

SAFETY TARGETS

Strategic Highway Safety Plan



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Texas Safety Plans- SHSP

- Strategic Highway Safety Plan
 - Statewide-Coordinated Safety Plan
 - Reduce Fatalities and Serious Injuries on All Public Roads
 - Data-Driven
 - Updated Every 5 Years
 - FAST Act Compliance by August 1, 2017
 - 4 E's - Engineering, Education, Enforcement and EMS
 - Strategies and Countermeasures
 - Emphasis Areas

2014 Texas Strategic Highway Safety Plan: A Report of Progress

September 2014 | Texas Department of Transportation
Prepared by the Texas A&M Transportation Institute, Center for Transportation Safety



Texas Safety Plans- SHSP

■ 2017 Strategic Highway Safety Plan Emphasis Areas

- Distracted Driving
- Impaired Driving
- Roadway and Lane Departures
- Speeding
- Pedestrian Safety
- Intersection Safety
- Older Users

TEXAS STRATEGIC HIGHWAY SAFETY PLAN

[ABOUT](#) [EMPHASIS AREAS](#) [RESOURCES](#) [CALENDAR](#) [CONTACT](#)



Never believe that a few caring people can't change the world. For, indeed, that's all who ever have. — *Margaret Mead*

At least one person dies on Texas roadways every day and the numbers are increasing at an alarming rate. Motor vehicle fatalities are the number one cause of death for children under the age of 14 – a human and economic tragedy for our state. The [Texas Department of Transportation](#), [Department of Public Safety](#), and a host of other agencies seek your help in developing a strategic highway safety plan (SHSP) to drive down the numbers.

The Texas SHSP will focus on selected issues with the greatest promise of success in the least amount of time. Please join one of the [emphasis area teams](#) and help us identify the most effective and efficient strategies and actions to reduce fatalities and injuries on Texas roads.



www.texasshsp.com

Texas Safety Plans- HSP

- Highway Safety Plan
 - National Highway Transportation Safety Administration (NHTSA)
 - Updated Every Year
 - Driver Behavior
 - Education and Enforcement
 - Statewide Safety Campaigns
 - Click It or Ticket
 - Share the Road - Look Twice for Motorcycles
 - Talk, Text, Crash.
 - Drink. Drive. Go to Jail.



Highway Safety Plan FY 2018

Prepared By:

The Staff of the Traffic Safety Section

TxDOT Traffic Operations Division

125 East 11th Street

Austin, Texas 78701-2483

<http://www.txdot.gov>

7/01/2017



Texas Safety Plans- HSP

- Highway Safety Plan Emphasis Areas
 - Impaired Driving
 - EMS
 - Motorcycle Safety
 - Occupant Protection
 - Pedestrian and Bicycle Safety
 - Police Traffic Services (STEP grants)
 - Speed Control
 - Improving Traffic Records
 - Driver Education and Behavior
 - Railroad-Highway Crossings
 - Roadway Safety
 - School Bus Safety



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Texas Safety Plans- HSIP

- Highway Safety Improvement Program
 - Federal Highway Administration (FHWA)
 - Safety Construction Program
 - Annual Statewide Program Call
 - Typical Highway Safety Projects
 - Small in Scope,
 - Low in Cost
 - Let to Contract within 3 years



Texas Safety Plans- HSIP

- Highway Safety Improvement Program Categories
 - Barriers
 - Curve Improvements
 - Grade Separations
 - Intersection Improvements
 - Pedestrian Improvements
 - Rumble Strips
 - Off-System Improvements
 - Widening Highways



- For common performance measures, targets must be identical
 - Strategic Highway Safety Plan
 - NHTSA Highway Safety Grants program in the Highway Safety Plan
 - Highway Safety Improvement Program
- State DOT and MPOs in the State must coordinate when establishing targets
- Applicable to all public roads regardless of functional classification or ownership

Texas Safety Plans

Common Performance Measures

- Fatalities
 - Fatality Analysis Reporting System (FARS)
 - FARS Annual Report File (ARF)
- Fatality Rate
 - FARS
 - State Vehicle Miles Traveled (VMT) data derived from the Highway Performance Monitoring System (HPMS)
- Serious Injuries
 - Crash Record Information System (CRIS)
 - Suspected Serious Injury (A)
- Serious Injury Rate
 - CRIS
 - State VMT
- Number of Non-motorized Fatalities and Non-motorized Serious Injuries
 - FARS
 - CRIS

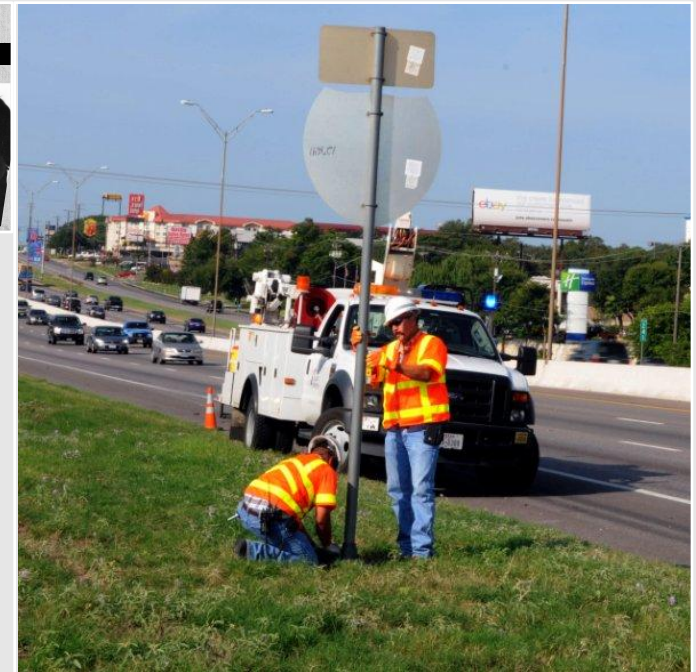
Texas Safety Plans

Safety Program	Target Year(s)	Establishment Date
Highway Safety Plan (HSP)	2018 and 2020	July 1, 2017
Strategic Highway Safety Plan (SHSP)	2022	August 1, 2017
Highway Safety Improvement Program (HSIP)	2018	August 31, 2017
Metropolitan Planning Organization (MPO)	2018	February 27, 2018



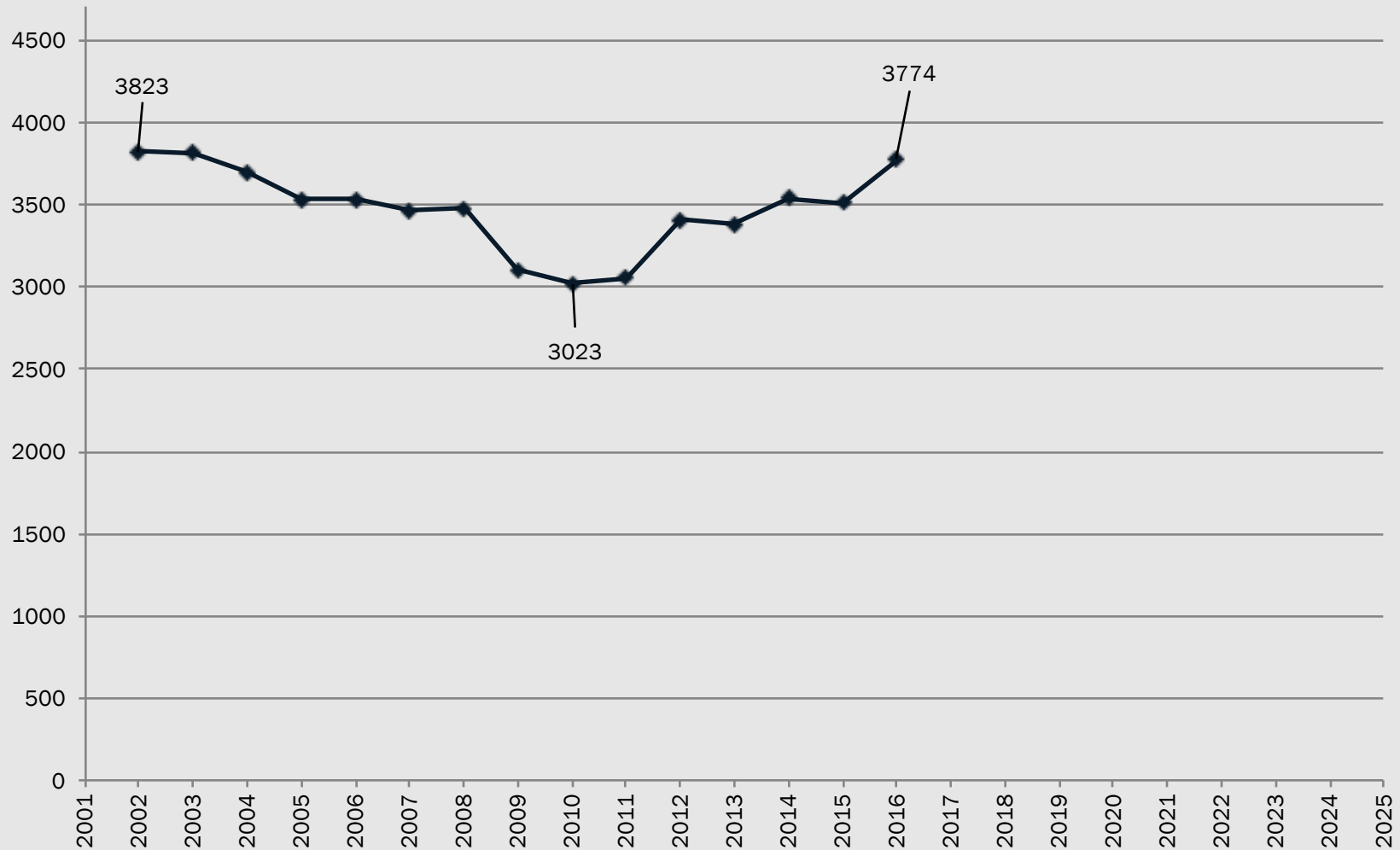
FUTURE FATALITY PROJECTIONS AND TARGETS

Texas A&M Transportation Institute



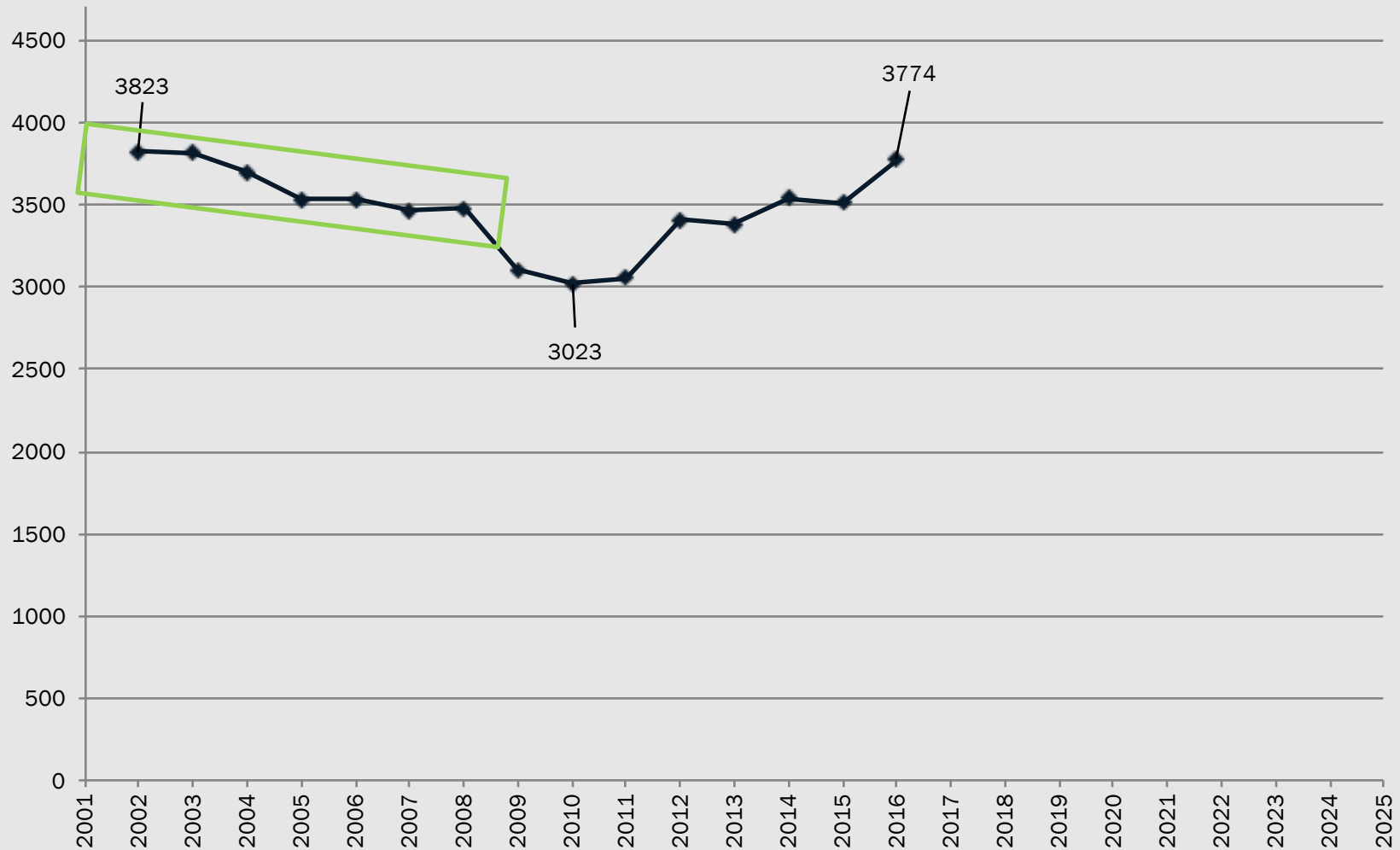
Texas Traffic Fatalities 2002 -2016 FARS

(CRIS – 2016)



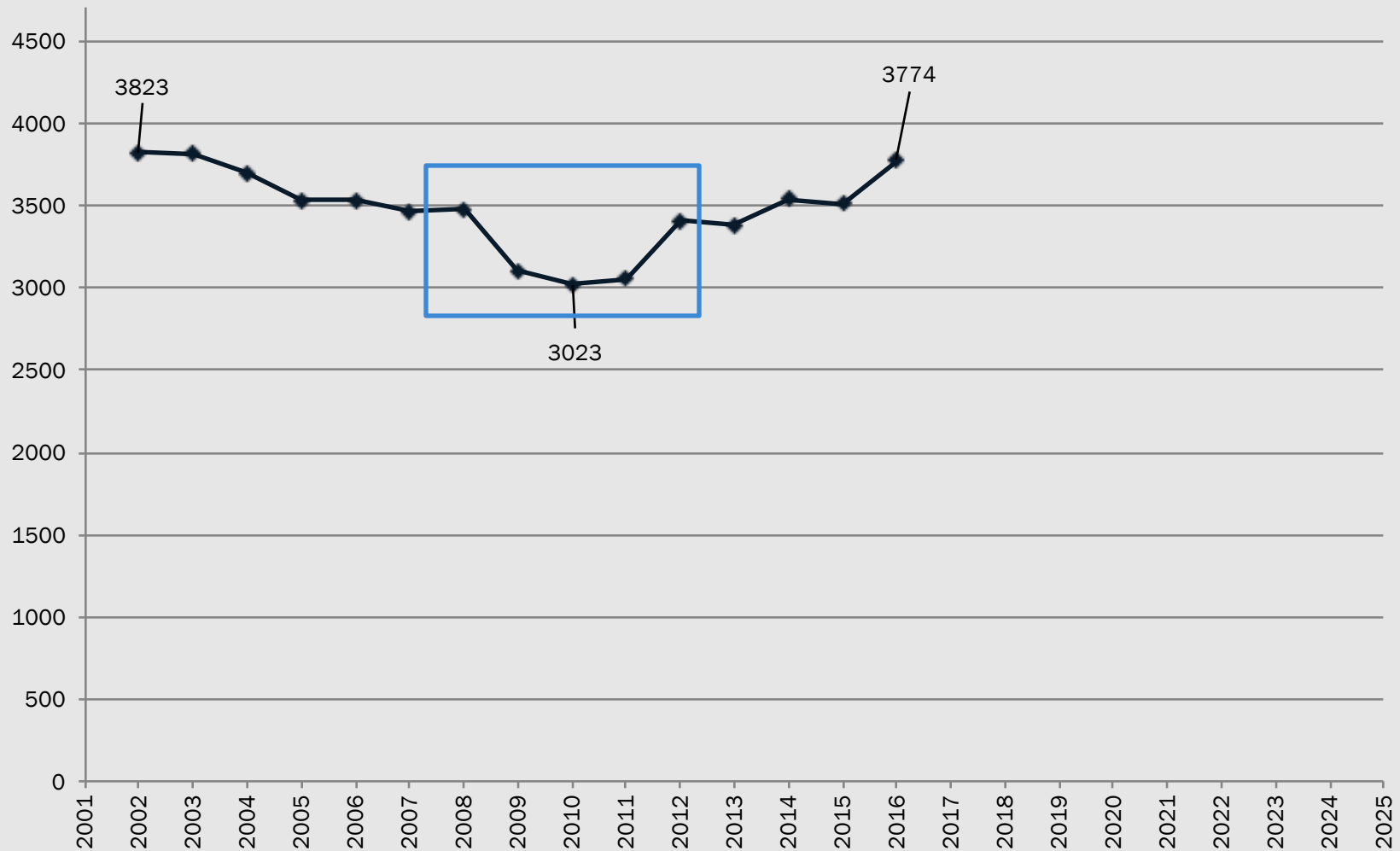
Texas Traffic Fatalities 2002 -2016 FARS

(CRIS – 2016)



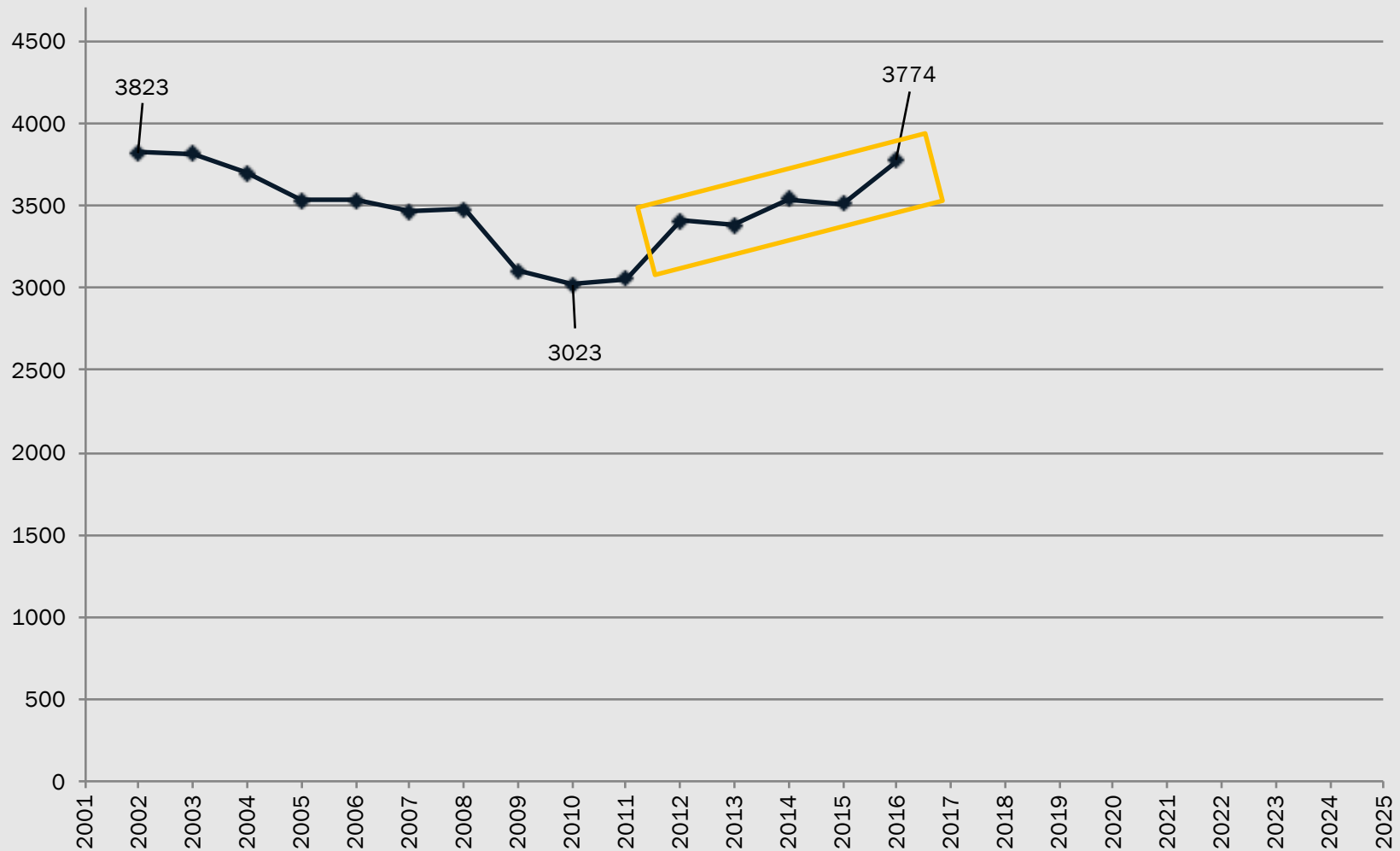
Texas Traffic Fatalities 2002 -2016 FARS

(CRIS – 2016)



Texas Traffic Fatalities 2002 -2016 FARS

(CRIS – 2016)



Key components of fatalities

Fatalities

=

Exposure

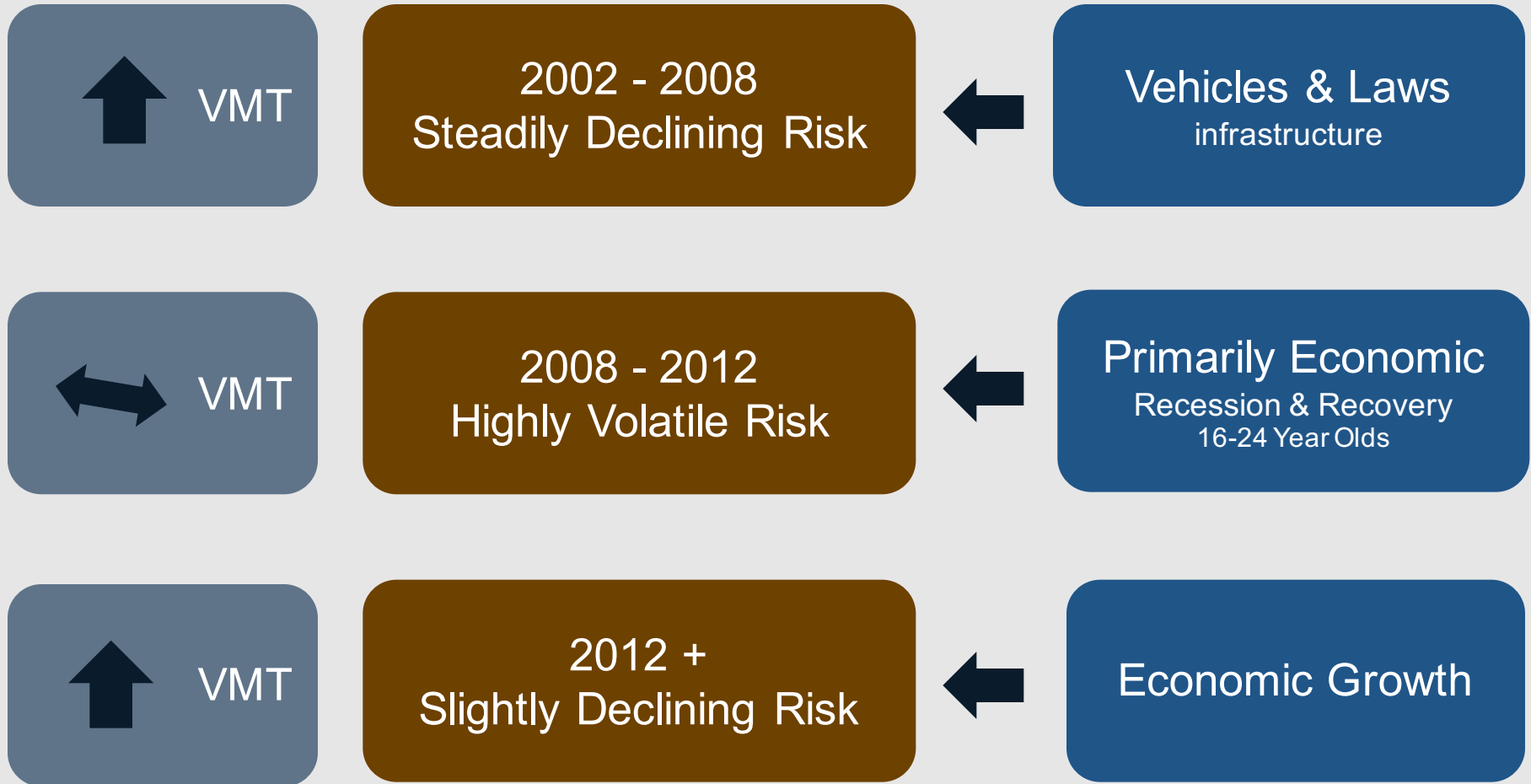
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Risk

Measure
of Travel

Likelihood of
Fatality per
Unit of Travel

Risk & VMT Trends since 2002



Possible Prediction Methods

Trend Line

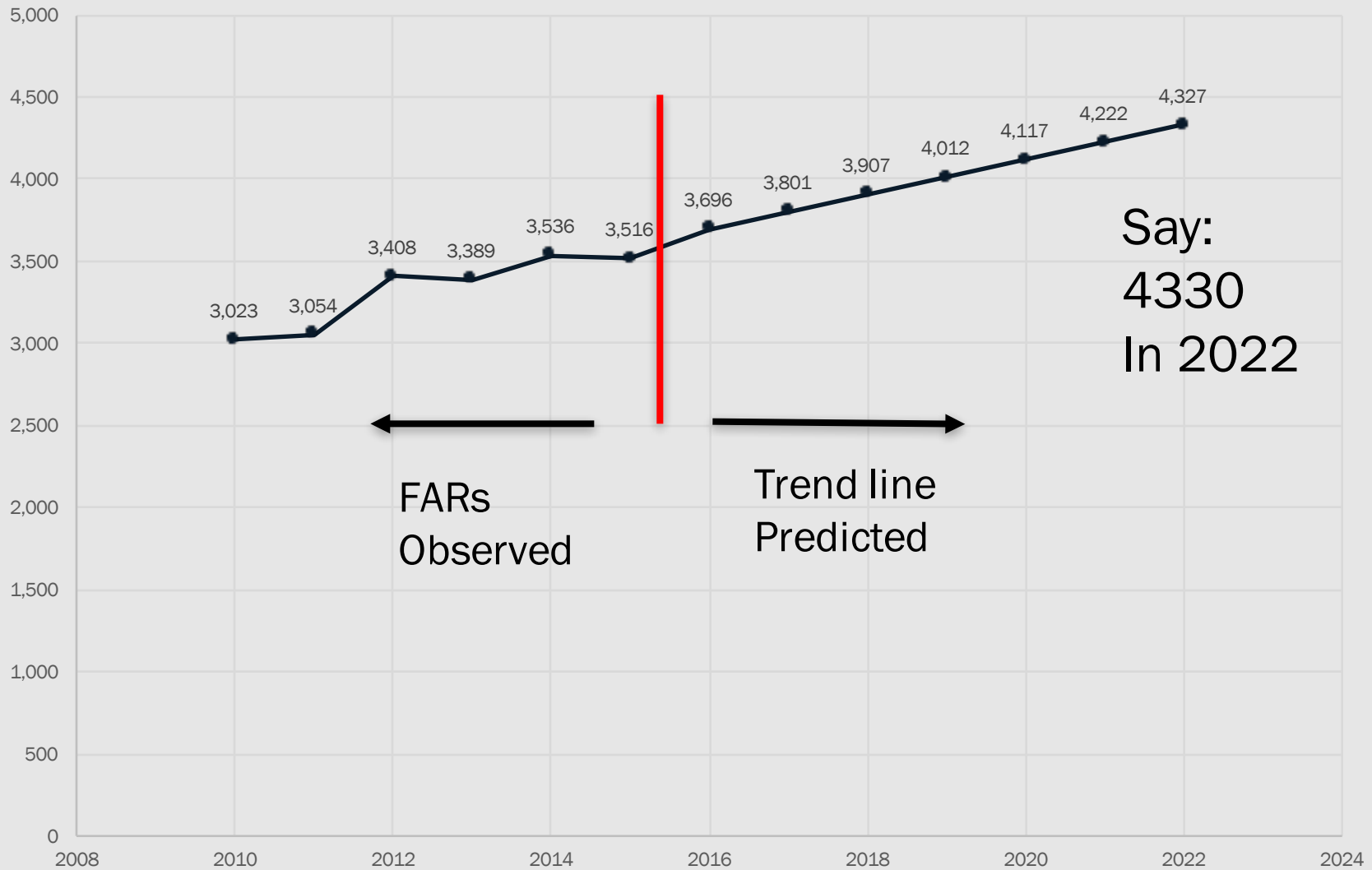
Traditionally used by
TxDOT for NHTSA
Goal setting

TTI Fatality Risk Model

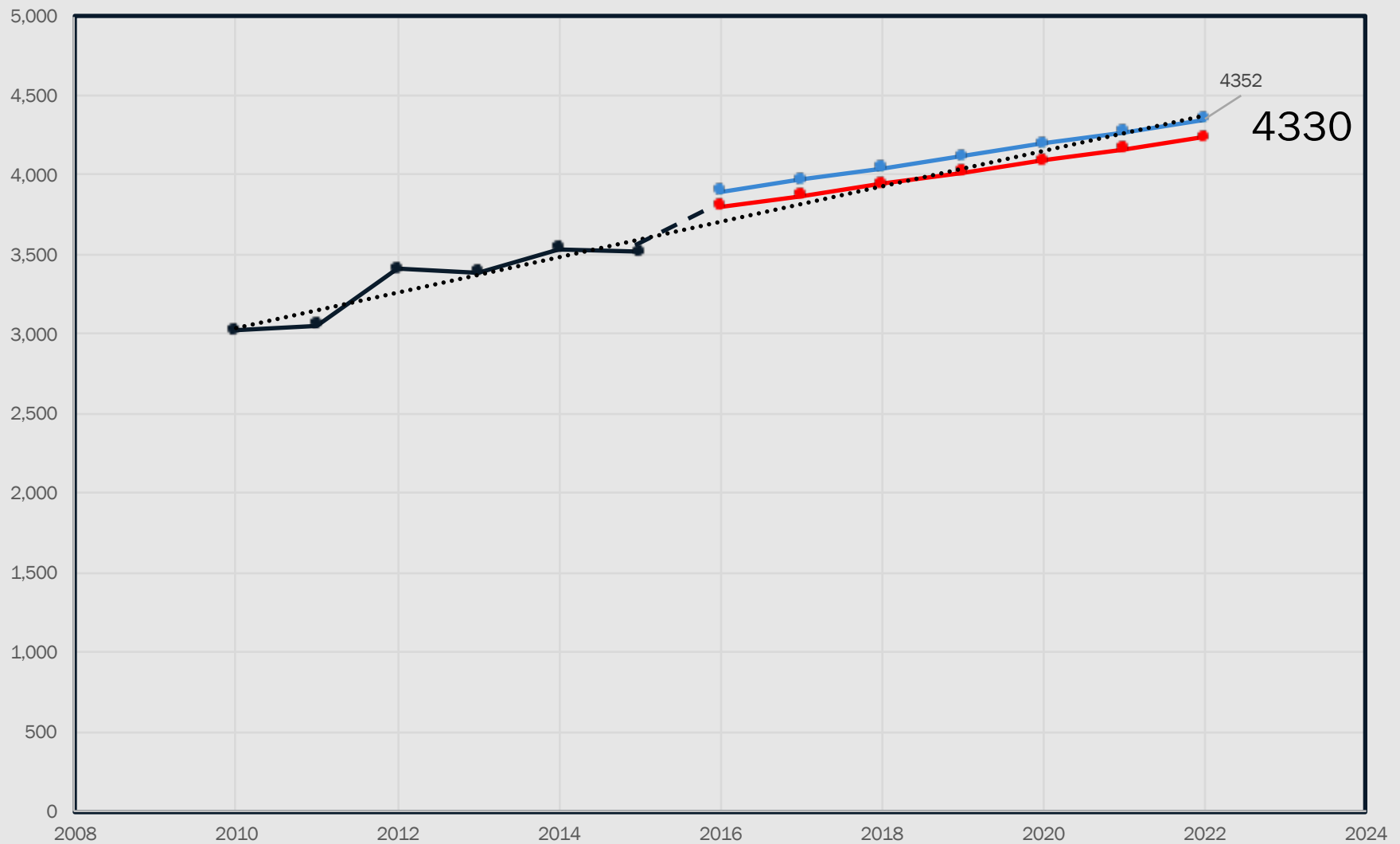
Developed by TTI for
NCHRP project

Predicted VMT x
Recent Risk Level

Trend Line Prediction



vs TTI Model & TTI pred. volume x risk



Setting a Target based on the Prediction

Exposure

VMT
predicted to rise
steadily from
2017 to 2022



Risk

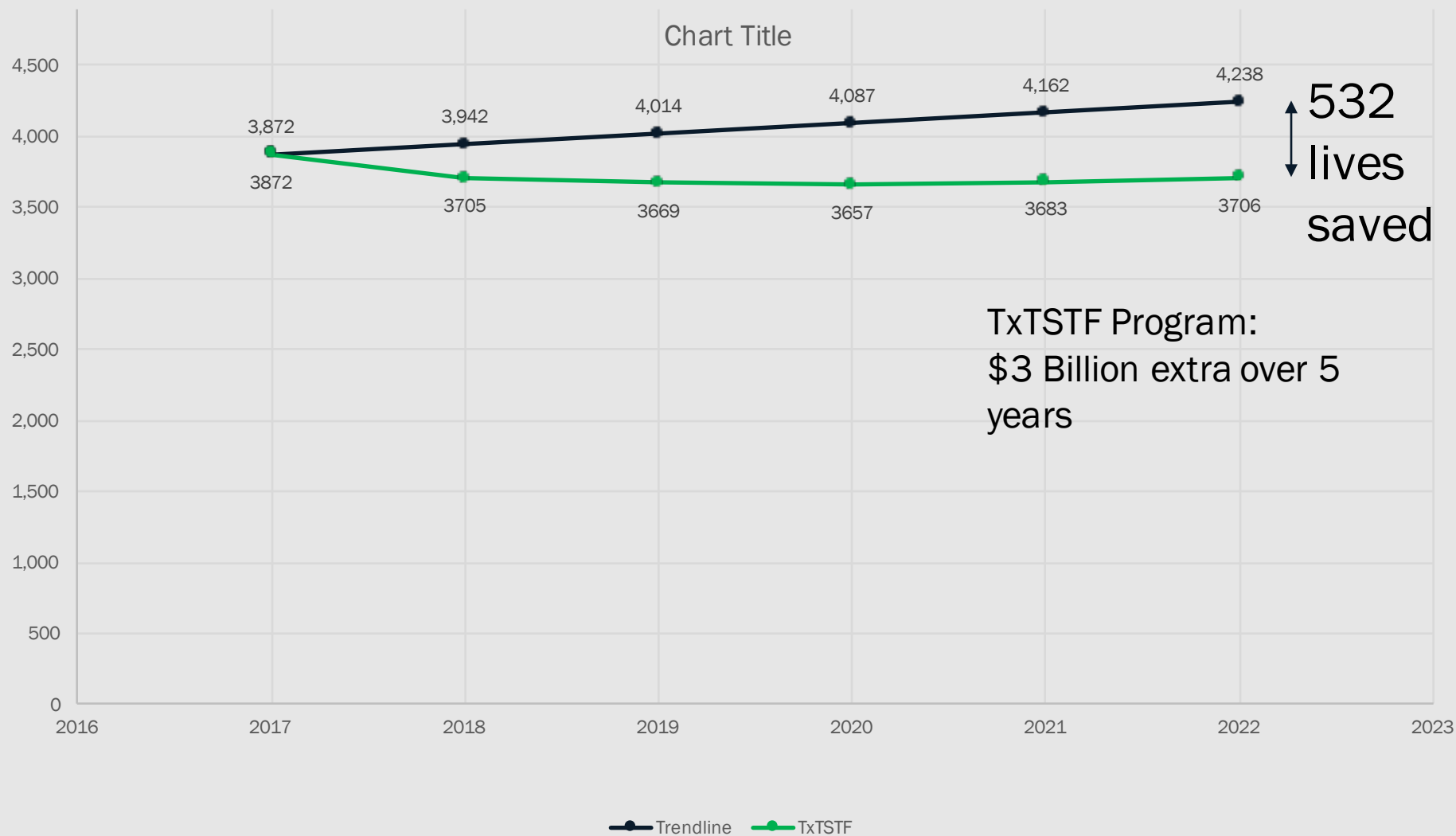
No Change from
Economics

Vehicle
Improvements?

SHSP?

Increase in
resources?

Effect of Texas Traffic Safety Task Force Program



The Question?

Everyone wants a reduction in fatalities

But...

Without significant additional resources
or laws,
is there a reason to believe that we will
be able to lower traffic fatality risk in
Texas?

Things to Consider & Discussion

Predictions
include existing
efforts and
expenditures

% reductions
vs
resource driven
estimates

VMT expected to
rise

Vehicle Safety
may have reached
max impact

Tech impact in
next 5 years-
Probably minimal

Chance of DUI or
helmet law
revisions?

Increased
Seatbelt Use?

Realistic Impact of
SHSP

no Action Plan yet

Chance to revise
based on Action
Plan

Other Required Targets

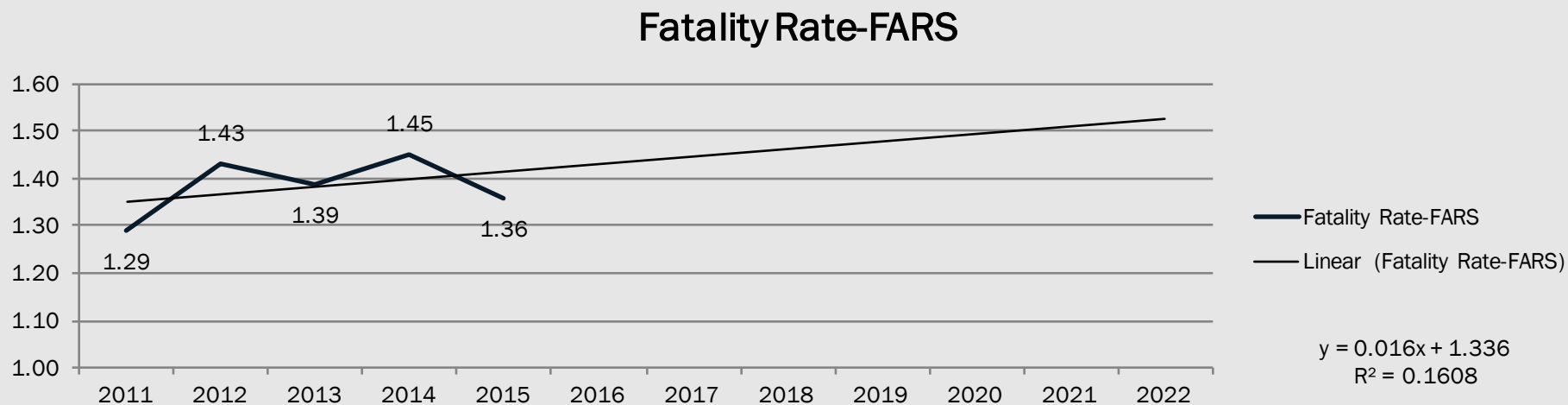
Fatality Rate

Serious Injuries

Serious Injury
Rates

Non-Motorized
Fatalities and
Serious Injuries

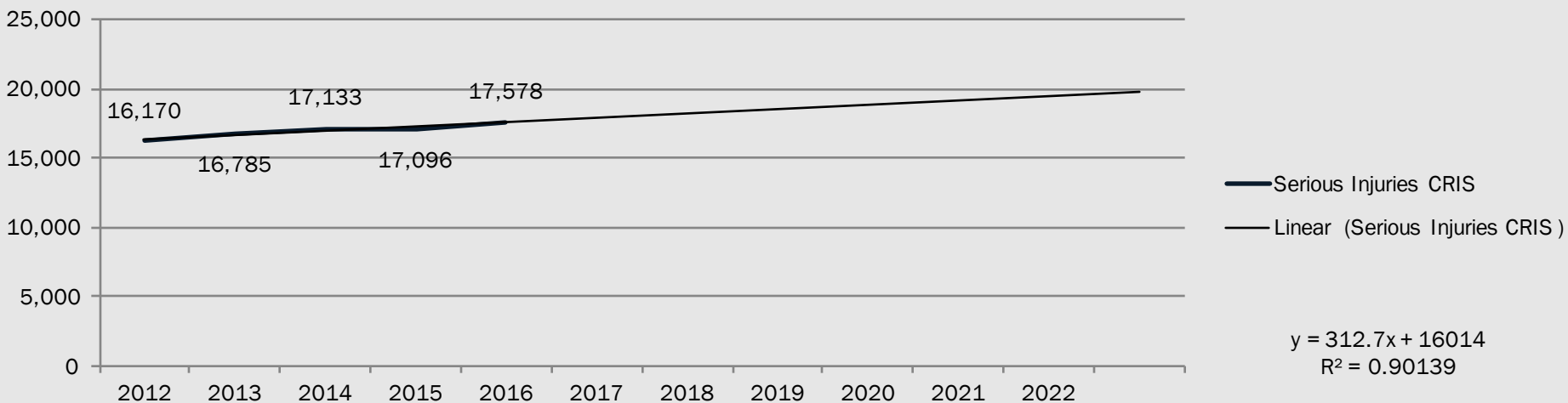
Fatality Rate - Linear Trend Analysis



Calendar Year	2011	2012	2013	2014	2015		
Fatality Rate (FARS)	1.29	1.43	1.39	1.45	1.36		
5-Year Trendline	2016	2017	2018	2019	2020	2021	2022
Projected Fatality Rate	1.43	1.45	1.46	1.48	1.50	1.51	1.53

Serious Injuries - Linear Trend Analysis

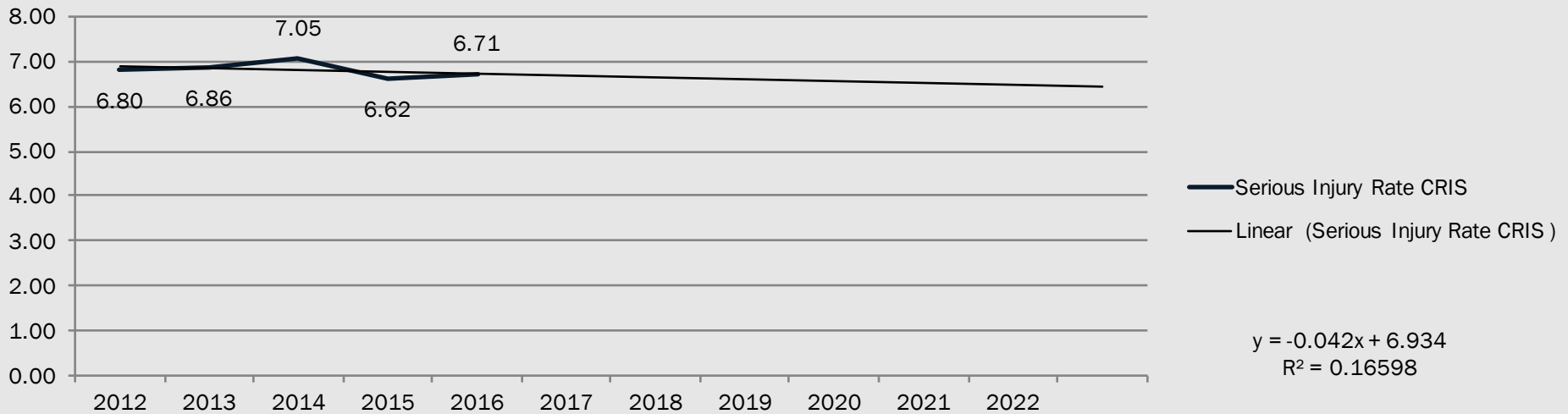
Serious Injuries CRIS



Calendar Year	2011	2012	2013	2014	2015	2016
Serious Injuries (CRIS)		16,170	16,785	17,133	17,096	17,578
5-Year Trendline	2017	2018	2019	2020	2021	2022
Projected Serious Injuries	17,890	18,203	18,516	18,828	19,141	19,454

Serious Injury Rate - Linear Trend Analysis

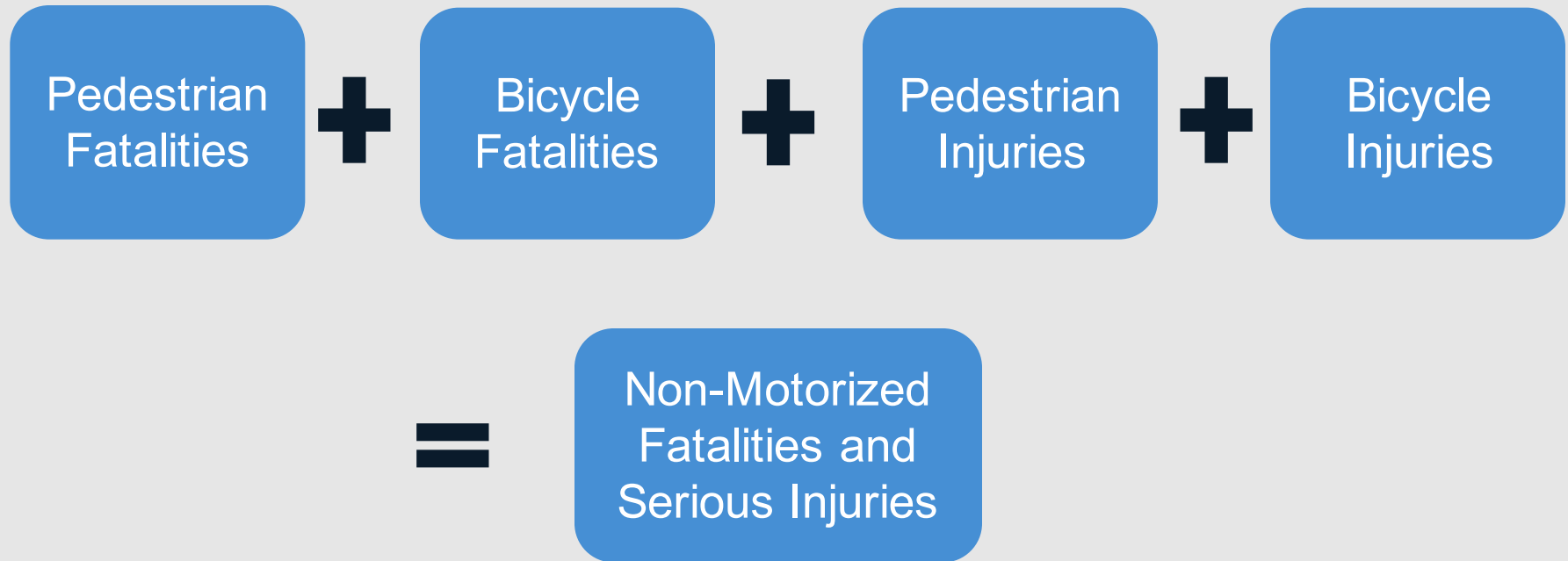
Serious Injury Rate CRIS



6.80	6.86	7.05	6.62	6.71	6.68	6.64	6.60	6.56	6.51	6.47
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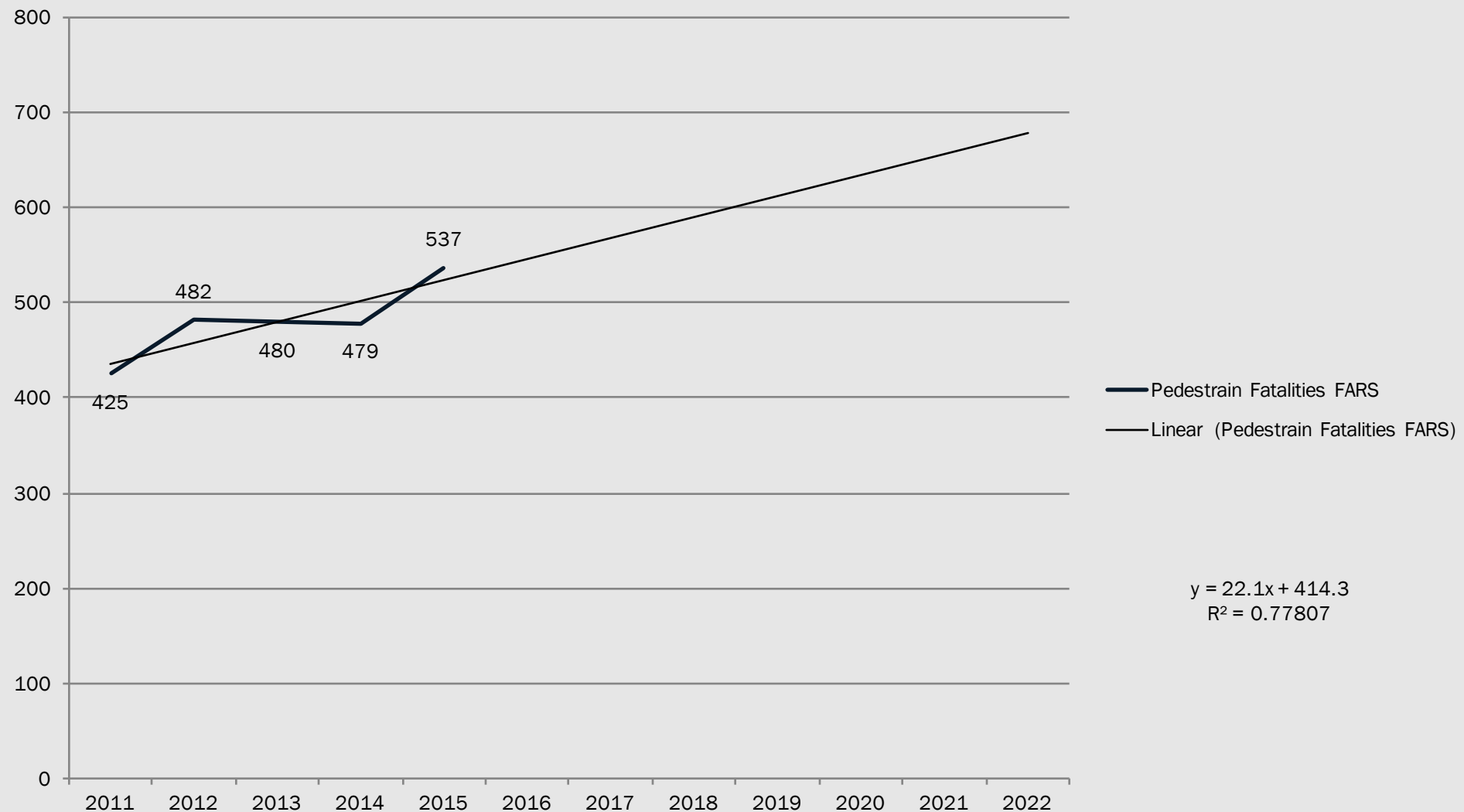
Calendar Year	2011	2012	2013	2014	2015	2016
Serious Injury Rate (CRIS)		6.80	6.86	7.05	6.62	6.71
5-Year Trendline	2017	2018	2019	2020	2021	2022
Projected Serious Injury Rate	6.68	6.64	6.60	6.56	6.51	6.47

Separate Pedestrian and Bicycle Predictions

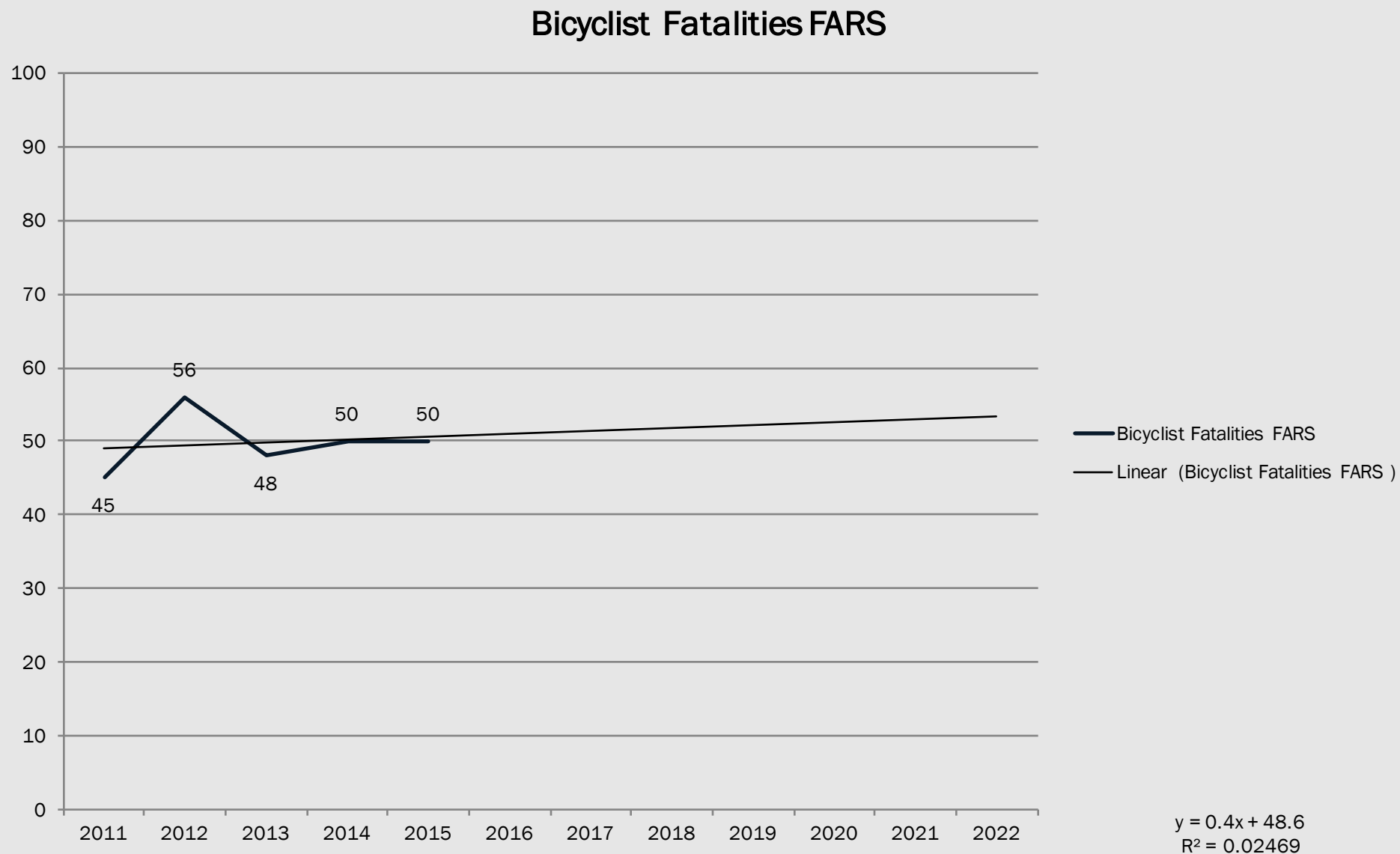


Pedestrian Fatalities - Linear Trend Analysis

Pedestrian Fatalities FARS

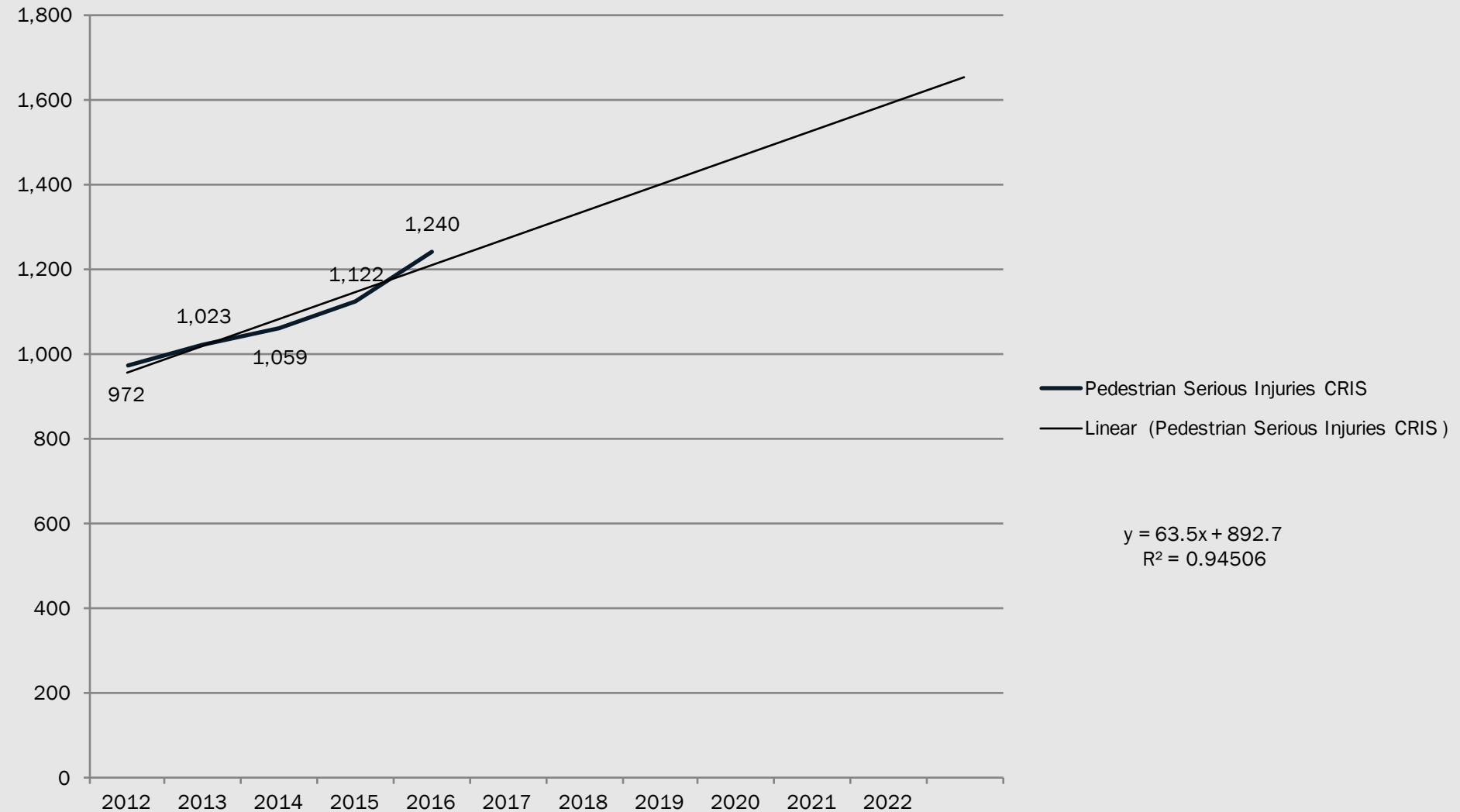


Bicyclist Fatalities - Linear Trend Analysis



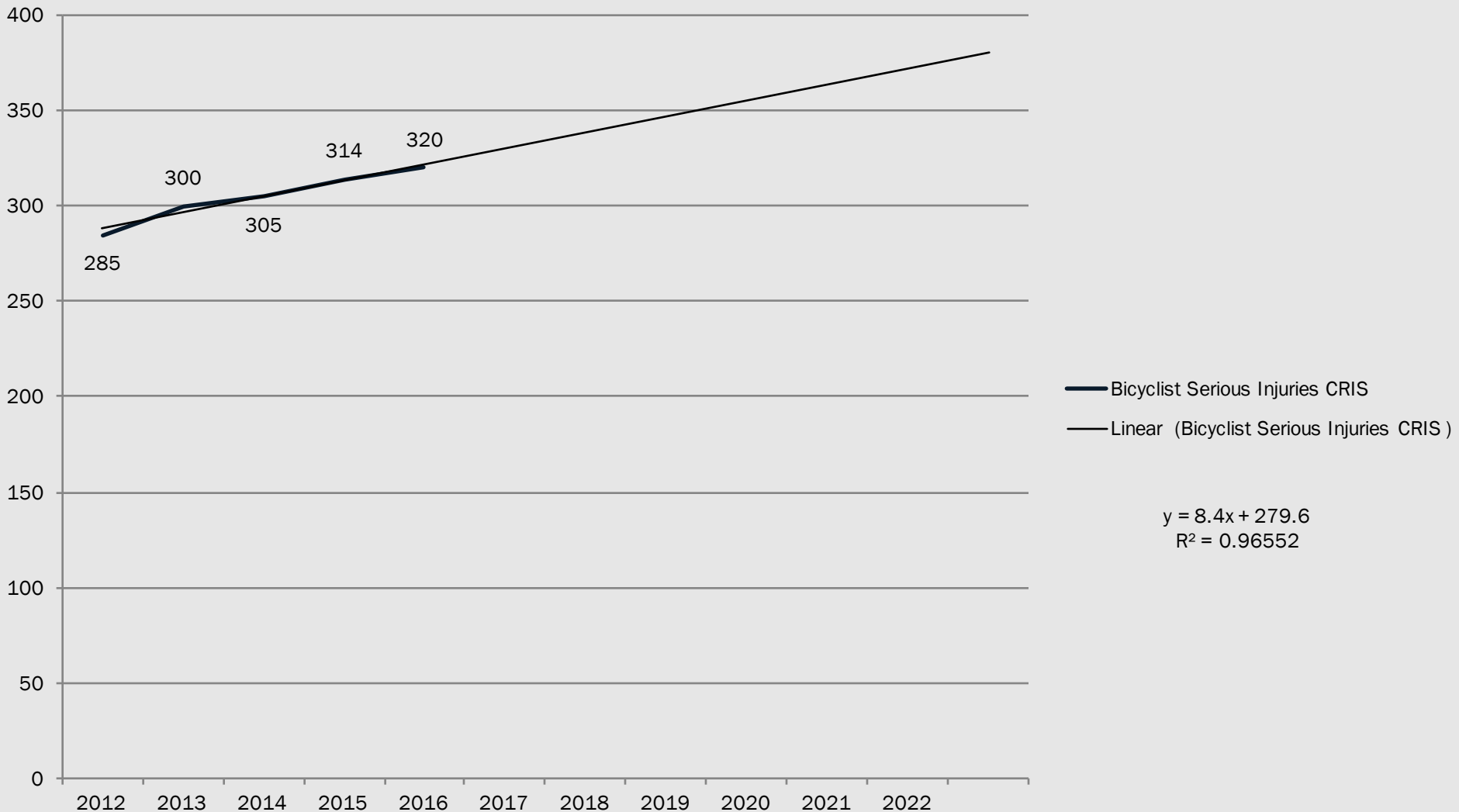
Pedestrian Serious Injuries - Linear Trend Analysis

Pedestrian Serious Injuries CRIS



Bicyclist Serious Injuries - Linear Trend Analysis

Bicyclist Serious Injuries CRIS



Linear Trend Analysis

Calendar Year	2011	2012	2013	2014	2015	2016	
Pedestrian Fatalities FARS	425	482	480	479	537		
Bicyclist Fatalities FARS	45	56	48	50	50		
Pedestrian Serious Injuries CRIS		972	1,023	1,059	1,122	1,240	
Bicyclist Serious Injuries CRIS		285	300	305	314	320	
5-Year Trendline	2016	2017	2018	2019	2020	2021	2022
Projected Pedestrian Fatalities	547	569	591	613	635	657	680
Projected Bicyclist Fatalities	51	51	52	52	53	53	53
Projected Pedestrian Serious Injuries	1,240	1,274	1,337	1,401	1,464	1,528	1,591
Projected Bicyclist Serious Injuries	320	330	338	347	355	364	372
Projected Non-Motorized Fatalities and Serious Injuries	2,158	2,224	2,318	2,413	2,507	2,602	2,696

Open Discussion on Targets



Texas – On the Road to Zero

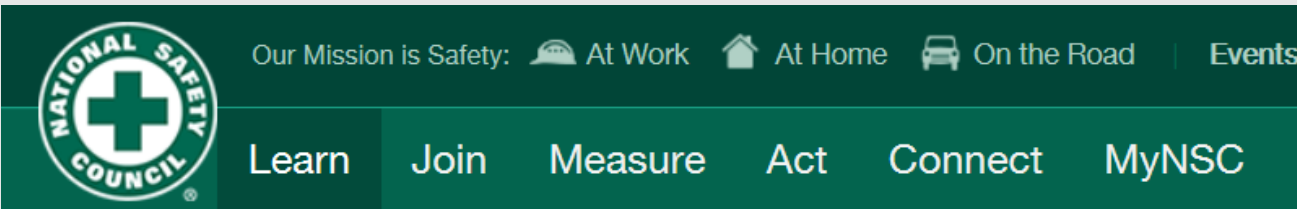
Driving Fatalities Down to Zero

Zero Fatalities: The Lonestar State of Mind

Let's Do This! Zero Traffic Fatalities in Texas

Zero Fatalities: Deep in the Heart of Texas





NSC / Learn / NSC Priorities / Road to Zero

Road to Zero

New Partnership Aims to End Traffic Fatalities Within 30 Years

Tens of thousands of people die on U.S. roads every year, and the fatality trend is going in the wrong direction. After a decade of record declines, traffic fatalities increased nearly 8% in 2015 over the prior year – the largest increase in 50 years. Estimates for the first half of 2016 show an increase of more than 10% over the same period in 2015.



In October, the National Safety Council, in partnership with the National Highway Traffic Safety Administration, the Federal Highway Administration and the Federal Motor Carrier Safety Administration, announced the Road to Zero initiative. Its aim: To eliminate traffic fatalities within 30 years.



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Road to Zero

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