Transportation Systems Management and Operations (TSMO)

2023 HSIP Application Process
FY27 – FY28

WEBINAR

January 18, 2024

Highway Safety Improvement Program
Welcome/Opening Remarks

Kerry Wilcoxon, P.E., PTOE, RSP1
State Traffic Safety Engineer

Highway Safety Improvement Program HSIP Goal

- The goal of the HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

- It is intended to drive State HSIP investment decisions by ensuring projects correspond to the emphasis areas and strategies identified in the SHSP.

Changes to FY 27/FY28 Program

- FHWA project naming convention added (Appendix E)
  - **SR 264: Intersection with Indian Road 4, north of Second Mesa**
- All potential applications will be reviewed by ADOT consultant and the consultant's fee has been added to the cost estimate

Project Cost Estimate:	Description:	Quantity:	Unit Cost:	Total Cost	HSIP Eligible:	HSIP:	HSIP:	Local Match	TOTAL COST
						100.00%	94.30%	5.70%	
Scoping	ADOT Consultant	1	$ 40,000.00	$ 40,000.00	$ 40,000.00	$ -	$ 37,720.00	$ 2,280.00	$ 40,000.00
Scoping Total			$ 40,000.00	$ 40,000.00	$ 40,000.00	$ -	$ 37,720.00	$ 2,280.00	$ 40,000.00
Preliminary Engineering:	Consultant	1	$ 150,000.00	$ 150,000.00	$ 150,000.00	$ 150,000.00	$ -	$ -	$ 150,000.00
Non-Infastructure (NI) Elements:		0	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Right of Way		1	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ADOT Admin Costs:		1	$ 40,000.00	$ 40,000.00	$ 40,000.00	$ 40,000.00	$ -	$ -	$ 40,000.00
Design Sub-Total				**$ 190,000.00**	**$190,000.00**	**$190,000.00**	**$ -**	**$ -**	**$ 190,000.00**
Inflation Factor		9.3%		$ 17,594.00	$ 17,594.00	$ 17,594.00	$ -	$ -	$ 17,594.00
Total Design Cost				**$ 207,594.00**	**$ 207,594.00**	**$ 207,594.00**		**$ -**	**$ 207,594.00**

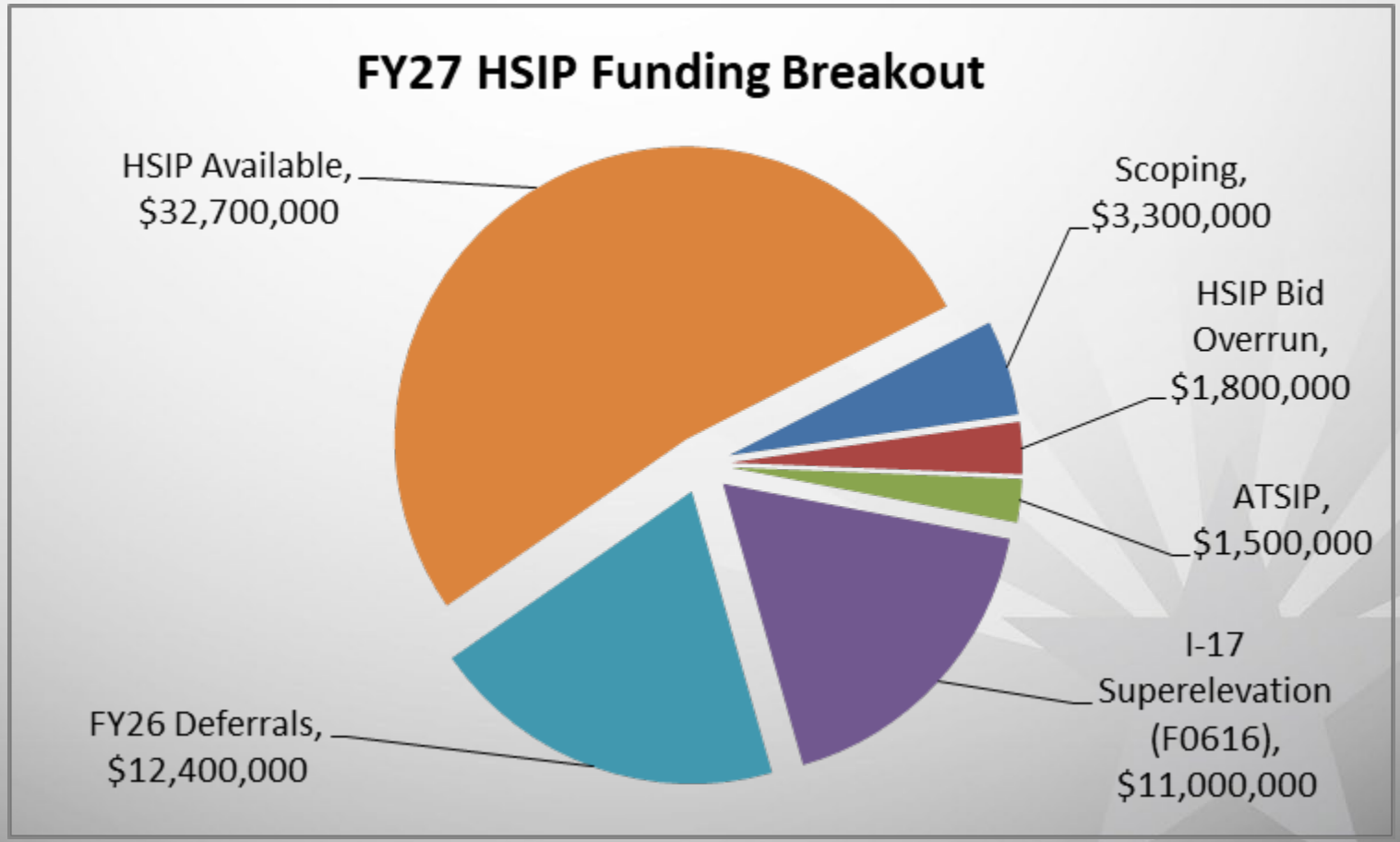
Changes to FY 27/FY28 Program

- ADOT will set-aside HSIP funds to cover potential construction cost increases on local 100% HSIP projects
  - a.Set-aside funds are limited and will be distributed in the order in which they come to TSS, first-come first-served.
  - b. The set-aside HSIP funds will apply only for the construction phase (After bid advertisement) of local HSIP projects funded with 100% federal share, ADOT will cover cost increases after bid advertisement up to 20% over the fully loaded cost estimate (Engineering estimate and below the line) amount not to exceed $100,000.
  - c. Local Agency will be responsible for any amount above the 20% or the $100,000.

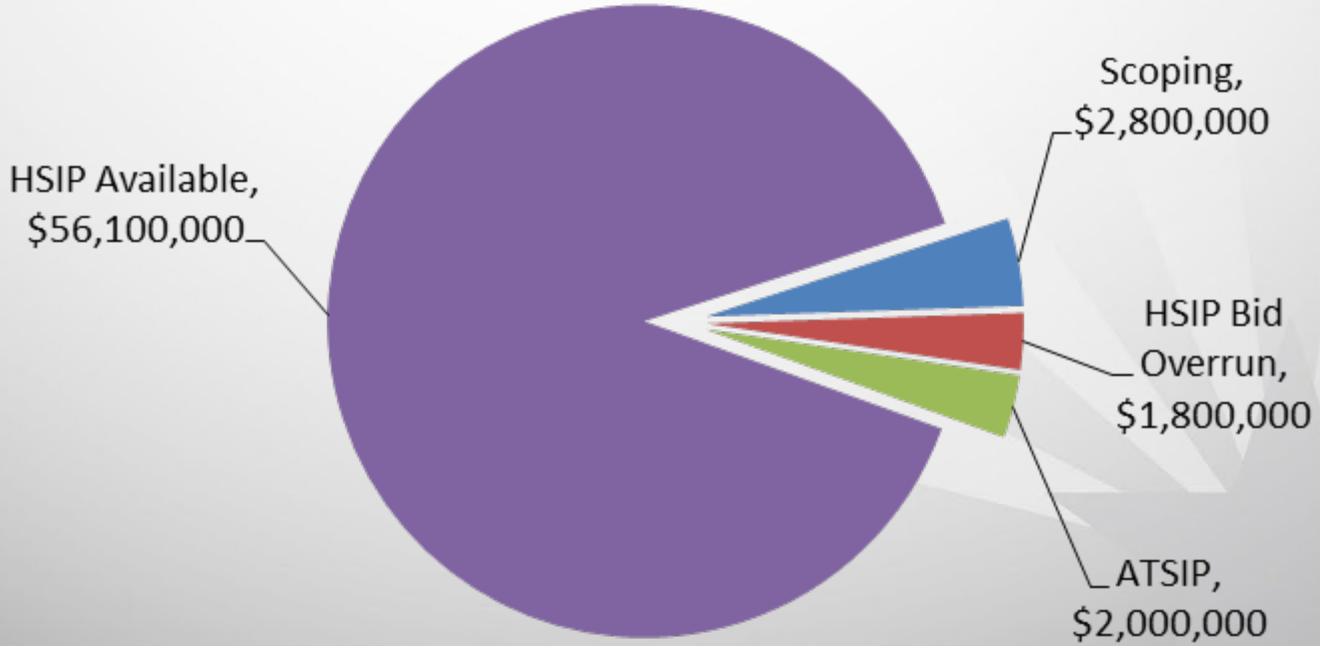
Changes to FY 27/FY28 Program

- Design consultant's cost must be at least $150,000 and the above the line construction phase must be at least $500,000
- Construction contingency increased to 40%
- Crash data to be used is July 1, 2018 to June 30, 2023
- Arizona Tribal Safety Infrastructure Program (ATSIP) has been added

FY27 HSIP Funding Breakout



FY28 HSIP Funding Breakout



Key Dates for FY27/FY28 Program

December 14, 2023: Pre-call-for Projects

January 4, 2024: Call-for Projects Announced

January 18, 2024: HSIP Webinar (1:00 - 2:30)

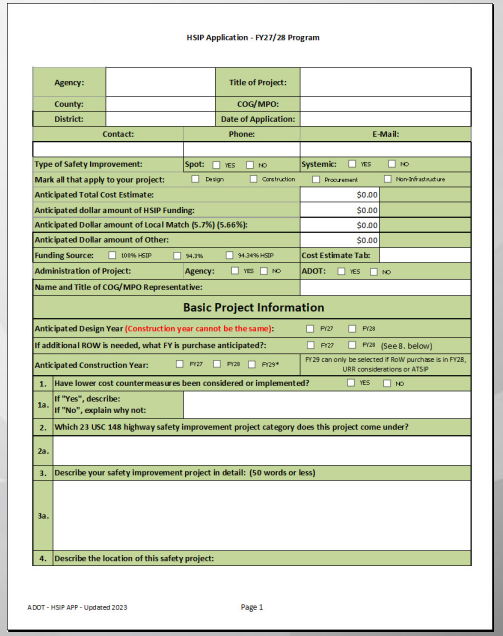
May 3, 2024: Last day to submit applications

May 31, 2024: Initial ranking of applications

June 11, 2024: List of applications submitted for PRB approval

July 19, 2024: State Transportation Board approves “Initial Project List”

August 19, 2024: Project Sponsor submits scoping initiation paperwork



HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	
Contact:	Phone:	E-Mail:	
Type of Safety Improvement:	Spot: ☐ YES ☐ NO	Systemic: ☐ YES ☐ NO	
Mark all that apply to your project:	☐ Design ☐ Construction ☐ Procurement ☐ Non-Infrastructure		
Anticipated Total Cost Estimate:		$0.00	
Anticipated dollar amount of HSIP Funding:		$0.00	
Anticipated Dollar amount of Local Match (5.7%) (5.66%):		$0.00	
Anticipated Dollar amount of Other:		$0.00	
Funding Source: ☐ 100% HSIP ☐ 94.3% ☐ 94.34% HSIP		Cost Estimate Tab:	
Administration of Project:	Agency: ☐ YES ☐ NO	ADOT: ☐ YES ☐ NO	
Name and Title of COG/MPO Representative:			

Basic Project Information

Anticipated Design Year (Construction year cannot be the same):	☐ FY27 ☐ FY28	
If additional ROW is needed, what FY is purchase anticipated?:	☐ FY27 ☐ FY28 (See 8. below)	
Anticipated Construction Year: ☐ FY27 ☐ FY28 ☐ FY29*	FY29 can only be selected if ROW purchase is in FY28, URR considerations or ATSIP	
1. Have lower cost countermeasures been considered or implemented?	☐ YES ☐ NO	
1a. If "Yes", describe: If "No", explain why not:		
2. Which 23 USC 148 highway safety improvement project category does this project come under?		
2a.		
3. Describe your safety improvement project in detail: (50 words or less)		
3a.		
4. Describe the location of this safety project:		

ADOT - HSIP APP - Updated 2023 Page 1

Key Dates for FY27/FY28 Program

October 18, 2024: PMG starts the scoping process

December 18, 2024: Scoping complete

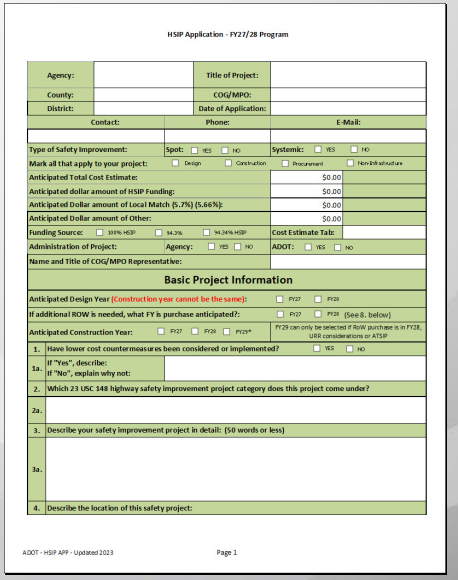
January 17, 2025: ADOT final review of applications

February 16, 2025: Applicant submits final application & project list is finalized

March 18, 2025: List of projects submitted to PRB

April 2, 2025: List of projects submitted to PPAC

April 18, 2025: State Transportation Board approves "Final Project List"



HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	

Contact:	Phone:	E-Mail:

Type of Safety Improvement:	Spot: ☐ YES ☐ NO	Systemic: ☐ YES ☐ NO	
Mark all that apply to your project:	☐ Design ☐ Construction	☐ Procurement ☐ Non-Infrastructure	
Anticipated Total Cost Estimate:		$0.00	
Anticipated dollar amount of HSIP Funding:		$0.00	
Anticipated Dollar amount of Local Match (5.7%) (5.66%):		$0.00	
Anticipated Dollar amount of Other:		$0.00	
Funding Source:	☐ 100% HSIP ☐ 94.3% ☐ 94.34% HSIP	Cost Estimate Tab:	
Administration of Project:	Agency: ☐ YES ☐ NO	ADOT: ☐ YES ☐ NO	
Name and Title of COG/MPO Representative:			

Basic Project Information

Anticipated Design Year (Construction year cannot be the same):	☐ FY27 ☐ FY28	
If additional ROW is needed, what FY is purchase anticipated?:	☐ FY27 ☐ FY28 (See 8. below)	
Anticipated Construction Year:	☐ FY27 ☐ FY28 ☐ FY29*	FY29 can only be selected if ROW purchase is in FY28. URR considerations or ATSIP
1. Have lower cost countermeasures been considered or implemented?	☐ YES ☐ NO	
1a. If "Yes", describe: If "No", explain why not:		
2. Which 23 USC 148 highway safety improvement project category does this project come under?		
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3. Describe your safety improvement project in detail: (50 words or less)		
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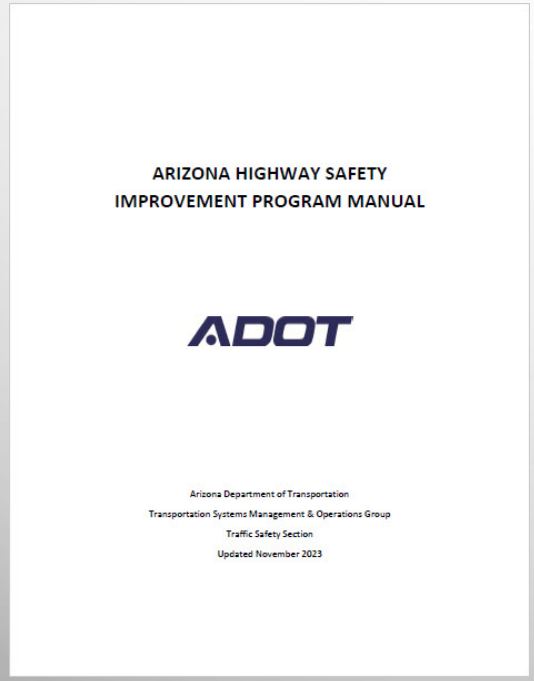
ADOT - HSIP APP - Updated 2023 Page 1

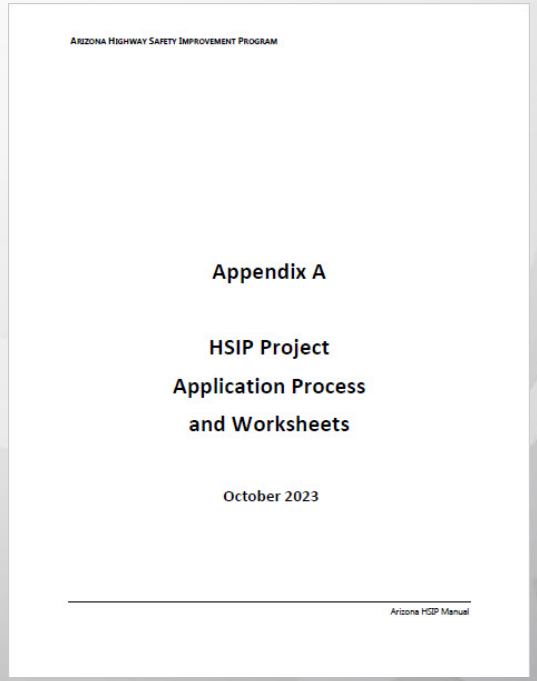
2023 HSIP Application Process



ARIZONA HIGHWAY SAFETY
IMPROVEMENT PROGRAM MANUAL

ADOT

Arizona Department of Transportation
Transportation Systems Management & Operations Group
Traffic Safety Section
Updated November 2023



ARIZONA HIGHWAY SAFETY IMPROVEMENT PROGRAM

Appendix A

HSIP Project
Application Process
and Worksheets

October 2023

Arizona HSIP Manual

HSIP Governance

The HSIP is legislated under Section 148 of Title 23, *United States Code* (23 U.S.C. 148) and regulated under Part 924 of Title 23, Code of Federal Regulations (23 CFR Part 924). The HSIP consists of three main components, the Strategic Highway Safety Plan (SHSP), State HSIP or program of highway safety improvement projects and the Railway-Highway Crossing Program (RHCP).

Ranking Criteria

- Overall list based on the B/C ratio of each project
- Systemic projects limited to 20% of available HSIP funding by SFY

Statutory Special Rules Funding Requirements

- Vulnerable Road Users (VRU): Per 23 U.S.C. 148(g)(3), States must dedicate 15% of HSIP funding to safety projects that address VRUs if a State's number of VRU traffic fatalities is equal to or greater than 15% of the total State fatalities in a single year.

- High Risk Rural Roads (HRRR): Per23 U.S.C. USC 148(a)(1) HRRRs are defined as "any roadway functionally classified as a rural major or minor collector or a rural local road with significant safety risks, as defined by a State in accordance with an updated State strategic highway safety plan" and applies if "the fatality rate on rural roads in a State increases over the most recent 2-year period for which data are available."

Lessons Learned - Application Process

Cost Estimates not thoroughly thought thru: Lump Sum submittals resulted in line items being left out; thus, underestimated construction costs

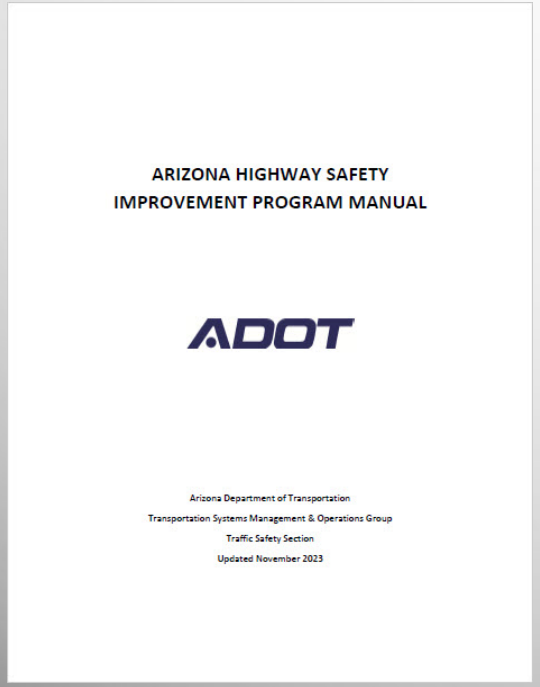
Not enough attention to Crash Modification Factor Specifics: Crash Type, Area Type, Crash Severity, etc. resulting in application having to be revised

Supporting structure not verified: Supporting structure cannot support countermeasure; thus, project has to be cancelled or reduced in scope or local agency has to fund to upgrade supporting structure.

Assumptions that RoW could be obtained in the same FY as design: Project should span a 3 year design/construction request; thus, project is subject to construction having to be move to out-year

Assumptions that RoW was adequate: Not enough space between sidewalk and edge of RoW; therefore, local agency had to fund purchase

ADOT HSIP Manual


ARIZONA HIGHWAY SAFETY
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ADOT

Arizona Department of Transportation
Transportation Systems Management & Operations Group
Traffic Safety Section
Updated November 2023

Appendix A – Project Application Process and Worksheets

Appendix B – Project Service Life

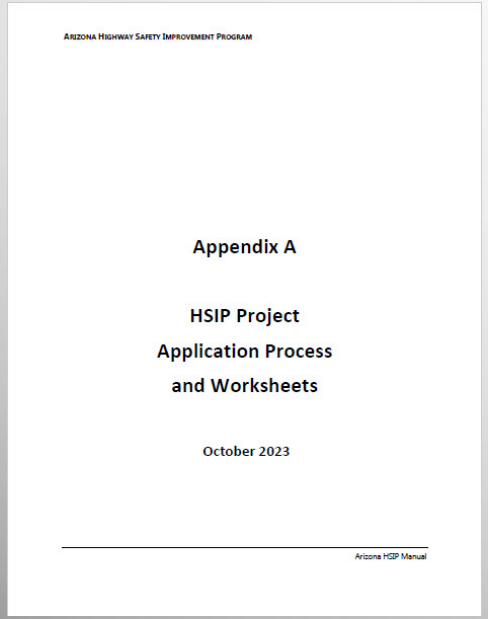
Appendix C – Acquisition of Construction and Highway Safety Equipment

Appendix D – Non-Infrastructure Project Guidance (Under Development)

Appendix E - FHWA Project Naming and Map Convention

HSIP Essentials

Appendix A



ARIZONA HIGHWAY SAFETY IMPROVEMENT PROGRAM

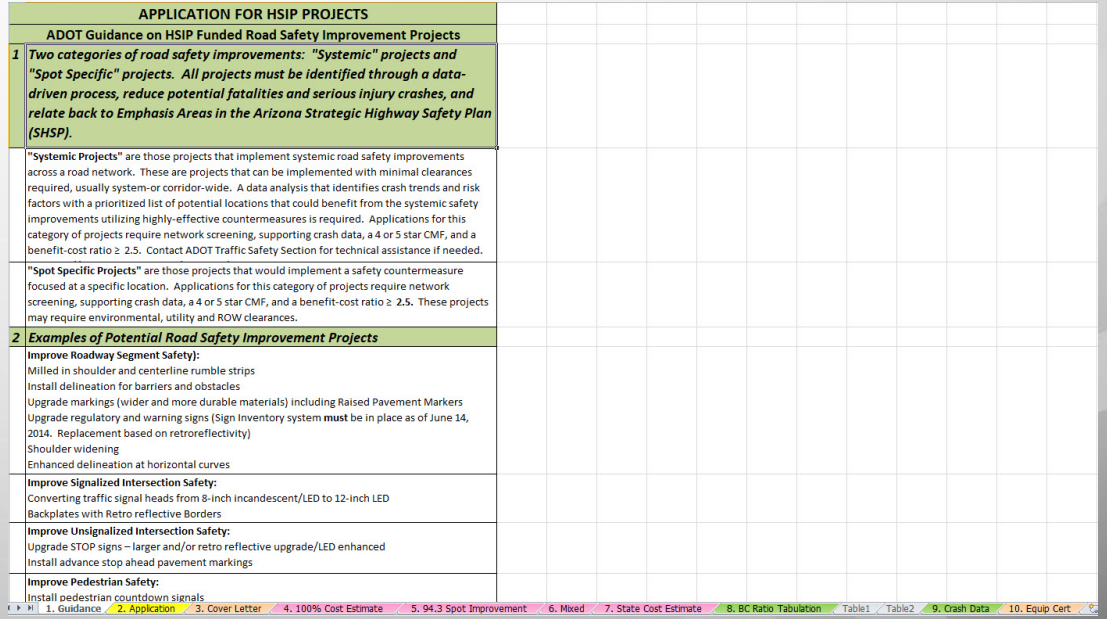
Appendix A

HSIP Project
Application Process
and Worksheets

October 2023

Arizona HSIP Manual

HSIP Excel Workbook – 10 Tabs



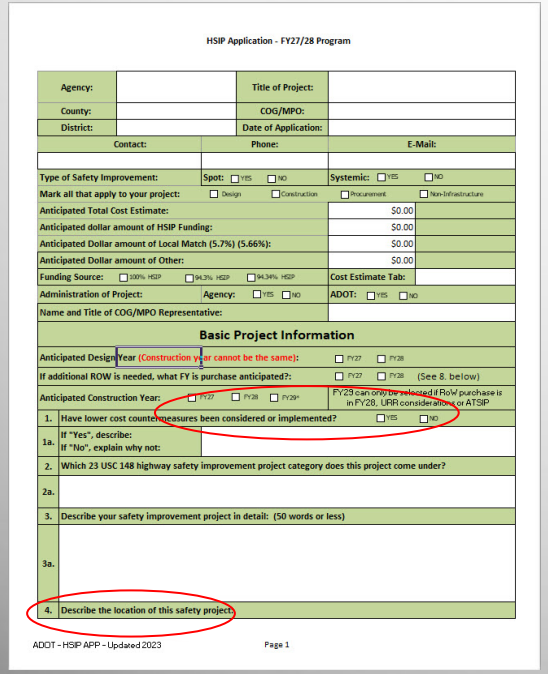
	APPLICATION FOR HSIP PROJECTS
	ADOT Guidance on HSIP Funded Road Safety Improvement Projects
1	***Two categories of road safety improvements: "Systemic" projects and "Spot Specific" projects. All projects must be identified through a data-driven process, reduce potential fatalities and serious injury crashes, and relate back to Emphasis Areas in the Arizona Strategic Highway Safety Plan (SHSP).***
	"Systemic Projects" are those projects that implement systemic road safety improvements across a road network. These are projects that can be implemented with minimal clearances required, usually system-or corridor-wide. A data analysis that identifies crash trends and risk factors with a prioritized list of potential locations that could benefit from the systemic safety improvements utilizing highly-effective countermeasures is required. Applications for this category of projects require network screening, supporting crash data, a 4 or 5 star CMF, and a benefit-cost ratio ≥ 2.5. Contact ADOT Traffic Safety Section for technical assistance if needed.
	"Spot Specific Projects" are those projects that would implement a safety countermeasure focused at a specific location. Applications for this category of projects require network screening, supporting crash data, a 4 or 5 star CMF, and a benefit-cost ratio ≥ **2.5.** These projects may require environmental, utility and ROW clearances.
2	***Examples of Potential Road Safety Improvement Projects***
	Improve Roadway Segment Safety): Milled in shoulder and centerline rumble strips Install delineation for barriers and obstacles Upgrade markings (wider and more durable materials) including Raised Pavement Markers Upgrade regulatory and warning signs (Sign Inventory system **must** be in place as of June 14, 2014. Replacement based on retroreflectivity) Shoulder widening Enhanced delineation at horizontal curves
	Improve Signalized Intersection Safety: Converting traffic signal heads from 8-inch incandescent/LED to 12-inch LED Backplates with Retro reflective Borders
	Improve Unsignalized Intersection Safety: Upgrade STOP signs – larger and/or retro reflective upgrade/LED enhanced Install advance stop ahead pavement markings
	Improve Pedestrian Safety: Install pedestrian countdown signals

1. Guidance | 2. Application | 3. Cover Letter | 4. 100% Cost Estimate | 5. 94.3 Spot Improvement | 6. Mixed | 7. State Cost Estimate | 8. BC Ratio Tabulation | Table1 | Table2 | 9. Crash Data | 10. Equip Cert

Documentation Required for HSIP Application (Appendix A)

1. Transmittal/Cover Letter (Tab 3)
2. HSIP Application (Tab 2)
3. Cost Estimate (Tab 4 – 7)
4. B/C Ratio Analysis (Tab 8)
5. State Location Map
6. Work Limits Map
7. Copy of Warrant (If required)

HSIP Application (Tab 2)



HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	

Contact:	Phone:	E-Mail:

Type of Safety Improvement:	Spot: ☐ YES ☐ NO	Systemic: ☐ YES ☐ NO
Mark all that apply to your project:	☐ Design ☐ Construction	☐ Procurement ☐ Non-Infrastructure
Anticipated Total Cost Estimate:	$0.00	
Anticipated dollar amount of HSIP Funding:	$0.00	
Anticipated Dollar amount of Local Match (5.7%) (5.66%):	$0.00	
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Funding Source: ☐ 100% HSIP ☐ 94.3% HSIP ☐ 94.34% HSIP	Cost Estimate Tab:	
Administration of Project:	Agency: ☐ YES ☐ NO	ADOT: ☐ YES ☐ NO
Name and Title of COG/MPO Representative:		

Basic Project Information

Anticipated Design Year (Construction year cannot be the same):	☐ FY27 ☐ FY28	
If additional ROW is needed, what FY is purchase anticipated?:	☐ FY27 ☐ FY28 (See 8. below)	
Anticipated Construction Year:	☐ FY27 ☐ FY28 ☐ FY29+	FY29 can only be selected if RoW purchase is in FY28. URR consideration or ATSIP
1. Have lower cost countermeasures been considered or implemented?	☐ YES ☐ NO	
1a. If "Yes", describe: If "No", explain why not:		
2. Which 23 USC 148 highway safety improvement project category does this project come under?		
2a.		
3. Describe your safety improvement project in detail: (50 words or less)		
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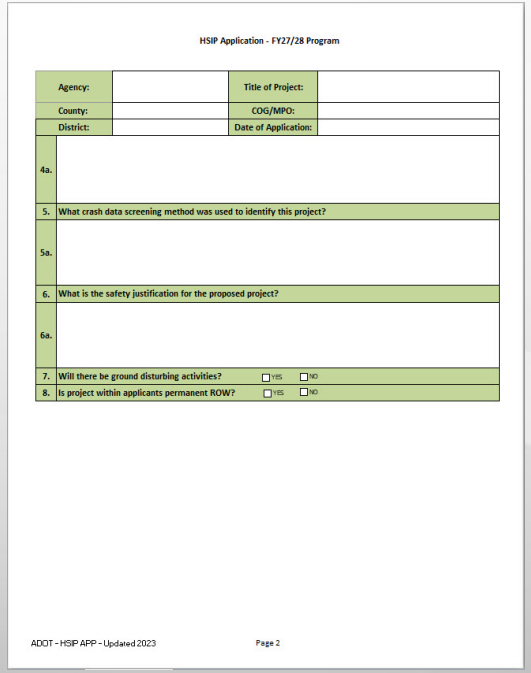
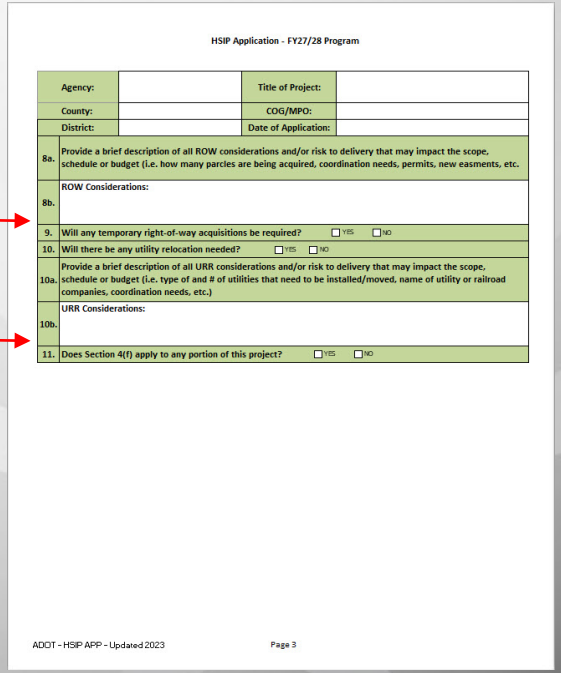
4. Describe the location of this safety project:		



HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	

4a.	
5. What crash data screening method was used to identify this project?	
5a.	
6. What is the safety justification for the proposed project?	
6a.	
7. Will there be ground disturbing activities?	☐ YES ☐ NO
8. Is project within applicants permanent ROW?	☐ YES ☐ NO

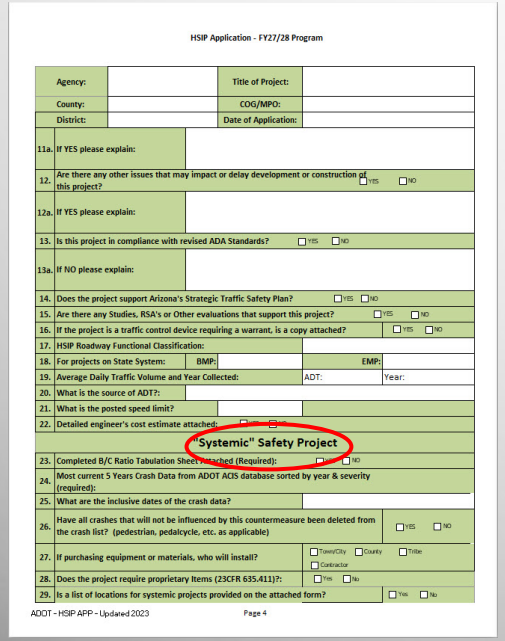


HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	

8a.	Provide a brief description of all ROW considerations and/or risk to delivery that may impact the scope, schedule or budget (i.e. how many parcles are being acquired, coordination needs, permits, new easments, etc.
8b.	ROW Considerations:
9.	Will any temporary right-of-way acquisitions be required? ☐ YES ☐ NO
10.	Will there be any utility relocation needed? ☐ YES ☐ NO
10a.	Provide a brief description of all URR considerations and/or risk to delivery that may impact the scope, schedule or budget (i.e. type of and # of utilities that need to be installed/moved, name of utility or railroad companies, coordination needs, etc.)
10b.	URR Considerations:
11.	Does Section 4(f) apply to any portion of this project? ☐ YES ☐ NO

HSIP Application (Tab 2) (Cont.)



HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	

11a.	If YES please explain:	
12.	Are there any other issues that may impact or delay development or construction of this project?	☐ YES ☐ NO
12a.	If YES please explain:	
13.	Is this project in compliance with revised ADA Standards?	☐ YES ☐ NO
13a.	If NO please explain:	
14.	Does the project support Arizona's Strategic Traffic Safety Plan?	☐ YES ☐ NO
15.	Are there any Studies, RSA's or Other evaluations that support this project?	☐ YES ☐ NO
16.	If the project is a traffic control device requiring a warrant, is a copy attached?	☐ YES ☐ NO
17.	HSIP Roadway Functional Classification:	
18.	For projects on State System: BMP:	EMP:
19.	Average Daily Traffic Volume and Year Collected:	ADT: Year:
20.	What is the source of ADT?:	
21.	What is the posted speed limit?	
22.	Detailed engineer's cost estimate attached:	☐ YES ☐ NO

"Systemic" Safety Project

23.	Completed B/C Ratio Tabulation Sheet Attached (Required):	☐ YES ☐ NO
24.	Most current 5 Years Crash Data from ADOT ACIS database sorted by year & severity (required):	
25.	What are the inclusive dates of the crash data?	
26.	Have all crashes that will not be influenced by this countermeasure been deleted from the crash list? (pedestrian, pedalcycle, etc. as applicable)	☐ YES ☐ NO
27.	If purchasing equipment or materials, who will install?	☐ Town/City ☐ County ☐ Tribe ☐ Contractor
28.	Does the project require proprietary Items (23CFR 635.411)?:	☐ Yes ☐ No
29.	Is a list of locations for systemic projects provided on the attached form?	☐ Yes ☐ No

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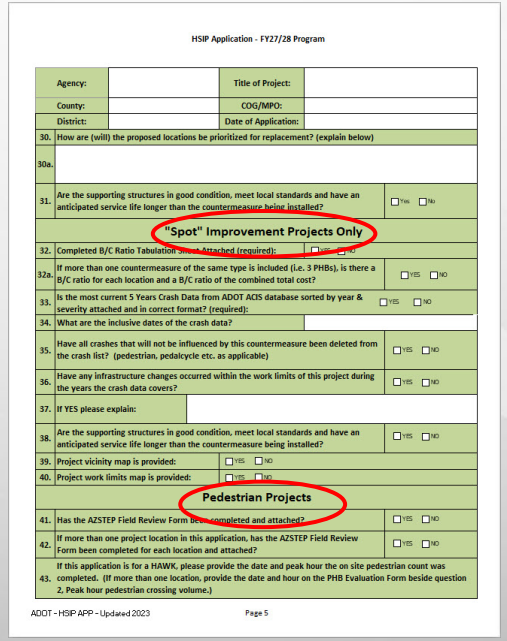

HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	

30.	How are (will) the proposed locations be prioritized for replacement? (explain below)	
30a.		
31.	Are the supporting structures in good condition, meet local standards and have an anticipated service life longer than the countermeasure being installed?	☐ Yes ☐ No

"Spot" Improvement Projects Only

32.	Completed B/C Ratio Tabulation Sheet Attached (required):	☐ YES ☐ NO
32a.	If more than one countermeasure of the same type is included (i.e. 3 PHBs), is there a B/C ratio for each location and a B/C ratio of the combined total cost?	☐ YES ☐ NO
33.	Is the most current 5 Years Crash Data from ADOT ACIS database sorted by year & severity attached and in correct format? (required):	☐ YES ☐ NO
34.	What are the inclusive dates of the crash data?	
35.	Have all crashes that will not be influenced by this countermeasure been deleted from the crash list? (pedestrian, pedalcycle etc. as applicable)	☐ YES ☐ NO
36.	Have any infrastructure changes occurred within the work limits of this project during the years the crash data covers?	☐ YES ☐ NO
37.	If YES please explain:	
38.	Are the supporting structures in good condition, meet local standards and have an anticipated service life longer than the countermeasure being installed?	☐ YES ☐ NO
39.	Project vicinity map is provided:	☐ YES ☐ NO
40.	Project work limits map is provided:	☐ YES ☐ NO

Pedestrian Projects

41.	Has the AZSTEP Field Review Form been completed and attached?	☐ YES ☐ NO
42.	If more than one project location in this application, has the AZSTEP Field Review Form been completed for each location and attached?	☐ YES ☐ NO
43.	If this application is for a HAWK, please provide the date and peak hour the on site pedestrian count was completed. (If more than one location, provide the date and hour on the PHB Evaluation Form beside question 2, Peak hour pedestrian crossing volume.)	

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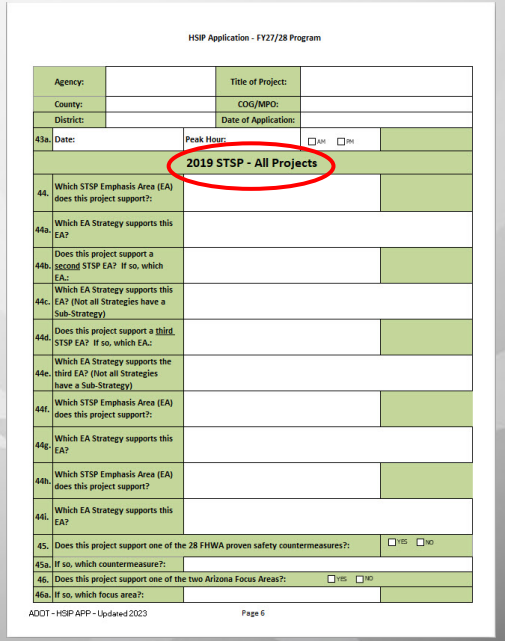

HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	

43a.	Date:	Peak Hour:	☐ AM ☐ PM

2019 STSP - All Projects

44.	Which STSP Emphasis Area (EA) does this project support?:	
44a.	Which EA Strategy supports this EA?	
44b.	Does this project support a second STSP EA? If so, which EA.:	
44c.	Which EA Strategy supports this EA? (Not all Strategies have a Sub-Strategy)	
44d.	Does this project support a third STSP EA? If so, which EA.:	
44e.	Which EA Strategy supports the third EA? (Not all Strategies have a Sub-Strategy)	
44f.	Which STSP Emphasis Area (EA) does this project support?:	
44g.	Which EA Strategy supports this EA?	
44h.	Which STSP Emphasis Area (EA) does this project support?	
44i.	Which EA Strategy supports this EA?	
45.	Does this project support one of the 28 FHWA proven safety countermeasures?:	☐ YES ☐ NO
45a.	If so, which countermeasure?:	
46.	Does this project support one of the two Arizona Focus Areas?:	☐ YES ☐ NO
46a.	If so, which focus area?:	

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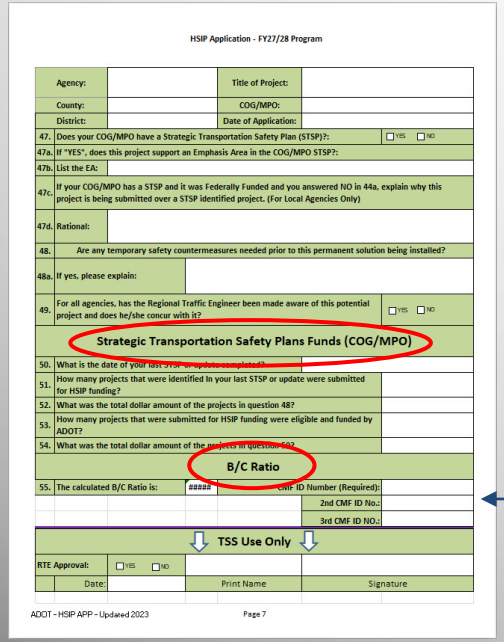
HSIP Application (Tab 2) (Cont.)



HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	

47.	Does your COG/MPO have a Strategic Transportation Safety Plan (STSP)?:	☐ YES ☐ NO
47a.	If "YES", does this project support an Emphasis Area in the COG/MPO STSP?:	
47b.	List the EA:	
47c.	If your COG/MPO has a STSP and it was Federally Funded and you answered NO in 44a, explain why this project is being submitted over a STSP identified project. (For Local Agencies Only)	
47d.	Rational:	
48.	Are any temporary safety countermeasures needed prior to this permanent solution being installed?	
48a.	If yes, please explain:	
49.	For all agencies, has the Regional Traffic Engineer been made aware of this potential project and does he/she concur with it?	☐ YES ☐ NO

Strategic Transportation Safety Plans Funds (COG/MPO)

50.	What is the date of your last STSP or update completed?	
51.	How many projects that were identified in your last STSP or update were submitted for HSIP funding?	
52.	What was the total dollar amount of the projects in question 48?	
53.	How many projects that were submitted for HSIP funding were eligible and funded by ADOT?	
54.	What was the total dollar amount of the projects in question 52?	

B/C Ratio

55.	The calculated B/C Ratio is:	#####	CMF ID Number (Required):
			2nd CMF ID No.:
			3rd CMF ID NO.:

TSS Use Only

RTE Approval:	☐ YES ☐ NO		
Date:		Print Name	Signature

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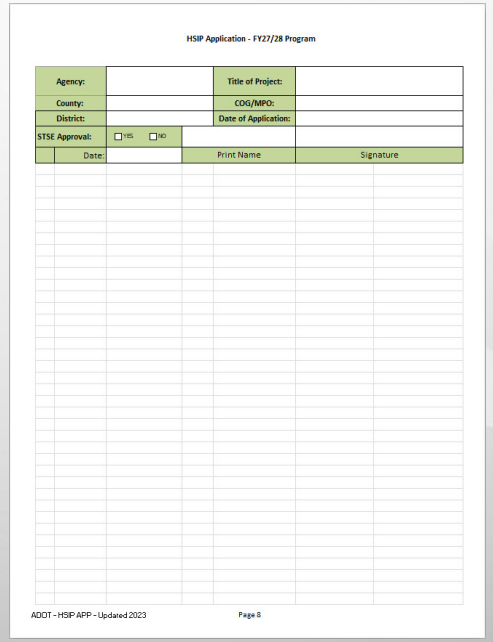

HSIP Application - FY27/28 Program

Agency:		Title of Project:	
County:		COG/MPO:	
District:		Date of Application:	
STSE Approval:	☐ YES ☐ NO		
Date:		Print Name	Signature

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CMF vs CRF

A crash modification factor (CMF) is a multiplicative factor used to compute the expected number of crashes after implementing a given countermeasure at a specific site.

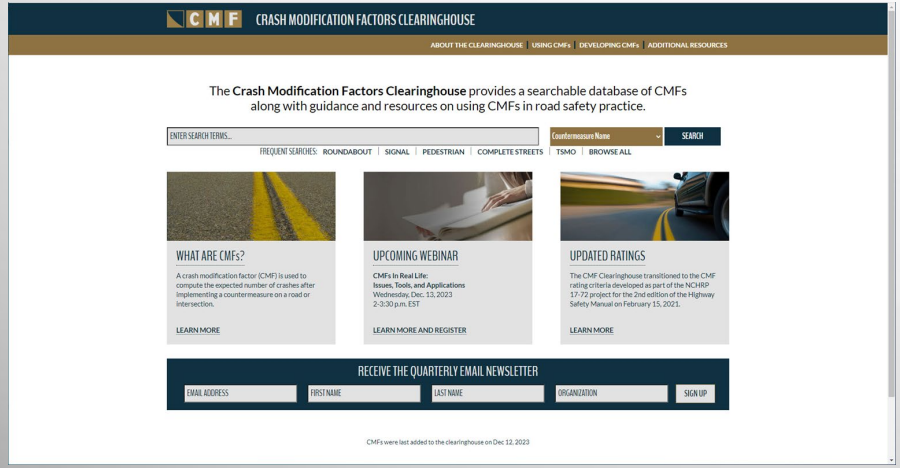
A crash reduction factor (CRF) is the percentage crash reduction that might be expected after implementing a given countermeasure at a specific site.

So, what do I use in my Benefit to Cost (B/C) ratio analysis?

CRF

Where Do I Find CRFs?

FHWA Crash Modification Clearing House



Compare	CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
☐	0.752	24.8	★★★★★	All	All		CHOI ET AL., 2015	[READ MORE]
☐	0.73	27	★★★★★	Run off road	All	Rural	TORBIC ET AL., 2009	[READ MORE]

http://www.cmfclearinghouse.org/

Required for all HSIP Applications

Agency:	0	Title of Project:	

Benefit / Cost Ratio Tabulation

Annual Benefit Tabulation

Severity	Annual Average	Estimated CRF* Reduction	Total Reduction	Unit Cost	Annual Benefit
Fatal	0.00	0%	0.00	$9,515,371	$0
Incapacitating Injury	0.00	0%	0.00	$550,499	$0
				Total Annual Benefits	$0

Costs

Total Project Cost	$0
Project Life (years)	10
Interest Rate (%)	8%
Capital Recovery Factor	0.1490
Annual Construction Cost	$0
Annual Maintenance Cost	$0.00
Total Annual Costs	$0

Benefit / Cost

Annual Benefit	Annual cost	Benefit / Cost Ratio
$0	$0	#DIV/0!

*REQUIRED: Use 4 and 5 star CMFs from FHWA CMF Clearing House should be used if listed. The CMF's CRF is used in the above calculation

5 Year Average, July 1, 2018 - June 30, 2023

CRF, Not CMF

From Cost Estimate Tab

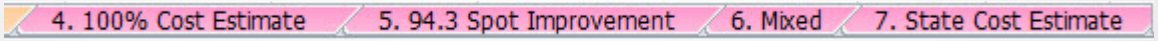
From Appendix B, HSIP Manual

Best estimate

≥ 2.5

Note: One required for each countermeasure in an application. Plus the overall B-C ratio.

Cost Estimate



The ADOT Project Resource Webpage is located at:
https://adotnet.az.gov/our-agency/intermodal-transportation/project-resource-officepro

The ADOT Project Estimating tool (E2C2) web address is:
https://apps.azdot.gov/websignon/logon.asp

94.3% Cost Estimate

Agency:	0	Name of Project:			Agencies use this form if "Other" funds are involved				
HSIP Project Cost Estimate Worksheet									
Project Cost Estimate:	Description:	Quantity:	Unit Cost:	Total Cost	HSIP Eligible:	HSIP:	State Match:	Other Amt:	TOTAL COST
						94.30%	5.70%	0.00%	
Scoping	ADOT Consultant	1	$ 40,000.00	$ 40,000.00	$ 40,000.00	$ 37,720.00	$ 2,280.00	$ -	$ 40,000.00
Scoping Total			$ 40,000.00	$ 40,000.00	$ 40,000.00	$ 37,720.00	$ 2,280.00		$ 40,000.00
Preliminary Engineerin	Consultant	1	$ 150,000.00	$ 150,000.00	$ 150,000.00	$ 141,450.00	$ 8,550.00	$ -	$ 150,000.00
Non-Infastructure (NI) Elements:		0	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Right of Way		0	$ -	$ -	$ -	$ -	$ -	$ -	
ADOT Admin Costs:		1	$ 40,000.00	$ 40,000.00	$ 40,000.00	$ 37,720.00	$ 2,280.00	$ -	$ -
Design Sub-Total				**$ 190,000.00**	**$ 190,000.00**	**$ 179,170.00**	**$ 10,830.00**	**$ -**	**$ 190,000.00**
Inflation Factor	FY25 - 27	9.26%		$ 17,594.00	$ 17,594.00	$ 16,591.14	$ 1,002.86	$ -	$ 17,594.00
Total Design Cost				**$ 207,594.00**	**$ 207,594.00**	**$ 195,761.14**	**$ 11,832.86**	**$ -**	**$ 207,594.00**
Construction:	Minimum	1		$ 500,000.00	$ 500,000.00	$ 471,500.00	$ 28,500.00	$ -	$ 500,000.00
Construction:		0							
Construction:		0			$ -	$ -	$ -	$ -	$ -
Traffic Control:		0			$ -	$ -	$ -	$ -	$ -
Mobilization:		0			$ -	$ -	$ -	$ -	$ -
Sub-Total		0		$ 500,000.00	$ 500,000.00	$ 471,500.00	$ 28,500.00	$ -	$ 500,000.00
Sales Tax:	(if applicable)	0.00%		$ -	$ -	$ -	$ -	$ -	$ -
Sub-Total				**$ 500,000.00**	**$ 500,000.00**	**$ 471,500.00**	**$ 28,500.00**	**$ -**	**$ 500,000.00**
Construction Admin :		14.00%		$ 70,000.00	$ 70,000.00	$ 66,010.00	$ 3,990.00	$ -	$ 70,000.00
Contingencies :		40.00%		$ 200,000.00	$ 200,000.00	$ 188,600.00	$ 11,400.00	$ -	$ 200,000.00
Post Design:		1.00%		$ 5,000.00	$ 5,000.00	$ 4,715.00	$ 285.00	$ -	$ 5,000.00
Communications:		5.00%		$ 25,000.00	$ 25,000.00	$ 23,575.00	$ 1,425.00	$ -	$ 25,000.00
					$ -	$ -	$ -	$ -	$ -
					$ -	$ -	$ -	$ -	$ -
					$ -	$ -	$ -	$ -	$ -
					$ -	$ -	$ -	$ -	$ -
					$ -	$ -	$ -	$ -	$ -
Post Sub-Total				**$ 300,000.00**	**$ 300,000.00**	**$ 282,900.00**	**$ 17,100.00**	**$ -**	**$ 300,000.00**
Construction Sub-Total				**$ 800,000.00**	**$ 800,000.00**	**$ 754,400.00**	**$ 45,600.00**	**$ -**	**$ 800,000.00**
Inflation Factor	FY25 - 28	12.32%		$ 98,560.00	$ 98,560.00	$ 92,942.08	$ 5,617.92	$ -	$ 98,560.00
Construction Total				**$ 898,560.00**	**$ 898,560.00**	**$ 847,342.08**	**$ 51,217.92**	**$ -**	**$ 898,560.00**
TOTAL REQUEST				**$1,146,154.00**	**$1,146,154.00**	**$ 1,080,823.22**	**$ 65,330.78**	**$ -**	**$ 1,146,154.00**
Comments:									

ADOT Consultant to Scope your application

Minimum Design Consultant Fee

Inflation Factor

Minimum Scoping & Design Estimate

Minimum Construction Estimate

Required Contingency

Inflation Factor

Minimum Total Construction Estimate

Minimum Total Project Estimate

Key Dates

- May 3, 2024 - Last day to submit application
- August 19, 2024 - Scoping initiation paperwork due
- February 16, 2025 - Last day to submit scoped application
- July 1, 2026 - Last day to submit project initiation packet

Link for HSIP Manual & Application

https://azdot.gov/business/transportation-systems-management-and-operations/operational-traffic-safety/arizona-highway

Thank You!

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