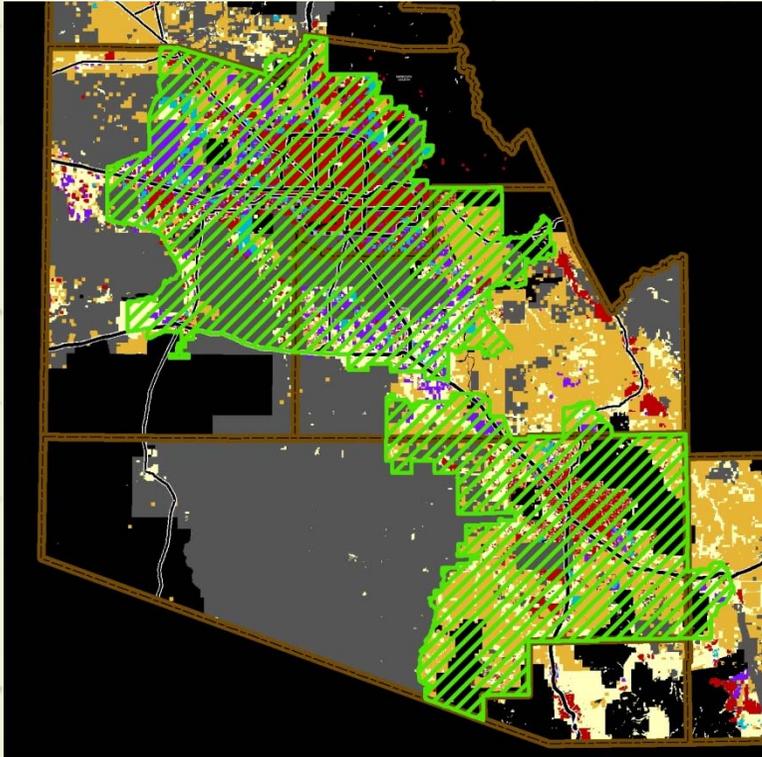
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- Keep updated census numbers and estimates
- Used common algorithm to model statewide growth
- Analysis of land ownership was used to help project growth

Data Collection

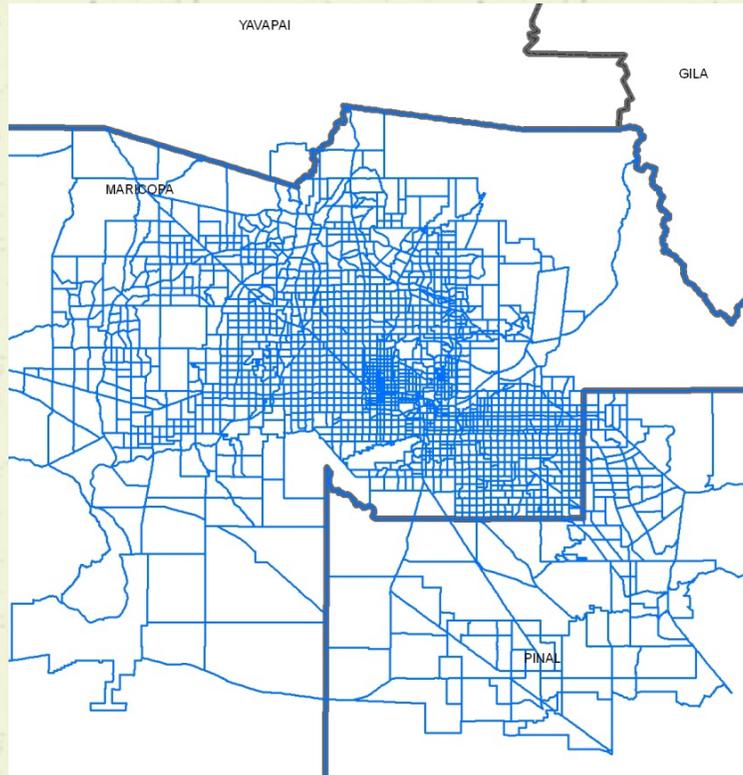
Out of Many, One
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- Modeling Area
 - MAG and PAG extended their modeling areas into Pinal County

Data Collection

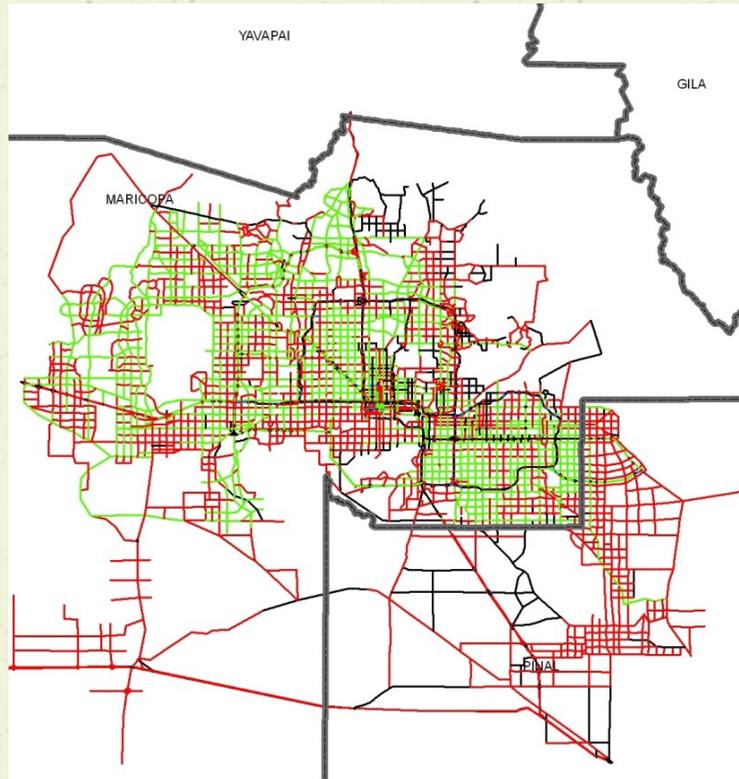
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It's the Economy



- Traffic Analysis Zones
 - Includes parts of Pinal and Yavapai Counties

Data Collection

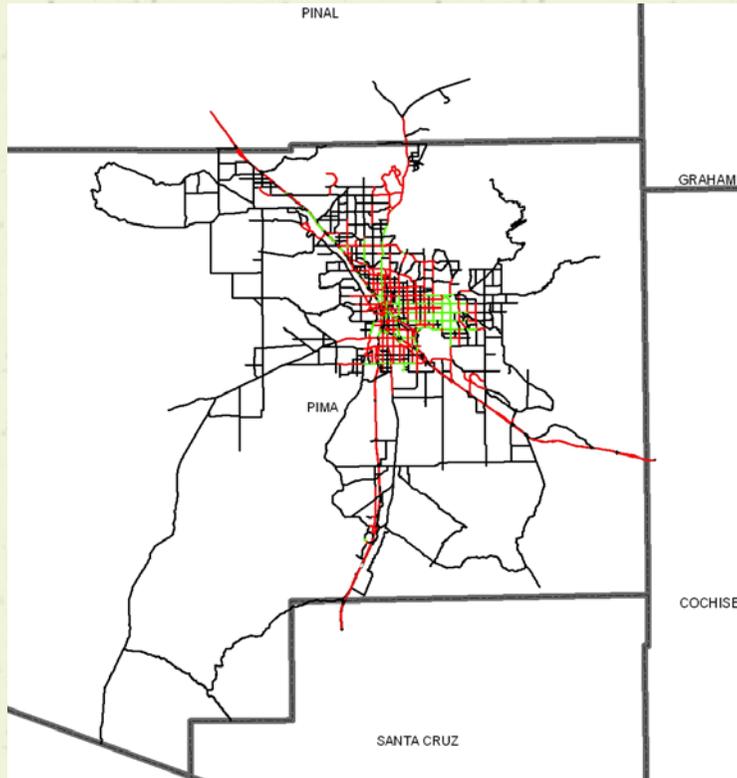
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- Street Network
 - Used for modeling future travel demand

Data Collection

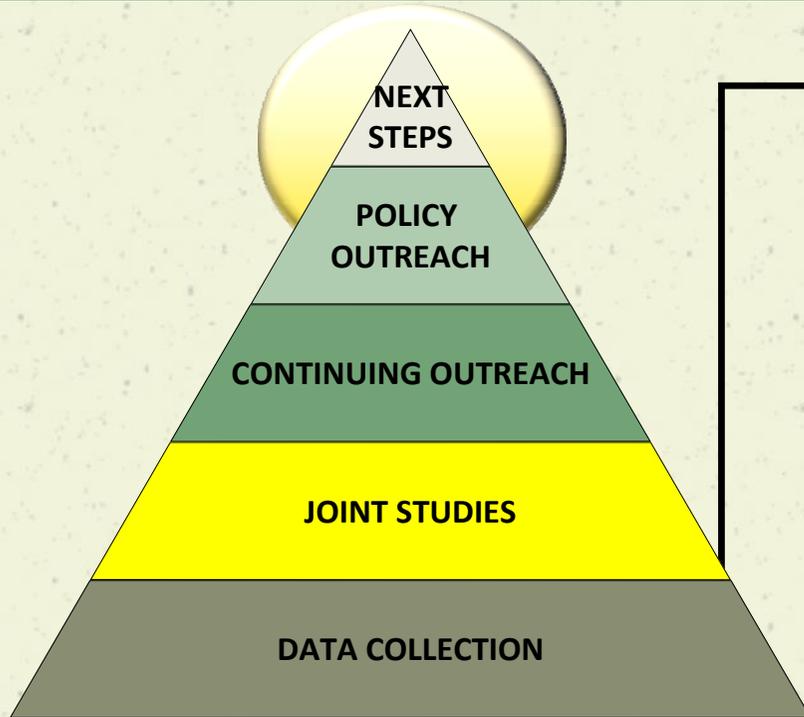
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It's the Economy



- Street Network
 - PAG modeling area includes parts of Southern Pinal County

Joint Studies in the Corridor

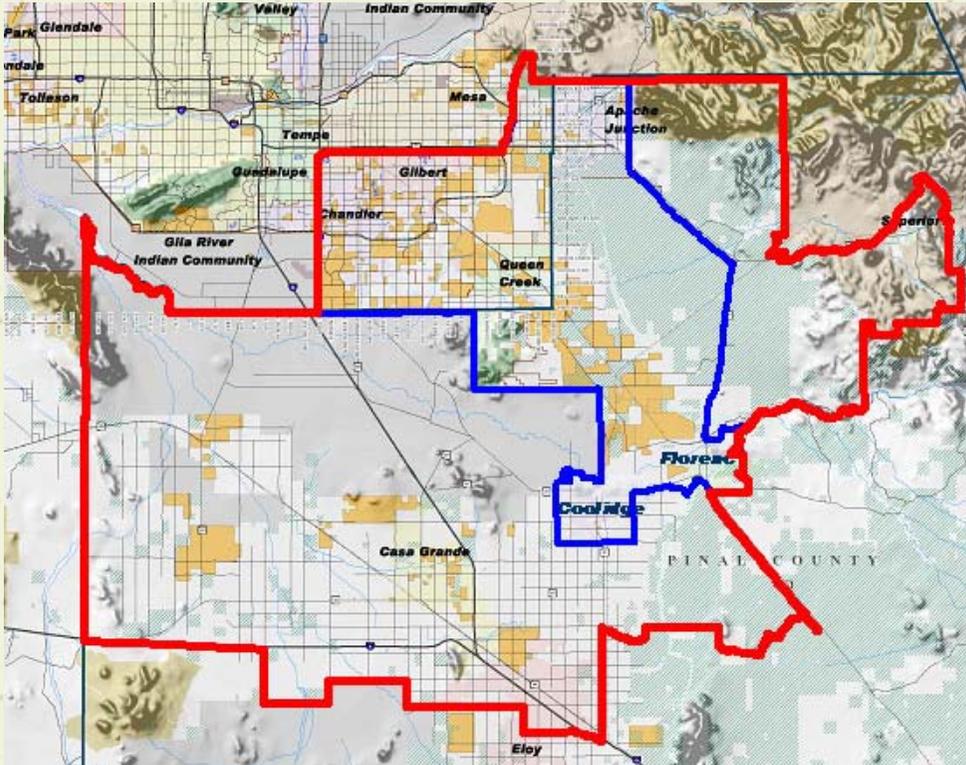
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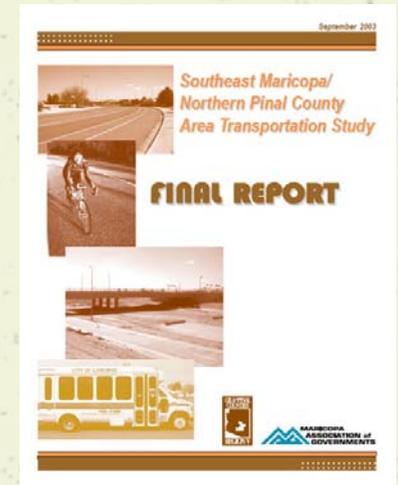
- Northern Pinal/ Southeast Maricopa County Study
- Hidden Valley Study
- Central AZ Framework Study
- Commuter Rail Strategic Plan
- Interactive Mapping Site

Joint Studies in the Corridor

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It's the Economy

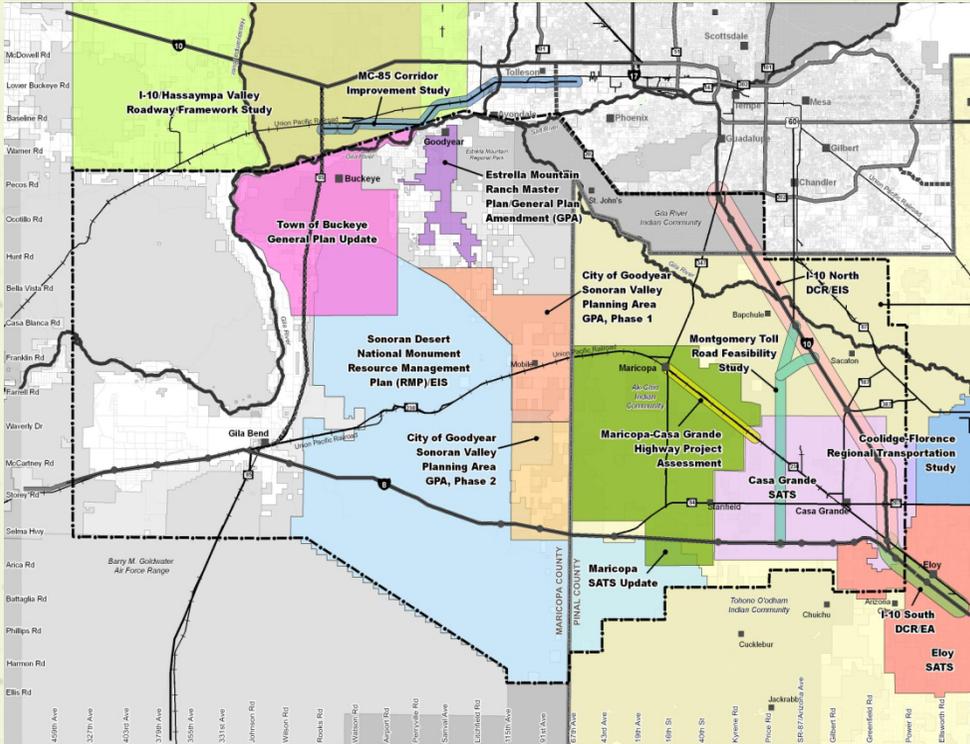


- Southeast Maricopa/
Northern Pinal County
Study



Joint Studies in the Corridor

Out of Many, One
It's the Economy



● Hidden Valley Study

DMJM HARRIS | AECOM



Interstate 8 and Interstate 10 Hidden Valley Roadway Framework Study



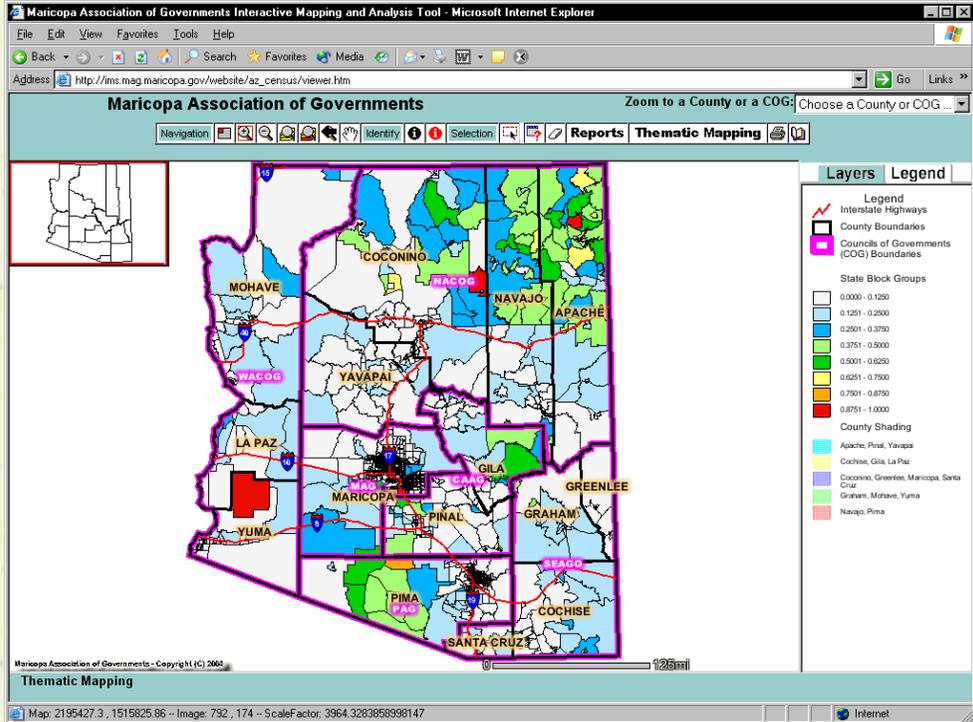
Study Review Team

April 12, 2007



Joint Studies in the Corridor

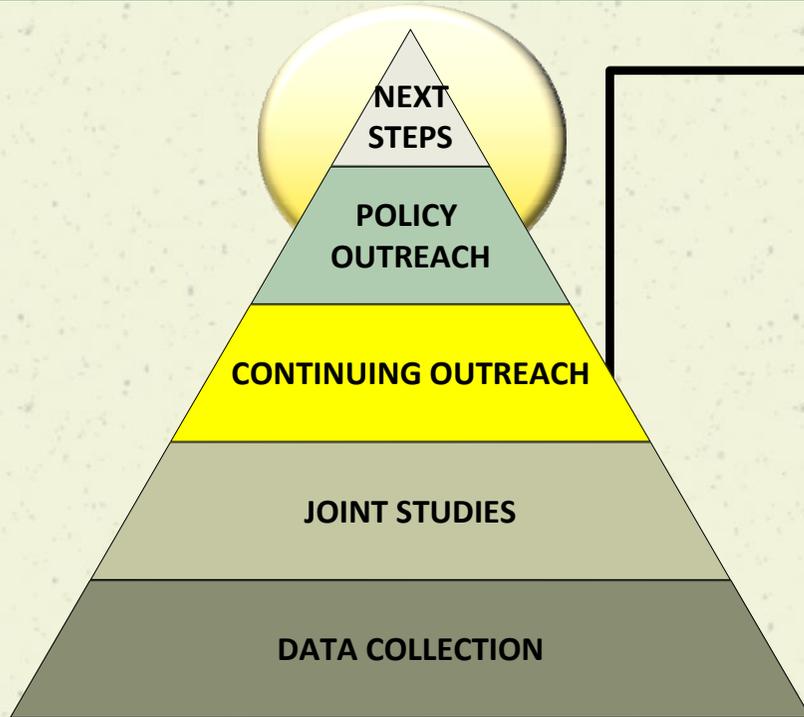
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- Creation of Statewide Socioeconomic Information on Interactive Mapping Site

Continuing Outreach

Out of Many, One
It's the Economy



- Working Together
 - Contractual Arrangements for Joint Planning
 - Joint Planning Meetings of MAG/CAAG/PAG

Continuing Outreach

Out of Many, One
It's the Economy



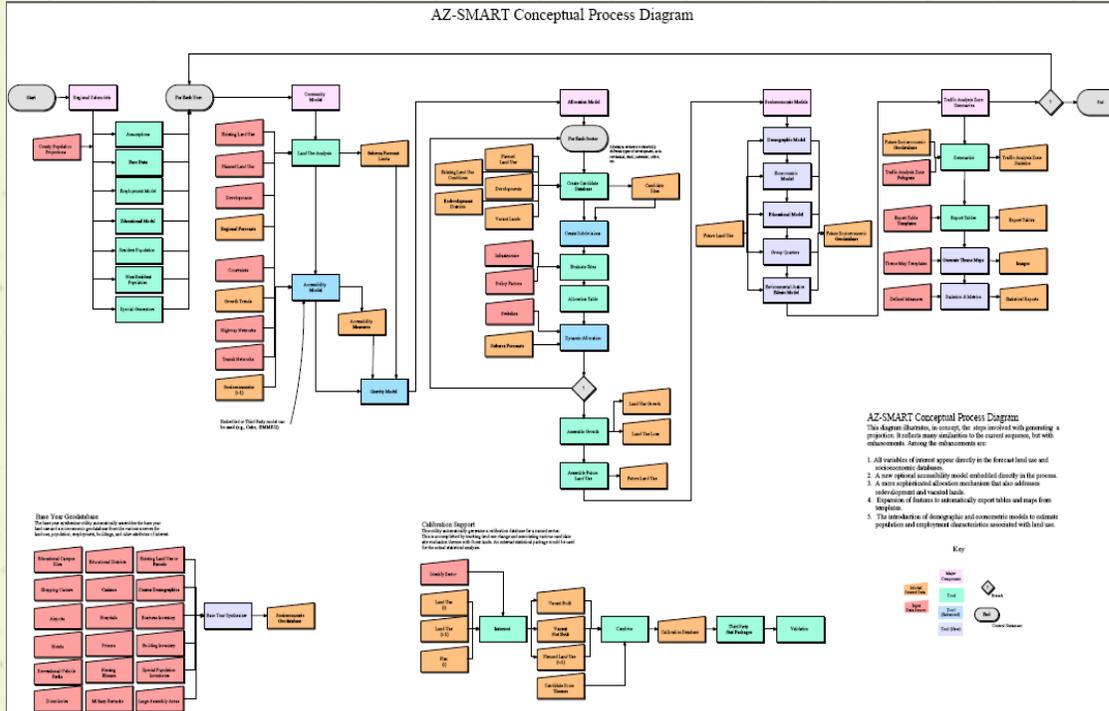
- Contractual Arrangements for Joint Planning
 - CAAG has contracted with MAG for socioeconomic modeling
 - PAG and MAG have contracted with CAAG to provide information on transportation corridors

Working Together

Out of Many, One
It's the Economy



AZ-SMART Conceptual Process Diagram



- Socioeconomic modeling platform now being implemented: AZ-SMART
- Common socioeconomic suite goes national

Continuing Outreach

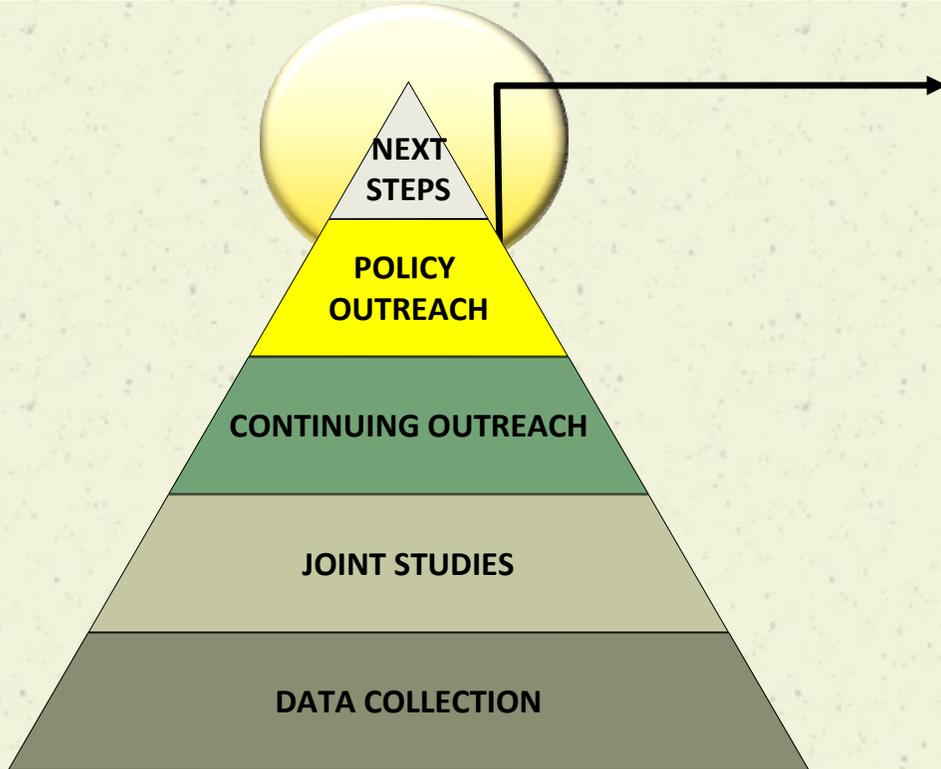
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- MAG-CAAG-PAG Council Meetings
- bqAZ Process Statewide
 - Mobility Reconnaissance Study
 - Statewide Regional Frameworks and Move AZ Update
- Arizona State Lands

Policy Outreach

Out of Many, One
It's the Economy



- Building a Quality Arizona
- Outreach to Counties
- Native American Communities
- Joint MAG/PAG and CAAG Policy Meetings

Building a Quality Arizona

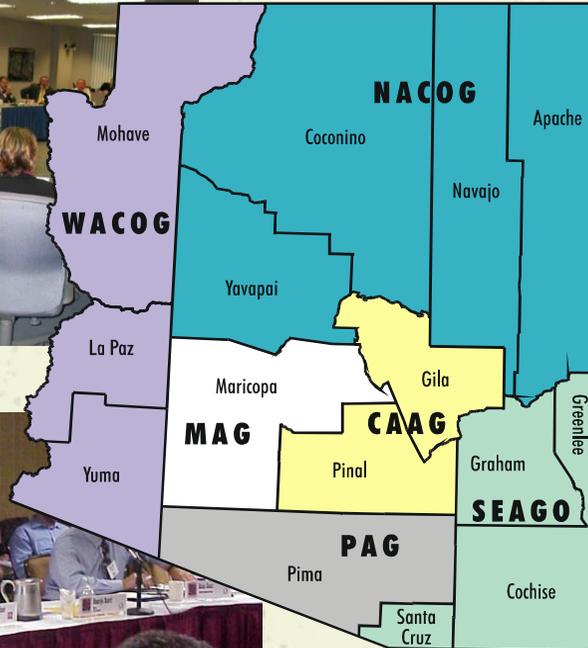
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- Initiated by the Association in 2006
- Addresses growth
- Studies methods for addressing rapidly shrinking infrastructure funds

Outreach to Counties

Out of Many, One
It's the Economy



- COG/MPO Directors Meetings
- Framework Studies
- Focus Groups
- Presentations

Native American Communities

Out of Many, One
It's the Economy



28th Arizona Indian Town Hall
Presented by: *First Nations Development Institute*
Protecting Arizona's Natural Resources:
Land and Water
July 14-16, 2008
Carefree Resort & Villas

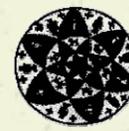
2005 6 million
2050 16 million
Map courtesy of Maricopa Association of Governments

To register and for more information please visit www.azcia.gov

Hosted by
Arizona Commission of Indian Affairs
1400 W Washington, Ste 300
Phoenix, AZ 85007



- Ak-Chin Indian Community
- Fort McDowell-Yavapai Nation
- Gila River Indian Community
- Pascua Yaqui Tribe
- Salt River Pima-Maricopa Indian Community
- Tohono O'odham Nation
- Yavapai-Prescott Indian Tribe

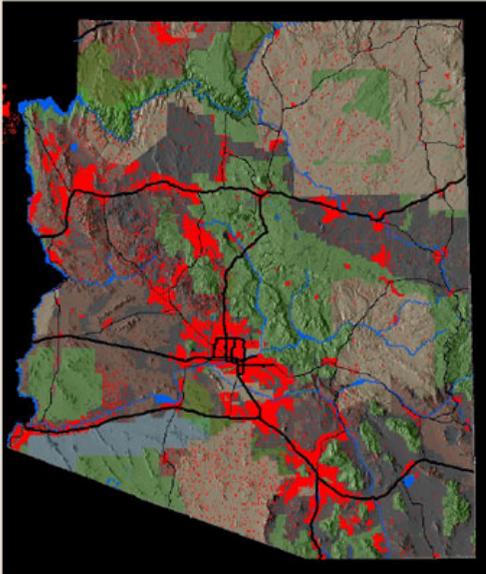


Policy Outreach

Out of Many, One
It's the Economy



ARIZONA



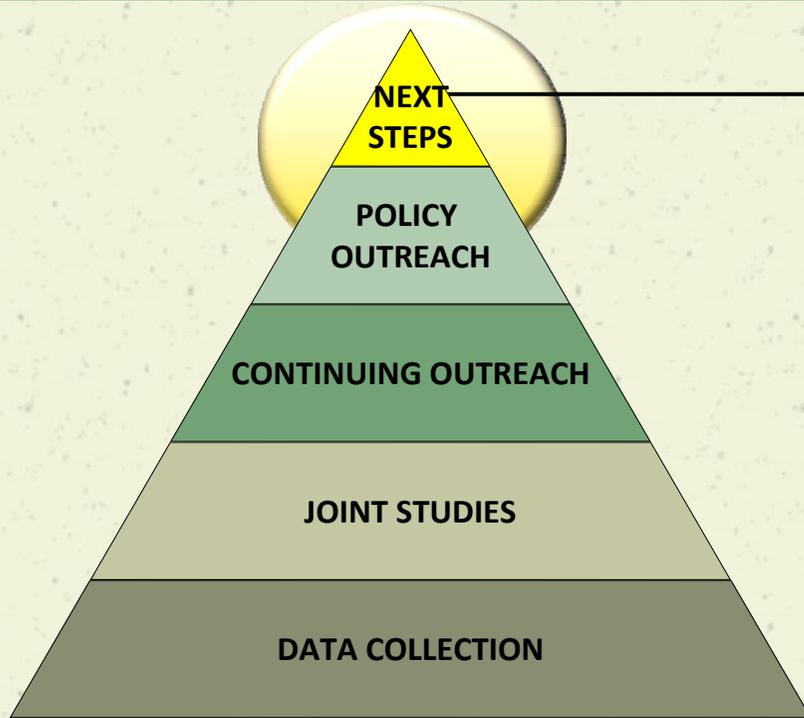
Regional Planning Dialogue



- CYMPO-MAG-CAAG-PAG Regional Councils Coordination
- Technology “Transfers” among Agency Staff and ADOT
- Fringe area coordination

Future Steps

Out of Many, One
It's the Economy



- Policy Collaboration in the Sun Corridor
 - Define the Future
 - Organize for Success
 - Coordinate with State Land Department
 - Complete Joint Studies

“Always do right. This will gratify some people, and astonish the rest.”

MARK TWAIN, AMERICAN AUTHOR

For more information:

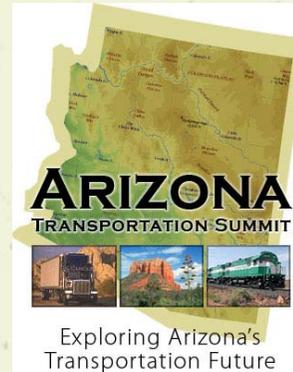
Bob Hazlett, P.E.

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Exploring Arizona's
Transportation Future

