Statewide Transportation Improvements Program (STIP)

<TARGET><BILL></BILL><SUBJECT>Statewide Transportation Improvements Program (STIP)</SUBJECT><COMM></COMM></TARGET>

THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Transportation and Public Facilities

OFFICE OF THE COMMISSIONER
Marc Luiken, Commissioner

3132 Channel Drive
P.O. Box 112500
Juneau, Alaska 99811-2500
Main: 907.465.3900
dot.state.ak.us

February 12, 2017

The Honorable Bert Stedman
Alaska State Senate
Capitol Building Room 30
Juneau, Alaska 99801

Dear Senator Stedman:

Thank you for the opportunity to present information on Alaska's Statewide Transportation Improvements Program (STIP) during the February 8, 2018, meeting of the Senate Transportation Committee.

In response to your request for a status report on Alaska's designated highway safety corridors, please see the enclosed documents, a recently completed 2017 safety corridors audit and its addendum. You can also view additional information on the department's safety corridors website at http://dot.alaska.gov/stwdplng/hwysafety/safety_corridors.shtml.

If you or your committee members have further questions, please feel free to contact Mike Lesmann at (907)465-4772.

Sincerely,

Marc Luiken
Commissioner

Enclosure

Cc: Darwin Peterson, Legislative Director, Office of the Governor
Mike Lesmann, Legislative Liaison, DOT&PF

2017 SAFETY CORRIDORS AUDIT Addendum

STATE OF ALASKA

Department of Transportation and Public Facilities

Department of Public Safety

To: Marc Luiken, Commissioner, DOT&PF Date: **12/06/2017**

To: Walt Monegan, Commissioner, DPS

Reviewed: Dave Kemp P.E., Regional Director, DOT&PF
Reviewed: Colonel Hans Brinke, Director, DPS 12/11/17.

From: Safety Corridor Review Team
Tammy Kramer, Administrator, Alaska Highway Safety Office AHSO, DOT/PF HQ Juneau
Lt. Katherine Shuey, Bureau of Highway Patrol, AST HQ Division
Matt Walker, P.E., State Traffic & Safety Engineer, DOT/PF HQ Juneau
Scott Thomas, P.E., Central Region Traffic & Safety Engineer, DOT/PF

SUBJECT: Highway Safety Improvement Program (HSIP) Analysis
15 Years of Safety Corridors – "Towards Zero Deaths"[1]

A list of top ranked Safety Corridors and other candidate corridors are shown in Table 1. This addendum quantifies 82 serious crashes prevented within the four of these segments "designated" as Safety Corridors. (Table 2: Segments of the Seward Hwy, Parks Hwy, Sterling Hwy, and Knik-Goose Bay Road). Serious crashes were reviewed using data from the year 2000 forward. As much as 350 serious crashes are estimated to have been prevented along the entire highways with these segments over 15 years. For comparison, this amount of crashes saved on these four highways is as large as what is currently reported on all roads in Alaska in a single year.

2017 AUDIT: Serious Injury and Fatal crashes declined 46 % since Safety Corridors (Table 2, Graph 1)
Table 2, expanded from the 2017 Safety Corridors Audit, shows a 46 % decline in serious injury and fatal crashes since Safety Corridors were designated This same trendline is also broadly reflected in a chart showing the year 2000 forward (Chart 1). This chart includes years of safe driving efforts underway before Safety Corridors.

Background Numbers: Safety Corridor reductions (46 %) exceed Statewide reductions (30 %) (Graph 2)
Comparing to statewide trends (Graph 2) shows Safety Corridors reduced serious crash numbers at 46 % or 1.5 times more. Similar results are found looking at fatality numbers statewide.[2]

Similar Roads: Safety Corridor reductions (46 %) are twice that of undesignated corridors (23 %) (Graph 3)
Testing against similar undesignated corridors, Safety Corridors are shown to have a 23 percent reduction (Graph 3). Since Safety Corridors are twice this trend (Graphs 1 vs 3), this suggests increased efforts towards engineering, enforcement, and emergency medical services led to a doubling of results compared to general background trends.[3]

Entire Corridors – "Ghost Effect": Entire highways benefit from designating segments (Graphs 1-5)
Examining Graph 1 further, the four highways with designated Safety Corridor segments experienced a reduction over their full length similar to just the Safety Corridor Segments (Graph 1). This could be a carryover "ghost effect", extending changes in driver behavior to the whole road. To verify this effect, undesignated candidates, were reviewed, (Graph 3) and do not reflect a greater reduction than statewide crash trends. The Seward, Parks, Sterling, and Knik-Goose Bay roadways however, do perform much better than statewide trends (Graph 2).

In fact, undesignated candidate highways show increasing fatalities over the decade (Graph 4), while the highways with Safety Corridors do not (Graph 5). This illustrates the effect of greater targeted infrastructure spending on designated corridors.

Number of Crashes Prevented within Safety Corridors using Crash Rates: 82 less serious crashes (Table 2).
A 46 percent reduction in serious crashes translates to 82 serious crashes which did not occur. These crashes would have occurred under the previous crash rates occurring before Safety Corridor Designation. This also illustrates the effect of greater targeted infrastructure spending on designated corridors.

Towards Zero: 250 serious injuries and fatalities prevented in the past decade (Table 3)
At least 250 serious crashes did not occur on the full length highways with Safety Corridor segments in the past 15 years (Table 3). Estimates through 2017 are this downward trend leads to over 350 less serious crashes. This number is the same as if a year's worth of serious crashes statewide were eliminated. Thus a "zero year" has in effect been achieved - as if one year of serious crashes did not happen. While the disappointing fact is no actual year has reached zero serious or fatal crashes, the cumulative effect of Safety Corridors demonstrates having and desiring the vision of achieving zero serious crashes is feasible. This shows how significant reductions require perseverance over time by focusing on select areas and crash types.

Permanent Results: Current divided highway construction is a recognized method for permanent crash reductions.
Each ranked highway has efforts underway towards permanent changes as budgets allow. DOTPF has committed over 100 million dollars to date for major projects in the four designated Safety Corridors. Three of the corridors are being treated with managed access and divided highway construction. The cost of these major projects are easily shown to be beneficial in terms of targeting the most significant roadways and returning a significant amount of lives saved and injuries prevented. Studies have shown these divided highway concepts minimize conflicts and more permanently sustain similar levels of serious crash reduction compared to interim Safety Corridor treatments[4].

Attachments

Table 1 2016 Central Region Safety Corridor Candidates
Table 2 2017 Safety Corridors Serious Crash Numbers and Crash Rate Reductions
Table 3 Rural Fatal and Serious Injury Crashes for Four Highways with Safety Corridor Designations

Graph 1 Rural Fatal and Serious Injury Crashes for Four Highways with Safety Corridor Designations
Graph 2 Alaska Fatal and Serious Injury Crashes Statewide
Graph 3 Rural Fatal and Serious Injury Crashes for Undesignated Highways
Graph 4 Rural Fatal Crashes for Undesignated Highways
Graph 5 Rural Fatal Crashes for Highways with Safety Corridors

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[1] Alaska Strategic Highway Safety Plan (SHSP), 2013 DOT/PF

[2] Fatality trends can Including serious injury checks combined with fatality data provides a large enough dataset for testing serious crash trends. This combined data is not available nationally. However, Alaska

[3] Background reductions are due to the cumulative effect of many efforts, including safer vehicles, improved emergency response, enforcement of impaired driving, education and social tolerance changes, as well as permanent road improvements.

[4] HSIP Handbook 2014, Accident Cost Reduction Factors (303, 304, 305); www.CMFClearinghouse.org , Roadway Median, Access Management, Median Barriers; and The Handbook of Roadway Safety Measures, 2nd edition, Copyright 2009, p. 224 Median, Tables 1.11.7 and 1.11.8 (Effects of median on accidents)

CENTRAL REGION DOT/PF

HSIP Safety Corridor Candidates for Projects using Crash Cost Rankings (2008-2012)

High Severity Two-Lane, Two Way Crash Segments (per ATM 2B.17)

PARKS = Yellow = Existing Safety Corridor

GLENN = Design and/or Construction in progress

Table 1

Highway Safety Improvement Program (HSIP) Review

(Consider benefit/cost of capital project possibilities: rerouting, medians, traffic control devices, grade separation, etc.)

Sliding Spot using @sumifs Sorting Formula

1 Mile Window (+/- 0.5 mi)

Reformatted SET 11/28/17

										ATM 2B.17 SORT 1		ATM 2B.17 SORT 2			
Rank	CDS Route	From MiPt	Road Name	Description	To MiPt	Description	Length (mi)	Fatal Crashes	Serious Injury Crashes	KSI Crashes/ Mile	Wtd Midlife AADT	KSI Crash Rate	HSIP Crash $$	HSIP Crash $$/Mile	Comments
1	170000	9.1	PARKS HWY	Wasilla (W of Church Rd)	17.3	Houston (Forest Lake Dr)	8.2	5	18	2.82	15,468	9.97	$ 26,000,000	$ 3,182,375	Existing Safety Corridor. 4 Lane Divided Hwy in Construction 2016-2019
2	117600	12.7	KENAI SPUR HWY	Kenai Urban (MP 12.5)	20.4	Robert Walker Ave (MP 20.5)	7.7	5	12	2.21	6,377	18.98	$ 19,000,000	$ 2,468,174	Rumble strips w/1R pavement preservation project in 2017
3	135000	34.0	GLENN HWY	Parks Hwy JCT	39.0	Palmer (S of Springer/Moore Rd)	5.0	1	10	2.20	12,180	9.90	$ 12,000,000	$ 2,400,000	New 4 Ln Divided Hwy in 2018
4	136800	0.5	PALMER-WASILLA HWY	Palmer (Irwin Lp)	9.4	Wasilla (.25 Mi' W of Trent Cir)	9.0	2	16	2.01	14,707	7.48	$ 21,000,000	$ 2,341,659	HSIP 3 Ln Construction 2019-2020
5	117600	1.8	KENAI SPUR HWY	Soldotna (N of Big Eddy)	7.8	Kenai Urban	6.0	3	9	2.00	11,500	9.53	$ 13,000,000	$ 2,166,667	Rehabilitate with turn lanes and 5 lane roadway in 2019
6	170073	0.0	BIG LAKE RD	Parks Hwy	4.7	Big Lake (500' W of Aero Ln)	4.6	2	7	1.94	4,410	24.15	$ 11,000,000	$ 2,375,297	MSB Roundabout built in 2016
7	110000	46.4	STERLING HWY	Sterling (Weigh Station / Marilee)	54.2	Soldotna (MP 91.2)	7.8	6	9	1.93	7,675	13.78	$ 21,000,000	$ 2,702,703	Existing Safety Corridor. 4 Lane Divided Hwy, urban transitions funded for 2022
8	170044	0.8	KNIK GOOSE BAY RD	Wasilla (S of PW Hwy)	17.3	Pt Mackenzie Rd	16.5	1	20	1.27	7,483	9.33	$ 22,000,000	$ 1,334,547	4 Ln Divided Hwy to Settler's Bay to begin in 2020
9	130000	87.1	SEWARD HWY	MP 87	115.5	Anchorage (Potters Marsh/Freeway)	28.4	13	18	1.09	7,300	8.18	$ 44,000,000	$ 1,547,661	Existing Safety Corridor. Windy Corner auxiliary lanes 2019.
10	130000	36.4	SEWARD HWY	Sterling JCT	43.3	MP 43.7	7.0	4	3	1.00	4,376	12.58	$ 11,000,000	$ 1,579,098	HSIP Passing Lanes MP 37-52 in 2019
11	136000	0.6	OLD GLENN HWY (PALMER ALT)	Glenn Hwy I/C	16.9	Matanuska Lake Park	16.3	5	9	0.86	3,777	12.45	$ 21,000,000	$ 1,287,712	HRR Roadway restriping in Planning
						Total	116.4	miles		0.851		9.921	$ 145,000,000	$ 1,245,426	
										Safety Corridor crash rate thresholds					
										16/20/14 HQ Memorandum					

CDS Milepoints are DOT/PF linear references. Mileposts are historical markers and are not the same. See Descriptions for locaion

Cost-effectiveness of mitigation strategies should be compared berfore selecting a solution.

ATM 2B.17	Qualifying Corridor Segments
09c	Interstate, Rural Arterial, Rural Major Collector
	>= 2000 vpd
	> 110% of Statewide Avg serious crashes/mile
	> 110% of Statewide Avg serious crash rate per 100 MVM
	>= 5 miles length

NOTE:

8,076

02/08/16

Table 2

11/28/2017

2017 Safety Corridors Serious Crash Numbers and Crash Rate Reductions

Benefit/Cost over previous crash frequency

Safety Corridor		Before		After					Years	Change	Fatal/Injury Cost	Benefit	Lives Saved
	Length	Fatal per Year	Fatal Crashes per HMVM	Fatal per Year	FatalCrashes per HMVM		Avg						
Seward	30.56	1.9	2.0	2.4	2.3	Seward			11.0	0.4	9600000	$ 46,225,592	5
				-22.7%	-16.3%		-20%						
Parks	8.47	1.5	3.3	0.9	1.1	Parks			10.6	-0.5	9600000	$ (55,222,532)	(6)
				36.5%	66.4%		51%						
KGB	16.4	1.2	1.4	1.0	0.5	KGB			7.9	-0.2	9600000	$ (17,329,089)	(2)
				18.4%	66.5%		42%						
Sterling	9.8	1.0	3.0	0.6	1.0	Sterling			7.9	-0.3	9600000	$ (24,406,992)	(3)
				33.7%	65.6%		50%						
	65.23												
								16%					

MAJOR INJURY

Safety Corridor		Before		After				26-Dec	Years	Change	Fatal/Injury Cost	Benefit	Serious Injuries Saved
	Length	Major Injury per Year	Major Injury Crashes per HMVM	Major Injury per Year	Major Injury Crashes per HMVM		Avg						
Seward	30.56	7.0	7.3	3.2	3.2	Seward			11.0	-3.8	670000	$ (28,357,512)	(42)
				54.7%	57.1%		56%						
Parks	8.47	4.7	10.4	2.9	3.4	Parks			10.6	-1.8	670000	$ (12,871,106)	(19)
				38.3%	67.3%		53%						
KGB	16.4	4.0	4.4	3.0	1.4	KGB			7.9	-1.0	670000	$ (5,144,300)	(8)
				24.2%	68.9%		47%						
Sterling	9.8	1.8	5.6	0.9	1.4	Sterling			7.9	-0.9	670000	$ (4,911,469)	(7)
				51.2%	74.6%		63%						
	65.23												
								54%					

FATAL & MAJOR INJURY

Safety Corridor		Before		After				26-Dec				Combined Benefit	Lives/Serious Injuries Saved		DOT Investments Completed in Audit		B/C Ratio	
	Length	Fatal, Major Injury per Year	Fatal, Major Injury Crashes per HMVM	Fatal, Major Injury per Year	Fatal, Major Injury Crashes per HMVM		Avg											
Seward	30.56	8.9	9.36	5.53	5.49	Seward						$ 17,868,081	(38)		$ 44,396,350		0.40	:1
				38.1%	41.3%		40%											
Parks	8.47	6.21	13.61	3.86	4.48	Parks						$ (68,093,639)	(25)		$ 40,241,285		1.69	:1
				37.8%	67.1%		52%											
KGB	16.4	5.24	5.75	4.04	1.82	KGB						$ (22,473,389)	(9)		$ 9,150,993		2.46	:1
				22.9%	68.3%		46%											
Sterling	9.8	2.76	8.56	1.52	2.44	Sterling						$ (29,318,461)	(10)		$ 8,488,978		3.45	:1
				45.1%	71.5%		58%											
	65.23																	
								46%			Combined	$ (102,017,408)	**-82**		$ 102,277,606		1.00	:1

serious crashes

-82 Serious Crashes
1:1 Return

Graph 1

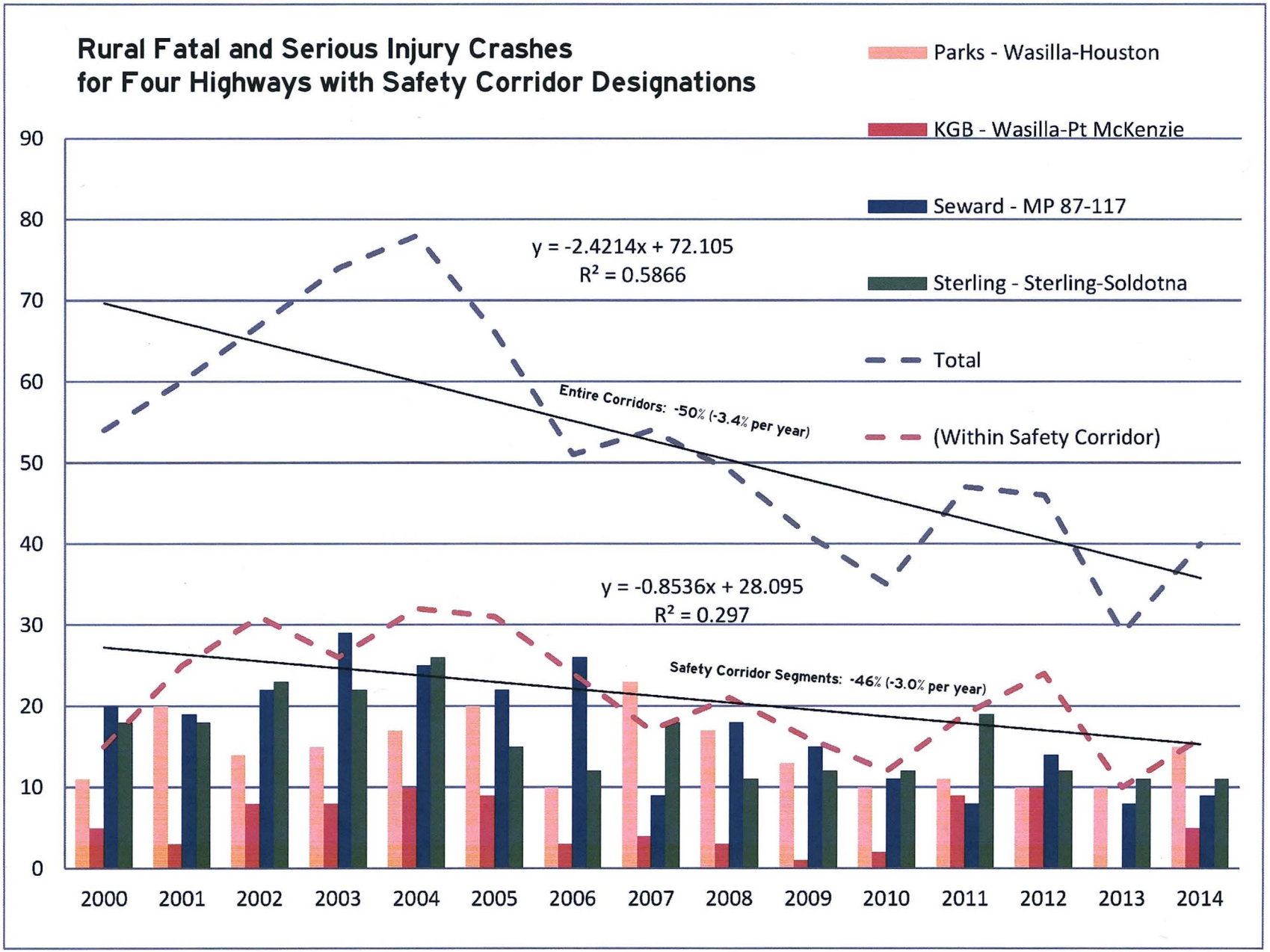
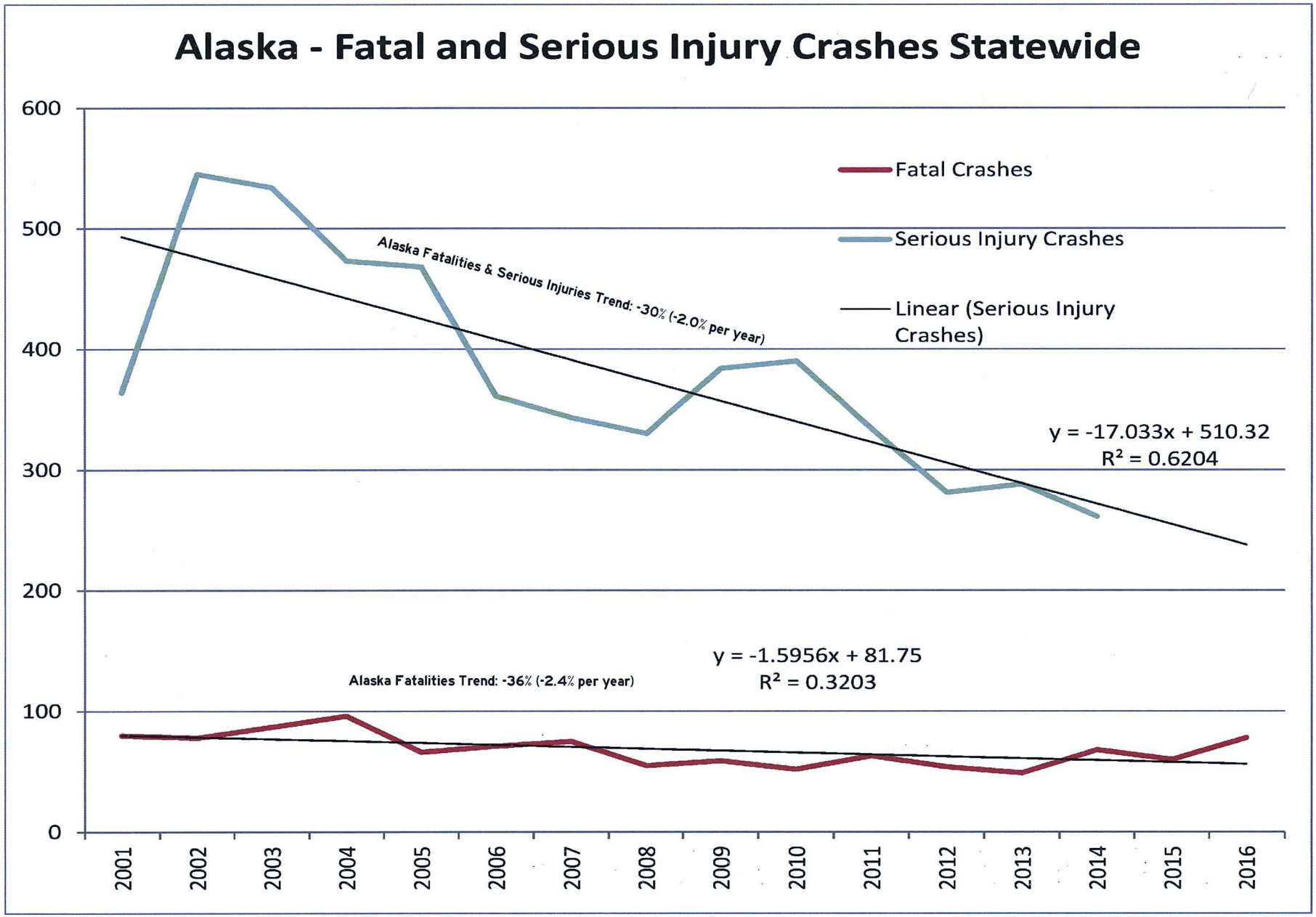
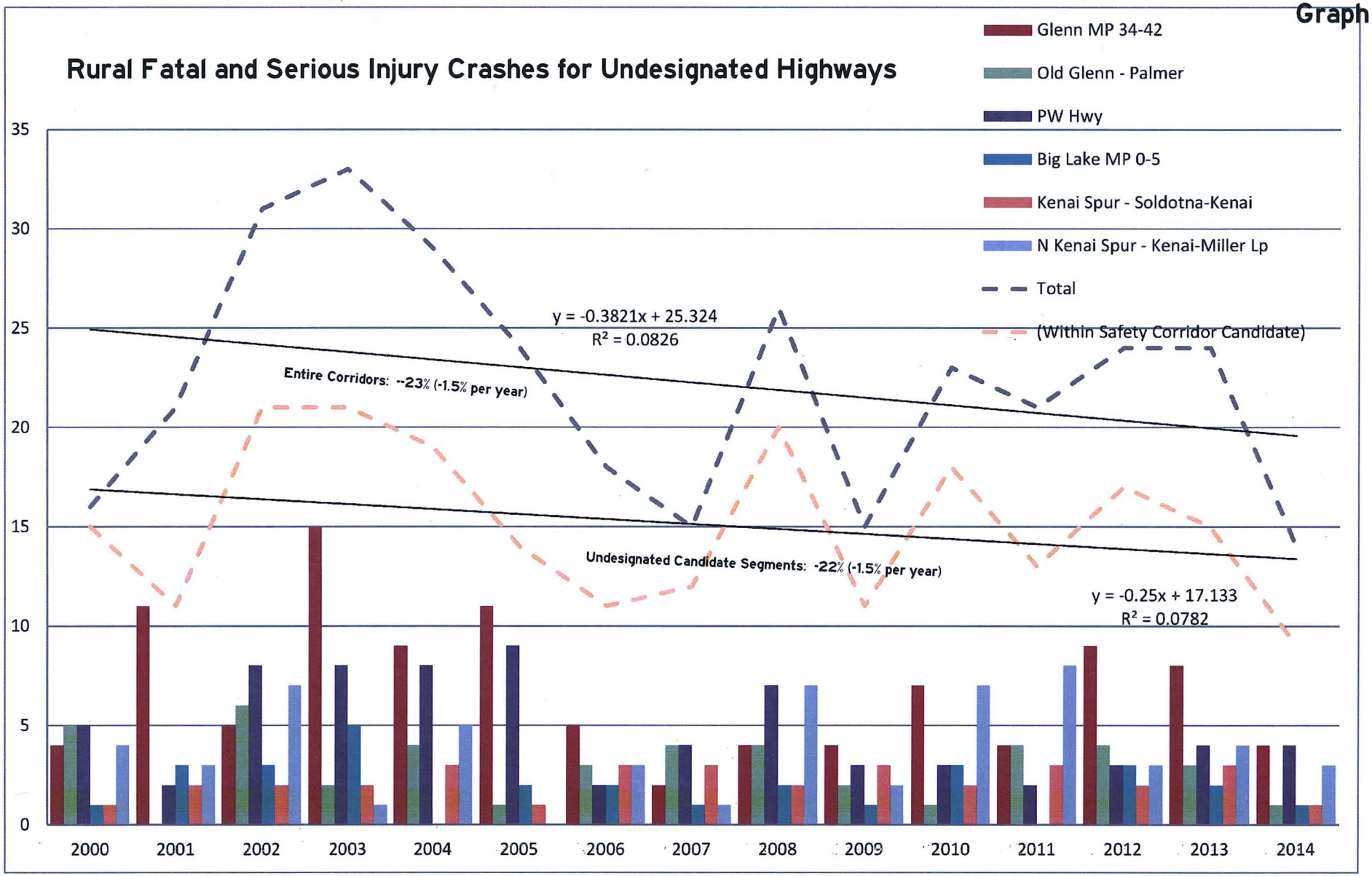

Rural Fatal and Serious Injury Crashes
for Four Highways with Safety Corridor Designations
Parks - Wasilla-Houston
KGB - Wasilla-Pt McKenzie
Seward - MP 87-117
Sterling - Sterling-Soldotna
Total
(Within Safety Corridor)
y = -2.4214x + 72.105
R² = 0.5866
Entire Corridors: -50% (-3.4% per year)
y = -0.8536x + 28.095
R² = 0.297
Safety Corridor Segments: -46% (-3.0% per year)
90
80
70
60
50
40
30
20
10
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014

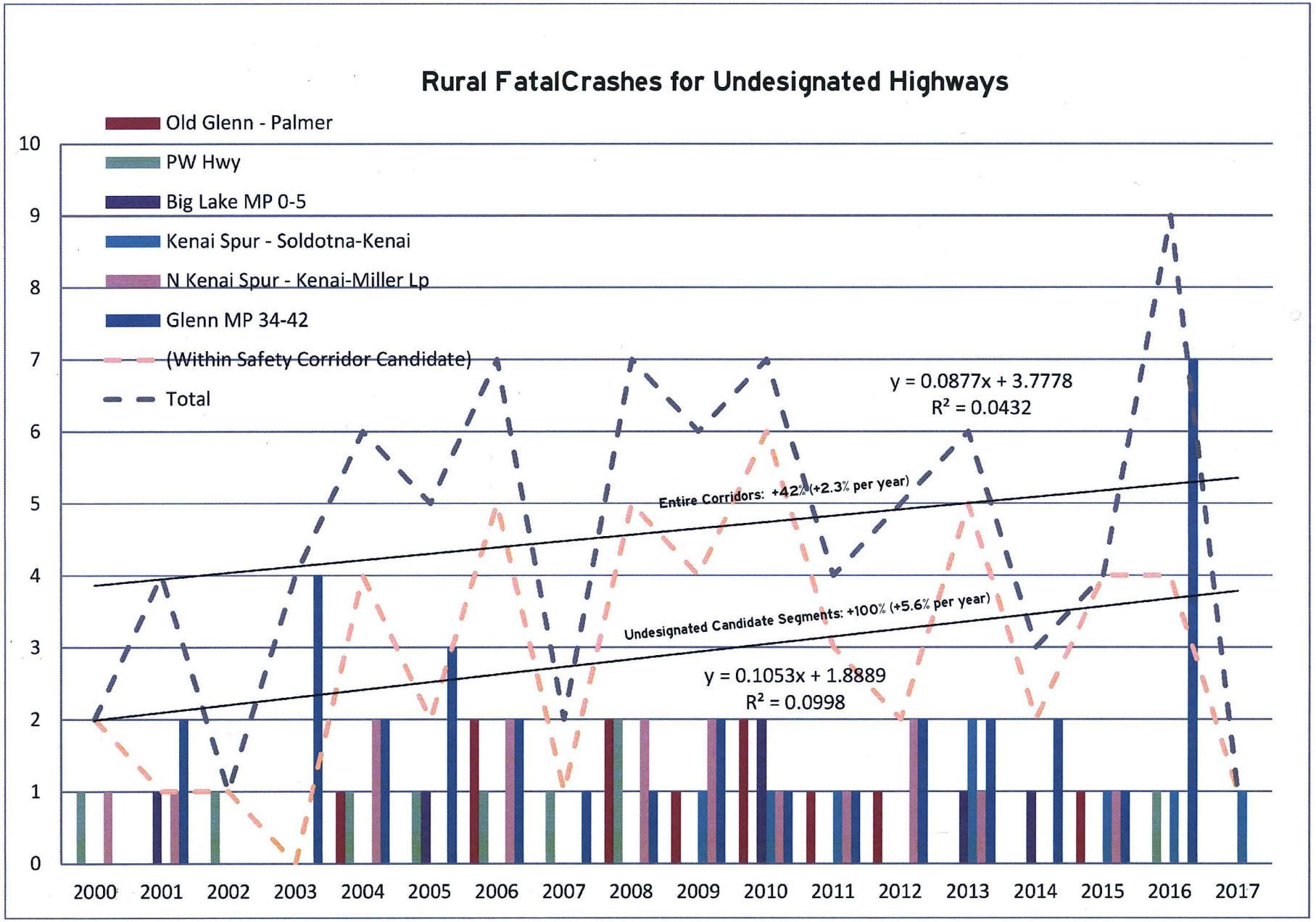
Chart 2


Alaska - Fatal and Serious Injury Crashes Statewide
600
500
400
300
200
100
0
Fatal Crashes
Serious Injury Crashes
Linear (Serious Injury Crashes)
Alaska Fatalities & Serious Injuries Trend: -30% (-2.0% per year)
y = -17.033x + 510.32
R² = 0.6204
y = -1.5956x + 81.75
R² = 0.3203
Alaska Fatalities Trend: -36% (-2.4% per year)
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016

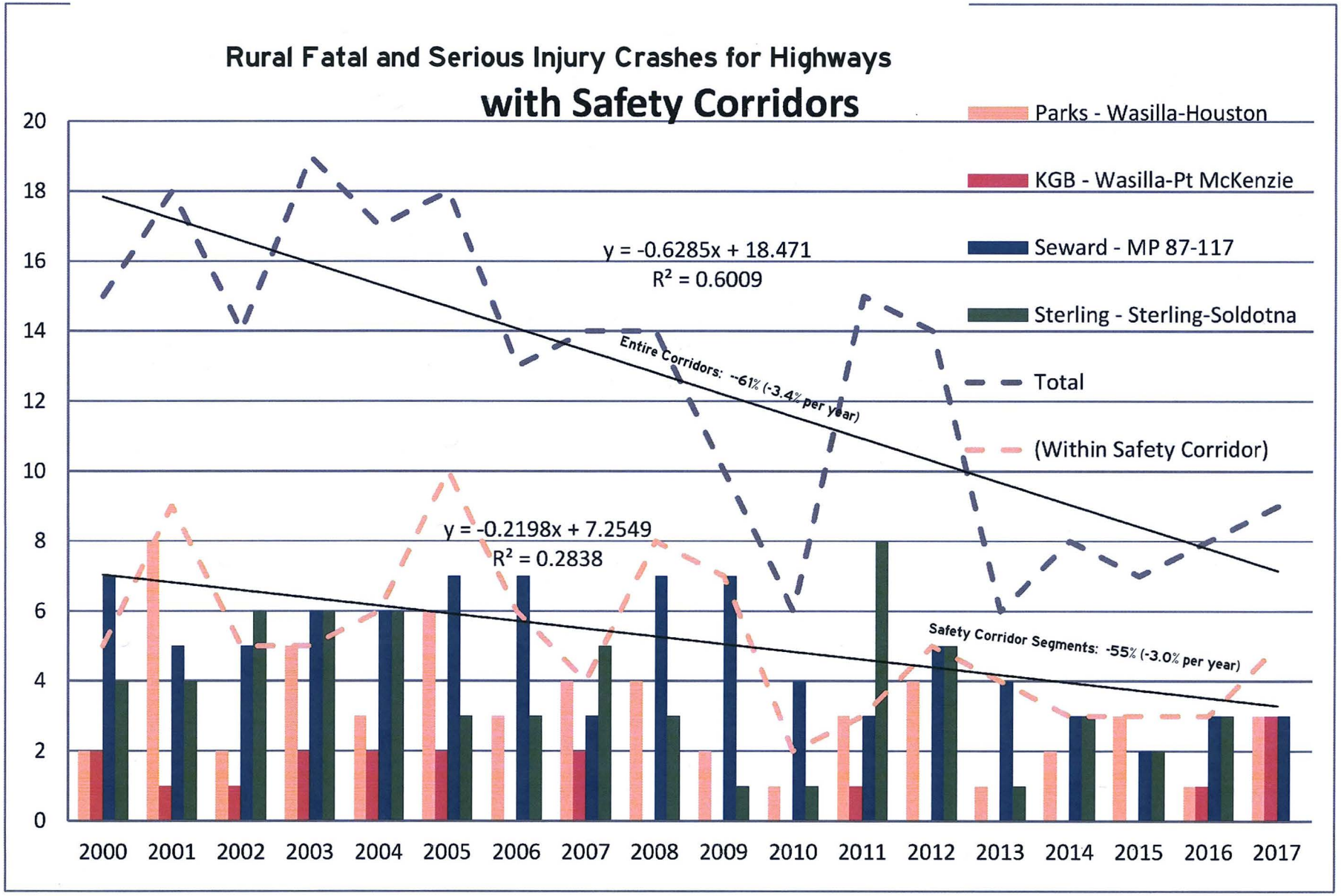
Graph 3


Rural Fatal and Serious Injury Crashes for Undesignated Highways
Glenn MP 34-42
Old Glenn - Palmer
PW Hwy
Big Lake MP 0-5
Kenai Spur - Soldotna-Kenai
N Kenai Spur - Kenai-Miller Lp
Total
(Within Safety Corridor Candidate)
y = -0.3821x + 25.324
R² = 0.0826
Entire Corridors: --23% (-1.5% per year)
Undesignated Candidate Segments: -22% (-1.5% per year)
y = -0.25x + 17.133
R² = 0.0782
35
30
25
20
15
10
5
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014

Graph 4


Rural FatalCrashes for Undesignated Highways
Old Glenn - Palmer
PW Hwy
Big Lake MP 0-5
Kenai Spur - Soldotna-Kenai
N Kenai Spur - Kenai-Miller Lp
Glenn MP 34-42
(Within Safety Corridor Candidate)
Total
y = 0.0877x + 3.7778
R² = 0.0432
Entire Corridors: +42% (+2.3% per year)
Undesignated Candidate Segments: +100% (+5.6% per year)
y = 0.1053x + 1.8889
R² = 0.0998
0
1
2
3
4
5
6
7
8
9
10
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017

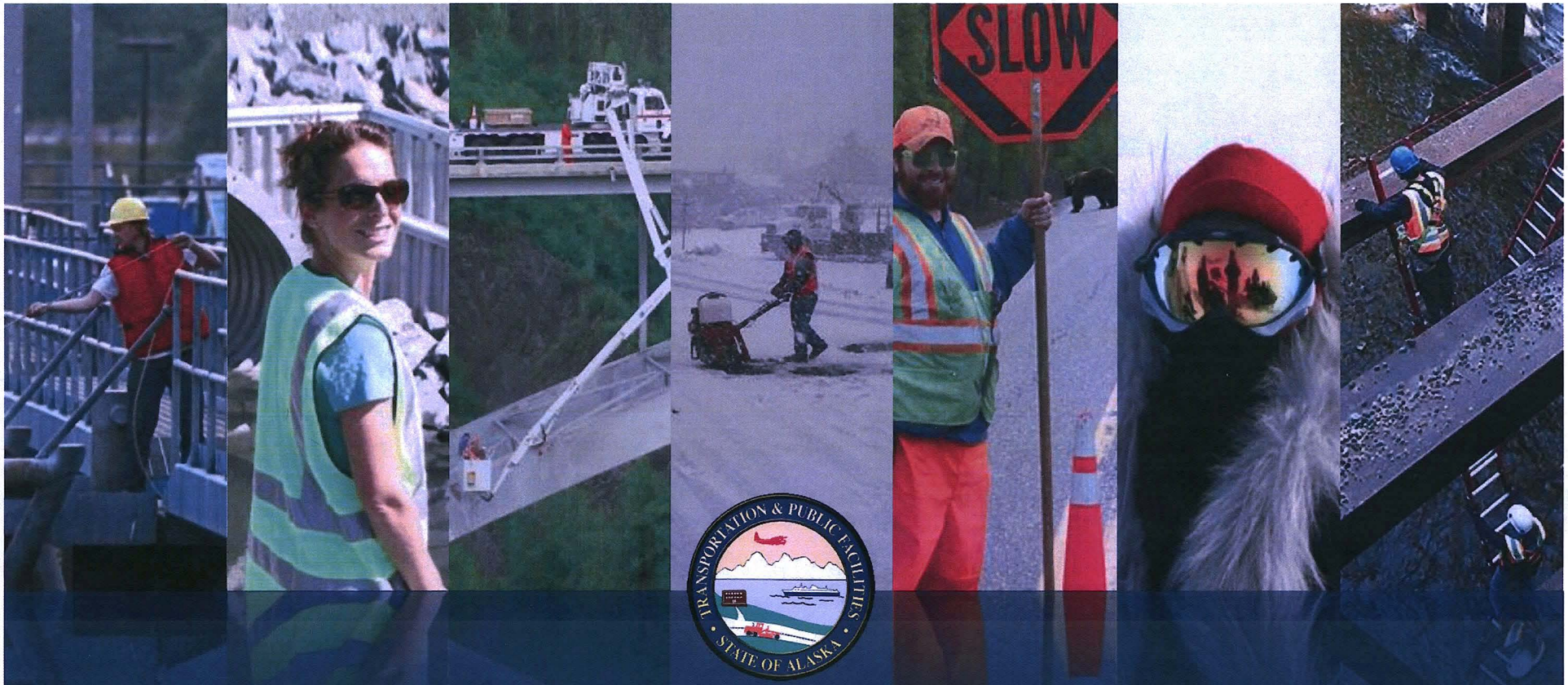
Graph 5


Rural Fatal and Serious Injury Crashes for Highways
with Safety Corridors
Parks - Wasilla-Houston
KGB - Wasilla-Pt McKenzie
Seward - MP 87-117
Sterling - Sterling-Soldotna
Total
(Within Safety Corridor)
y = -0.6285x + 18.471
R² = 0.6009
Entire Corridors: --61% (-3.4% per year)
y = -0.2198x + 7.2549
R² = 0.2838
Safety Corridor Segments: -55% (-3.0% per year)
0
2
4
6
8
10
12
14
16
18
20
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017

Rural Fatal and Serious Crashes (Not urban Incorporated Cities) 11/28/2018 **Table 3**

for Four Highways with Safety Corridor Designations

	Parks - Wasilla - Houston	KGB - Wasilla - Pt McKenzie	Seward - MP 87 - 115	Sterling - Sterling - Soldotna	Total	(Within Safety Corridor)	Trendline	Safety Corridor Savings Estimate	Trendline	Entire Corridor Savings Estimate	
2000	11	5	20	18	54	15	28		72		
2001	20	3	19	18	60	25	27	- 17	0	- 2	
2002	14	8	22	23	67	31	26	- 26	7	- 5	
2003	15	8	29	22	74	26	26	- 36	5	- 7	
2004	17	10	25	26	78	32	25	- 36	2	- 10	
2005	20	9	22	15	66	31	24	- 46	0	- 12	
2006	10	3	26	12	51	24	23	- 55	8	- 15	
2007	23	4	9	18	54	17	22	- 65	5	- 17	
2008	17	3	18	11	49	21	21	- 75	3	- 19	
2009	13	1	15	12	41	16	20	- 85	0	- 22	
2010	10	2	11	12	35	12	20	- 94	8	- 24	
2011	11	9	8	19	47	19	19	- 94	5	- 27	
2012	10	10	14	12	46	24	18	- 10	43	- 29	
2013	10	0	8	11	29	10	17	- 11	41	- 31	
2014	15	5	9	11	40	16	16	- 12	38	- 34	**- 254**
2015							15		36	- 36	crashes
2016							14		33	- 39	as of 2014
2017							14		31	- 41	
%					- 50%	- 46%		- 90		**- 370**	est. thru
%/yr					- 3.4%	- 3.0%				CRASHES	2017



Alaska Department of Transportation & Public Facilities

Statewide Transportation Improvement Program

Michael Vigue
Director, Program Development & Statewide Planning

February 8, 2018

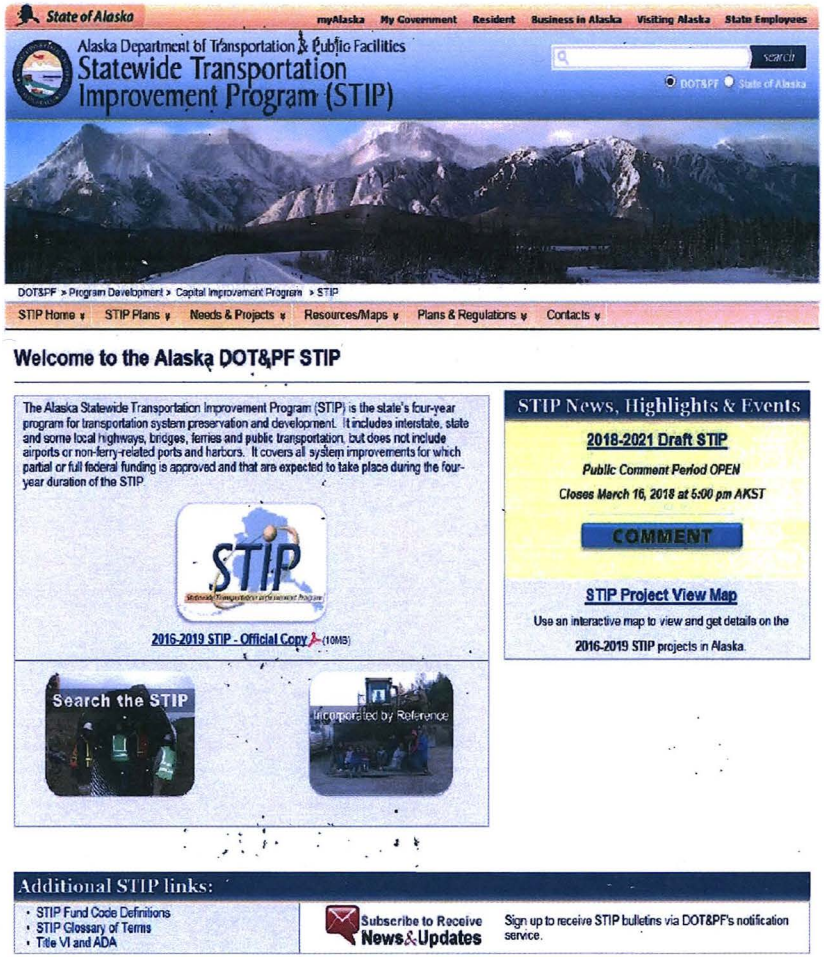
Keep Alaska Moving through service and infrastructure

Outline

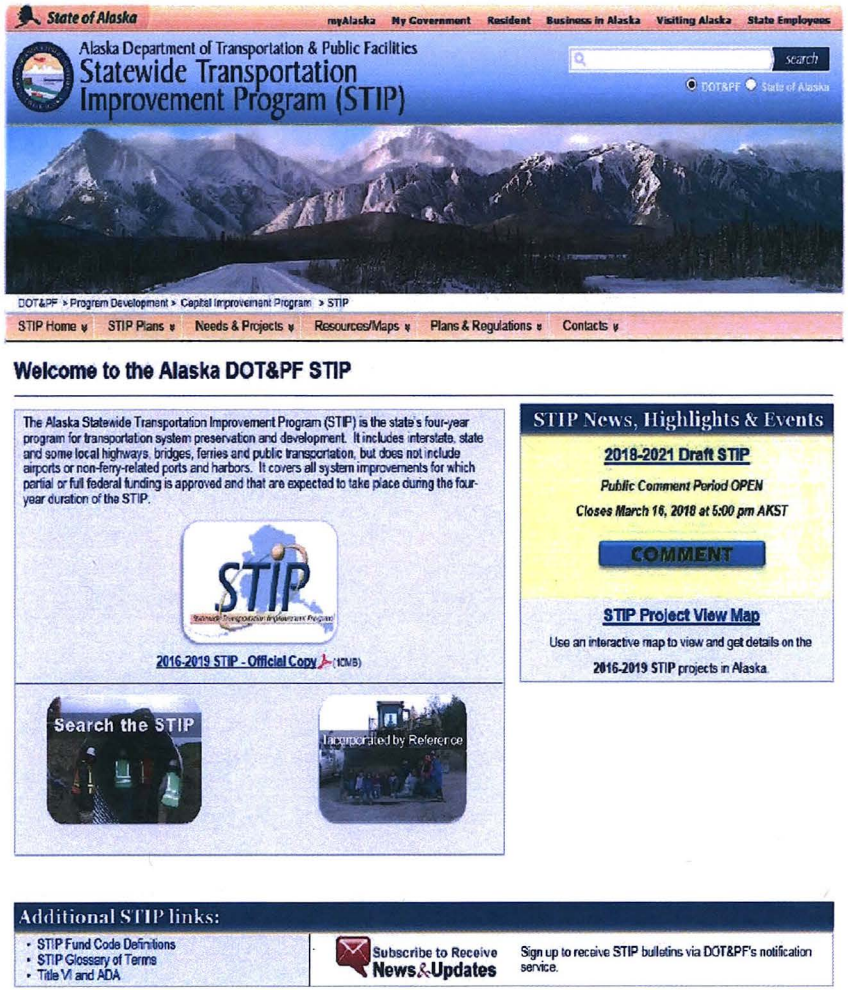
- What is the STIP?
- How is the STIP regulated?
- What is unique about transportation funding in Alaska?
- How are projects selected for the STIP?
- What programming considerations exist?
- What STIP tools are available?

What is the STIP? (1)

- **S**tatewide **T**ransportation **I**mprovement **P**rogram
- Federally required in order to spend federal highway funds
- Approved by Federal Highway Administration (FHWA) and Federal Transit Administration (FTA)
- *Must* include all FHWA and FTA funded projects
- *May* include non-federally funded projects



What is the STIP? (2)

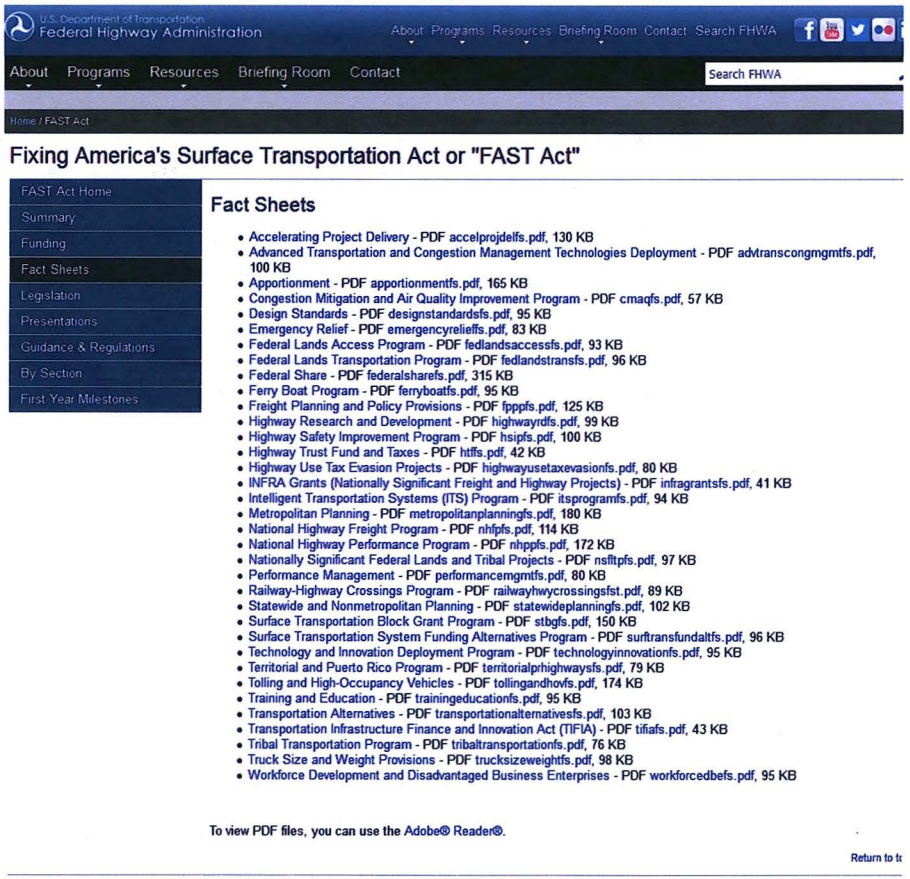


- Must be <u>fiscally constrained</u>
- Public information document with defined involvement process
- Covers a period of at least four years
- Changes by ***amendment*** or ***administrative modification*** due to give and take of project schedules and estimates
- Each funding type has unique eligibility requirements

How is the STIP Regulated? (1)

Federal Statute and Regulation

- 23 USC Chapter 1 (§101-190)
- 23 CFR 450
  - Subpart A—Transportation Planning and Programming Definitions
  - Subpart B—Statewide Transportation Planning and Programming
  - Subpart C—Metropolitan Transportation Planning and Programming

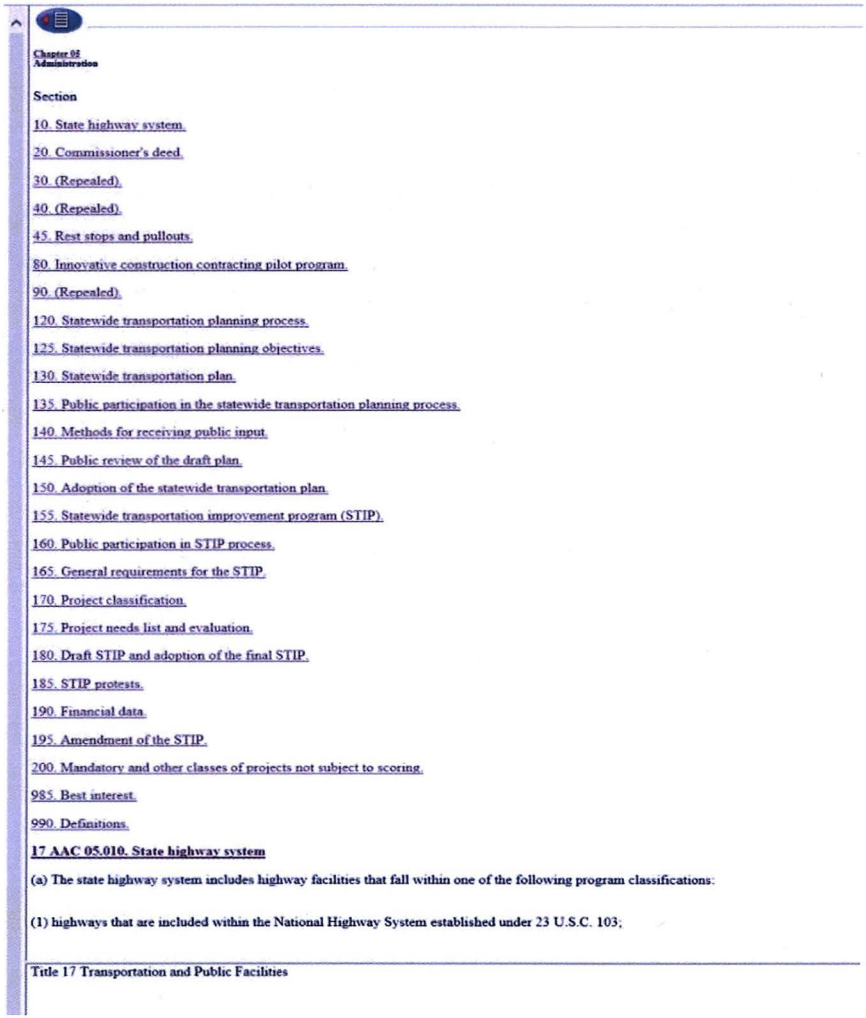


https://www.fhwa.dot.gov/fastact/factsheets//

How is the STIP Regulated? (2)

State Statute and Regulation

- 19 AS 15
- 17 AAC 05.155-200
  - General requirements
  - Public participation
  - Project needs list and evaluation
  - Adoption
  - Amendment



Chapter 05
Administration

Section

10. State highway system.
20. Commissioner's deed.
30. (Repealed).
40. (Repealed).
45. Rest stops and pullouts.
80. Innovative construction contracting pilot program.
90. (Repealed).
120. Statewide transportation planning process.
125. Statewide transportation planning objectives.
130. Statewide transportation plan.
135. Public participation in the statewide transportation planning process.
140. Methods for receiving public input.
145. Public review of the draft plan.
150. Adoption of the statewide transportation plan.
155. Statewide transportation improvement program (STIP).
160. Public participation in STIP process.
165. General requirements for the STIP.
170. Project classification.
175. Project needs list and evaluation.
180. Draft STIP and adoption of the final STIP.
185. STIP protests.
190. Financial data.
195. Amendment of the STIP.
200. Mandatory and other classes of projects not subject to scoring.
985. Best interest.
990. Definitions.

17 AAC 05.010. State highway system

(a) The state highway system includes highway facilities that fall within one of the following program classifications:

(1) highways that are included within the National Highway System established under 23 U.S.C. 103;

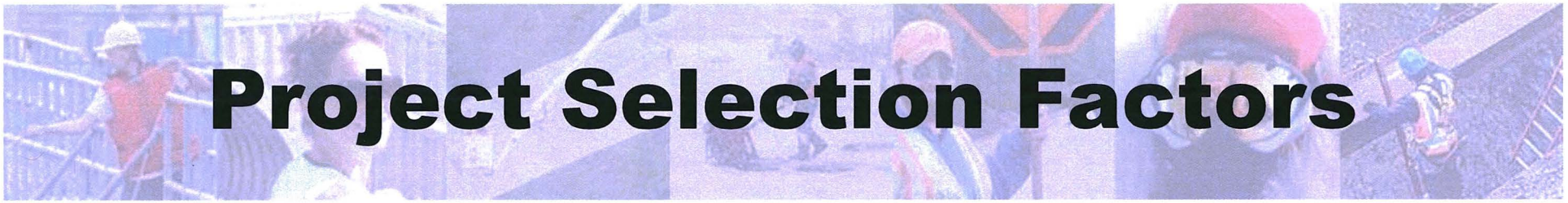
Title 17 Transportation and Public Facilities

What is Unique About Transportation Funding in Alaska?

- $1:~$5 Highway Trust Fund return
- Can spend federal highway funds on any public road
- Reliant on federal funds
- Lowest gas tax in the country

Alaska Federal-aid Eligibility

- Title 23 Section 118 (d) allows Alaska to use any funds made available under Title 23 for construction of access and development roads that will serve resource development, recreational, residential, commercial, industrial, or other like purposes.
- FHWA interprets this to be limited to public roads. This is defined under Title 23 Section 101(a)(22) as any road under the jurisdiction of and maintained by a public authority and open to public travel.



Project Selection Factors

- Significant eligibility rules in federal and state law
- National Highway System (NHS) routes are primarily state owned and selected
  - System plans, performance data
  - Emphasis on safety, capacity, economy and continuity
- Safety projects are required to be data driven focus
  - Reducing major injuries and fatalities using proven solutions
- Surface Transportation Program (STP) has high demand
  - Urban allocations scored by MPOs (FMATS, AMATS)
  - Due to lower funding, statewide program has backlog of projects waiting on funds

Surface Transportation Block Grant Eligibility (STP)

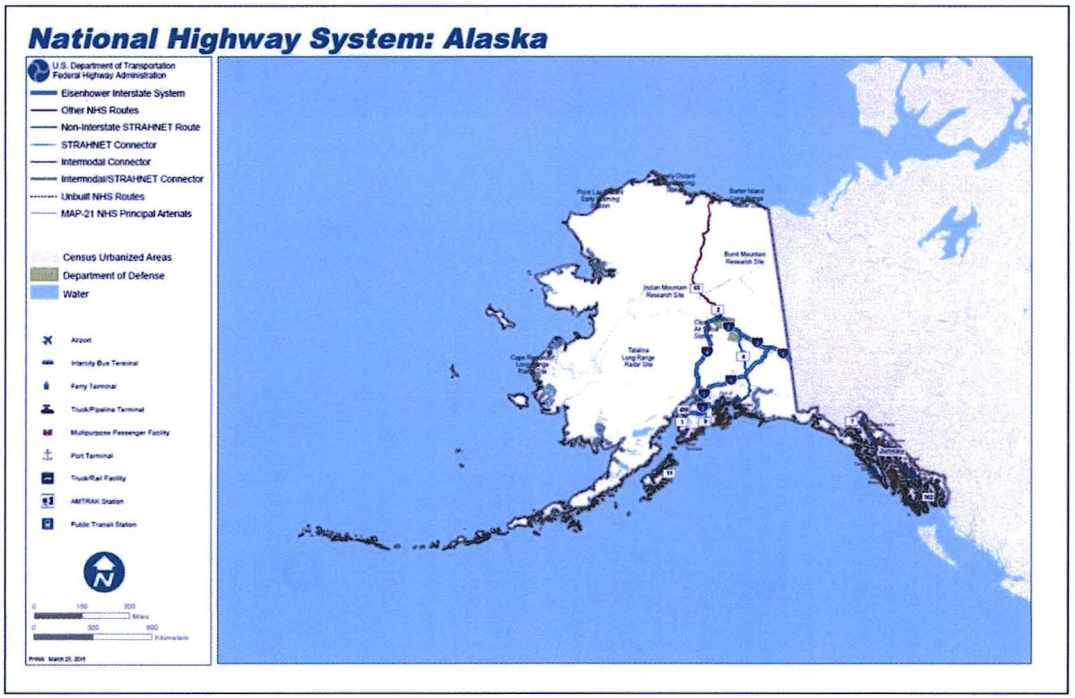
Title 23 Section 133

- Construction of:
  - Highways, bridges, tunnels
  - Ferry boats and terminals
  - Transit capital projects under Title 49
  - Infrastructure-based intelligent transportation systems (ITS) improvements
  - Truck parking facilities
- Operational improvements/capital & operating costs for traffic monitoring, management, and control facilities
- Environmental measures
- Highway and transit safety infrastructure improvements
- Protection for bridges (seismic, scour, security etc.)
- Surface transportation planning programs

How are Projects Selected for the STIP? (1)

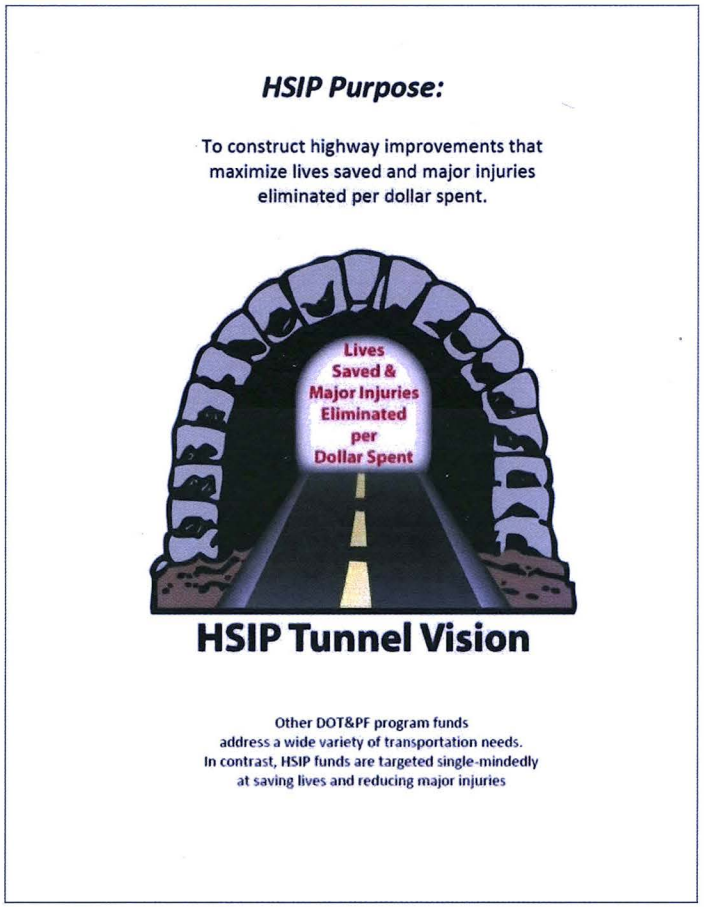
- NHS projects scored for the first time
  - Data driven project selection is the goal
  - Data analysis still in infancy – data rich, information poor
  - Scores guided discussion
  - Team effort

- Considerations include:
  - Safety
  - Pavement condition
  - Bridge condition
  - Traffic
  - Unique benefits



How are Projects Selected for the STIP? (2)

- Highway Safety Improvement Program (HSIP) ranks projects through Benefit Cost Analysis
- Program must select projects where documented safety issues exist
- Safety issues must be remedied using solutions that have been proven to alleviate such issues
- FAST Act restricts these funds to infrastructure improvements (no longer education, enforcement, or emergency response)



How are Projects Selected for the STIP? (3)

- Community Transportation Program (CTP) projects are scored
- 5 sets of scoring criteria
  - Remote and Trail
  - Urban and Rural
  - TRAAK
  - Transit
  - ITS
- This STIP continues to fund backlog of past scored projects
- Expect another round in 1-2 years

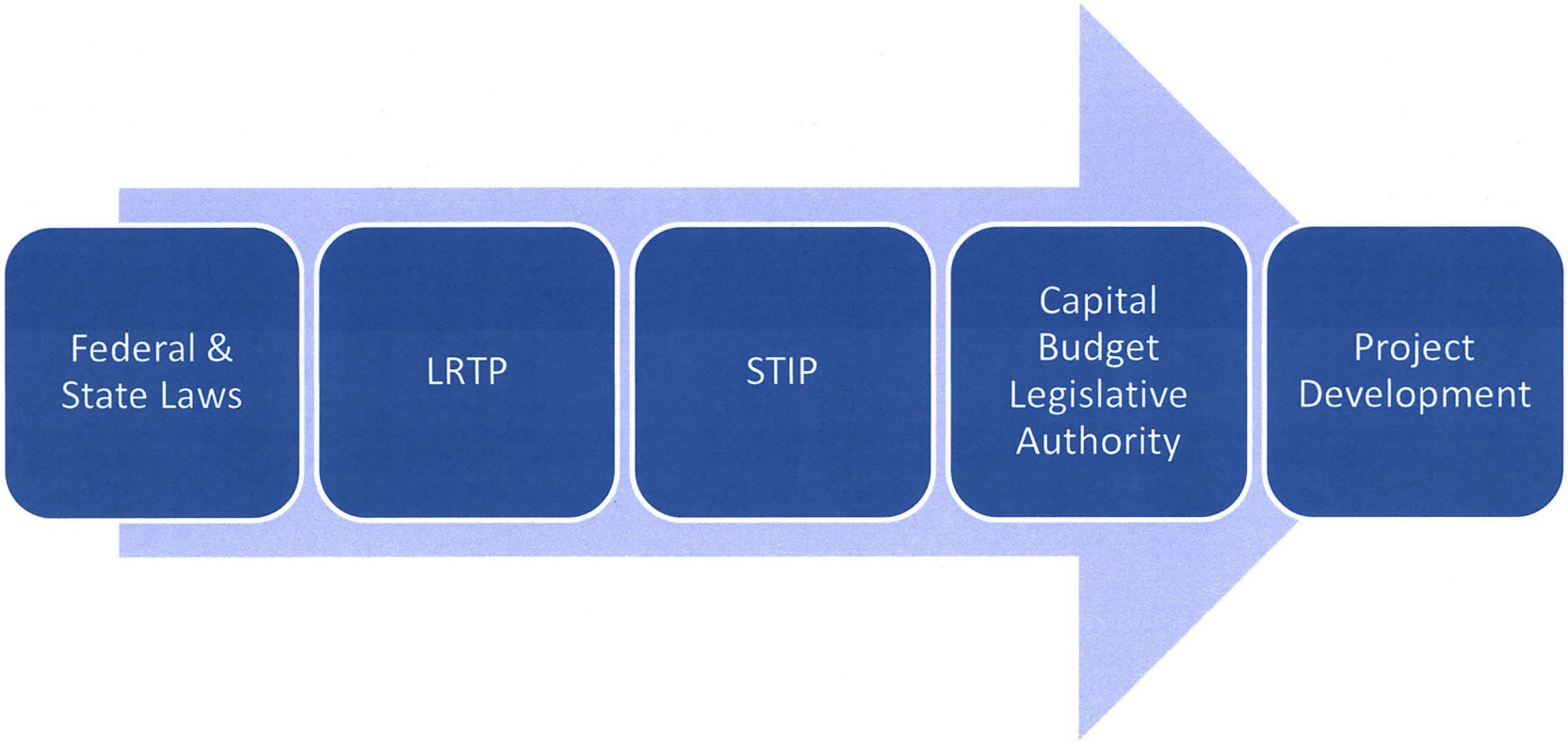
2012 – 2015
STIP Project Scoring Criteria

Urban and Rural Projects Criteria				
	Scoring Criteria			
Standards	**9**	**7**	**4**	**1**
7. **Public support?** Weighting: 3	• **Preponderance** of public record shows support for project, AND • A resolution from the local elected body shows support for project , AND • Project is **fully supported** in state, tribal, or local plans.	• **Majority** of public record shows support for project, AND • A resolution from the local elected body shows support for project , AND • Project is **nominally supported** in official state, tribal, or local plans	• Project has resolution of support from local elected body, OR • There is a public record of support if project is located in unincorporated community in unorganized borough.	• No resolution of support from Local elected body, OR • There is no public record of support if project is located in unincorporated community in unorganized borough.
Resolution is only required in areas/communities represented by locally elected body.				
8. **Environmental approval** readiness? Weighting: 2	• Environmental approval complete = 9 • Environmental approval likely with Categorical Exclusion = 8	• Environmental approval likely with Environmental Assessment = 7 • Environmental approval likely with draft documents circulated = 7	Environmental approval likely with Environmental Impact Statement.	Environmental approval unlikely.
9a. **Surface rehabilitation** Weighting: 5 or 0	• Primarily surface refurbishment and a PMS recommendation for rehab within 2 years, OR • A gravel surface badly deteriorated or serious surface deformation.	• Primarily resurfacing, restoration or rehabilitation of an existing roadway on the same or similar alignment, OR • A portion of the project addresses serious foundation problems.	• Project would be better served by a major reconstruction or longer-term project	N/A
OR				
9b. **Deficient width/grade/alignment (w/g/a).** Weighting: 5 or 0	Significantly deficient w/g/a relative to standards.	Moderately deficient w/g/a relative to standards.	No w/g/a deficiencies.	N/A

How are Projects Selected for the STIP? (4)

- Allocations to Metropolitan Planning Organizations (MPO)
  - Anchorage
  - Fairbanks
- Communities affected by air pollution
  - State Implementation Plan (SIP) - DEC
  - Fairbanks
  - Anchorage/Eagle River
  - Juneau

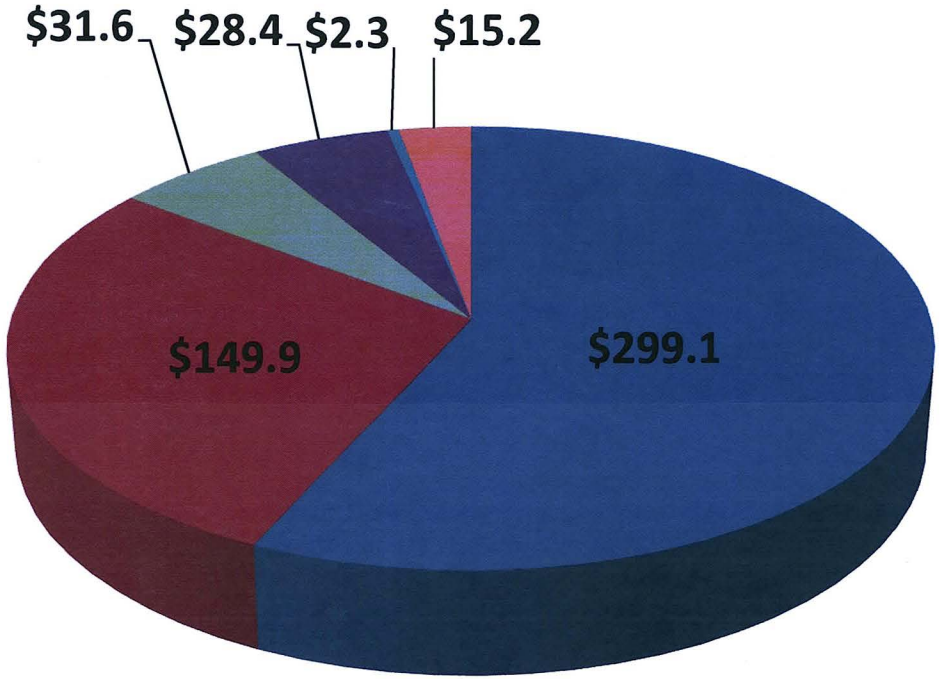
How are Projects Selected for the STIP? (5)



Programming Considerations

- STIP can only be programmed up to expected funding level
- Most STIP funding is "use or lose" and cannot be carried over from year to year
  - Funding for a project must be obligated to secure funding
  - Obligation occurs when a project is certified as meeting all federal requirements and a funding agreement is signed by FHWA
- In Alaska and nationwide ~30% of projects end up delaying into a later year
  - Large, controversial projects are at a higher risk of slipping
  - Funding tools such as Advanced Construction (AC) allow some flexibility to pursue additional projects for when projects slip

2018 FAST Act Funding for Alaska



- National Highway Performance Program (NHPP)
- Surface Transportation Block Grant Program (STP)
- Highway Safety Improvement Program (HSIP)
- Congestion Mitigation and Air Quality (CMAQ)
- Metropolitan Planning Program
- National Highway Freight Program

$ in millions

*Currently the federal government is operating under a Continuing Resolution for 2018

FAST Act

Funding Certainty for Five Years

- Congress passed FAST Act in December 2015
- Modest increase in total funding levels
  - Initial 5% FHWA increase and 16% FTA increase from 2015 to 2016, then 2% annual increases
- $2.65 billion in FHWA apportionments to Alaska over five years
  - Averages $531 million annually
- $268 million in FTA apportionments to Alaska over five years
  - Averages $53.6 million annually

FAST Act

Funding Certainty for Five Years

- Maintains Alaska's Ferry Boat Program at $18+ million annually
- Increases Tribal Transportation Program funds nationally from $450M in 2015 to $465M in 2016 with $10M annual increments
- Formula based National Freight Program to support highway freight movement with some multimodal eligibility (Alaska averages $16M annually)
- Continuation of Transportation Alternatives Program (TAP)

FAST Act

FAST Act Policy Priorities

- Generally maintains MAP-21 programs and policy
- As in MAP-21, streamlining project delivery to reduce time and cost identified as priority
- Freight policy and freight network under dedicated National Freight Program
- Continues Performance Based Program Management
  - Federal Highway Administration's National Proposed Rule Making (NPRM) set goals for:
    - Safety
    - Pavement
    - Bridges

Federal Lands Access Program

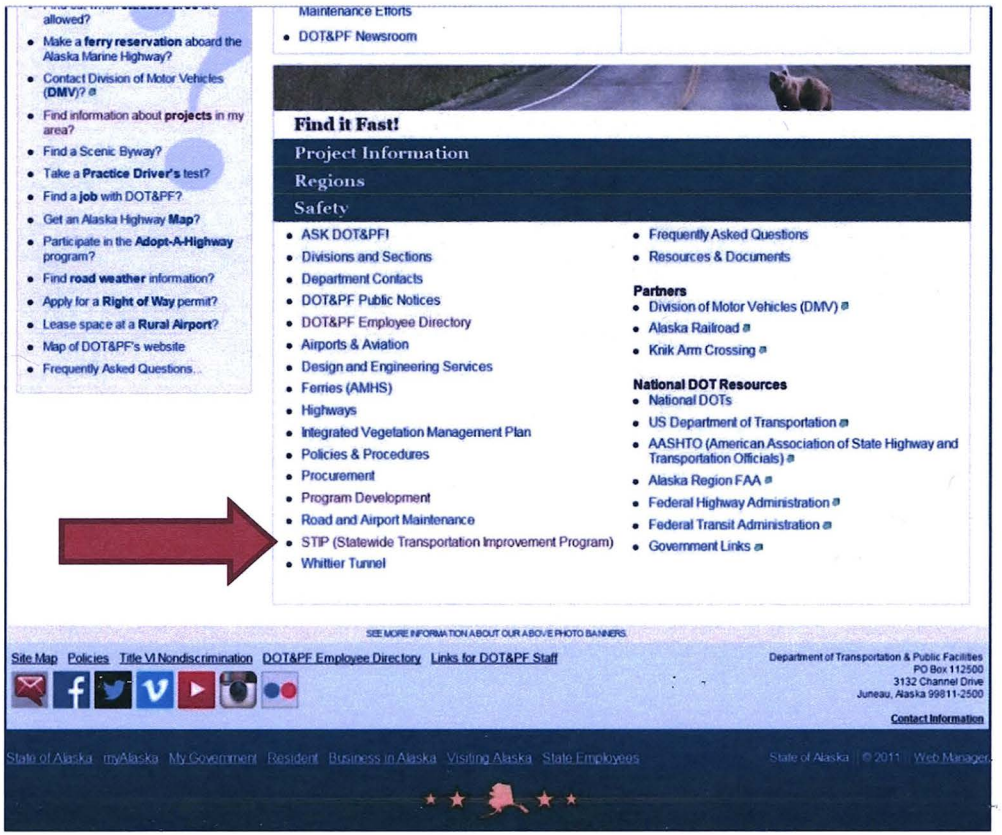
- FLAP provides funds for projects on public roads or trails that are located on or provide access to Federal lands.
  - Title or maintenance responsibility must be with the State, municipal or tribal government.
  - Federal lands include those managed by National Park Service, US Forest Service, US Fish & Wildlife Service, Bureau of Land Management, and US Army Corps of Engineers.
- Funding for Alaska averages around $8 million annually (formula based distribution) and is administered by Western Federal Lands Highway Division in Vancouver WA.
- Program Decision Committee selects projects
  - The PDC must include a State DOT representative, a FHWA representative and representative of a political subdivision of the State. The AML Executive Director fills this last slot.

Tribal Transportation Program

- TTP jointly administered by FHWA Federal Lands Highway and BIA as a nationally based Federal program.
- FHWA/BIA develop a stand alone Transportation Improvement Program (TIP).
- Funding for Alaska Tribes in 2018 is expected to be $49 million. None of this funding comes through DOT&PF.
- Coordination and communication between Tribes, Federal agencies and State and local agencies is critical to success.
  - Governor's Tribal Advisory Council (GTAC) Transportation Subcommittee
  - DOT&PF has created a Tribal Liaison position
  - Looking for ways to leverage TTP funding towards larger budget projects

What STIP Tools are Available? (1)

- Official STIP
  - Current & Prior Amendments
- Needs List Search & Active Projects
- STIP Search
  - Report Tools
- Project Viewer Map

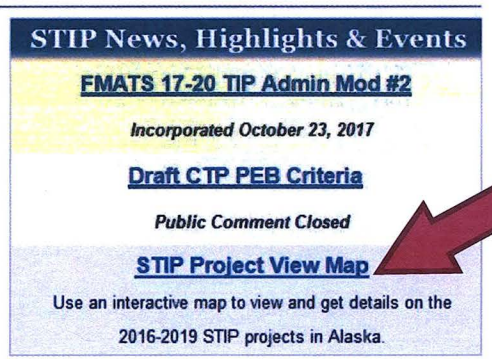


http://dot.alaska.gov/

What STIP Tools are Available? (2)

View Needs and Active Projects

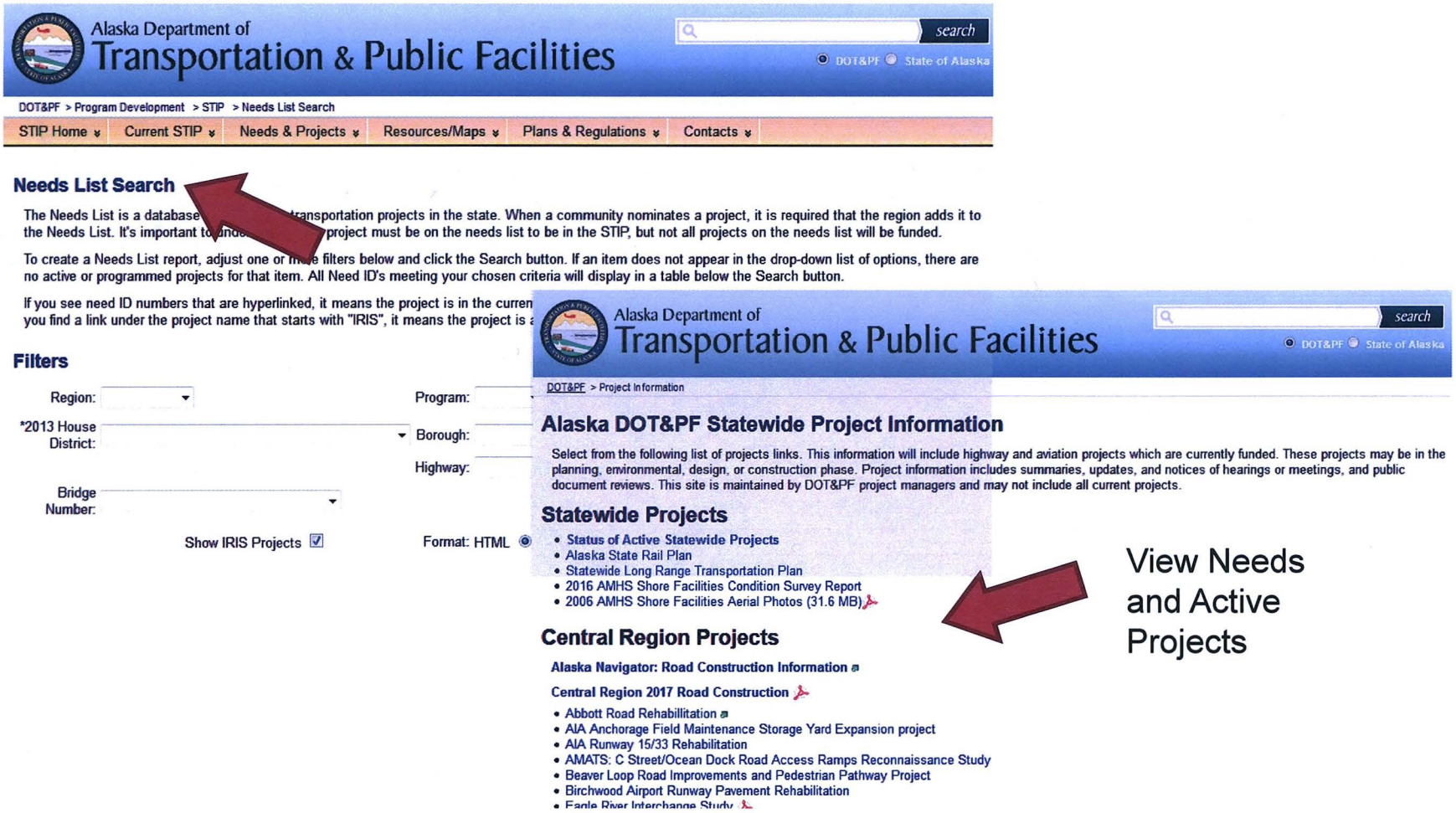
Search and create reports using filters and sorting tools



View STIP projects on a map

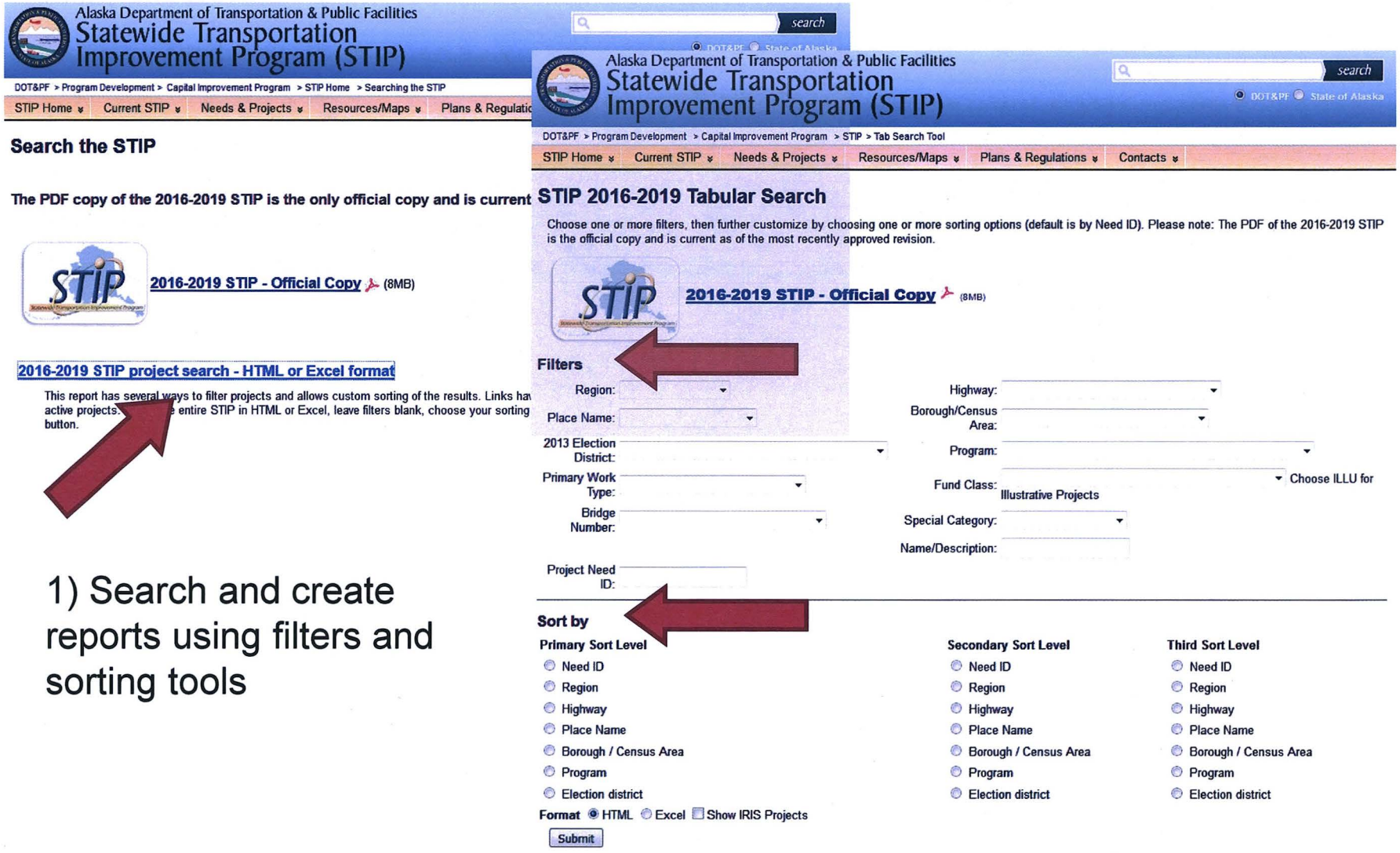
Official STIP

What STIP Tools are Available? (3)



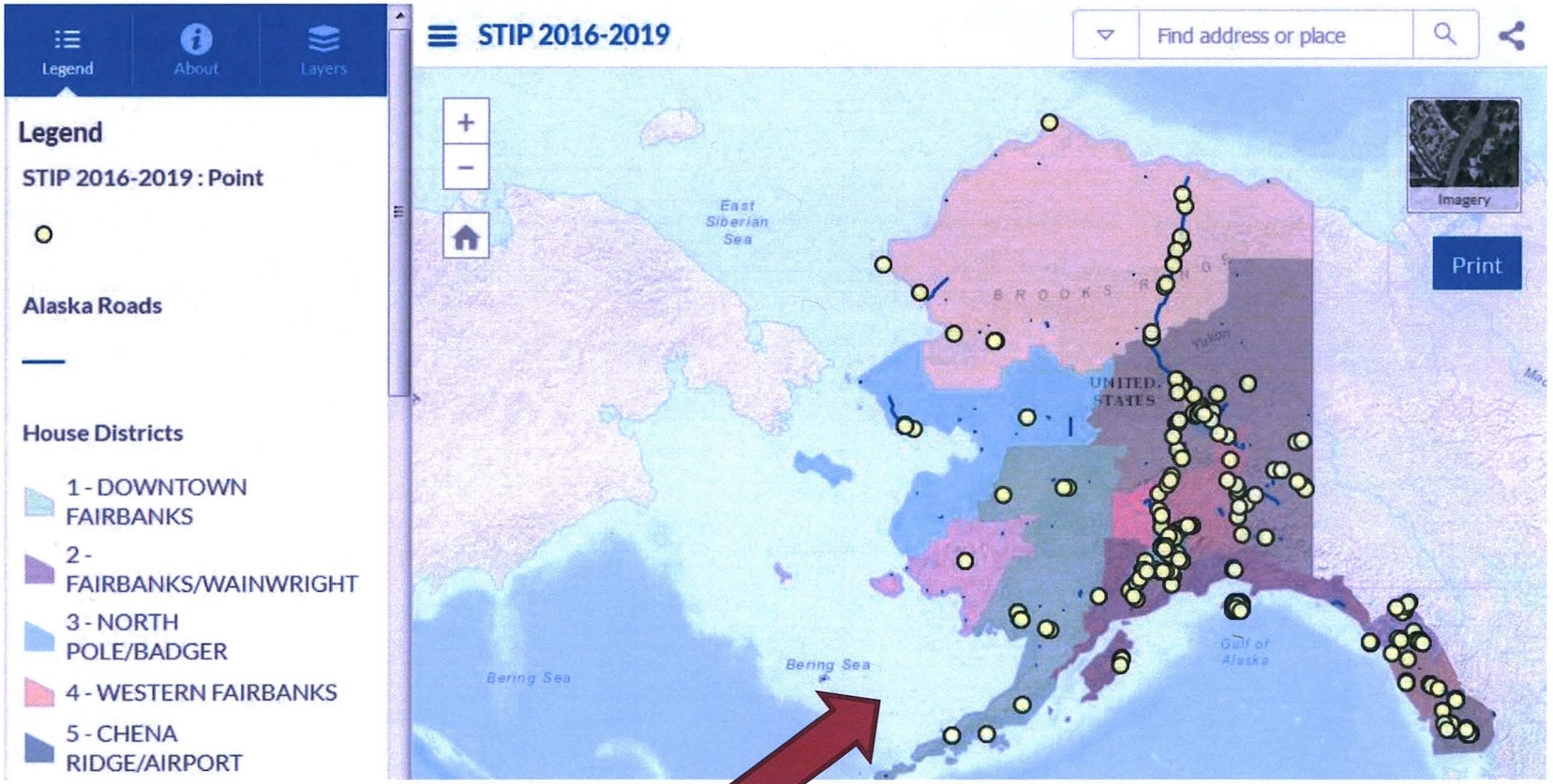
View Needs and Active Projects

What STIP Tools are Available? (4)



1) Search and create reports using filters and sorting tools

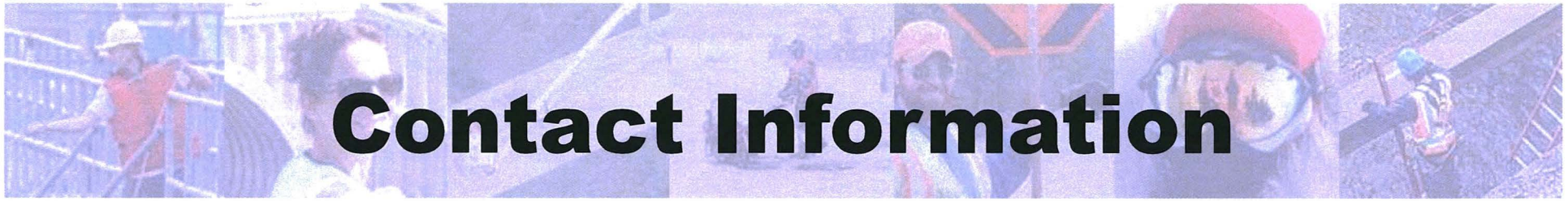
What STIP Tools are Available? (5)



3) View STIP projects on a map

Notable STIP Projects

Seward Highway 74-90 Ingram Creek to Girdwood Rd *Advertised 1/19/2018*	$89.5M	Construction/Utilities
Glenn Highway South Inner Springer Loop to Old Glenn *Tentative Advertise April 2018*	$49M	Construction/Utilities
Parks Highway 13-18 Pittman Road to Big Lake Road *Tentative Advertise Late 2018*	$45M	Construction/Utilities
Dalton Highway 223-238 Reconstruction *Tentative Advertise Early 2019*	$26M	Construction
Richardson Highway 354-359 *Tentative Advertise Late 2018*	$25.6M	Construction
Skagway State Street Rehabilitation *Tentative Advertise August 2018*	$10.6M	Construction/Utilities
Egan Drive Main Street to 10th Street *Tentative Advertise May 2018*	$10.5M	Construction/Utilities
Ketchikan North Tongass Bridges, Waterfall Creeks *Tentative Advertise March 2018*	$10M	Construction



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