

Planning a Sustainable Future for Apache Junction

PUP 548: Planning Sustainable Communities

TEAM

Project Description:

The purpose of the project is for students to conduct a sustainability assessment of Apache Junction to determine what assets and opportunities can be leveraged for a more sustainable future. Students will propose specific sustainability recommendations and language for the city's next General Plan Update that will transform the city as it moves into the future.

Methods or Process:

The project uses the seven themes under the STAR communities framework to evaluate AJ's current General Plan, its sustainability status, diagnose its strengths, weaknesses, and provide recommendations for improvement.

Built Environment	Climate & Energy	Economy & Jobs	Education, Arts & Community	Equity & Empowerment	Health & Safety	Natural Systems
Ambient Noise & Light	Climate Adaptation	Business Retention & Development	Arts & Culture	Civic Engagement	Active Living	Green Infrastructure
Community Water Systems	Greenhouse Gas Mitigation	Green Market Development	Community Cohesion	Civil & Human Rights	Community Health & Health System	Invasive Species
Compact & Complete Communities	Greening the Energy Supply	Local Economy	Educational Opportunity & Attainment	Environmental Justice	Emergency Prevention & Response	Natural Resource Protection
Housing Affordability	Industrial Sector Resource Efficiency	Quality Jobs & Living Wages	Historic Preservation	Equitable Services & Access	Food Access & Nutrition	Outdoor Air Quality
Infill & Redevelopment	Resource Efficient Buildings	Targeted Industry Development	Social & Cultural Diversity	Human Services	Indoor Air Quality	Water in the Environment
Public Spaces	Resource Efficient Public Infrastructure	Workforce Readiness		Poverty Prevention & Alleviation	Natural & Human Hazards	Working Lands
Transportation Choices	Waste Minimization				Safe Communities	

Findings: Strengths

- Stormwater research, water and wastewater compliance with CCR's and EPA ECHO
- EPA Infill Development report and newer infrastructure
- No transportation fatalities
- Addressed aims for educational green awareness programs, energy conservation, renewable energy, and water conservation methods
- 82.9% of Households ≥ Living Wage of \$24,511 (MIT Calculator)
- General Plan has diverse and impactful economic goals and objectives
- Equal male/female educational attainment
- Abundant special events for residents will enhance the arts and culture of the city
- Adequate programs to enhance the community cohesion
- Importance of community involvement and transparency in decision making
- Diversity in services offered by medical facilities
- Many non-profits creating a healthy community for residents
- Hazard mitigation plan is approved by FEMA
- City sits at the base of the Superstition Mountains with strong natural habitats, valuable natural resources, and recreation trails

Findings: Areas for improvement

- Density & walkability: Smart Location Index = 65%, H + T Compact Neighborhood score = 44%
- Nearly half of Block Groups spend +45% on housing & transportation
- Nearly 80% of residents drive alone to work
- Longer commute-time than Metro Phoenix and the National average
- Need citywide climate change vulnerability assessment
- Need integrated climate change adaptation action plan
- Lack of GHG emissions data and measurements
- Unemployment rate is higher than Maricopa County and Pinal County
- Limited targets and complementing action plans to implement economic strategies
- Lowest high school graduation rate and highest dropout rate comparing with other cities in county
- Lack of art programs that support local artist and advance arts education
- Lack of access to information about community issues for minorities who do not speak English
- No mention of minority populations and how to engage them in General Plan
- Lack of fair and equitable distribution of public facilities throughout AJ
- General Plan has no mention of creating a safe and healthy community
- Poor connectivity, majority land area is within a food desert
- Lack of accreditation for emergency management services
- Low tree canopy coverage
- Many valuable natural systems are owned by either the State or Federal government
- No clear path for the implementation for the goals of the General Plan

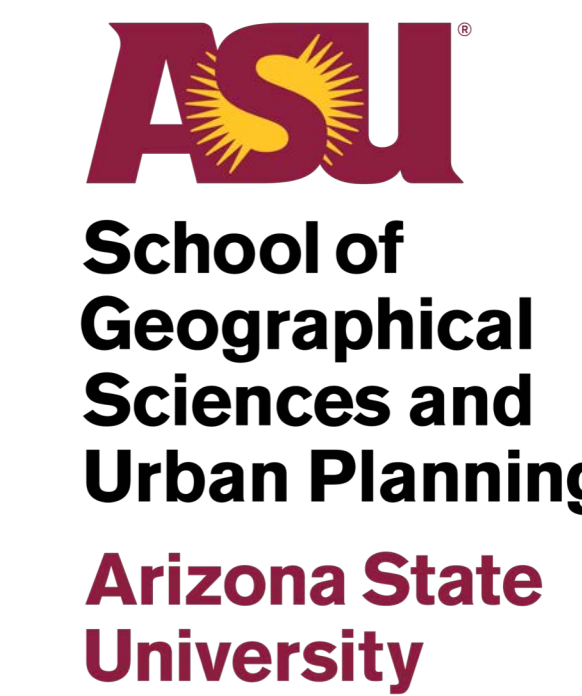
Recommendations:

- Create partnerships to preserve natural resources and connectivity with greenbelts
- Use Central Arizona Conservation Alliance (CAZCA) data for future design/development
- Perform a comprehensive infrastructure inventory and walkability index/map
- Diversify water sources and institute reclamation strategies
- Look to Curitiba's transit goals and strategies for creative strategies on a tight budget
- Develop quantitative indicators for climate preparedness of the AJ community & assess annually
- Provide access to neighborhood-level climate and energy data
- Offer multiple pathways to graduation as a way to improve educational outcomes for students
- Art Education Programs to provide youth with marketable skills (e.g. Chicago's Gallery 37)
- Provide information about community issues, programs, services, and activities that is accessible to English and non-English speaking residents
- Evaluate where and who are the disadvantaged communities within Apache Junction
- Create diverse stakeholder meetings by providing food, childcare, and flexible scheduling
- Provide information/resources equally among residents for opportunity to help themselves
- Pop-up food markets
- Create new General Plan section for health and safety with subsections: Health Conditions, Equity and Access, Recreation and Physical Activity, Healthy Eating, Food Access and Sustainable Food Systems, Violence Prevention and Safety
- Incorporate law enforcement policies into General Plan
- Partner with state and federal lands - solidify long term preservation of the wildlife corridors
- Become a Start Community Member
- Implement ASU Trail connectivity plans
- Adopt best practices from other cities including green streets, Tree City USA Program, Learning landscapes
- Dedicate funding for investment in green infrastructure



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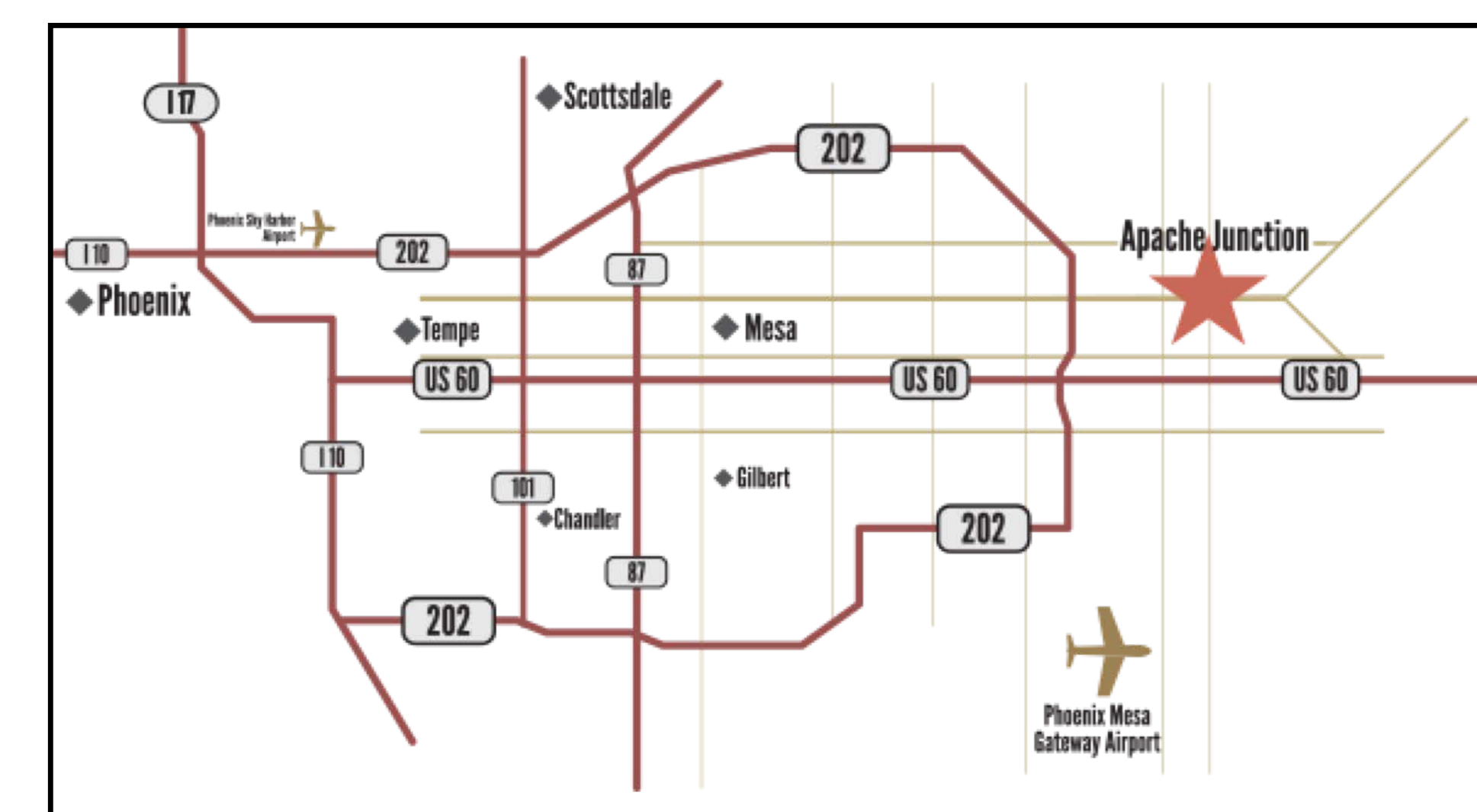
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Project Cities



Apache Junction Vicinity Map

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