

Project Delivery Academy

Grand Canyon

Arizona Division Office

Module 2 – Federal Authorization



Roman Moreno
Tom Deitering
Ammon Heier

Overview:

- Project Funds Management
- Project Authorization Package
- Increased Federal Share Authorization

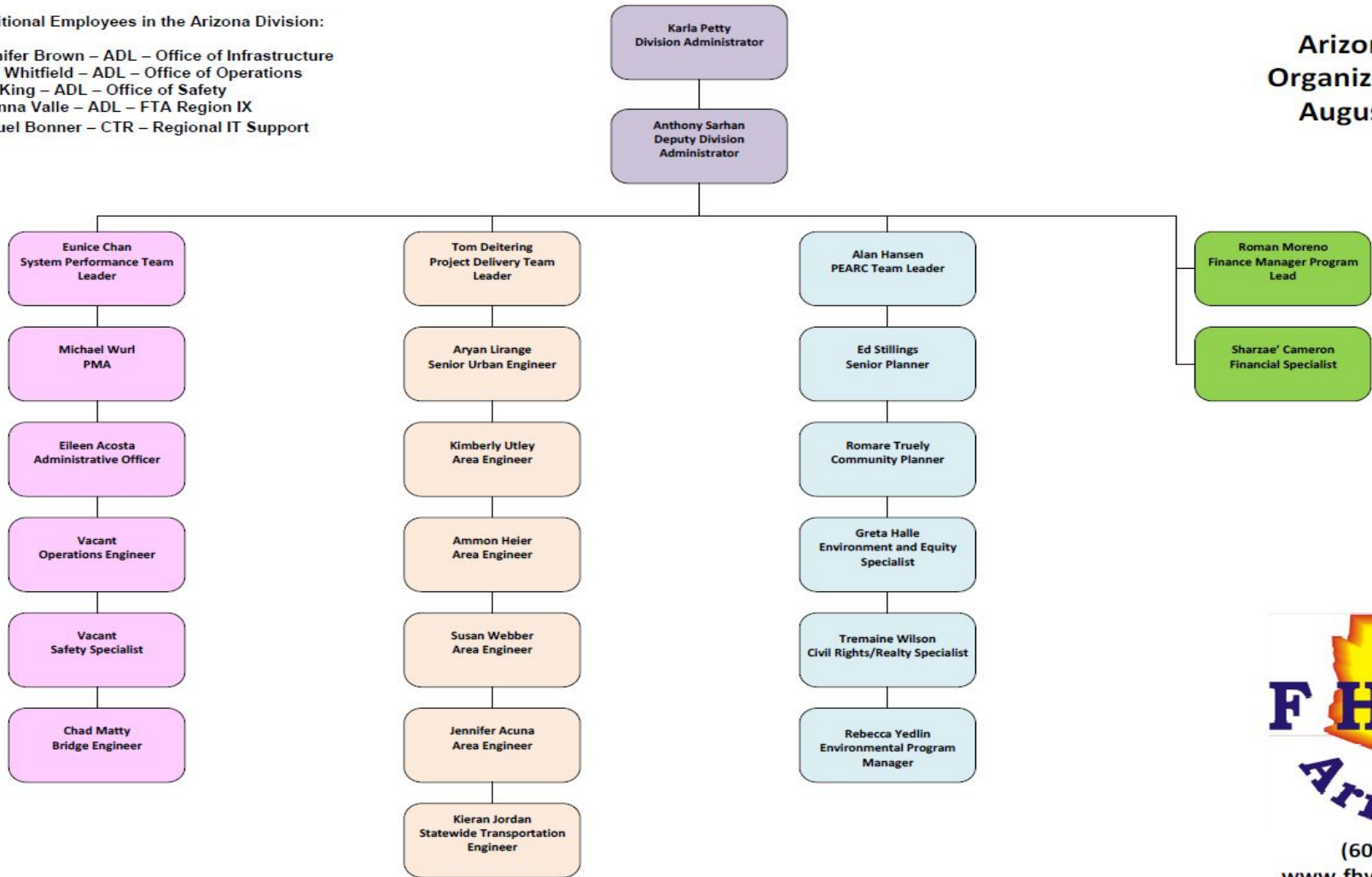


U.S. Department of Transportation
Federal Highway Administration

Additional Employees in the Arizona Division:

Jennifer Brown – ADL – Office of Infrastructure
Toni Whitfield – ADL – Office of Operations
Jeff King – ADL – Office of Safety
Arianna Valle – ADL – FTA Region IX
Raquel Bonner – CTR – Regional IT Support

**Arizona Division
Organizational Chart
August 22, 2022**



(602) 379-3646
www.fhwa.dot.gov/azdiv/

Project Funds Management

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Properly Authorizing a Project

- Authorization is required before work starts or is advertised for consultant services or construction
- Project or project phase must be ready to proceed
- Federal share is established when funds are obligated
- Signed by at least two authorized state representatives and a minimum of two from FHWA



Project Funds Management

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Properly Authorizing a Project

- A proper authorization includes a clearly defined scope of work for the applicable phase (PE, ROW, Construction) with sufficient funds to accomplish that work.
- Must be supported by a documented current cost estimate aligned with the eligible work being completed.
 - Requesting authorization for part of a phase is not allowed (“Partial PE”).
- The agreement must have an identified Period of Performance (Project End Date) for the scope of work being authorized.



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Project End Date vs Period of Performance

- The Project End Date is the final date recorded in the project agreement when the recipient may incur direct costs on the project to be eligible for Federal-aid reimbursement.
- The Period of Performance is the time period when cost may be incurred for authorized work.
- Project charges must be incurred prior to the project end date lapsing (2 CFR 200.77)



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Prohibited Practices

- Requesting authorization before a project is ready to proceed (prior to having an approved PS&E)
- Authorizing projects prematurely to protect funds from lapsing at year-end
- Requesting authorization prematurely to meet fiscal delivery goals
- Requesting authorization when a known scope change is under consideration
- Obligating funds solely to use all obligation limitation



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Inactive Obligations

- An obligation that has not had expenditures in 6 months
- A Project should be advertised promptly after authorization
 - FHWA's expectation is Award and NTP occur within 3 months of authorization
- **If a project is not progressing promptly, the project should be withdrawn or closed.**
- Some circumstances may be beyond the state's control -
 - Litigation
 - Catastrophic events
 - Unforeseen environmental concerns



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Closeout and Record Retention

- Closeout process should occur soon after the project is physically completed.
- Required record retention period for the non-Federal entity starts at final voucher and lasts 3 years.
- >>>>Note some records, such as for right-of-way, have some variance.
- Includes all records that demonstrate project met Federal requirements, not just financial.
- To be retained at last level that required them to be submitted.
- >>>>E.g., If the pass-through entity (State) required records to be submitted by the LPA for approval or with billing, then the State is required to retain. If the LPA did not submit them to the Federal or pass-through entity, then the LPA would retain those records. (2 CFR 200.333(d))



Project Authorizations

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The full Federal-aid Project Number should be shown on all documents.

Example **AC-NHPP-017-B(234)T**

AC = Advanced Construction

NHPP = Funding Category

017 = Route or City

B = Segment identifier on state highway projects

234 = Sequential project number

T = Level of FHWA involvement



Project Authorizations

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Types or “Phases” of Authorization

Project Authorization may be for:

- Phase I PE
- Phase II PE
- Single Phase PE
- Other
- ROW
- Construction



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Authorization of PE

- Two Phase Authorization – For EA’s or EIS’s and some Cat Ex’s
 - PE Phase 1 – for Preliminary Design up to 15 or 30%
 - *Work needed to complete initial design and finalize NEPA*
 - PE Phase 2 – for Final Design after NEPA is complete
 - *Preparation of final design documents for advertisement.*
- Single Phase Authorization – Single-phase authorizations are on projects with a Cat Ex.
 - **Preliminary and Final Design authorized at once**, with the understanding that NEPA should be complete by 60% design
 - Projects that are not controversial may proceed to 95% design with EPG approval.
 - Activities considered “Final Design” (final plans, final quantities, and final engineer’s estimate) may not advance prior to completion of NEPA.

40 CFR 1502.2(f)
– “Agencies shall not commit resources prejudicing selection of alternatives before making a final decision”





Arizona

FEDERAL HIGHWAY ADMINISTRATION - ARIZONA DIVISION OFFICE

ARIZONA DEPARTMENT OF TRANSPORTATION

"The FHWA and ADOT Stewardship and Oversight Agreement for Arizona (April, 2015)"

LETTER OF AUTHORIZATION AND PROJECT AGREEMENT

- Authorization Modified Project Agreement
 Project Agreement Grant Agreement

The state agrees that as a condition to payment of the Federal funds obligated, it accepts and will comply with the agreement provisions set forth in 23 CFR 630.112; and its signature constitutes the making of the certificates.

DUNS # 098416667

FEDERAL AID PROJECT NO. NOG-0(210)	SUFFIX T	PROGRAM / PHASE (ADOT) T0246 01D	COUNTY SANTA CRUZ
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DATE AUTHORIZATION EFFECTIVE	FMIS DATE
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GENERAL LOCATION

 PATHWAY PROJECT, BAFFERT DR TO NOGALES HIGH SCHOOL, IN NOGALES

GENERAL DESCRIPTION OF WORK

 BICYCLE AND PEDESTRIAN PATHWAY PROJECT

- YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW:**
- | | |
|--|---|
| <input checked="" type="checkbox"/> PHASE I: PRELIMINARY ENGINEERING - SCOPING, LOCATION STUDIES, ENVIRONMENTAL STUDIES AND PRELIMINARY DESIGN | <input type="checkbox"/> CONSTRUCTION - ADVERTISE FOR RECEIPT OF BIDS |
| <input checked="" type="checkbox"/> PHASE II: PRELIMINARY ENGINEERING - FINAL DESIGN/PREPARATION OF CONTRACT PLANS | <input type="checkbox"/> CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS |
| <input type="checkbox"/> ACQUISITION OF RIGHT-OF-WAY | <input type="checkbox"/> Other: |

FUNDING	TOTAL ESTIMATED PROJECT COST(\$)	FEDERAL PARTICIPATION AMOUNT(\$)	FEDERAL FUNDS(\$)	APPN CODE	RATIO(%)
PREVIOUS AUTHORIZATIONS:	\$0.00 \$0.00	\$0.00 \$0.00			94.30% 94.30%
THIS AUTHORIZATION	\$380,000.00	\$380,000.00	\$358,340.00	2003	94.30%
PROJECT TOTALS	\$380,000.00	\$380,000.00	\$358,340.00		

OTHER (SPECIFY)



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PE vs. Other

Authorizations for “PE” no longer requires repayment if the project does not proceed to R/W Acquisition or Construction within 10 year, unless the state continues to mandate.

Authorizations as “Other” are limited to:

- Railroad work by the railroad itself
- Procurement-only of Equipment or Software
- Corridor Needs studies
- Advance utility relocation prior to construction
- Sign Management Systems
- NBIS Inspection or Training
- Travel Demand projects (carpool, rideshare programs)



Project Authorizations

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Project Title

- Should be in the form of – “Route Number or Road/Street”, “Termini 1” to “Termini 2”, in or near appropriate city.
 - *SR 85, Welcome St. to Pima County Line, North of Ajo*
- Use features that can be found on maps as termini – roads, rivers, political boundaries, etc.
- Point locations may use “@”
- Mileposts used alone are not desirable
- Avoid using county names, or ADOT Districts
- Should be the same on all documents if possible – NEPA, PIFs, DEs, PS&E, STIP.



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Project Description

- Should not be a repeat of the Project Title
- Should concisely state the primary purpose/scope of the project
- Should be the same on all documents
- Please avoid using “Preliminary Engineering of” in the description of work for PE projects.

- **Tip – Specific Words are important for pavement projects.**
 - Pavement Rehabilitation – Mill and Fill over two inches
 - Pavement Preservation – Surface Treatments only, mill and fill less than two-inches in depth.



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Project Funding

- Verify Eligibility of the Program Fund – NHPP, CMAQ, HSIP, STBG
- Federal Share
 - Verify the Pro-rata share of eligible project costs – 94.3%, 94.34% (Interstate), 80%, 90%, 100%?
 - The match must be for Federal-Aid eligible activities. **Using non-federal match to pay for ineligible items of work is not acceptable.**
 - The authorization request must describe in detail any ineligible work in the project



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STIP and TIP

- Provide the page from the approved STIP.
- If included in a STIP Amendment - Provide page that contains the project and be sure it was approved by ADOT and FHWA.
 - COG, MPO, or City Council approvals are not adequate.
- Verify that authorization request is within 15% or \$200K of programmed amount, whichever is less.
 - If not, STIP/TIP amendment may be required prior to authorization.



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Status of Right-of-Way

- 23 CFR 635.309 - A statement is received from the State certifying that one of the following applies:
 - **(Type 1)** All necessary rights-of-way, including control of access rights when pertinent, have been acquired including legal and physical possession. **Lowest Risk.**
 - **(Type 2)** Although all necessary rights-of-way have not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. **Uncommon.**
 - **(Type 3)** The acquisition or right of occupancy and use of a few remaining parcels is not complete and the state is requesting to proceed with construction. **Obtain FHWA approval, must be rare, and must have contract provisions to advise interested bidders.**



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Status of Utilities

23 CFR § 635.309 - A statement is received from the SDOT on the status of Utility and RR.

- **Type 1** - No Conflicts, or cleared before construction. **Lowest Risk.**
- **Type 2** – (conditional certification) Authorization requested and will be cleared before bid opening.
- **Type 3** - (conditional certification) Project can be authorized but will not be advertised prior to completion of utility relocation.
- **Type 4** – All utilities are mitigated. Contractor and/or Utility will coordinate final relocation during construction. See the Special Provisions for additional information.



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Certification of NEPA

- Per the 326 and 327 MOUs, FHWA must have the following statement on the authorization cover letter that certifies NEPA is complete and incorporates all environmental commitments – *“ADOT certifies that NEPA requirements consistent with the scope of work of the project have been met and the project incorporates all environmental commitments per 23 CFR 771.109(d).”*
 - Should be from the ADOT environmental planner or above.
 - This statement must also be provided for projects administered by LPAs.
 - **Sending the environmental document to FHWA will not allow us to proceed with authorization.** Only ADOT can certify that NEPA is complete, current for the scope of the project, and includes all environmental commitments and mitigation.



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Railroad Certification

23 CFR 635.309(b); 23 CFR 635.307 - A statement is received from the State certifying that one of the following applies:

- There is no railroad involvement within ½ mile of the project limits.
- There is a railroad within ½ mile of the project limits; but there is no railroad work on this project. The railroad was notified.
- There is a railroad within the project limits. The railroad work will be completed prior to advertisement of this project.
- There is a railroad within the project limits. Railroad work will be completed by the railroad and/or the contractor during this project. See attached special provisions for required coordination and impacts to this project.



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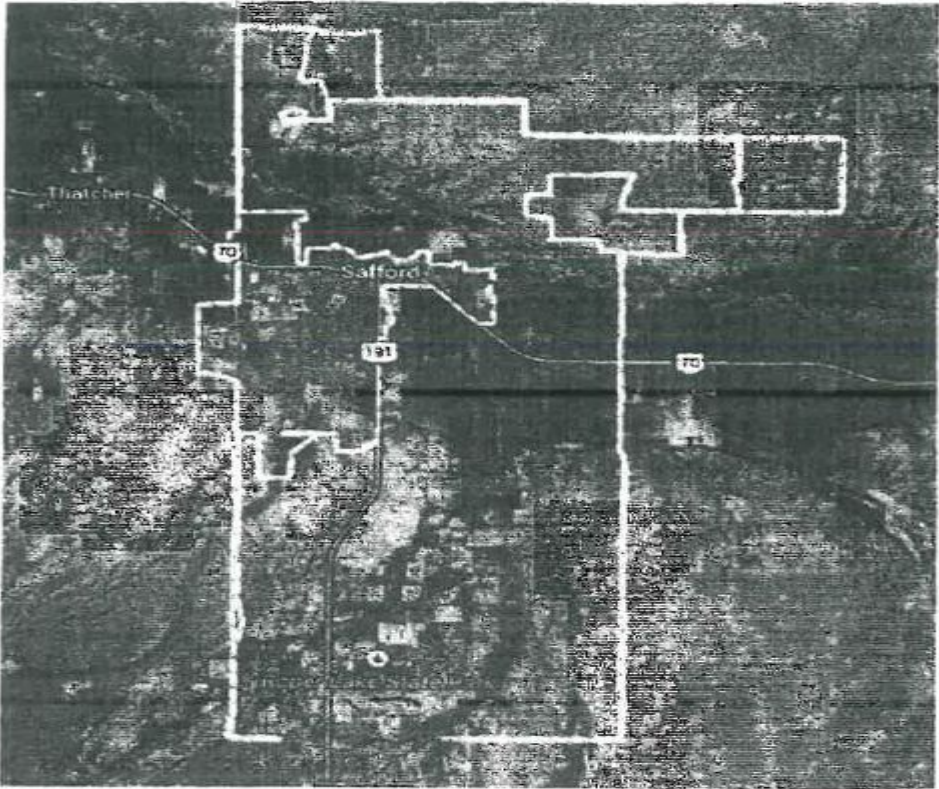
Project MAP!!!

- “A proper authorization includes a clearly defined scope of work for the applicable phase...” - FHWA Funds Management Guide.
- FHWA asks that construction authorization requests include a legible map showing the location of the project.
- Someone not familiar with Arizona geography should be able to locate the project and corresponding limits.
- ADOT PDCA established guidance for the project map.

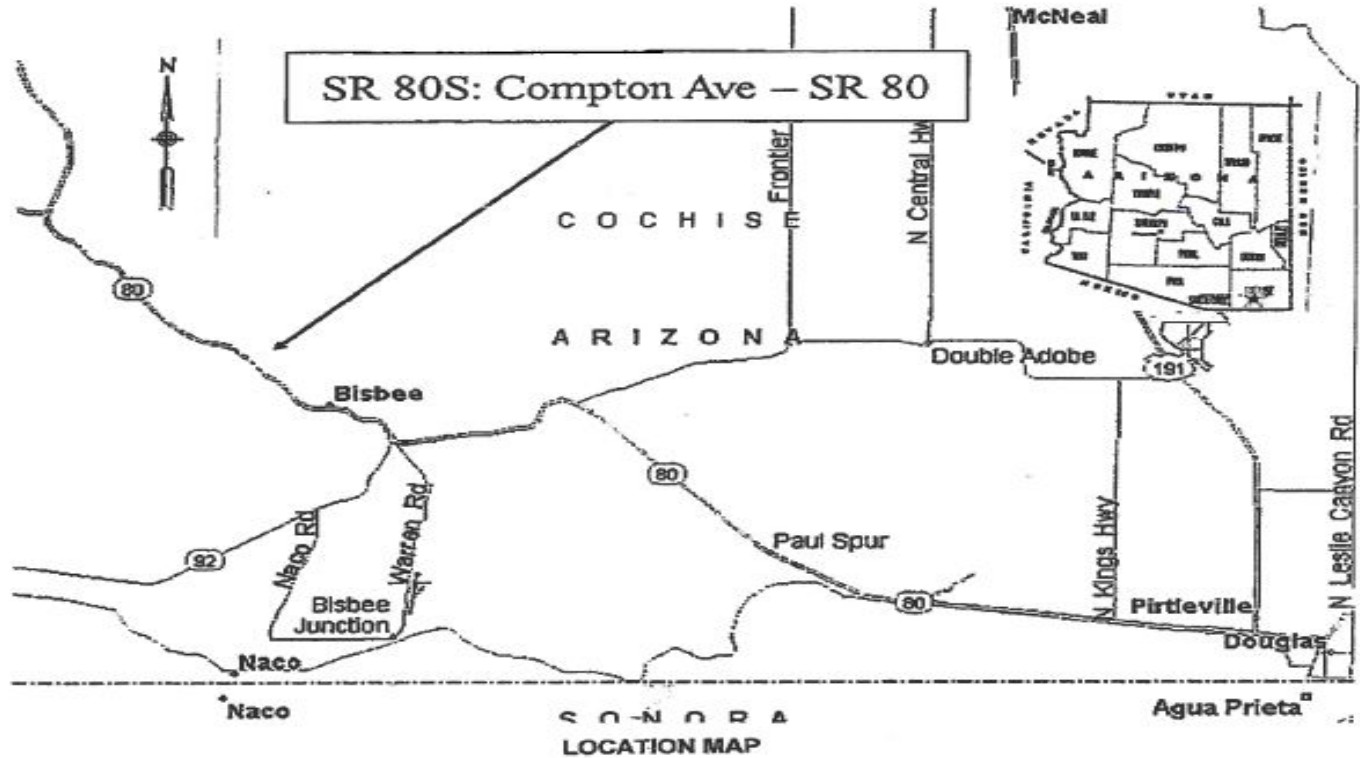


Project Name - “Various Locations in Safford”

Figure 1: Vicinity Map
Safford, AZ



Not bad, but where is SR 80S? Where is Compton Ave?



A Recent Example of Why a Map is Important

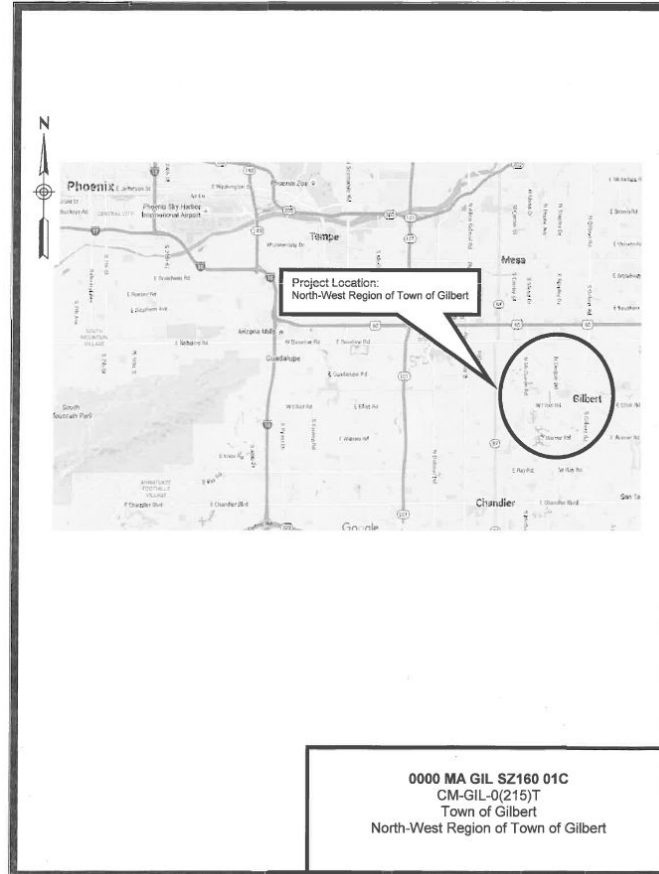
I-17 @ Dugas TI, MP 268

Concrete Slab for Scour Protection to
Bridge Piers and Abutments

NHPP-017-B(234)T



Map from Authorization Request (not bad)



Map from Cat-Ex (Much Better!)

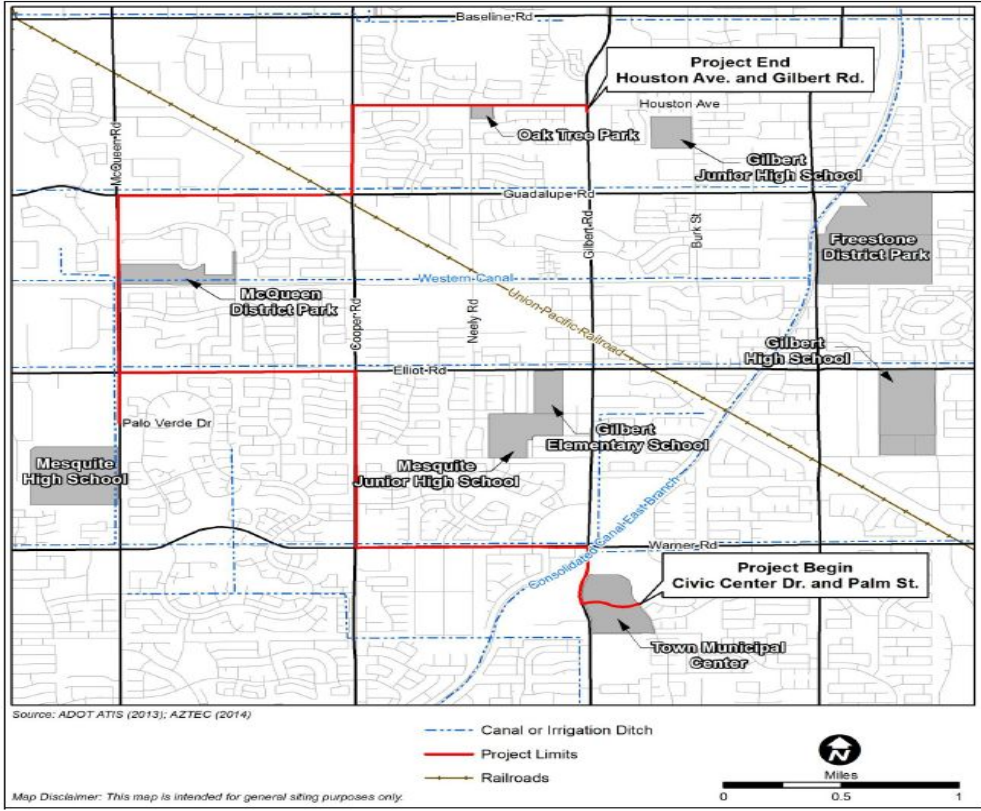


Figure 2. Project Vicinity Map
CM-GIL-0(215)T

INCREASED FEDERAL SHARE (IFS)

AMMON HEIER, ARIZONA DIVISION



INCREASED FEDERAL SHARE (IFS) – 23 USC 120(C)(3)

Purpose

Promote innovative technologies and practices

Incentive

Additional 5% Federal-Aid up to 100% share



WHAT QUALIFIES?

Innovative project delivery methods, technologies, engineering or design approaches, financing, or contracting that:

- Improve Work Zone Safety,
- Reduce congestion related to the construction
- Improve quality of highways and bridges
- Extend service life of highways and bridges
- Reduce long-term maintenance costs of highways and bridges

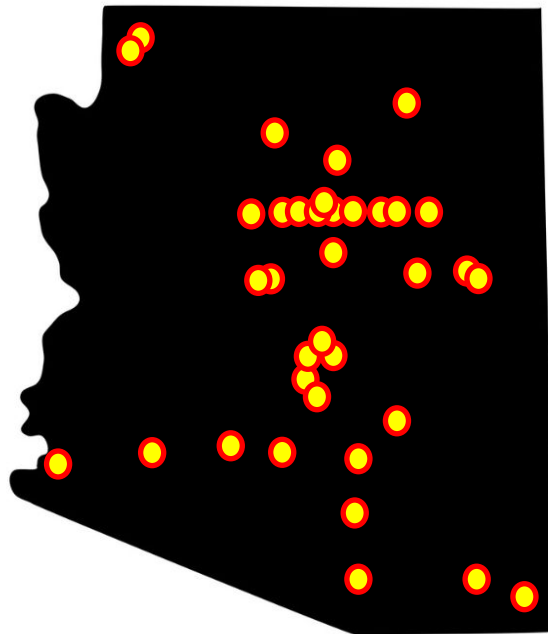
Must be innovative for the applicant



IFS - WIDE USE IN ARIZONA

36 Projects Since 2014

- Accelerated Bridge Construction
- Smart Work Zone
- Increased Asphalt Density
- Incentivized Longitudinal Joint Density (AC)
- Fiber Reinforced Asphalt
- Polymer Modified Asphalt
- Warm Mix Asphalt
- Intelligent Compaction
- Polyester Polymer Bridge Deck
- ID/IQ
- EDC Cape Seal
- 3D Paving
- 2D Hydraulic Modeling & A-GaMe
- Electronic Plans
- Project Bundling
- E-ticketing



Additional Federal Share (\$)



State may apply up to 10% of total apportionments of STBG, NHPP, NHFP, and PL each Federal Fiscal Year

Limit of approximately **\$75M each FFY**

- 33 Total Projects and \$41.5M in 9 years
- \$25M and 14 projects in last 2 years
- Room to Grow!



**Application Form
Technology and Innovation Deployment Program (TIDP)
Increased Federal Share for Project-Level Innovation
23 USC 120(c)(3)**

A. Project Information (completed by Applicant)

State	
Project Name	
Location of Project (Include Route Name and general location information)	
Description of Project	
Anticipated Authorization Date	
Approximate Additional Federal Share (\$)	
Increased Federal Share (%)	
Funding Source Used	<input type="checkbox"/> National Highway Performance Program (NHPP) <input type="checkbox"/> Surface Transportation Block Grant (STBG) Program <input type="checkbox"/> National Highway Freight Program (NHFP) <input type="checkbox"/> Metropolitan Planning (PL)
Innovation Being Proposed	
Description of Expected Benefit (include how the innovative technology or practice increases the efficiency of construction, accelerates the construction, improves the safety, improves the quality, reduces congestion from construction, and/or extends the service life of highways and bridges)	
Describe How the Project is Innovative in your State (Include how the technologies or practices proposed are new or have only rarely been used for unique or special applications and represent significant improvement to the state or local agency's conventional practice.)	
Contact Information (Name, Phone, Email)	

B. Eligibility Determination (completed and signed by FHWA Division Office)

- In each fiscal year, a State may apply up to 10 percent of its combined apportionments under the National Highway Performance Program (NHPP), Surface Transportation Block Grant (STBG) Program, National Highway Freight Program (NHFP) or Metropolitan Planning (PL) (funds apportioned under 23 U.S.C. 104(b)(1), (2), (5)(D) and (6)) for this increased federal share provision.

Would approving the increased federal share proposed for this project exceed the limitation of funds available?

Yes No

- The Federal share payable may be increased by up to 5 percent of the total project cost, not to exceed 100 percent, for projects determined to meet the requirements specified in 23 U.S.C. 120(c)(3).

Would approving the increased federal share proposed exceed the allowable adjustment for the project?

Yes No

- Provide a short narrative that substantiates how the proposed project meets or does not meet the eligibility requirements for the increased federal share provision.

Comments:

Based on a review of the application submitted by the _____ Department of Transportation, project _____ is determined to be:

Eligible Not Eligible

for participation in increased Federal share for project level innovation in accordance with 23 USC 120(c)(3).

SIGNATURE: _____

NAME (PRINTED): _____

FHWA DIVISION OFFICE: _____

DATE: _____



IFS – PROBLEM/SOLUTION

Problem:

- 1) Possibility of innovations being dropped
- 2) No process for capturing lessons learned.

Solution:

Creation of an IFS special provision



NEW SPECIFICATION: 109INFS

Description of IFS
component

IFS cannot be removed
without State and FHWA
consent

Lessons Learned Report and
Closeout Meeting is
Required

NEW Specification

****USE ON PROJECTS WITH INCREASED FEDERAL SHARE****
****DESCRIBE THE INNOVATIVE TECHNOLOGY IN THE SECOND PARAGRAPH****

(109INFS, XX/XX/XX)

SECTION 109 MEASUREMENT AND PAYMENT: of the Standard Specifications is modified to add:

109.14 Increased Federal Share:

(A) General:

Increased federal share has been approved by FHWA for an innovative technology and practice. The increased federal share on this project is 5 percent.

The innovation includes *(Describe specific innovation – information can be found on the Increased Federal Share Application.)*

Due to the increased federal share, the project components related to the innovation described above must be constructed with the materials, quantities, methods, and innovations as shown on the project plans and specifications. If the contractor requests materials, quantities, methods, or innovations other than those included in the plans and specifications, the request must be reviewed and approved by the Department and FHWA. Approved changes shall be at no additional cost to the Department, and shall not increase contract time.

(B) Post-Activity Report and Meeting:

The contractor shall prepare a report that includes a general summary of the daily operations and discussion of the overall effectiveness of the innovative technology, in a format provided by the Department. A description of additional means of quality control and any benefits realized or detriments suffered relating to implementation and utilization of the innovative technology shall be included. Comments provided by equipment operators, laborers, field personnel, or other personnel who adapted to the use of the technology, positive or negative shall be included.

The contractor shall schedule a closeout meeting with the Engineer within 30 days of the innovative technology completion to review and discuss the findings contained in the report.



Report on GRS-IBS Innovative Technology:

- **Design Plan Changes:**
 - Examine abutment wall
 - Native fill takes longer to compact
 - Plan specifications should allow making the necessary adjustments
- **Geotech:** Identify how to sample native fill (Sample/Design)
- **Backfill Specifications:** Backfill abutment to with GRS materials for a smooth transition
 - Materials on approach resulting in less settlement to structural top of abutment wall
- **Girders:** Ends of girders need to be sealed
- **Structural Modular Block:** Meteor City block grade 7% slope
 - FHWA: Build as vertical as possible (>1%)
 - Increased verticality makes construction easier
 - Block cuts
 - Complicates corner constructability
 - FHWA suggests .5 to 1% batter for blocks
- **Wing Walls:** ADOT 8' wing walls on each abutment are not present on this project
 - Currently water runs off superstructure of bridge and blocks into median, landscape box and beam seat area
 - Creating erosion of backfill materials
 - Add a layer of Geotech/geotextile or riprap to remediate runoff
 - Inspect bridge joint to approach and outside bridge embankment curve for water/erosion concerns
 - Water should only drain to one corner
- **Reinforcement Layout:**
 - Geogrid: Face of wall, laid out and angles at 45 degrees at corners
 - Not easy to work with (cuts, not pliable)

LESSONS LEARNED GRS-IBS



RESOURCES

Increased Federal Share FAQ:

https://www.fhwa.dot.gov/innovation/resources/increased_federal_share.cfm

FHWA Center for Accelerating Innovation: <https://www.fhwa.dot.gov/innovation/>

FHWA Every Day Counts: <https://www.fhwa.dot.gov/innovation/everydaycounts/>

United States Code: [23 USC 120 \(c\)\(3\)](#)

Ammon Heier, P.E.
Arizona Division
602-382-8983
Ammon.Heier@dot.gov





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THANK YOU



U.S. Department of Transportation
Federal Highway Administration