

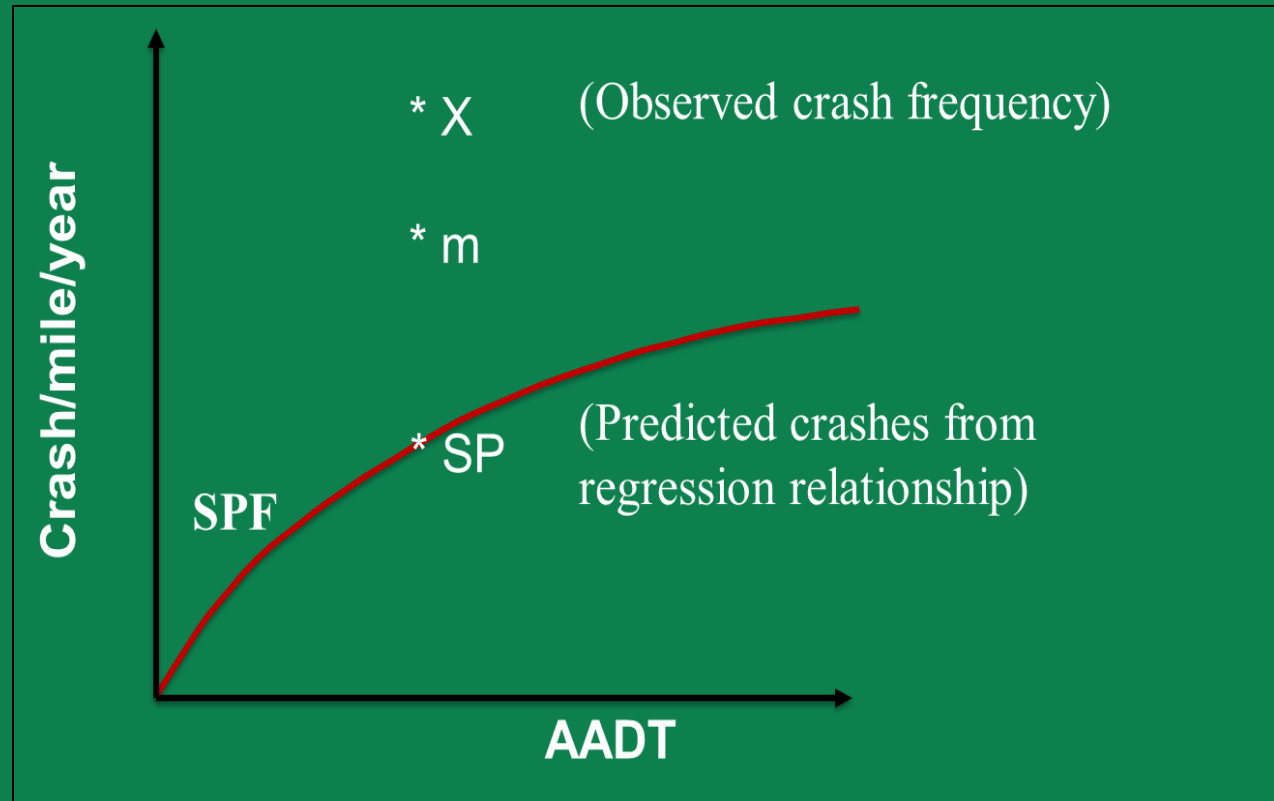


# **ODOT's Economic Return on Bike/Ped Investments**



# Safety Performance Function Curve

Anytime we reduce VMT, we can lower the Safety Performance Function Curve



# Crashes Cost Money

- You're probably wondering what reducing crashes has to do with the economy, right?
- Each crash has consequences on the economy:
  - Law enforcement and EMS
  - Delay to motorists
  - Wages lost
  - Medical expenses
  - Car damage costs
  - Staff time
  - Damage to roadway and appurtenances



# Year 2010 Crash Costs

Type of Crash	FREEWAY			RURAL			URBAN		
	Number of Crashes	Total Cost	Cost per Crash	Number of Crashes	Total Cost	Cost per Crash	Number of Crashes	Total Cost	Cost per Crash
Not-Notated	206	\$4,029,095	\$19,559	260	\$5,848,829	\$22,495	258	\$9,055,778	\$35,100
Head-On	68	\$15,263,468	\$224,463	699	\$97,589,302	\$139,613	1,164	\$66,034,048	\$56,730
Rear End	12,231	\$344,116,662	\$28,135	18,854	\$539,305,771	\$28,604	46,816	\$1,194,989,672	\$25,525
Backing	319	\$6,763,577	\$21,202	2,758	\$72,466,420	\$26,275	10,690	\$231,691,805	\$21,674
SS Meeting	214	\$26,158,803	\$122,237	3,900	\$251,779,346	\$64,559	3,843	\$136,698,318	\$35,571
SS Passing	7,745	\$220,547,852	\$28,476	4,502	\$133,204,548	\$29,588	15,681	\$383,182,525	\$24,436
Angle	853	\$25,538,471	\$29,940	11,796	\$598,223,489	\$50,714	31,707	\$909,069,577	\$28,671
Parked Vehicle	749	\$29,795,278	\$39,780	2,264	\$53,586,348	\$23,669	16,500	\$369,228,279	\$22,377
Pedestrian	73	\$15,911,458	\$217,965	459	\$67,507,634	\$147,075	2,323	\$157,066,203	\$67,614
Animal	3,801	\$61,520,017	\$16,185	18,132	\$307,908,211	\$16,981	3,193	\$87,189,809	\$27,307
Train	0	\$0	\$0	27	\$4,027,491	\$149,166	49	\$2,279,198	\$46,514
Pedalcycle	24	\$693,368	\$28,890	284	\$19,229,361	\$67,709	1,679	\$69,509,170	\$41,399
Other Non-Vehicle	0	\$0	\$0	4	\$149,196	\$37,299	4	\$130,784	\$32,696
Fixed Object	10,543	\$241,817,218	\$22,936	27,214	\$845,548,564	\$31,070	16,184	\$427,135,342	\$26,392
Other Object	1,374	\$22,765,459	\$16,569	892	\$17,731,193	\$19,878	561	\$9,735,351	\$17,354
Overturning	612	\$30,243,274	\$49,417	1,943	\$118,119,893	\$60,793	459	\$23,019,605	\$50,152
Other Non-Collision	1,793	\$51,093,672	\$28,496	1,398	\$27,571,130	\$19,722	1,135	\$27,053,234	\$23,835
Left Turn	323	\$12,968,107	\$40,149	3,128	\$140,466,442	\$44,906	8,358	\$286,216,024	\$34,245



# Safety Improvements

- Intersections designed for pedestrians can reduce pedestrian risk by 28%
- Sidewalks reduce pedestrian crash risk by 88%
- CRF of 63% for Bike Boulevard
- We need more infrastructure to get the data



# What other measures can we use?

- Savings associated with not having to add extra capacity – road widening. Where is that tipping point?
- Emission CMAQ. Health costs.
- Savings for reducing crashes
- More delay in commute times
- Extra cost with gas, insurance, maintenance, parking, associated with owning a car(s)

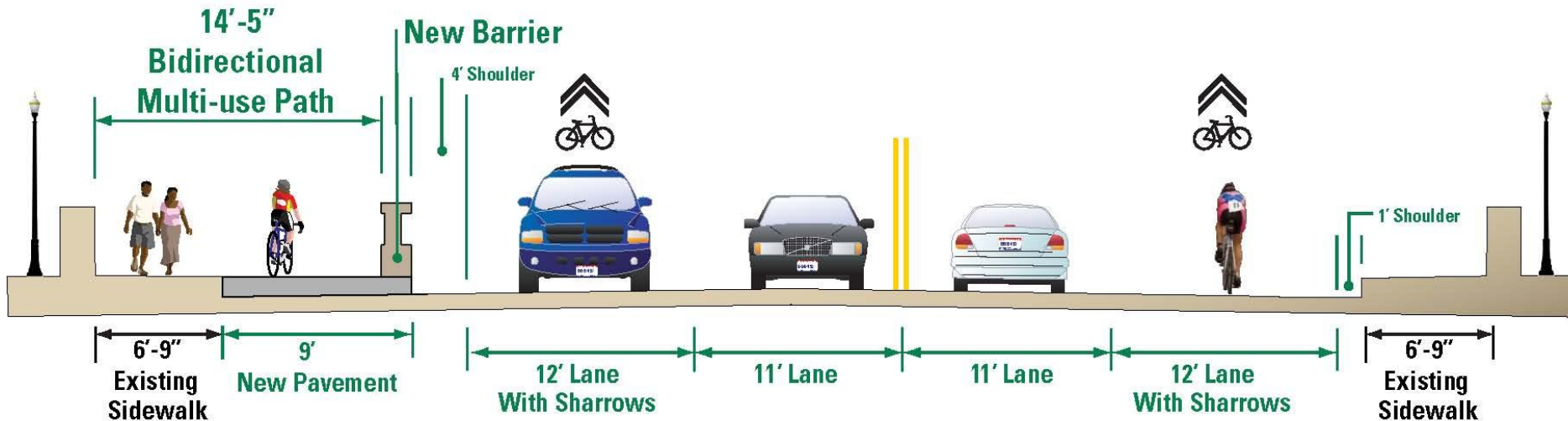


# Lorain Carnegie



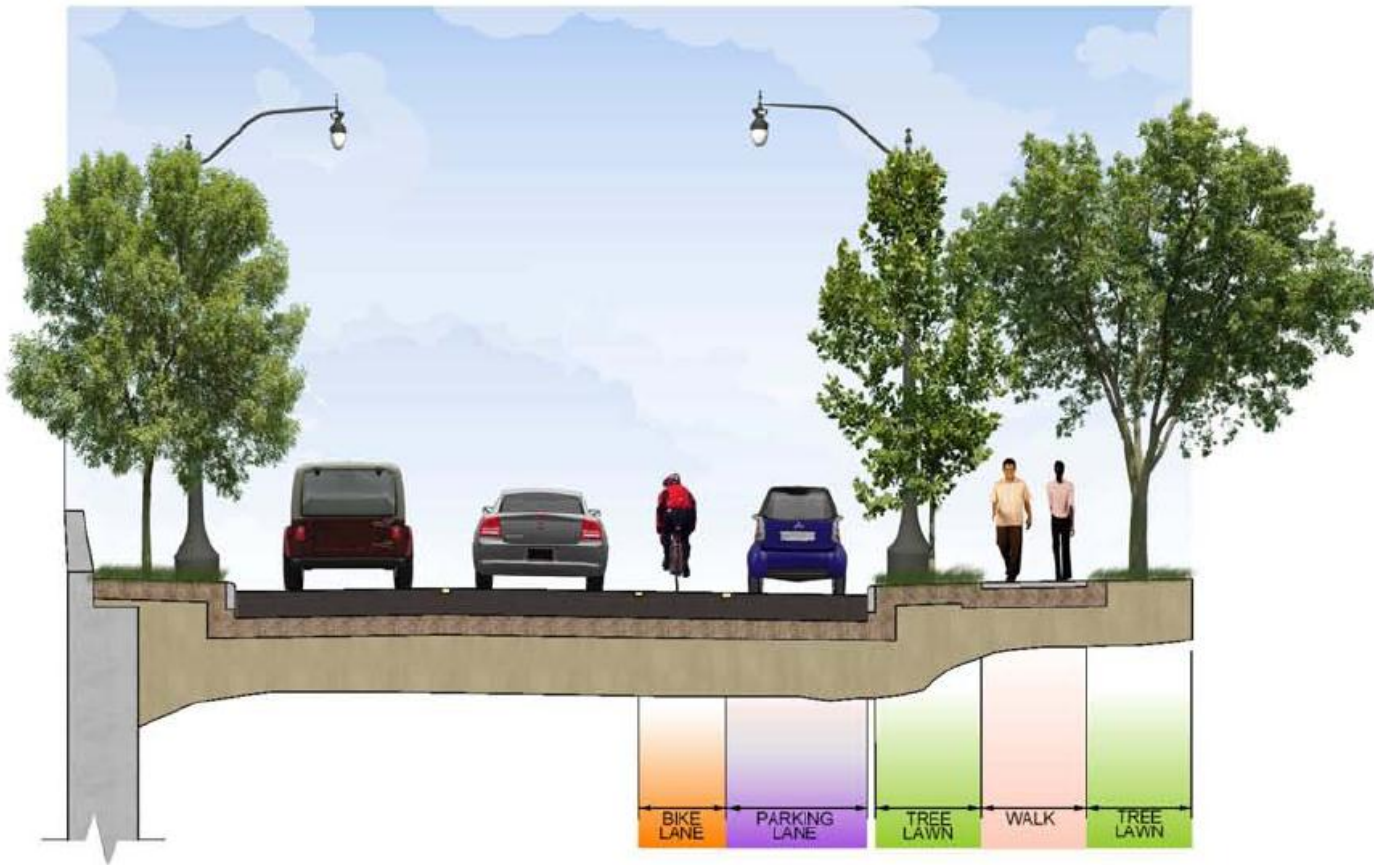
**Existing Condition**  
6' Bike Lanes & 6'-9" Sidewalks

Looking East



# 70/71 Urban Avenues





**SCENARIO 2**  
**bikelane - parking lane - treelawn - sidewalk - treelawn**  
**2 LANES**



# We Need Success Stories

- We need to collaborate effectively on data collection and evaluation.
- We've got before counts on Lorain Carnegie.
- We need to relate CMFs to impact on the economy.
- We need to create our own personal ROR analysis.



# For more information ...

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Jana's Soul Food Café on the Hock-Hocking Adena Bikepath

