



**COLORADO**

Department of  
Transportation



# **FASTER Safety Mitigation Program**

Division of Transportation Development

Division of Transportation System Management and Operations

4/16/14



## FASTER Safety Legislation

Started in FY 2010 after passage of FASTER legislation.

*"...Construction, reconstruction or maintenance project that the Commission determines is needed to enhance safety of a state highway". SB 09-108*



## FASTER Safety Audit Report

- Recent Audit report found that:
  - CDOT is in compliance with legislative requirements
- Audit Recommendations:
  - Need metrics to measure/report safety improvements
  - Need consistency in project selection process
  - Need timely reports on funds and expenditures



## FASTER Safety Mitigation Program Goals

### FASTER Safety Mitigation

- Reduce Total Highway Crashes
- Reduce Severity of highway crashes (fatality and injury)



## Process Steps

1. Analyze Crash Data - identify locations for mitigation; develop Statewide "list"
2. Fund Allocation - data based method for assignment of funds
3. Candidate Projects - Region develops mitigation projects based on Statewide list and local knowledge
4. Project Selection - use statewide criteria to select projects
5. Implementation - Region implements projects
6. Monitoring/Reporting - Statewide evaluation and documentation of benefits achieved from projects





## Assumptions for all options

1. All options would address FASTER safety goals
2. Any allocation formula can be updated periodically (Plan/STIP cycle)
3. Need to plan for at least 2 years of projects, maybe more, at a time
4. Will have method to track and report results at statewide level
5. Statewide crash mitigation/location list provided
6. Use common criteria for selection of projects ( may have different weighting by area in some options)
7. Option needs to address both reactive and proactive projects



## Process Options

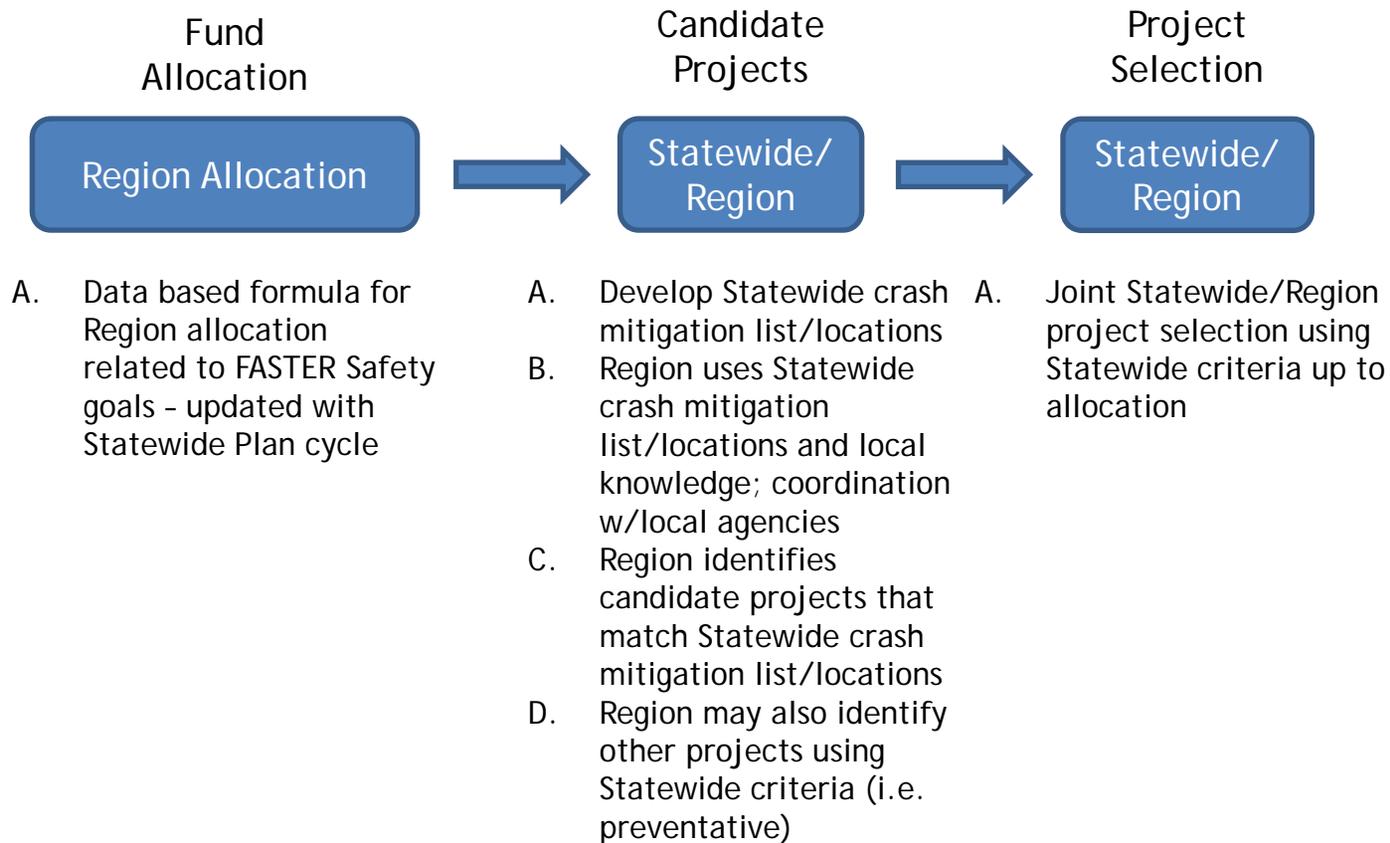
- **Analyze Crash Data** - Statewide crash data and identification of Statewide mitigation locations will be the same for all options.
- **Implementation** - at Region in all options
- **Evaluation** - Occurs in all options and data will be compiled at the statewide level.

Variations in *Fund Allocation, Candidate Projects, and Project Selection* steps.

- **Fund Allocation** - options for Region Allocation, Statewide pool with Region planning estimates, or Statewide pool only. All distribution methods would be data based.
  - **Candidate Projects** - options for using Statewide location list and other locations identified by the Region, or Statewide location list only
  - **Project Selection** - options for Region selection, Statewide/Region joint selection, or Statewide selection.
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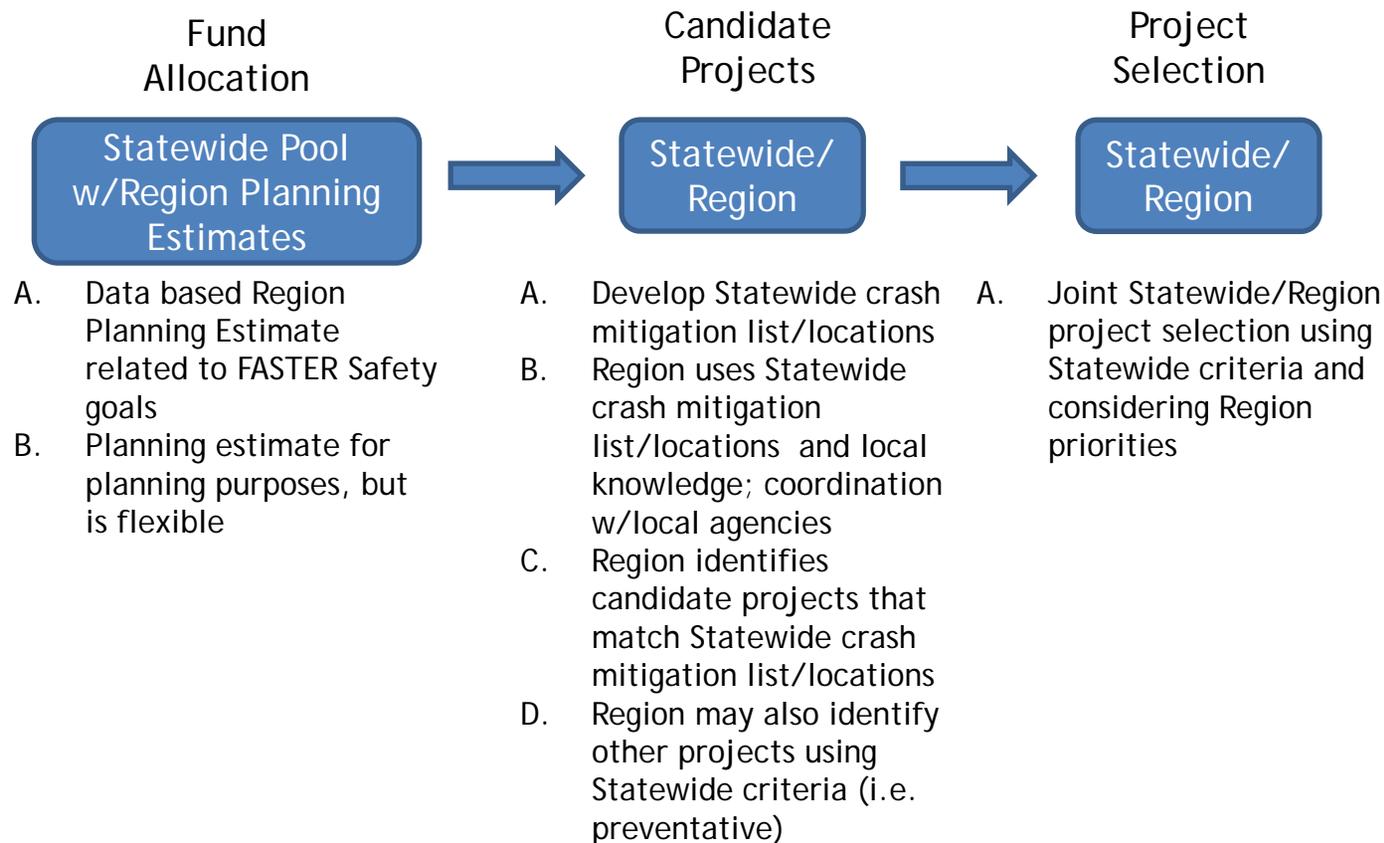


## Option 1 – Region Allocation



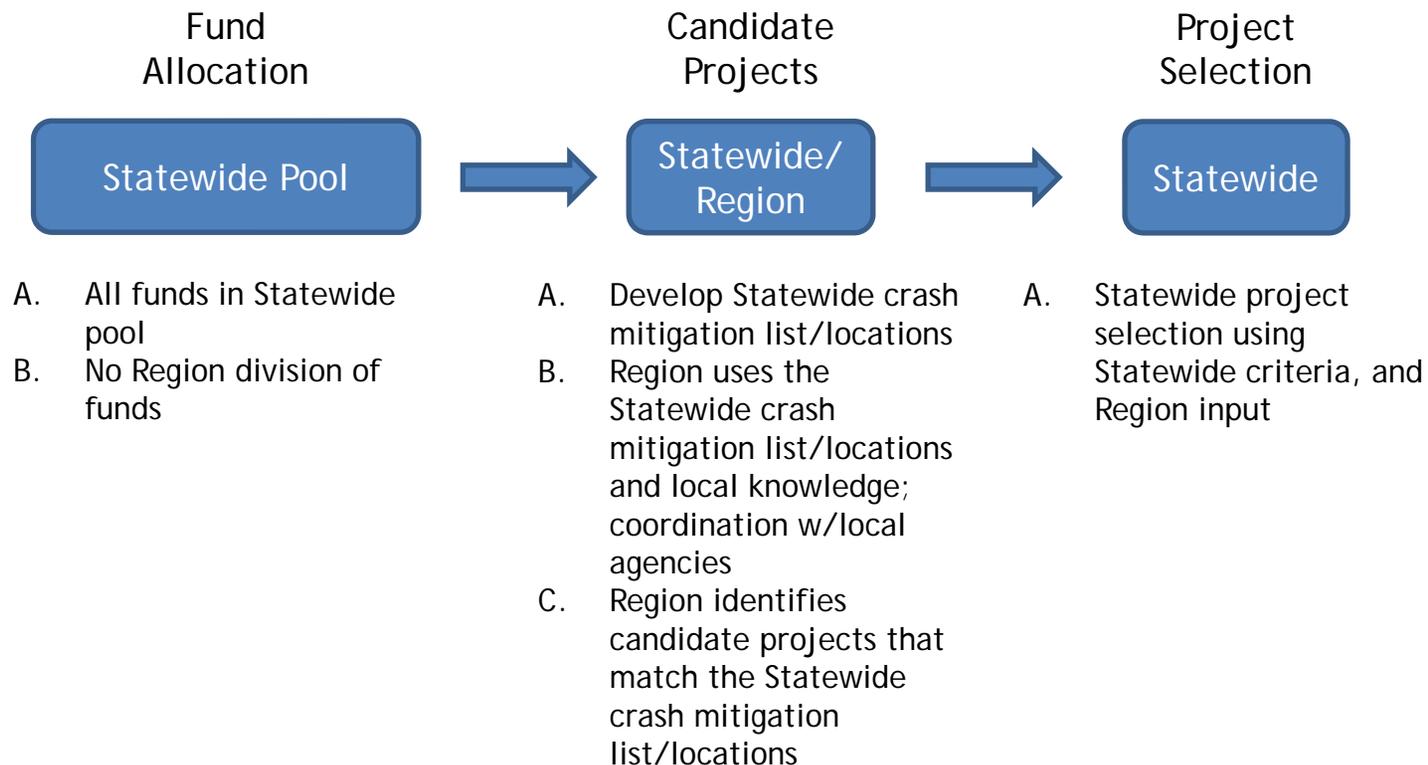


## Option 2 – Statewide Pool w/Region Planning Estimates





## Option 3 – Statewide Pool for Statewide Program





# Statewide FASTER Safety Mitigation Selection Criteria

All Region projects will be evaluated using these criteria:

- A. Reduce existing crashes
- B. Reduce existing crash severity
- C. Address existing system for safety weakness
- D. Encourage cooperative safety effort with local agency
- E. Enhance other highway safety features and/or functions
- F. Provide proven safety measures for a systematic/preventative location
- G. Improve pedestrian/bicycle safety
- H. Existing project (leveraging funding opportunities with proposed safety project)
- I. Benefit/Cost Analysis



# Allocation Options

	Option 1	Option 2	Option 3	Option 4 (Staff Recommendation)
	Total Crashes	Fatal + Injury Crashes	6/2/1 Fatal/ Injury/ PDO	National Safety Council Weighting
<b>Weighting</b>				
Fatal Crashes	-	-	6.0	14.100
Injury Crashes	-	-	2.0	0.789
Fatal + Injury Crashes	-	1.0	-	-
PDO Crashes	-	-	1.0	0.089
Total Crashes	1.0	-	-	-
<b>TOTAL</b>	<b>1.0</b>	<b>1.0</b>	<b>9.00</b>	<b>14.98</b>
<b>Formula %s</b>				
Region 1	52.2%	48.1%	38.0%	33.0%
Region 2	16.8%	16.8%	20.0%	21.3%
Region 3	9.9%	10.4%	12.9%	14.1%
Region 4	17.0%	19.5%	22.1%	23.6%
Region 5	4.1%	5.2%	7.0%	8.0%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Formula \$s</b>				
Region 1	\$24,986,978	\$23,026,504	\$18,208,114	\$15,803,360
Region 2	\$8,050,610	\$8,024,236	\$9,565,054	\$10,222,647
Region 3	\$4,747,182	\$5,003,786	\$6,195,081	\$6,750,737
Region 4	\$8,131,249	\$9,343,127	\$10,562,251	\$11,292,751
Region 5	\$1,983,981	\$2,502,347	\$3,369,500	\$3,830,505
<b>TOTAL</b>	<b>\$47,900,000</b>	<b>\$47,900,000</b>	<b>\$47,900,000</b>	<b>\$47,900,000</b>



# Discussion of Options