



# PINAL COUNTY ARIZONA STATE ROUTE 24 EXTENSION

## FY 22 MEGA Discretionary Grant Application

Connecting People, Communities, and Serving the Northern Pinal  
County Region



**PINAL COUNTY**

WIDE OPEN OPPORTUNITY

**Prepared By:**

Pinal County, Arizona

DUNS# 074447095

**Project Location:**

Northern Pinal County, Arizona

**Total Project Cost:** \$502,720,900

**Total MEGA Grant Request:** \$301,632,540

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<b>Basic Project Information</b>	
What is the Project Name?	Pinal County State Route 24 Extension
Who is the Project Sponsor?	Pinal County
Was an application for USDOT discretionary grant funding for this project submitted previously?	No
A project will be evaluated for eligibility for consideration for all three programs, unless the applicant wishes to opt-out of being evaluated for one or more of the grant programs.	<input type="checkbox"/> Opt-out of Mega? <input type="checkbox"/> Opt-out of INFRA? <input checked="" type="checkbox"/> Opt-out of Rural?
<b>Project Costs</b>	
MPDG Request Amount	Exact Amount in year-of-expenditure dollars: \$ <u>301,632,540</u>
Estimated Other Federal funding (excl. MPDG)	Estimate in year-of-expenditure dollars: \$ <u>0</u>
Estimated Other Federal funding (excl. MPDG) further detail	Other Federal funding from Federal Formula dollars: \$ _____ Other Federal funding being requested from other USDOT grant opportunities?: \$ _____ From What Program(s)?: _____
Estimated non- Federal funding	Estimate in year-of-expenditure dollars: \$ <u>201,088,360</u>
Future Eligible Project Cost ( <i>Sum of previous three rows</i> )	Estimate in year-of-expenditure dollars: \$ <u>502,720,900</u>
Previously incurred project costs ( <i>if applicable</i> )	Estimate in year-of-expenditure dollars: \$ _____
Total Project Cost (Sum of 'previous incurred' and 'future eligible')	Estimate in year-of-expenditure dollars: \$ <u>502,720,900</u>



<p>INFRA: Amount of Future Eligible Costs by Project Type</p>	<ol style="list-style-type: none"> <li>1) A highway freight project on the National Highway Freight Network: \$_____</li> <li>2) A highway or bridge project on the National Highway System: \$ <u>502,720,900</u></li> <li>3) A freight intermodal, freight rail, or freight project within the boundaries of a public or private freight rail, water (including ports), or intermodal facility and that is a surface transportation infrastructure project necessary to facilitate direct intermodal interchange, transfer, or access into or out of the facility: \$_____</li> <li>4) A highway-railway grade crossing or grade separation project: \$_____</li> <li>5) A wildlife crossing project: \$_____</li> <li>6) A surface transportation project within the boundaries or functionally connected to an international border crossing that improves a facility owned by fed/state/local government and increases throughput efficiency: \$_____</li> <li>7) A project for a marine highway corridor that is functionally connected to the NHFN and is likely to reduce road mobile source emissions: \$_____</li> <li>8) A highway, bridge, or freight project on the National Multimodal Freight Network: \$_____</li> </ol>
<p>Mega: Amount of Future Eligible Costs by Project Type</p>	<ol style="list-style-type: none"> <li>1) A highway or bridge project on the National Multimodal Freight Network: \$_____</li> <li>2) A highway or bridge project on the National Highway Freight Network: \$_____</li> <li>3) A highway or bridge project on the National Highway System: \$ <u>502,720,900</u></li> <li>4) A freight intermodal (including public ports) or freight rail project that provides public benefit: \$_____</li> <li>5) A railway highway grade separation or elimination project: \$_____</li> <li>6) An intercity passenger rail project: \$_____</li> <li>7) A public transportation project that is eligible under assistance under Chapter 53 of title 49 and is a part of any of the project types described above: \$_____</li> <li>8) A grouping, combination, or program of interrelated, connected, or dependent projects of any of the projects described above</li> </ol>
<p>Rural: Amount of Future Eligible Costs by Project Type</p>	<ol style="list-style-type: none"> <li>1) A highway, bridge, or tunnel project eligible under National Highway Performance Program: \$_____</li> <li>2) A highway, bridge, or tunnel project eligible under Surface Transportation Block Grant: \$_____</li> <li>3) A highway, bridge, or tunnel project eligible under Tribal Transportation Program: \$_____</li> </ol>

	<p>4) A highway freight project eligible under National Highway Freight Program: \$_____</p> <p>5) A highway safety improvement project, including a project to improve a high risk rural road as defined by the Highway Safety Improvement Program: \$_____</p> <p>6) A project on a publicly-owned highway or bridge that provides or increases access to an agricultural, commercial, energy, or intermodal facility that supports the economy of a rural area: \$_____</p> <p>7) A project to develop, establish, or maintain an integrated mobility management system, a transportation demand management system, or on-demand mobility services: \$_____</p>
<b>Project Location</b>	
State(s) in which project is located	Arizona
INFRA: Small or Large project	Large
Urbanized Area in which project is located, if applicable	A portion of the project is in the Phoenix--Mesa, AZ Urbanized Area <a href="https://censusreporter.org/profiles/40000US69184-phoenix-mesa-az-urbanized-area/">https://censusreporter.org/profiles/40000US69184-phoenix-mesa-az-urbanized-area/</a>
Population of Urbanized Area (According to 2010 Census)	3,629,114 <a href="https://portal.azoah.com/oedf/documents/2017-EMS-0104-DHS/CA-151-2010%20Census%20Urban%20Areas%20by%20the%20Numbers.pdf">https://portal.azoah.com/oedf/documents/2017-EMS-0104-DHS/CA-151-2010%20Census%20Urban%20Areas%20by%20the%20Numbers.pdf</a>
Is the project located (entirely or partially) in Area of Persistent Poverty or Historically Disadvantaged Community?	While the project is not in an Historically Disadvantaged Community, the project will provide vital transportation linkages to areas that are. These are identified in the project narrative.
Is the project located (entirely or partially) in Federal or USDOT designated areas	While the project is not in an Opportunity Zone, the project will provide transportation linkages to areas that are. These are identified in the project narrative.
Is the project currently programmed in the: <ul style="list-style-type: none"> <li>• TIP</li> <li>• STIP</li> </ul>	No
<ul style="list-style-type: none"> <li>• MPO Long Range Transportation Plan</li> <li>• State Long Range Transportation Plan</li> <li>• State Freight Plan</li> </ul>	Planning studies that support the project are identified in the project narrative.

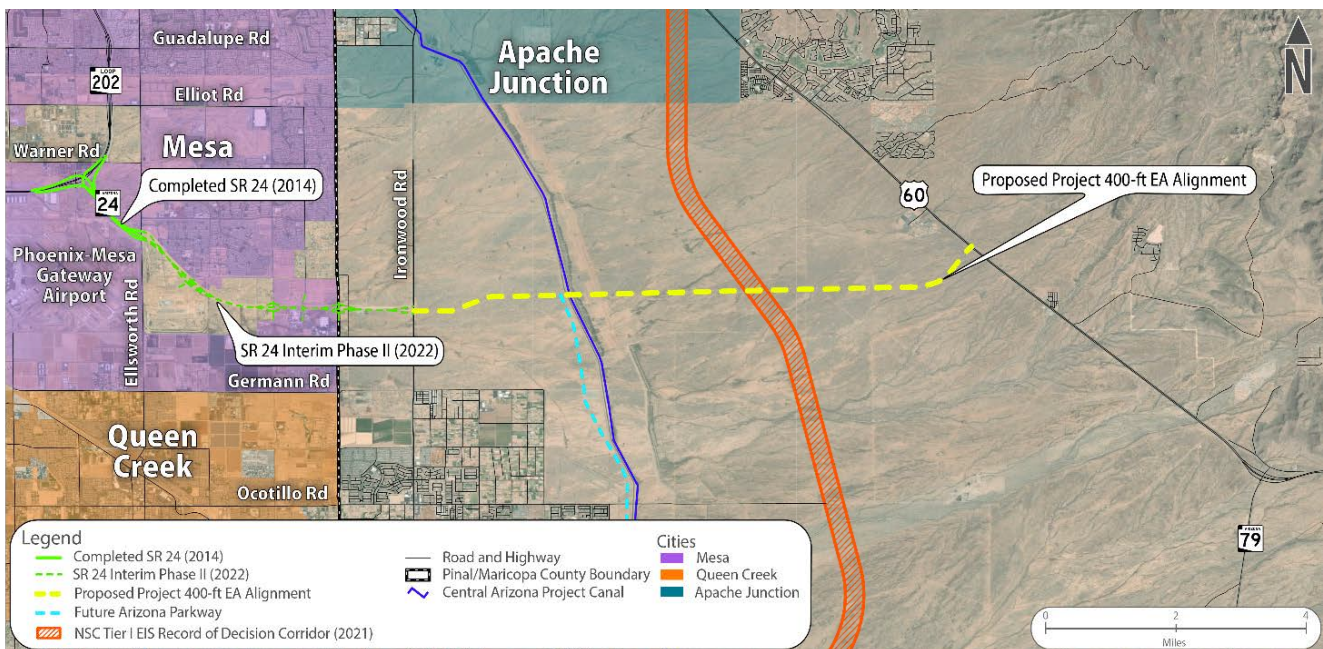
## Project Description

Pinal County, Arizona is applying for MEGA funding to construct the Pinal County State Route 24 Extension. This project is the culmination of 20 years of planning to create a vital link between the rapidly growing portions of Pinal County, State Route 202 (SR 202), and the United States Route 60 (US 60) in the Phoenix Metropolitan Area to the north. The first mention of a controlled-access highway facility in the area occurred in 2003, when the Maricopa Association of Governments Southwest Maricopa/Northern Pinal County Area Transportation Study identified a freeway starting at State Route 202, passing by the Phoenix-Mesa Gateway Airport (at the time called Williams Gateway), and extending east into Pinal County, having its eastern terminus at US 60. The extension of State Route 24 (SR 24) from Ironwood Drive to US 60 will address a lack of capacity; improve the efficiency of existing freeway and arterial street networks; improve access to future activity centers; and enhance transportation system linkages in the region while benefiting the communities of San Tan Valley, Queen Creek, Apache Junction, Gold Canyon, and the Gila River Indian Community (GRIC). The east valley of the Phoenix Metro region is currently experiencing remarkable growth.

In this area of Pinal County, the transportation network relies primarily on arterial streets that no longer accommodate current traffic volumes. The recently completed Town of Queen Creek and Pinal County Small Area Transportation Study indicated that the local network of principal arterials in the area will be overwhelmed before 2030 with level a of service (LOS) of F for the majority of the roadways analyzed.

The first mile of SR 24 from SR 202 to Ellsworth Road opened on May 4, 2014. The project was completed by the Arizona Department of Transportation (ADOT) in conjunction with the Town of Queen Creek. An extension of SR 24 from Ellsworth Road to Ironwood Drive known as “Interim Phase 2” is currently under construction and is expected to be open to the public later this year. Currently, ADOT has no funding identified for design or construction of the SR 24 to the east of Ironwood Drive.

The Pinal County State Route 24 Extension will construct a four-lane freeway that will improve regional mobility, facilitate economic development and employment growth, and provide an alternative route to the congested arterials that connect this growing community of the East Valley to regional freeways including Interstate 10 (I-10), SR 202 and US 60.



## Transportation Challenges Addressed

### *Continuing Growth and Limited Access*

San Tan Valley is an unincorporated community and census-designated place in northern Pinal County located between the towns of Queen Creek to the north and west, the town of Florence to the south, and the city of Apache Junction to the far north. While San Tan Valley is constrained and will grow primarily to the south and east, a recent study ([Town of Queen Creek and Pinal County Small Area Transportation Study](#)) indicates that the population around the Pinal County State Route 24 Extension will experience remarkable population growth. The study influence area bounded to the west by Crismon Road, to the east by Quail Run Lane, to the south by Skyline Drive, and to the north by Elliot Road had a population of 101,264 in 2020 and is projected to increase to 301,837 by 2030, a **198% increase in population in ten years.**

West of the community are developed residential subdivisions that continue south all the way to the Gila River Indian Community. The Central Arizona Project (CAP) canal runs to the east of the community, and immediately east of the canal are a series of flood retarding structures. The Pinal County State Route 24 Extension will cross over these facilities providing opportunity for future economic development east of the CAP canal. Due to the canal and earthen dams currently creating an east-west travel barrier, the SR 24 Extension will provide much needed connectivity that will accommodate future growth. In addition to providing connectivity for future growth, the SR 24 Extension will provide improved connectivity to the Phoenix region, greater Arizona, national, and international economies for existing development.

The city of Apache Junction located to the north of the Pinal County State Route 24 Extension project and is on the precipice of tremendous population growth. Superstition Vistas is a 275 square mile planned community located south of the City, roughly the size of the cities of Mesa, Chandler, Tempe and Gilbert combined. Development of two master-planned communities, the first communities of the Superstition Vistas area broke ground on December 7, 2021. The communities are just south of Elliot Road, bordered to the west by Meridian Road, to the east by Idaho Road and to the south by Ray Road. The communities are planned to consist of approximately 10,500 residential units once completed. A total of 1,825 first-phase home sites are expected to be available for sale to homebuilders in the near future. The two mixed-use projects will offer at least 40 acres of commercial use, more than 20 acres for an elementary school site, 73 acres dedicated to outdoor and recreational space and 10 acres for a public safety facility, which may include a library, police and fire stations, or other services. When the first portion of Superstition Vistas is fully developed it will double the City's population. The City estimates over 10 years the population will go from about 38,000 to nearly 70,000 an 84% increase.

Gold Canyon, a census-designated place and unincorporated community east of the city of Apache Junction along US 60, is experiencing growth as well. The pending expansion of two developments, Entrada Del Oro and Ranch 160, is expected to bring another 1,567 residential lots to the area.

### *More Growth... and High-Tech Jobs*

For years, growth in Queen Creek has been slow and gradual. Today, Queen Creek is a booming vibrant community with nearly 70,000 residents. Making it one of the fastest-growing cities in Arizona. Due to rapid growth, new shopping centers, residential neighborhoods, and employment centers are changing the landscape. This growth has made it challenging to meet the infrastructure needs of the area; this grant will support Pinal County in expediting the necessary improvements to create a quality transportation network.



With the annexation of 4,150 acres of state trust land in 2019, the town council envisioned a continuation of residential and commercial development. But employers looking for expansion sites have begun to show interest too. The town’s General Plan now indicates that the zoning in this area “encourages a range of light to intensive uses such as high-tech manufacturing and related manufacturing enterprises, support industry, aerospace support, computer software, and technical service businesses.”

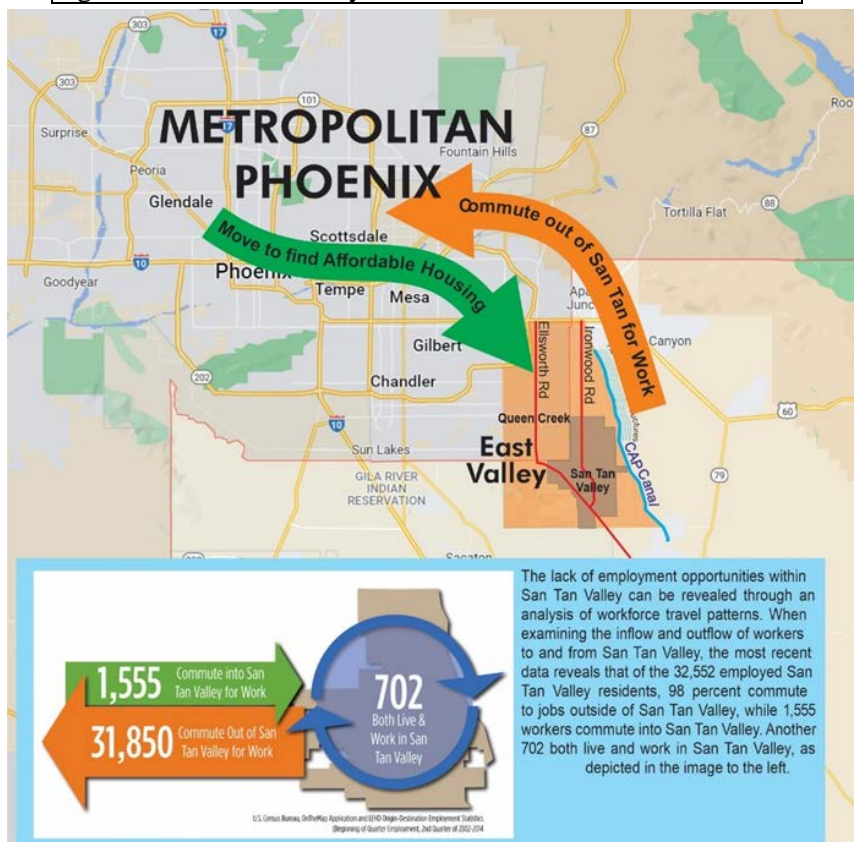
Recently, LG Energy Solution (LGES) announced it is investing \$1.4 billion to build its first ever cylindrical-type battery facility in North America. The company expects that the new facility will add 2,800 jobs, with construction starting this summer and production commencing in 2024. The facility will feature a smart factory system and be one of the largest plants to be developed in the State of Arizona. Once built, the facility will be adjacent to the proposed SR 24 extension project. The area around the LG plant is planned for mixed use and will offer further economic development and employment opportunities that will benefit the town of Queen Creek, Pinal County, the greater East Valley and the state of Arizona while also adding to the necessity of extending SR 24 past its current limits.

In May, the Queen Creek Town Council approved a \$487 million budget for the 2021–2022 fiscal year, with 66 percent dedicated to capital infrastructure projects like transportation, water, police, and fire, and 25 percent allocated for roadway development to improve the heavy traffic congestion in Queen Creek. These roadway improvements include widening both Meridian Road and Ocotillo Road to two lanes in each direction. Infrastructure improvements are anticipated to be completed in late 2022. Unfortunately, widening two of the only three north-south corridors in the area makes the entire community more reliant on the existing arterials and when a crash occurs, the entire community’s travel options are restricted.

**Travel Times and Congestion**

The construction of the Pinal County State Route 24 Extension project would address major regional connectivity issues and provide reliable travel times for residents and visitors to the East Valley. The vast majority of citizens living in the San Tan Valley region commute to the Phoenix metropolitan area as illustrated in *Figure 1*. Analysis of workforce travel patterns show that 98% of residents travel outside the San Tan Valley region for work. To get to these jobs, access to the US 60, or SR 202 freeways via the proposed SR 24 extension would be the most efficient means of commute and help alleviate the overburdened principal arterials in the area. Limited access between communities places tremendous burden on existing roadways, creating congestion and potential safety issues. Congestion and long travel times also increases fuel consumption, vehicle emissions, and creates overall quality of life issues. The

Figure 1 – San Tan Valley to Phoenix Metro Commute Patterns





access-controlled Pinal County State Route 24 Extension is particularly important in addressing the long-term mobility and traffic demand of the region – as population increases in the East Valley has been tremendous at 6.5% per year, but the growth is expected to increase by 48% by 2030 alone.

A bypass of the US 60 along the Gold Canyon community has been discussed in various studies since the early 2000s. The bypass plan called for the Superstition Freeway to be re-routed around Gold Canyon one mile south of the existing US 60 roadway while the existing road would remain for local traffic only. The Gold Canyon Bypass Plan was completed by ADOT in 2012 but little has been done since as other State transportation priorities have taken precedent. The U.S. 60 in the Gold Canyon area is subject to significant traffic, including heavy trucks. Each spring for approximately two months the Arizona Renaissance Festival causes traffic congestion and safety issues in the area. A [traffic report](#) completed in 2018 as part of the North/South Corridor Tier 1 process indicated that by 2040 the US 60 adjacent to the Gold Canyon community would be operating at a Level of Service of “F”. Pinal County State Route 24 Extension project would create a bypass that will reduce congestion, facilitate emergency access, and improve regional connectivity.

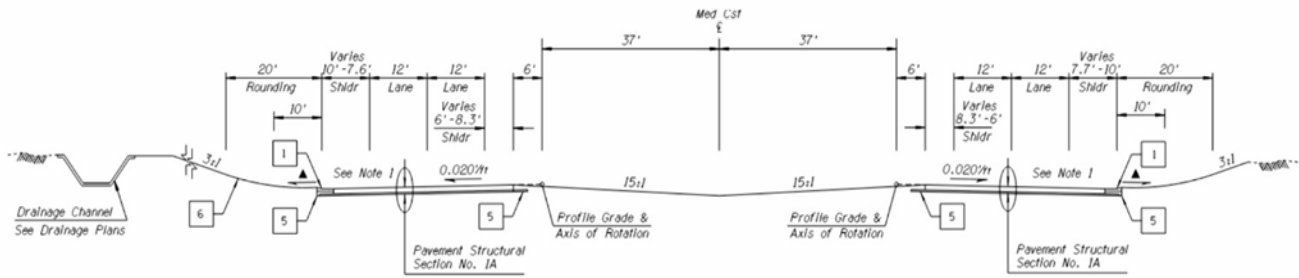
Limited freeway access puts a burden on US 60 which faces serious congestion along the area adjacent to Apache Junction east to the portion of US 60 along the community of Gold Canyon. The US 60 in this area is a 4 lane facility (two in each direction) that experiences road closures at times due to crashes which leaves drivers with few alternative routes. A serious accident in this area of the US 60 can cause miles long back-up while leaving westbound drivers essentially cut-off from Pinal County as well as the City of Mesa and the Town of Gilbert. The only option currently is to take State Route 79 south to Arizona Farms Road and then navigate the already congested local street network. Likewise, an accident leaves eastbound drivers the same unenviable task; traversing either Ellsworth Road or Ironwood Drive south and crisscrossing the local street network to access SR 79 to gain access back to US 60.

### **The Proposed Solution**

The Pinal County State Route 24 Extension from Ironwood Drive to the US 60 will provide a new east-west corridor to improve regional mobility and connectivity. The project will include development phase activities, design, and construction.

While a portion of the SR 24 extension was included in the Tier 1 Environmental Impact Statement (EIS) completed for the North/South Corridor (Ironwood Drive to the proposed North/South Corridor), additional development phase tasks will need to be completed as part of this project. These include a feasibility study with alternatives analysis that will define a preferred corridor alignment east of the proposed North/South Corridor; an environmental assessment continuing the analysis completed in the Tier 1 EIS that documents environmental impacts in accordance with the National Environmental Policy Act (NEPA); and further development of preliminary engineering documents including a benefit-cost analysis.

The design and construction phases will include bridge structures over the CAP canal and flood retarding structures found east of the CAP canal as well as an interchange at the eastern terminus to connect to the US 60. The Pinal County State Route 24 Extension will be a divided roadway with a 34-foot median; the typical section in each direction will consist of two 12-foot travel lanes, with 2-foot inside and 6-foot outside shoulders. The right-of-way is anticipated to be 400-feet in width to accommodate widening of the facility at a future date.



**Pinal County State Route 24 Extension Typical Section**

### Recommendations Supported by Many Studies

The Pinal County State Route 24 Extension represents a 20-year vision for the construction of an additional east-west route to alleviate congestion on existing overwhelmed routes. The need for this project has been identified as a critical link in many planning documents:

- [San Tan Valley Special Area Plan](#) (Oct. 2018)
- [Sun Corridor Regional Transportation Plan 2040](#) ( Mar. 2020)
- [Pinal County Small Area Transportation Study](#) (Aug. 2006)
- [Florence Transportation Planning Study](#) (Feb. 2020)
- [Maricopa Association of Governments 2040 Regional Transportation Plan](#) (Dec. 2019)
- [Queen Creek Transportation Master Plan](#) (Dec. 2016)
- [Pinal County Comprehensive Plan](#) ( Jan. 2021)
- [Town of Queen Creek & Pinal County Small Area Transportation Study](#) (Dec. 2021)
- [CAG Regional Transportation Plan](#) (2015)
- [Southeast Maricopa / Northern Pinal County Area Transportation Study](#) (Sept. 2003)
- [US 60 Corridor Definition Study](#) (May 2006)

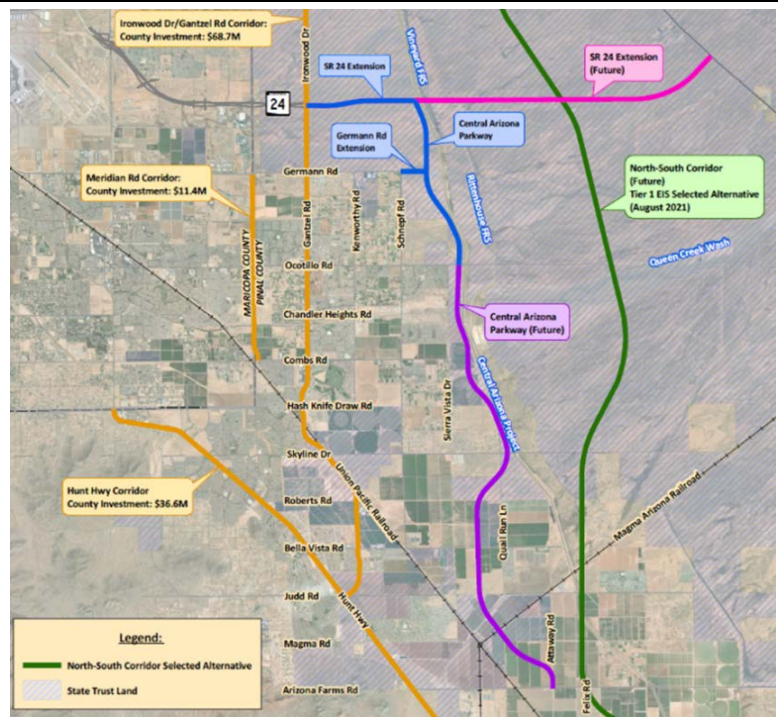
While many planning documents advocate for the extension of SR 24 to the US 60, currently there is no funding identified in either ADOT's Long Range Transportation Plan or 5-Year Construction Program nor the Maricopa Association of Governments Long Range Transportation Plan. Because of this, the grant funds will help address the transportation needs in the region. In 2021, the County, working closely with Arizona State Lands Department and ADOT, investigated corridors for building the remaining portions of SR 24 outside of Maricopa County, within Pinal County. Together, the agencies have developed an alignment and are researching the cultural requirements to clear the corridor environmentally.

Concurrently, as part of the overall vision for the region, the County is developing a Design Concept Report (DCR) and NEPA document for a new north-south roadway along with an initial section of the SR 24 extension (Ironwood Drive to the CAP canal). The first phase of the Central Arizona Parkway will connect to the SR 24 Extension at its northern terminus, traverse to the south keeping to the west of the CAP canal and connect Ocotillo Road at its southern terminus as shown in *Figure 2*. The second phase of the Central Arizona Parkway project will continue south and connect to Arizona Farms Road. The Design Concept Report and Planning and Environmental Linkages (PEL) for phase one of the Central Arizona Parkway and the initial section of the SR 24 extension commenced in 2022 to evaluate

potential corridor alignments and refinements to the original segments. Once the alternatives are vetted both internally, with our partnering agencies, and with the public, we will formally identify the actual highway alignment, define roadway characteristics, gain consensus from the public and stakeholders on an alignment, evaluate environmental constraints, and develop 15-percent design plans for the corridor. Pinal County is prepared to expedite the effort to an Environmental Assessment once the funds for this project are realized.

The SR 24 Extension project will address lack of capacity; improve the efficiency of existing freeway and arterial street networks; improve access to future activity centers; and enhance transportation system linkages in the region.

Figure 2 – Existing and Proposed Regional Roadway Network



## PROJECT LOCATION

The east-to-west corridor of the Pinal County State Route 24 Extension is bounded by the Town of Queen Creek and the unincorporated community of San Tan Valley on the west and south and the community of Gold Canyon to the east. The western terminus of the SR 24 Extension will connect into an extension of SR 24 at Ironwood Drive and the eastern terminus will tie into the US 60, as shown in the Vicinity Map below.

The Pinal County State Route 24 Extension is located within the Sun Corridor region (Region), a linear area of high population density anchored by Tucson and Phoenix. In conjunction with the future Interstate 11 freeway, the Region (shown in figure 3) is envisioned to eventually stretch from the Mexican border to Prescott, Arizona. The Region is one of 20 megapolitan areas across the United States identified as experiencing the majority of the country’s growth (FHWA, Modeling a Multi-Modal Megaregion, 2017). The urbanized areas of Tucson and Phoenix are anticipated to grow into one “megaregion.” More than 80 percent (6 million) Arizonans currently live within the Region, which is expected to grow to nearly 9 million people by 2040 (Arizona Commerce Authority, Demographic Trends in Arizona, 2021).

Figure 3 – Arizona Sun Corridor Megaregion





The proposed SR 24 extension footprint is in a census tract (Census Tract 2.07, Pinal County, Arizona) that has a Transportation Disadvantage Indicator of yes (US DOT Historically Disadvantaged Communities [Dashboard](#)). While the project footprint is not within a Historically Disadvantaged Community or Opportunity Zone, the project will provide a vital transportation link to and benefit areas that meet the definition including:

Historically Disadvantaged Communities

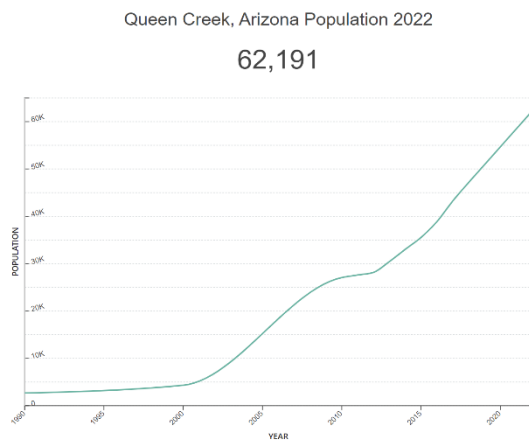
- Census Tract 2.08, Pinal County, Arizona
- Census Tract 9412, Pinal County, Arizona
- Census Tract 9413, Pinal County, Arizona
- Census Tract 2.15, Pinal County, Arizona
- Census Tract 4, Pinal County, Arizona
- Census Tract 3.17, Pinal County, Arizona
- Census Tract 3.18, Pinal County, Arizona
- Census Tract 3.13, Pinal County, Arizona
- Census Tract 3.15, Pinal County, Arizona

Opportunity Zone IDs

- 04013817600
- 04013522800
- 04013422641
- 04021000310
- 04021002300
- 04021000400

**Area Overview**

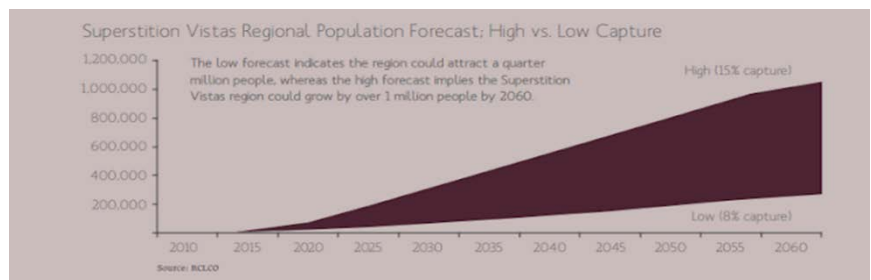
The Town of Queen Creek indicates for the 2040 growth scenario their population in the area will grow by 43% percent over the following years. According to the United States Census Bureau, San Tan Valley’s population increased 18.6% from 2010 to 2020. A recent study indicates that the northern portion of San Tan Valley along with Queen Creek’s expansion east will cause the population in the area to increase by 198%. As Apache Junction develops a portion of the Superstition Vistas area north of the SR 24 extension project, the growth is expected to continue. The [Superstition Vistas Final Report & Strategic Actions](#) indicated a low forecast population increase of 250,000 people whereas the highest forecast suggests Superstition Vistas could grow by more than 1 million people by 2060. With no high capacity limited access freeway in the area other than US 60 to the north and east of the project area, transportation concerns will only intensify. With continuing development, congestion levels are expected to significantly increase. By 2040, arterials are expected to reach roadway capacity.



Queen Creek is a city located in Maricopa County Arizona. With a 2020 population of 62,191, it is the 17th largest city in Arizona and the 619th largest city in the United States. Queen Creek is currently growing at a rate of 6.45% annually and its population has increased by 135.92% since the most recent census, which recorded a population of 26,361 in 2010. Spanning over 32 miles, Queen Creek has a population density of 1,920 people per square mile.

State	Arizona
County	Maricopa County
Land Area (mi²)	32.4 sq mi
Density (mi²)	1,919.90/sq mi
2020 Growth Rate	6.45% (3,767)
Growth Since 2010	135.92% (35,830)
Rank in State	17th
Rank in Country	619th

The current population of Queen Creek, Arizona is 62,191 based on our projections of the latest US Census estimates. The US Census estimates the 2018 population at 62,191. The last official US Census in 2010 recorded the population at 26,361.



### Existing Transportation Network

The project area is bounded by a network of locally, regionally, and nationally significant corridors:

- **US 60: Superstition Freeway:** Four-lane freeway that connects Phoenix to the “East Valley”.
- **Ellsworth Road:** N-S arterial roadway that provides direct access to both Loop 202 and US 60 to the north. Heading south, Ellsworth Road transitions to the Hunt Highway that ultimately heads east before entering the boundaries of Florence. First of two existing N-S corridors in the East Valley.
- **Ironwood / Gantzel Road:** N-S arterial roadway that provides direct access to both SR 24 and US 60 to the north. Heading south, Ironwood transitions to the Gantzel Road that ultimately terminates at the Hunt highway. The Second of two existing N-S corridors in the East Valley.

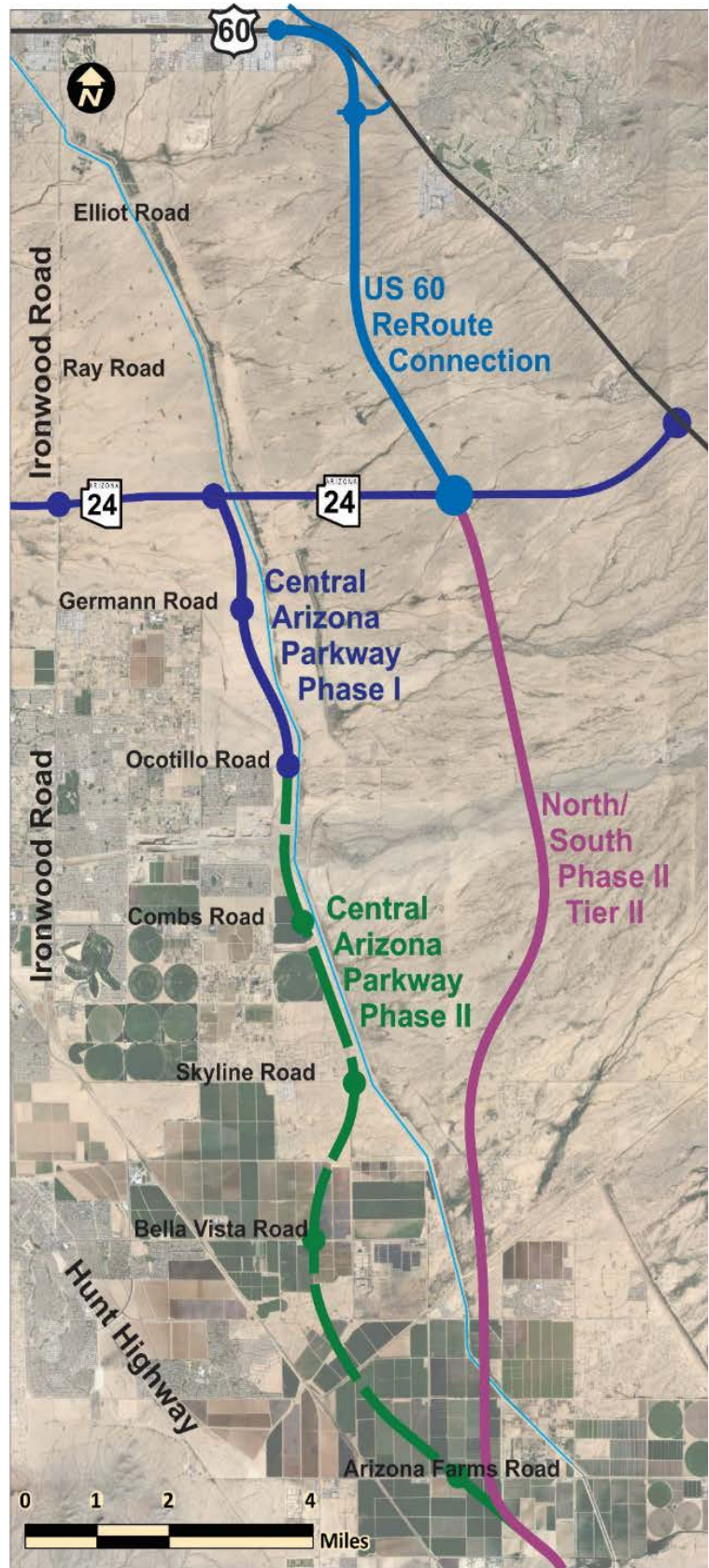
## PROJECT PARTIES

The SR 24 Extension project builds on a long history for regional coordination, planning, and commitment. Pinal County is serving as the lead agency and primary applicant for this MEGA grant; however, a project of this nature requires significant coordination and partnership with local governments and community partners.

### Jurisdictional and Stakeholder Collaboration

Pinal County has dedicated tremendous effort and financial resources to ensuring ongoing collaboration and information sharing with all communities and impacted individuals throughout the East Valley of the Metropolitan Phoenix area. While the County is taking the lead as champion of this project, numerous state, local, and federal agencies and public organization are actively involved in the planning and implementation of this project. Jurisdictional agencies and stakeholders that support the SR 24 Extension project include:

- Gila River Indian Community
- Town of Queen Creek





- City of Mesa
- Town of Florence
- Community of San Tan Valley
- City of Apache Junction
- Arizona Department of Transportation
- Arizona State Land Department
- Arizona Game and Fish Department

- Maricopa Association of Governments
- Central Arizona Governments
- Flood Control District of Maricopa County
- Salt River Project
- Central Arizona Project

### Project Partnership

As shown in the graphic to the right, \$15 million dollars will be appropriated in 2023 from the State’s General Fund to acquire right-of-way for the SR 24 extension.

### Experience with Federal Funds

Pinal County has experience with receipt and expenditure of Federal transportation funds both as a direct recipient and sub-recipient of pass through Federal grants and Federal formula funds allocated to ADOT, Metropolitan Planning Organizations (MPOs), and Council of Governments (COGs).

**14 BEX azbex**

TUESDAY  
FEBRUARY 8, 2022  
VOLUME 12 ISSUE 99

**PLANNING & DEVELOPMENT**

**Arizona House Committee Approves SR 24 Extension Funding**

A bill sponsored by State Representative David Cook of Globe that will appropriate \$15M to fund an extension of SR 24 and develop a connector that extends from SR 24 along the **Central Arizona Project** canal alignment has won unanimous approval from the **House Transportation Committee**.

The money, which equals roughly half the estimated project cost, will be taken from the **General Fund** next year and issued to the **Arizona Department of Transportation** for distribution to **Pinal County**. The County will acquire the right of way for the SR 24 extension and develop the connector route. [\(Source\)](#)

**ON THE JOB**

**SR 24 EXTENSION AND CONNECTOR ROUTE, PINAL COUNTY**

VOLUME: \$30M  
OWNER: PINAL COUNTY  
DESIGN FIRM: NOT YET SELECTED  
GC: NOT YET SELECTED

**DATABEX PROJECT ID: # 4382**

In 2019, Pinal County was awarded a Better Utilizing Investments to Leverage Development (BUILD) grant for the Inland Port Arizona Improvement Project. The project will make improvements to State Route (SR) 87 in proximity to the intersection at Houser Road; improvements at the Houser Road and Hanna Road railroad crossings; improvements on Hanna Road from SR 87 to Vail Road, and on Houser Road from SR 87 to Vail Road; and the addition of a fire lane on Houser Road. These improvements are intended to support the construction of an approximately 2,700-acre inland port. The Federal grant was in the amount of \$15,373,698 with Pinal County contributing \$2,700,001 in local funds for a total of \$18,073,699. Currently, construction of the project is expected to start in June of 2022 with completion in one year.

In 2021, Pinal County was awarded a Federal Lands Access Program (FLAP) grant for improvements to East Peralta Road (AZ FLAP PIN FR77(1)). This project includes improvements to approximately 6.1 miles of East Peralta Road. The road provides access to Tonto National Forest recreation sites, and will provide future access to a regional park that will be constructed in 2022. Proposed project improvements consist of providing a defined roadway prism (from approximately 20 to 30 feet unpaved to 26 feet paved), including ditches, formalization of parking areas/pullouts, drainage improvements, possible sight distance improvements, safety improvements, and right-of-way acquisition from the Arizona State Land Department (ASLD). Additionally, the project includes work within the USFS Boundary, consisting of the reconstruction and paving of 0.3 miles, paving of the parking lot trailhead, and the overflow parking lot. The federal award is \$13,900,000 with Pinal County contributing a 5.7% local



match of \$792,300. Currently, the design phase of the project is starting this summer with construction funds obligation expected in FY24; construction expected to begin in fall of 2024/Spring of 2025.

Pinal County has also utilized Surface Transportation Block Grant Program (STBG), Highway Safety Improvement Program (HSIP), and Congestion Mitigation and Air Quality Improvement (CMAQ) funds through partnerships with ADOT, Maricopa Association of Governments, Sun Corridor Metropolitan Planning Organization, and Central Arizona Governments to fund transportation construction projects throughout the County.

## GRANT FUNDS, SOURCES AND USES OF PROJECT FUNDING

Pinal County has already invested **\$2.1 million** of resources in this project to complete planning studies, mapping, and traffic studies thus far. Pinal County is committed to contributing the **\$201,088,360** towards this project. A statement of Pinal County’s funding commitment is included in *Appendix A*.

### Source and Use of Project Funds

The total cost for all elements of the project is **\$502,720,900**. It is anticipated that the MEGA funds (grant funds) will cover costs associated with the construction of the roadway. The majority of the ROW costs are offset with the Arizona State Land Department providing the ROW through their holdings. The balance of private and public lands and construction will be acquired by a \$10 million grant from Arizona’s General Fund, focused on the corridor between Ironwood Drive and the CAP canal. Pinal County, despite their limited resources, is committed to funding preliminary engineering, final design, environmental studies, and right-of-way acquisition associated with the project. *Table 1* provides an overview of the overall project costs. *Appendix B* provides a more detailed cost breakdown.

**Table 1. Pinal County State Route 24 Extension MEGA FY 22 Cost Summary**

Description	Project Cost	Source
<b>Federal Funds</b>		
Roadway Construction	\$301,632,540	FY 22 MEGA Grant
<b>MEGA Grant Request</b>	<b>\$301,632,540</b>	
<b>Local Funds</b>		
ROW	\$15,000,000	Arizona General Fund
ROW through State Lands	36,700,000	State Land Department
Remaining Construction, Admin / Utility Relocation Costs	111,683,360	Pinal County Half-Cent Sales Tax/ General Fund
Engineering, Design, and Environmental Studies/Clearances	\$37,705,000	Pinal County Half-Cent Sales Tax/ General Fund
<b>Pinal County Local Match</b>	<b>\$201,088,360</b>	
<b>Total Project Cost</b>		<b>\$502,720,900</b>

# PROJECT OUTCOME CRITERIA

## Criterion # 1: Safety

### *Reduction of Vehicle Miles Travelled on Congested Roadways*

The proposed project vicinity consists of undeveloped and developed land lacking roadways suitable for regional high-volume travel. There are currently no east-west corridors providing direct through access between Loop 202 and US 60 connecting the region to the balance of the Phoenix Metropolitan Area and greater Arizona. There are also no direct efficient east-west connections to Interstate 10 to the west and US 60 to the east. This creates a peninsular or island effect when it comes to area connectivity, with limited to no efficient ingress and egress routes depending on the direction of travel. The addition of the SR 24 Extension in this region is anticipated to reduce the need for motorists to travel along congested arterials to reach key local and regional destinations.

### *Reassignment of Traffic to Roadways Designed for High Volumes*

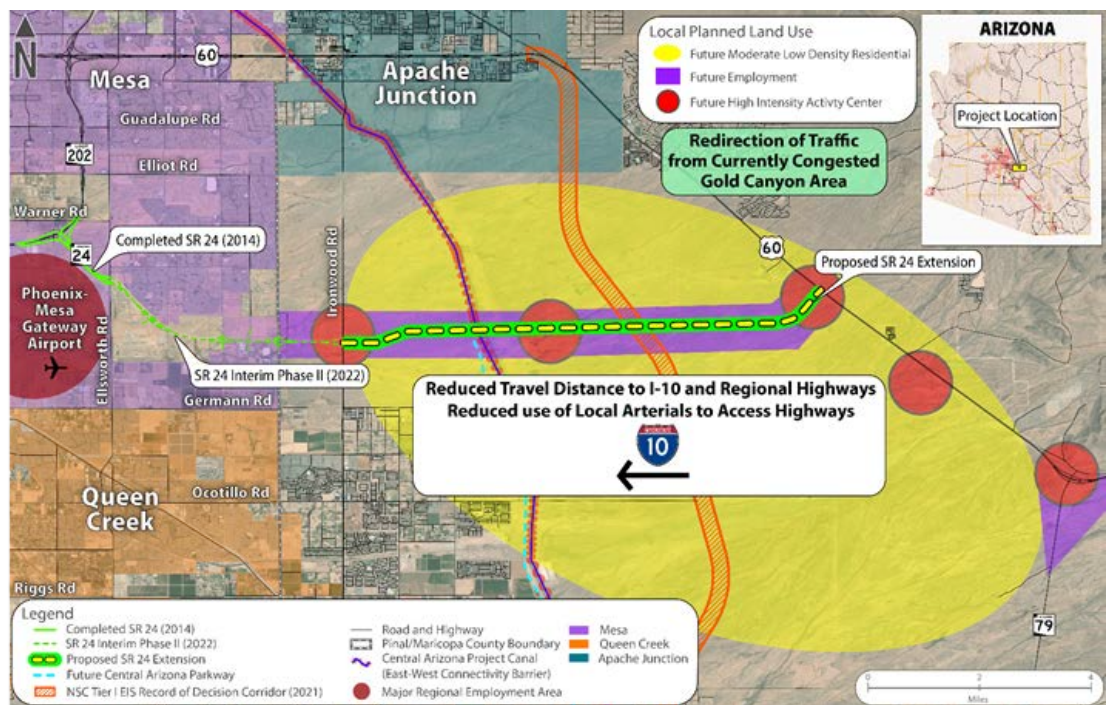
Adding a new controlled access east-west roadway in this region is anticipated to reduce the crash rates occurring on heavily traveled nearby arterial streets, and the high-capacity SR 24 Extension will limit conflicts at intersecting roadways. Existing roads are rural in nature without bi-directional centerline medians. The proposed project will remove regional traffic from local rural roads and other regional routes including but not limited to U.S. 60 in the vicinity of Gold Canyon, Hunt Highway, SR 87, and SR 287 that provide east-west access and are not designed for current and future population growth, leading to a reduction in bodily injury, fatal and serious injury crashes.

### *Integration of Safety Into Design*

Should a crash occur on the SR 24 Extension, there will be adequate width to provide room for emergency response movements. Roadway design will incorporate shoulders graded for drainage and clear zone requirements. These wide shoulders can be used by emergency

vehicles as detours to bypass crash incidents. Similar detours can be operated by law enforcement if required for any crash on the SR 24 Extension to keep the facility open at least partially. In addition roadway design elements will include adequate lighting, retroreflectivity of signs, guard rails, shoulder rumble strips, safety edge treatments, and consider variable speed limit applications. *Safety benefits associated with the SR 24 Extension are shown in Figure 4.*

Figure 4 – Safety Benefits



## Criterion #2: State of Good Repair

Maintaining a state of good repair for the improvements is essential for maximum lifecycle benefit. The SR 24 Extension reflects Pinal County’s dedication to improving and maintaining its existing transportation facilities. The goal of the project is to create a better network to carry people and goods safely and more efficiently in northern Pinal County and provide improved connectivity to the regional, Arizona, and national roadway network.

- The new roadway would be compatible with current maintenance equipment and practices, affording safe and efficient maintenance operations, thus reducing life-cycle costs.
- Reduced demand placed on the parallel arterials including U.S. 60 in the vicinity of Gold Canyon, Hunt Highway, SR 87, and SR 287 by collecting regional traffic on this high capacity, access-controlled facility. Removing the regional traffic from the local streets extends the life of the entire roadway network - reducing maintenance costs.
- Proposed improvements will be designed to provide a minimum 20-year life cycle for roadway elements and a 75-year minimum structural life for the drainage structures.
- The proposed improvements will be designed to current AASHTO and ADOT Roadway Design Guidelines. The project is consistent with numerous local, regional, and statewide studies to provide increased connectivity between the developing communities growing to the south, and the regional freeways located to the north.
- Reassignment of regional trips including heavy truck trips to the proposed project corridor that will be designed for heavy traffic and vehicles will alleviate wear, tear, and lifecycle maintenance costs on local and County maintained roads. The proposed project corridor will be integrated into ADOT Asset Management systems for identification of lifecycle costs that will lead to

maintenance of a state of good repair. State of Good Repair benefits associated with the SR 24 Extension are shown in Figure 5.

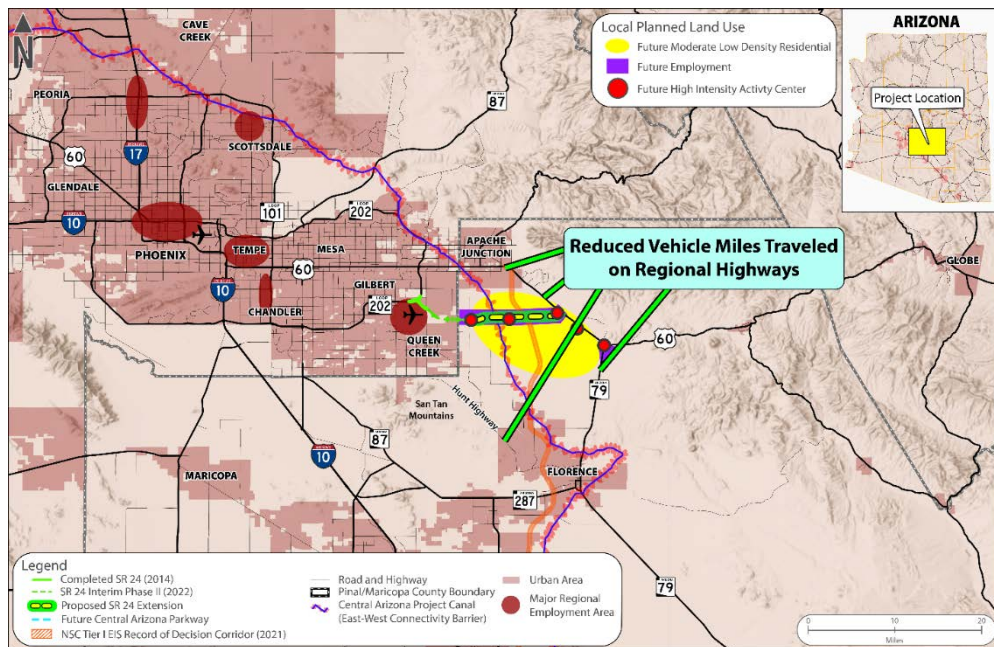


Figure 5 – State of Good Repair Benefits



### Criterion #3: Economic Impacts, Freight Movement, and Job Creation

The lack of economic competitiveness in the vicinity is tied to a lack of infrastructure including roads, and bridges over the CAP canal, flood mitigation structures, water, and housing. The proposed project will enhance connectivity to the greater Phoenix region, state, national, and international economies by providing a direct connection for vehicles and freight to SR 202, the Phoenix freeway network, Arizona highway system, U.S. 60, and the future North-South Corridor. These connections will provide connectivity for continued development of the area and the creation of jobs. The proposed project will improve the economic strength of the entire surrounding area and region by providing connectivity that will improve the economic productivity of land, capital, labor, and provision of linkages, in particular east-west linkages between distinct rural and urban areas. Connectivity to the Phoenix-Mesa Gateway Airport, areas with preferred U.S. Customs trade status, and the ASU Polytechnic Campus will all be enhanced. Recreational and tourism opportunities will be enhanced by providing access to Federal lands including Arizona national forests, wilderness areas and national recreation areas. *Economic Impacts, Freight Movement, and Job Creation benefits associated with the SR 24 Extension are shown in Figure 6.*

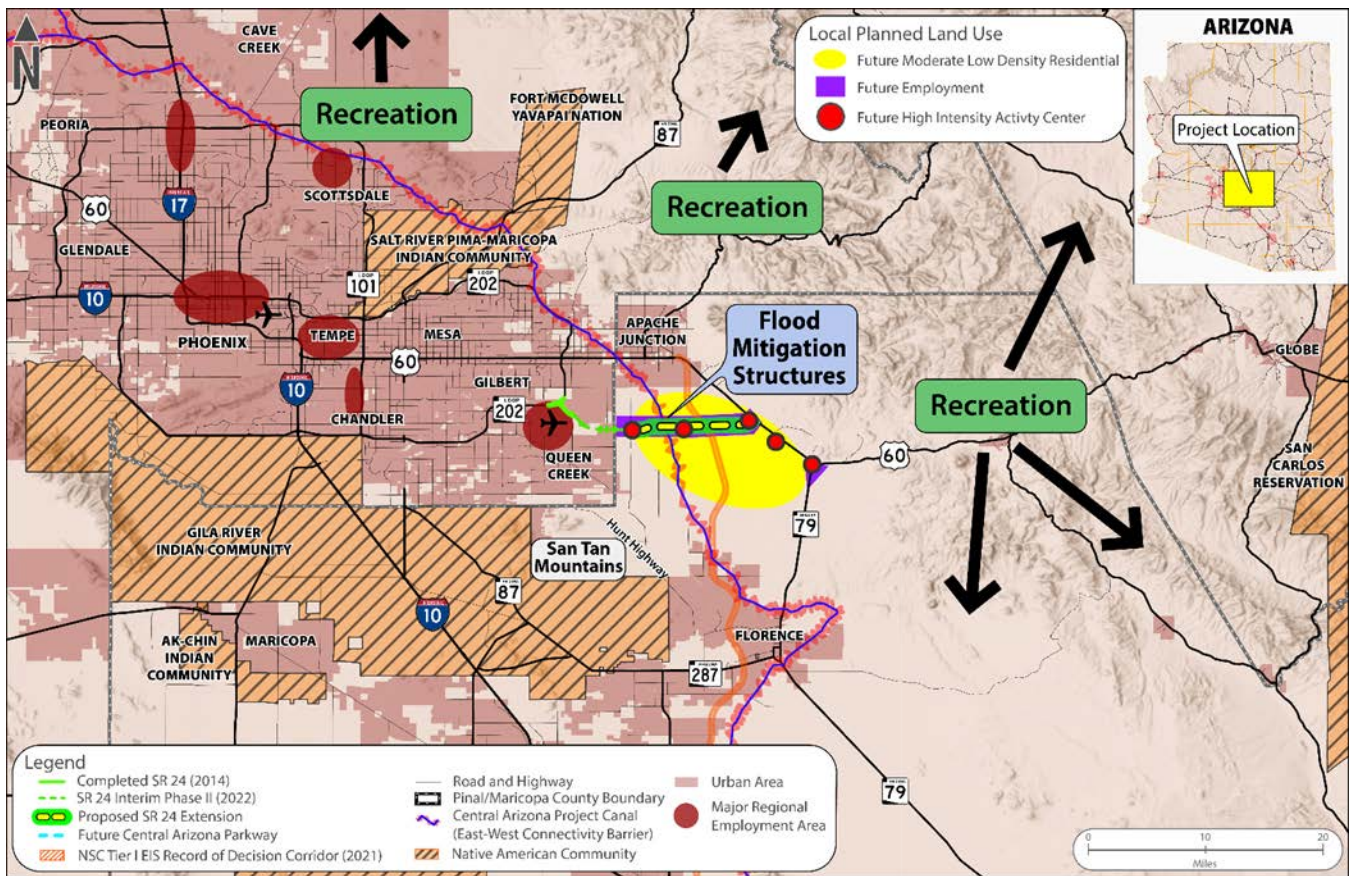


Figure 6 – Economic Impacts, Freight Movement, and Job Creation Benefits

## **Criterion #4: Climate Change, Resiliency, and the Environment**

### *Reduces Congestion and Fuel Use*

The proposed project will lead to reduction in congestion on local roads that will improve air quality and reduce greenhouse gas emissions. The project area lacks necessary regional east-west connectivity creating the need for vehicles to travel long distances either to the north or south to utilize the Phoenix freeway network, Hunt Highway, SR 87, and SR 287 for crossing of the CAP canal and traversing of undeveloped land. Provision of a direct east-west connection will greatly reduce vehicle miles travelled to make this east-west connection and will also provide benefits by connecting to the future North-South Freeway.

### *Supports EPA National Ambient Air Quality Standards*

The U.S. Environmental Protection Agency (EPA) re-designated a portion of Pinal County including the proposed location for the SR 24 Extension to non-attainment for the 1987 24-Hour National Ambient Air Quality Standard (NAAQS) for coarse particulate matter (West Pinal PM<sub>10</sub> Non-Attainment Area). The eastern limits of the 2012 24-hour fine particulate matter (PM<sub>2.5</sub>) non-attainment area is located approximately 5 miles to the west of the SR 24 Extension Project. Major sources of PM<sub>10</sub> include re-entrained road dust on paved roads, dust from driving on unpaved roads, and construction.

In combination with wind-blown dust, tailpipe emissions comprise 52 percent of PM<sub>10</sub> in Arizona. A major source of PM<sub>2.5</sub> from mobile sources is tailpipe emission of diesel particulates, particularly from large trucks. This project will assist in reducing vehicle miles traveled and mobile source emissions of PM<sub>10</sub>/PM<sub>2.5</sub> from vehicles that would otherwise use surface streets to travel north and south through the area.

### *Design to Minimize Environmental Impacts*

The corridor will be developed with future regional transit considered, incorporate lower carbon pavement and construction materials, and mitigate disproportionate impacts of transportation on disadvantaged communities by utilizing an alignment that minimizes impacts. Construction will integrate the latest environmental safety mitigation measures, reducing erosion potential to adjacent properties and the region.

## **Criterion #5: Equity, Multimodal Options, and Quality of Life**

### *Improved Access and Community Investment*

The proposed project will provide accessible transportation choices for disadvantaged communities by improving access to jobs, recreation, emergency care, essential services, and healthcare. The proposed project will support greater commercial and mixed-income residential development along rural main streets or in walkable neighborhoods by bringing economic development to the vicinity, reducing the need for automobile dependency and long commute trips. The project development process will engage a broad spectrum of stakeholders and integrate their feedback into project location and design.

### *Transformation from Rural to a Thriving Community*

Lack of connectivity and high-volume transportation access is a significant challenge for residents of the area. The SR 24 Extension supports quality of life in the socioeconomically disadvantaged portions of Pinal County by increasing access to jobs, education, shopping, medical facilities, pharmacies, healthy food, and basic services located in the bustling new developments within Queen Creek and San Tan Valley. The SR 24 Extension will improve the quality of life for Pinal County residents in numerous ways, including:

- Reducing Crashes and Congestion on area arterial Streets. Restrictions due to overwhelmed infrastructure are creating a barrier to access needed goods and services as the area is frequently grid locked by a single collision. By reducing travel time and improving access to daily essentials – such as pharmacies, low-cost grocery stores, educational institutions, healthcare facilities, and access to work, the project will dramatically improve the quality of life for area residents.
- Connecting newly developed family housing and commercial developments to the main portion of the Phoenix Metropolitan Area, where new affordable homes have become extinct due to high property values and even higher rents. The area needs dependable access to jobs and services.
- Enhancing economic competitiveness of the area through reliable access to job centers and creating opportunities for economic growth in prime, undeveloped land.
- Promoting livability by creating connections for broadband, water, and wastewater infrastructure
- Building the SR 24 Extension will enhance the adjacent multimodal corridors by reducing demand and thereby providing safe, reliable, and economical transportation options.
- Reducing traffic on adjacent arterials, collectors, and local streets will allow residents to engage more in physical activity on sidewalks, which may aid in reducing high rates of obesity, diabetes, and other chronic health issues.

#### *Revitalizes Existing Communities*

Forty-five percent of area residents commute to Phoenix for employment. Additionally, 11.6 percent of Pinal County’s population is unemployed and 17.8 percent of residents in Queen Creek are below the poverty level. Local development spurred by the construction of housing communities and subdivisions will help bring quality jobs to local residents. Additionally, goods and services built as a result of this growth will improve the quality of life for local residents and rural communities and improve access to centers of employment and services. Completing these improvements will not only make living and working in the area safer, but it will also retain the quality of life that has encouraged so many to move to this community in the first place. The project will allow residents to quickly and safely leave and return to their homes without experiencing delays due to closed and overwhelmed arterials. The SR 24 Extension will relieve congestion and restore the ability of existing infrastructure to carry its designed volumes of traffic and pedestrians alike.

#### *Enhanced Community Connectivity*

Housing in the metropolitan Phoenix area has been overwhelmed with the constant influx of residents moving from California or colder portions of the country. Subdivisions have been growing such that the rate of growth in the next five years in Queen Creek alone is estimated to be 43%. The area is quickly becoming a commuter community, but the existing infrastructure cannot sustain the existing traffic or the anticipated growth. The SR 24 Extension will be the only high speed, high-capacity facility providing access for these new subdivisions and businesses to have east-west access to SR 202, US 60, and a more direct route to Interstate 10. The enhanced corridor will remove traffic from regional arterial, collector, and local streets, creating more comfortable, reliable, and economical transportation options that include increased walking and biking in the surrounding areas. *Equity, Multimodal Options, and Quality of Life benefits associated with the SR 24 Extension are shown in Figure 7.*



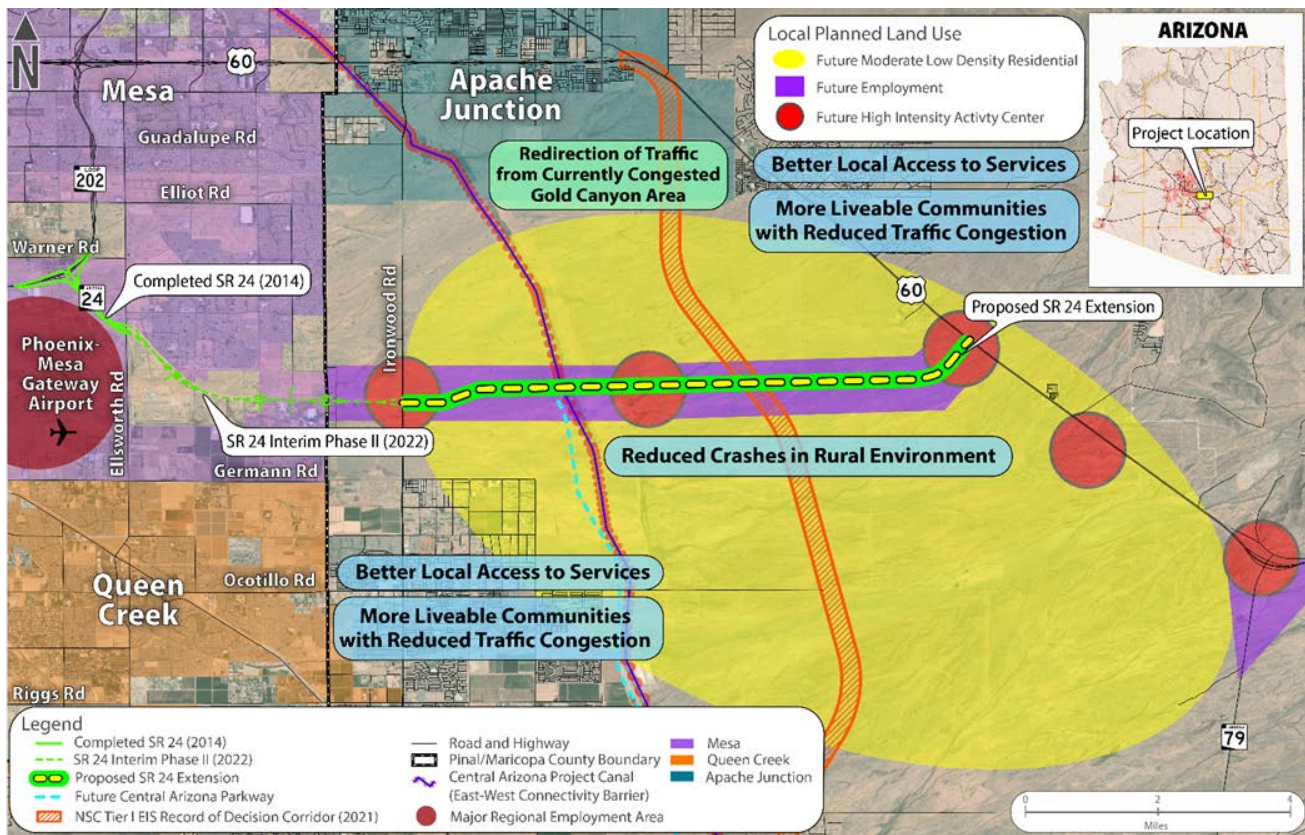


Figure 7 – Equity, Multimodal Options, and Quality of Life Benefits

**Criterion #6: Innovation Areas, Technology, Project Delivery, and Financing**

The proposed project alignment could serve as a regional and local broadband corridor. Innovative permitting, contracting, and other project delivery practices including P3 financing and design-build delivery methods will be explored. The use of Dynamic Messaging Signs (DMS), ramp metering, closed circuit televisions and connectivity to the ADOT Traffic Management Center will all be considered for inclusion in corridor design.

*Broadband and Other Critical Infrastructure*

The Gila River Indian Community and areas adjacent to the project have very limited broadband and other essential utilities. The Gila River Indian Community has expressed strong interest in potentially bringing broadband and other utilities along the project alignment. The proposed project is near the CAP canal and the SRP Dinosaur Power Transmission corridor. The Tribe is in the process of applying for a federal grant to bring broadband to the community. Including these critical infrastructure elements could tremendously improve the quality of life for Tribal residents.

*Accelerated Off-Site Bridge Construction*

The project area has ample wide-open and vacant areas adjacent to the project site that could be utilized to construct the future system and service interchange bridge decks and superstructures. Using off-site construction, bridges could then be lifted into place in a single event, resulting in minimal impacts to connecting streets. This process would also accelerate project times significantly, reduce traffic delays and road closures and could potentially reduce project costs.

*Reducing Rural Roadway Departures*

Reducing fatalities on rural roads remains a major challenge in the United States. Roadway departures on the rural road network account for one-third of traffic fatalities. Pinal County will be implementing ADOT standards that apply proven roadway departure countermeasures such as rumble strips, friction treatments, and wide clear zones to help keep vehicles in their travel lanes, reduce the potential for crashes, and reduce the severity of those crashes that do occur.

As most of the crashes occur at interchange intersections, the number of intersections will be reduced. The SR 24 Extension will likely have a minimum spacing of 2-miles between service interchanges to limit the opportunity of intersection conflicts and expand opportunities to change lanes safely between interchange ramps.

*Integrated NEPA and Permitting Process*

A synchronized NEPA and permitting process will be utilized to complete remaining environmental analysis and obtain necessary permits to meet the needs of all agencies with statutory or regulatory responsibilities

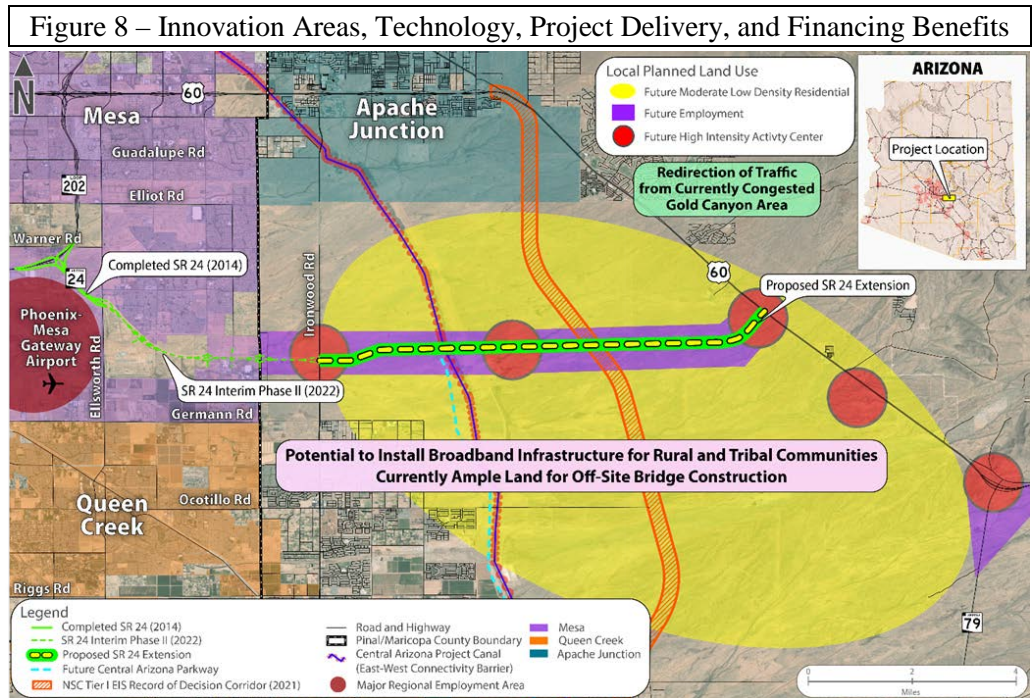
*Combined Study-Design Team*

Pinal County will consider awarding a single contract to the study and design team, allowing all of the knowledge gained during scoping to flow immediately into final design. This delivery method will accelerate the project schedule while minimizing costs.

*Virtual Public Involvement*

Public engagement during the transportation project planning and development process will help agencies identify issues and concerns early in the process, which can ultimately accelerate delivery. Virtual public involvement strategies have replaced traditional face-to-face information sharing of late due to the pandemic issues. This has been a huge benefit to Pinal County and our public partners. With technology platforms

that increase the number and variety of methods used to inform the public, receive feedback, and collect and consider comments, our virtual meetings have been and will draw higher attendance numbers than our traditional on-site meetings. *Innovation Areas, Technology, Project Delivery, and Financing benefits associated with the SR 24 Extension are shown in Figure 8.*





## BENEFIT COST ANALYSIS

A benefit-costs analysis for the SR 24 Extension project is not currently completed. As such, development of preliminary engineering documents including a benefit-cost analysis is part of the overall application request.

It is expected that the SR 24 Extension project will produce monetized benefits in the following categories: travel time savings from reduced distances, safety benefits resulting from fewer miles traveled, and reduction in vehicle emissions.

### Expected Project Impacts and Benefits Summary

Benefit Category	Type of Impacts	Population Affected by Impacts	Economic Benefit
<b>Maintenance</b>	Maintenance cost of the new bridge and roadway	Pinal County Public Works Department	Additional maintenance cost due to project
<b>Travel Time</b>	Reduced travel time for residents on local arterials when traveling to/from Queen Creek	Residents Pinal County, East Valley, San Tan	Monetized value of time savings
<b>Safety</b>	Reduction in potential crashes due to fewer miles of travel	Population traveling within Pinal County, East Valley, San Tan area	Monetized value of reduced crashes
<b>Air Quality</b>	Reductions in pollutants due to fewer vehicles and trucks using longer route	Automobiles and Trucks have to drive less due to shorter connections	Monetized value of reduced emissions
<b>Residual Value</b>	Value of project after period of BCA analysis	Pinal County Public Works Department	Monetized value of the remaining asset
<b>Fire Response Time</b>	Decreased damage potential due to reduced fire response time		Monetized value of reduced damage potential
<b>EMS Response Time</b>	Improved emergency care potential due to reduced EMS response time		Monetized value of better emergency response times

In addition to the expected monetized benefits, the project will produce ancillary benefits important to the economy of the region. On a regional level, a well-connected transportation network means faster, more reliable travel times for both people and goods. Medical and fire emergency response times will be significantly reduced, allowing local EMS and fire trucks to operate more efficiently. Additionally, construction of the project will generate numerous construction related jobs, indirect jobs created at suppliers who make the materials utilized in the project, and induced jobs from economic growth.



Federal Wage Rate Certification: Certification that Pinal County will comply with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code (Federal wage rate requirements) has been submitted in *Appendix C*.

## PROJECT READINESS AND ENVIRONMENTAL RISK

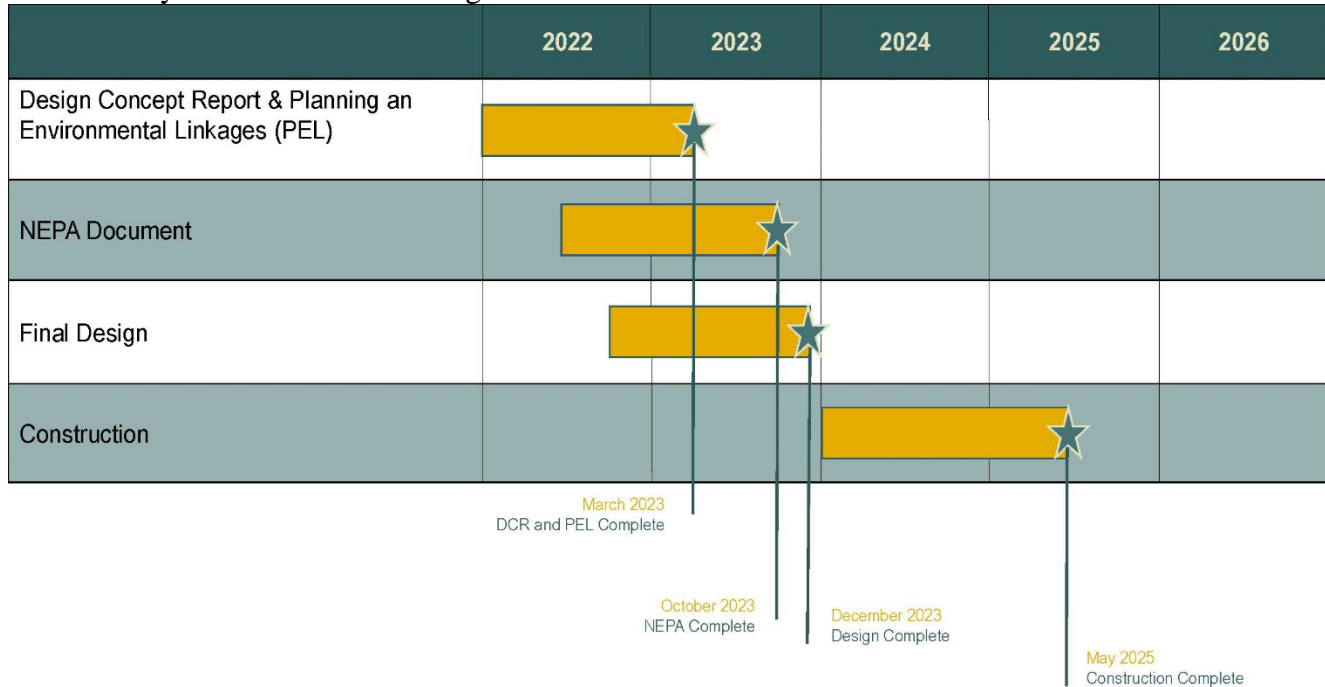
The following section outlines Pinal County's process and commitment to progress the Pinal SR 24 Extension project so it can proceed with final design by the time the MEGA Grant agreement is executed. Among the larger project elements, many are in-process or are planned for execution in the next year. Currently, a segment of the project (Ironwood Drive to the CAP Canal) is in the planning and preliminary engineering phase, which includes extensive agency scoping, public outreach, and development of a design concept and is expected to be complete in 2022. Upon notification of the MEGA Grant award, the DCR and PEL will be complete for the initial segment, allowing us to collaborate with FHWA to complete the Environmental Assessment portion of NEPA, and final design. Concurrently, we will be completing a DCR and PEL for the remaining portion of the project (CAP Canal to the US 60) which will lead to completion of the Environmental Assessment portion of NEPA, and final design for this section as well. Without the Federal Funding, the project is not fiscally constrained, and the NEPA Process cannot be completed. Therefore, all outreach and environmental studies that inform the alternatives analysis will be documented in a PEL to preserve the information for application to the EA when funding is awarded.

### **Technical Feasibility**

Pinal County is currently in the process of completing the Central Arizona Parkway Design Concept Report and Planning and Environmental Linkages (PEL) which includes an initial segment of the SR 24 extension (Ironwood Drive to the CAP Canal). This study examines the feasibility of potential alternative locations and includes extensive agency coordination to ensure that preferred alignments meet nationally-accepted design standards and are feasible. Pinal County is working closely with the Gila River Indian Community, Towns of Queen Creek and Florence, the Community of San Tan Valley, Arizona State Lands, ADOT, FHWA, and local stakeholders to holistically evaluate alternative concepts to determine the most feasible and logical corridor location, as well as identification of environmentally and culturally sensitive areas. A similar effort will take place over the next year for the rest of the Pinal SR 24 Extension. The current study is predicated on a previous regional Phase 1 EIS that identified corridors throughout this part of the State. For the initial section of the corridor, we have already developed the design criteria and the initial alignments for evaluation to serve as the basis for identifying the final centerline and rights of way required for a freeway facility. The DCR and PEL create a significant foundation of information to allow the remaining design to be completed before the MEGA grant funding timeframe. The project costs are anticipated to be \$502,720,900 million for all phases of the project.

## Project Schedule

### Pinal County SR 24 Extension Design and Construction Schedule



To make sure that Pinal County SR 24 Extension is shovel ready by FY 2024, Pinal County will conduct the following:

- **Identify Preferred Alignment:** As part of the Pinal County SR 24 Extension DCR, alternative alignments and refinements of the previous corridors studied under the Tier 1, are being assessed to determine the most logical and feasible corridor. The preferred alignment will be identified Spring 2023.
- **Environmental Linkages (PEL):** The Study Team will study all of the environmental resource issues in an effort to clear the purchase of the ROW associated with the sale of the land from the Arizona State Land Department.
- **Environmental Clearance:** With the PEL complete and the funding secured for the construction through this MEGA Grant, we will have the Federal Nexus to finish the NEPA process through ADOT on behalf of FHWA as the lead agency, completing the Environmental Assessment.
- **Final Design:** The County will have the DCR and final design completed by the same team, saving time in procurement and mitigating the loss of information that can occur using a normal advertised bid process. This will allow the consultant to immediately move into final design following the 30% concept plans as part of the completed DCR and PEL. Working through ADOT, the balance of the NEPA issues including acquiring easements through the BLM's lands that are used by the Army National Guard for training. This will dramatically accelerate the NEPA process and thereby design completion.

## Required Approvals

### *Environmental Permits and Reviews*

#### *Public and Agency Engagement*

The DCR, which is currently underway, includes a very robust public involvement process and the preparation of technical studies and reports. The process includes public outreach and close collaboration with local agencies and stakeholders. A Technical Advisory Committee, comprised of Arizona Department of Transportation, Central Arizona Project (Agency Canal), city and community representatives, and other stakeholders, was also formed. Frequent meetings are held with the TAC to ensure that all potential parties are included in the planning process. Gila River Indian Community is also a critical member of the TAC as their members and businesses are benefitting from these improvements.

Public input will be solicited in a number of ways, including an online forum, project website, and traditional public meetings. All of this information is being captured in detail for use in the PEL. The kickoff of the public meetings will share the corridors being evaluated for the project. The completion of the PEL and technical studies, which is scheduled to be completed by March 2023, will streamline the EA development significantly. It carries with it all of the previous meetings held for the corridor during the Tier 1 development when these corridors were initially defined by ADOT. Once the corridor has been selected in spring 2023, Pinal County will immediately proceed towards the preparation of the appropriate NEPA document, which is expected to be an Environmental Assessment (EA).

#### National Environmental Policy Act (NEPA)

During the development of the EA, agency coordination will continue, and environmental permitting will be undertaken. The project is anticipated to cross private land as well as land under the jurisdiction of the BLM, Arizona State Land Department, Salt River Project (Power Utility) and the Central Arizona Project (canal). Coordination and partnering with these agencies is already occurring and will continue throughout the NEPA process. The EA will be developed to meet the NEPA requirements of all federal agencies involved. Environmental reviews and permits that will be completed include:

- Cultural Investigations – cultural investigations will be completed early in the design process so that avoidance strategies can be implemented, as needed. Section 106 consultation will be undertaken to communicate with the tribal and agency stakeholder.
- Biological Surveys and Evaluation – biological surveys, field work, a Biological Evaluation that meets the requirements of the FHWA, the BLM, and the U.S. Fish and Wildlife Service (USFWS) will be developed, and if needed, formal Section 7 consultation with the USFWS will be undertaken. In which case, a Biological Opinion from the USFWS will be obtained prior to the approval of the EA.

Clean Water Act - early coordination with the Corps will be undertaken to facilitate the Clean Water Act permitting process. Once 60 percent plans are available, Section 404 individual permit application will be prepared. Coordination with the Arizona Department of Environmental Quality will be undertaken during the application process to obtain a Section 401 permit. The Clean Water Act permitting will be completed prior to the approval of the EA. The preparation of a Stormwater Pollution Prevention Plan that meets the National Pollutant Discharge Elimination System and the Arizona Pollutant Discharge Elimination System for the rest of the project in compliance with Section 402 of the Clean Water Act would be completed during the final design process and completed prior to construction.



## State and Local Approvals

This project is consistent with the numerous local and regional planning studies including:

- San Tan Valley Special Area Plan (Oct. 2018)
- Sun Corridor Regional Transportation Plan 2040 ( Mar. 2020)
- Pinal County Small Area Transportation Study (Aug. 2006)
- Florence Transportation Planning Study (Feb. 2020)
- Maricopa Association of Governments 2040 Regional Transportation Plan (Dec. 2019)
- Queen Creek Transportation Master Plan (Dec. 2016)
- Pinal County Comprehensive Plan ( Jan. 2021)
- Town of Queen Creek & Pinal County Small Area Transportation Study (Dec. 2021)
- CAG Regional Transportation Plan (2015)
- Southeast Maricopa / Northern Pinal County Area Transportation Study (Sept. 2003)
- US 60 Corridor Definition Study (May 2006)

Support has been expressed by

- Federal Highway Administration
- Arizona Department of Transportation
- Maricopa Association of Governments
- Town of Queen Creek
- City of Apache Junction
- Town of Florence
- Gila River Indian Community
- Pinal Regional Transportation Authority

## Federal Transportation Requirements

While no legislative approvals are required to implement this project, federal guidelines for design and construction are being adhered to.

## Assessment of Project Risks and Mitigation Strategies

While every project contains elements of risk; Pinal County has identified robust quality control and quality assurance measures to keep planning, design and construction on time and within budget. The urgency of the project is that it is tied to the development of the adjacent State Lands. At the same time, federal funds must take the time to adequately address all of the elements of the NEPA process. Our schedule allows us to start on the preliminary environmental studies to clear the rights of way for purchase. Then, as soon as the grant funds are available, the NEPA process will continue to allow delivery of a timely EA, a schedule successfully achieved by the current design and study team on other similar corridors.

Design and Construction follow an aggressive schedule to quickly turn dirt as soon after the NEPA and ROW processes allow. While the project schedule is fast paced, Pinal County has experience with this type of expedited project and has a track record of effectively meeting all milestones.

Fortunately for the grant process, our construction is scheduled to be completed by May 2025, allowing **14 months of float for unforeseen environmental or other challenges before the desired expenditure of funding deadline.**

Potential Risk	Mitigation Measures
Environmental Uncertainties	Like any other project, environmental issues may arise during the planning process. To mitigate this risk, all potentially impacted parties have been included during the planning process – including BLM, Arizona State Land, Central Arizona Project, etc. This extensive coordination and collaboration puts known issues and constraints on the table early. When needed, all agencies or involved partners will be invited to meet together to identify solutions to meet the needs of all parties.
Culturally Rich Area	Immediately during the PEL process, a complete review of cultural sites within the proposed alignment will begin. With the early identification of sites, actions such as designing around the site or expediting any cultural resource recovery can be implemented. Once federally funding is secured, the Section 106 process will be undertaken.
Biological Resources	The project will traverse over the CAP canal and the County’s Regional Flood Retarding Structures (FRS) located parallel to the canal. The FRS does trap and pond runoff, and has created a dense area of trees that attract seasonal and migrating birds. In addition, Sonoran desert tortoise, western burrowing owl, bald eagles, and various BLM species could occur in the area. Still, to obtain adequate environmental clearance, conducting biological surveys during the PEL process will allow to expedite completion of the biological clearance and Section 7 consultation if needed.
BLM / ARNG Easement	A portion of the project is taking BLM / Army National Guard lands previously used for a military air base. The base was used lately for helicopter training to extract water from the adjacent CAP canal and drop over wildfires on forest lands. The local growth and development has made the site undesirable for the training operations, and the base has gone unused for some time. Our experience has proven that bringing together the BLM, other agencies, our design team, and environmental planner early and involving them throughout the development of the alternatives and the design simplifies the preparation of the transportation easement application and review times, so that the ROW access can be obtained in the shortest possible time.
Right-of-Way (ROW) Acquisition	There are no ROW takes expected outside of the BLM and State Land limits anticipated for this project. Both agencies involved have expressed support for this project. The proposed project is providing access to the lands that allow the State Land Department to sell these parcels to large development projects. All involved are better served if the process moves quickly, so collaboration and continuous communication should resolve concerns and complete the sales in time for construction.
Project Funding	If the MEGA Grant is awarded, Pinal County feels comfortable generating funds to meet its commitment. The County could allocate funds ear-marked for other projects using future sales tax revenues to mitigate unforeseen funding issues.

# STATUTORY PROJECT REQUIREMENTS

## Mega Statutory Project Requirements

The Pinal SR 24 Extension project contributes to accomplishing one or more national goals in safety, condition, congestion, reliability, freight, and regional economic benefits (49 U.S.C. 6701).

- **Safety:** the proposed project will lead to reassignment of trips from facilities not designed for heavy regional traffic and will incorporate state of the art design elements geared towards reducing traffic fatalities and serious injury crashes on public roads in the vicinity.
- **Infrastructure Condition:** the proposed project will be designed to accommodate high-volume traffic and heavy vehicles that currently utilize roads in the vicinity not designed for regional connectivity. Maintenance of the facility will be integrated into ADOT asset management systems to account for maintenance lifecycle costs and maintenance of a state of good repair.
- **Congestion Reduction:** the proposed project will provide a bypass for traffic that would otherwise utilize the already congested regional freeway and arterial network in the Southeast Phoenix Metro Area. An alternative to the already congested Gold Canyon area of U.S. 60, utilization of SR 87, SR 287, and Hunt Highway for east/west and northwest-southeast travel will also be provided. Finally, the project will remove regional traffic from congested local roads.
- **System Reliability:** the proposed project will create much needed redundancy in the local and regional transportation network that can serve as a reliever route in the event surrounding roadways experience emergency situations or are rendered inoperable.
- **Freight Movement and Economic Vitality:** the proposed project will provide a high-capacity reliable link between the rapidly growing Phoenix Metropolitan Area, Pinal County, State of Arizona, national, and international economies by providing a controlled access facility for the rapid, reliable, safe, and efficient movement of freight.
- **Environmental Sustainability:** the proposed project will enhance performance of the transportation system while enhancing the natural environment by reducing congestion leading to air quality improvements. The proposed project will also integrate state of the art drainage design to protect groundwater resources, incorporate lower carbon pavement and construction materials, and consider use of low-water use aesthetically appealing landscape features.
- **Reduced Project Delivery Delays:** to reduce project delivery delays, the proposed project will be considered for application of the design-build construction approach and will explore P3 financing of construction and maintenance.



## **Administrative and National Policy Goals**

While not a statutory requirement for the MEGA grant, the Pinal SR 24 Extension project will contribute to the following administrative and national policy goals.

- **State Highway Safety Plan Maintained:** the proposed project design will incorporate all policies and design elements included in the State Highway Safety Plan.
- **Climate Change and Environmental Justice Impact Consideration:** the environmental review process for the proposed project will perform a detailed analysis of climate impacts in addition to identifying any negative impacts to traditionally disadvantaged communities. Negative impacts will be mitigated through proper corridor siting and development of mitigation measures.
- **Equity and Barriers to Opportunity:** the proposed project will be developed in a manner that incorporates a broad and robust stakeholder outreach process targeted towards disadvantaged populations to receive feedback and incorporate comments into siting and design. The proposed project will also alleviate barriers to opportunity by providing greater connectivity to local and regional jobs while also providing necessary infrastructure for future area employment growth and investment. The proposed project will alleviate congestion on the local transportation network, leading to improved safety for alternative and economical modes of transportation.

## **Sustainable Revenue Source**

The proposed improvements will be maintained by both ADOT and the Pinal County, ADOT being responsible for maintaining all of the facilities within the access control limits and the County maintaining the balance. As the interchange will be managed by the County until the area is incorporated, The County is a sustainable source of revenue available for maintenance.

## **Non-Federal Revenue for Transportation Infrastructure Investment**

Pinal County will utilize a portion of the proceeds from the County half-cent sales tax (non-federal revenue) for this project. Overall, the County has committed \$201,088,360 in local funds. In addition, the project is expected to receive financial support from:

The Arizona State Land Department:	Expected to provide \$41,700,000 in right-of-way funds
The Arizona State Legislation:	HB 2184 will appropriate \$15,000,000 from the State's general fund to acquire right-of-way to extend SR 24

While non-federal funding has been identified, this project cannot easily and efficiently be completed without federal funding requested in the grant application.





# PINAL COUNTY ARIZONA STATE ROUTE 24 EXTENSION

## FY 22 MEGA Discretionary Grant Application

Connecting People, Communities, and Serving the Northern Pinal  
County Region



## APPENDIX A: PINAL COUNTY FUNDING COMMITMENT

Andrew Smith  
Public Works Director

Joe Ortiz  
Deputy Director

Christopher Wanamaker  
County Engineer



Leo Lew  
County Manager

**PINAL COUNTY**  
WIDE OPEN OPPORTUNITY

May 20, 2022

**SUBJECT: Letter of Commitment for non-Federal Funding Project Costs**

This letter serves as Pinal County's letter of commitment and to document that the county intends to contribute non-Federal funds in the amount of \$201,088,360 for subject MEGA grant.

If you have questions or need additional information, please contact Jason Bottjen, the county's point of contact for this project, at [jason.bottjen@pinal.gov](mailto:jason.bottjen@pinal.gov) or 520-866-6345.

Sincerely,

Andrew Smith  
Public Works Director  
Pinal County



Public Works Department

85 N. Florence Street, PO Box 727 Florence, AZ 85132  
T 520-509-3555 Hours: M-F 8:00 am – 5:00 pm F 520-866-6511

[www.pinalcountyaz.gov](http://www.pinalcountyaz.gov)





# PINAL COUNTY ARIZONA STATE ROUTE 24 EXTENSION

## FY 22 MEGA Discretionary Grant Application

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## APPENDIX B: DETAILED COST ESTIMATE

**SR 24 - Ironwood Drive to US 60**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
Construction Survey & Layout	LS	1	1.5%	\$ 163,400.00
AZPDES (NPDES) Construction Permit Requirements	LS	1	1%	\$ 108,900.00
Mobilization / Demobilization	LS	1	8%	\$ 871,200.00
Traffic Control	LS	1	2%	\$ 217,800.00
Quality Control	LS	1	1%	\$ 108,900.00
Pinal County Off-Duty Sheriff Deputy (Allowance)	HR	100	\$ 65.00	\$ 6,500.00
Clearing & Grubbing	AC	42	\$ 3,000.00	\$ 126,000.00
Miscellaneous Removals & Relocations	LS	1	\$ 150,000.00	\$ 150,000.00
Earthwork	CY	300,000	\$ 7.00	\$ 2,100,000.00
Furnish Water	LS	1	\$ 400,000.00	\$ 400,000.00
Pavement Section No 1 (13" PCCP / 4" AB)	SY	44,000	\$ 60.00	\$ 2,640,000.00
Drainage System (Conveyance Channel)	LF	23,467	\$ 80.00	\$ 1,877,360.00
Concrete Catch Basin	EA	33	\$ 5,000.00	\$ 165,000.00
Storm Drain Pipe, 24"	LF	3,300	\$ 150.00	\$ 495,000.00
Sign Structures	EA	3	\$ 100,000.00	\$ 300,000.00
ITS Structure and Panel	EA	2	\$ 250,000.00	\$ 500,000.00
Signing (Freeway)	Mile/Dir	2	\$ 40,000.00	\$ 80,000.00
Pavement Marking	Lane Mile	6	\$ 5,000.00	\$ 30,000.00
Intelligent Transportation System	Mile	1	\$ 550,000.00	\$ 550,000.00
Seeding	AC	28	\$ 5,000.00	\$ 140,000.00
Scour Protection	LS	1	\$ 20,000.00	\$ 20,000.00
Freeway Curb (ADOT Std Det C-05.10, Type E)	LF	10,560	\$ 30.00	\$ 316,800.00
Roadway Appurtenances (Guardrail, Barrier, Etc.)	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
<b>Sub-total</b>				\$ 12,366,860.00
Contingency (20%)				\$ 2,473,400.00
<b>Cost Per Mile (w/o Structures)</b>				\$ 14,840,260.00
Total Project Length (Miles)				9.00
New Bridge (CAP / FRS)	SF	46,000	\$ 200.00	\$ 9,200,000.00
New Bridge (Wash Crossing)	SF	60,000	\$ 200.00	\$ 12,000,000.00
New Bridge (Wash Crossing)	SF	30,000	\$ 200.00	\$ 6,000,000.00
Concrete Box Culverts	EA	4	\$ 500,000.00	\$ 2,000,000.00
New Systems Interchange (US 60)	LS	1	\$ 180,000,000.00	\$ 180,000,000.00
<b>Total Construction Cost</b>				\$ 342,763,000.00
Utility Relocations	LS		\$ 2,000,000.00	\$ 2,000,000.00
Right-of-Way	SF	25,850,000	\$ 2.00	\$ 51,700,000.00
Engineering Design & Environmental	COST	10%		\$ 34,277,000.00
Construction Administration	COST	14%		\$ 47,986,900.00
Construction Contingency	COST	6%		\$ 20,566,000.00
Post Design Services	COST	1%		\$ 3,428,000.00
<b>Total Project Cost</b>				\$ 502,720,900.00





# PINAL COUNTY ARIZONA STATE ROUTE 24 EXTENSION

## FY 22 MEGA Discretionary Grant Application

Connecting People, Communities, and Serving the Northern Pinal  
County Region



## APPENDIX C: FEDERAL WAGE CERTIFICATE





May 20, 2022

Federal Wage Rate Certification

Pinal County hereby certifies, all contractors will be required to pay the prevailing wage for this project. During the procurement process, the following language and the most recent wage determination will be provided to and signed by prospective contractors certifying compliance.

Compliance with Davis-Bacon Act. Pursuant to the Davis-Bacon Act (40 USC §§ 3141-3148) as supplemented by Department of Labor regulations at 29 CFR Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction) and 2 CFR Part 200, Appendix II(D), Contractor agrees as follows during the performance of this Contract:

- (a) The Davis-Bacon and Related Acts applies to contractors and subcontractors performing on federally funded or assisted contracts in excess of \$2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. Davis-Bacon is applicable to housing projects when four or more units are renovated or constructed.
- (b) All transactions regarding applicable contracts shall be done in compliance with the Davis-Bacon Act (40 USC §§ 3141- 3144, and 3146-3148) and the applicable requirements of 29 CFR pt. 5. The Contractor shall comply with 40 USC §§ 3141-3144, and 3146-3148 and the applicable requirements of 29 CFR pt. 5.
- (c) Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.
- (d) Additionally, Contractors are required to pay wages not less than once a week.

Reference link for Labor Standards <https://www.dol.gov/agencies/whd/government-contracts/construction> and <https://www.hud.gov/sites/documents/4010.PDF>

Andrew Smith, Public Works Director