

PM1: SAFETY PERFORMANCE MEASURES SNHPC 2022

Southern New Hampshire Planning Commission
Metropolitan Planning Organization
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PM1: Safety Performance Measures

FAST Act requires DOTs to annually **measure and report performance** in the following areas:

- Safety
- Pavement and bridge
- System performance/congestion
- Freight movement, and
- Congestion mitigation and air quality (CMAQ).



Background Info – Federal Legislation and Safety Performance

What are the Five Federally-required safety measures?



1. Number of Fatalities

The 5-year average of the total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year.

2. Rate of Fatalities

The 5-year average of the ratio of the number of fatalities to the number of vehicle miles traveled (VMT, in 100 Million VMT) in a calendar year.

3. Number of Serious Injuries

The 5-year average of the total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year.

4. Rate of Serious Injuries

The 5-year average of the ratio of the number of serious injuries to the number of VMT (in 100 Million VMT) in a calendar year.

5. Number of Non-Motorized Fatalities and Non-motorized Serious Injuries

The 5-year average of the combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year.

Federal Legislation and State-level Safety Performance Targets

States set safety performance targets:

MPOs including SNHPC are allowed the flexibility to set their own safety targets

OR

MPOs may support the State-level performance targets

For 2022 SNHPC Recommends:

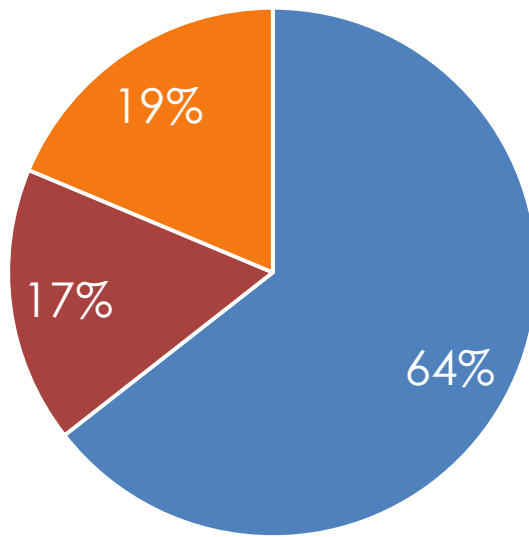
Support State Targets FOR 2022

EXCEPT

That SNHPC adopt A REGIONAL target for the Fatality Rate.

New England Annual
Crash Fatalities
(2019 5-Year Average)

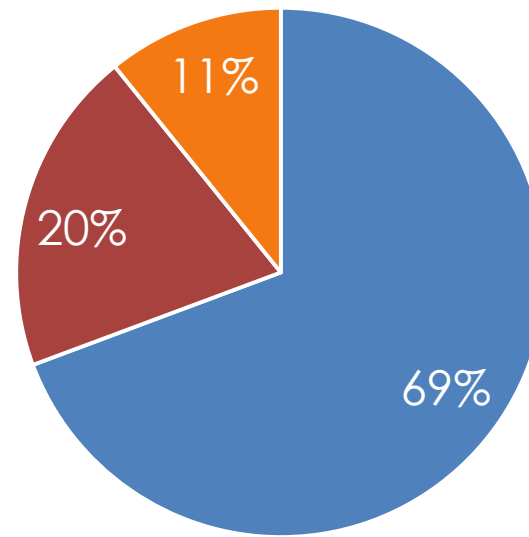
Total: 1,029



■ Vehicular ■ Motorcycle
■ Bike-Ped

New Hampshire Annual
Crash Fatalities
(2019 5-Year Average)

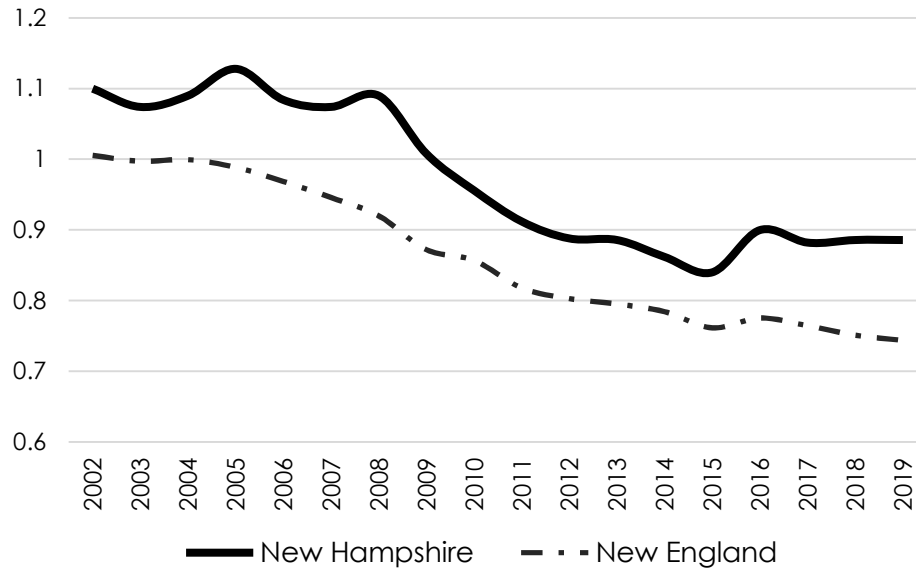
Total: 120



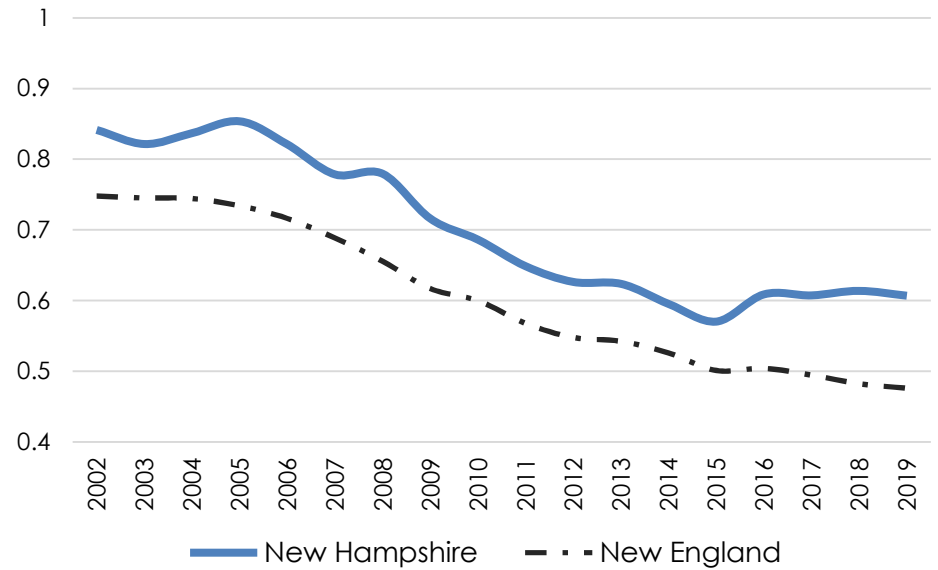
■ Vehicular ■ Motorcycle
■ Bike-Ped

[Source: Fatality Analysis Reporting System \(FARS\)](#)

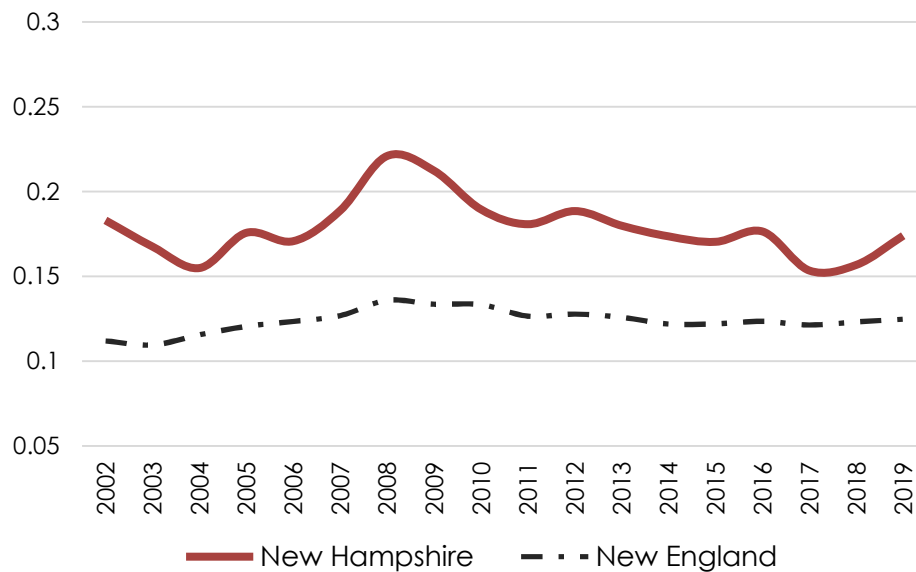
Crash Fatalities/1 Mil. VMT (5-Year Average)



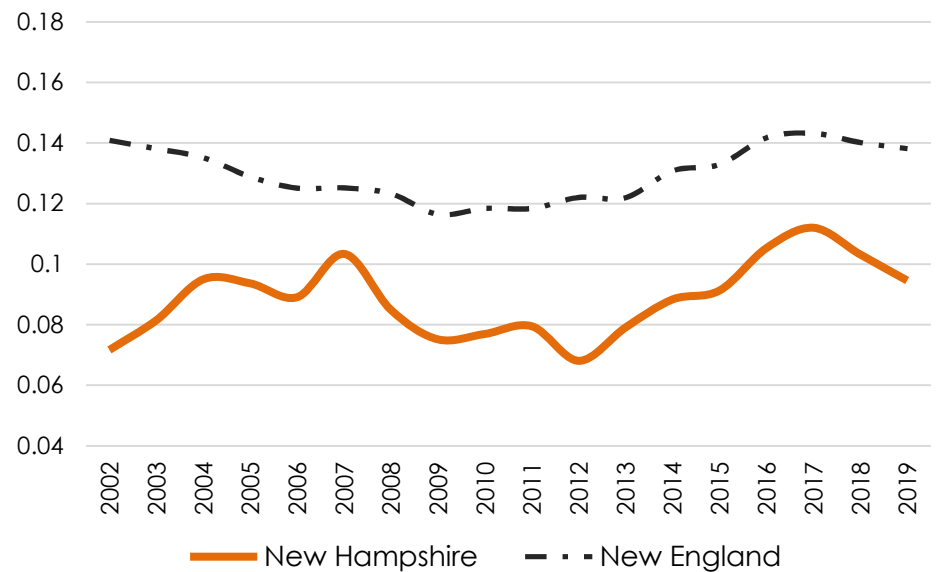
Vehicular Fatalities/1 Mil. VMT (5-Year Average)



Motorcycle Fatalities/1 Mil. VMT (5-Year Average)



Bike-Ped Fatalities/1 Mil. VMT (5-Year Average)



1994-1998 Average Annual Vehicular
Fatalities

	Restraint Used	Restraint Not Used	Restraint Used	Restraint Not Used
New Hampshire	24	61	28%	72%
New England	234	546	30%	70%

2015-2019 Average Annual Vehicular
Fatalities

	Restraint Used	Restraint Not Used	Restraint Used	Restraint Not Used
New Hampshire	24	55	31%	69%
New England	239	315	43%	57%

Restraint Not Used Fatalities
2015-2019 vs. 1994-1998
Average

	Absolute Change	Relative Change
New Hampshire	-6	-10%
New England	-231	-42%

SNHPC Vehicular Crashes

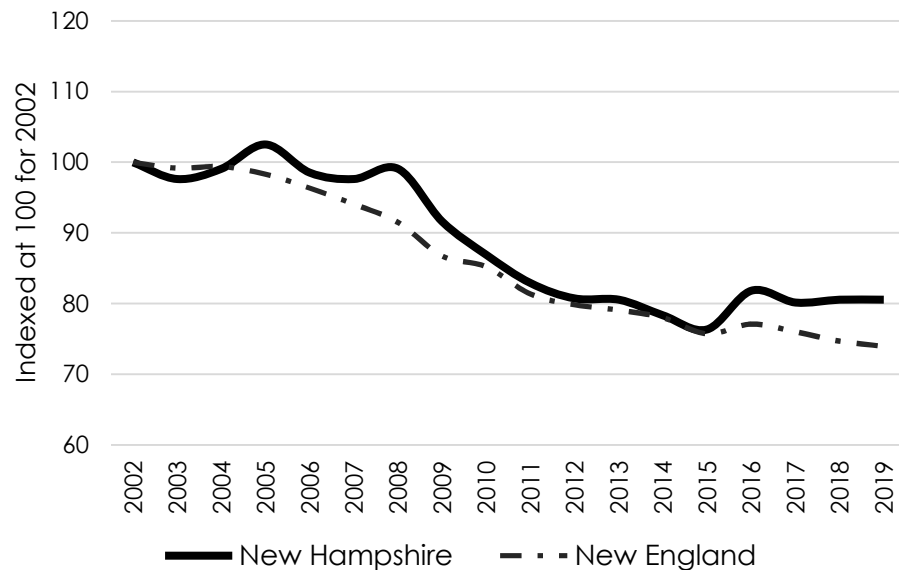
	2002-2016 All Crashes	Fatalities
Restraint Used	85%	28%
Restraint Not Used	15%	72%

Source: NHDOS; NHDOT.

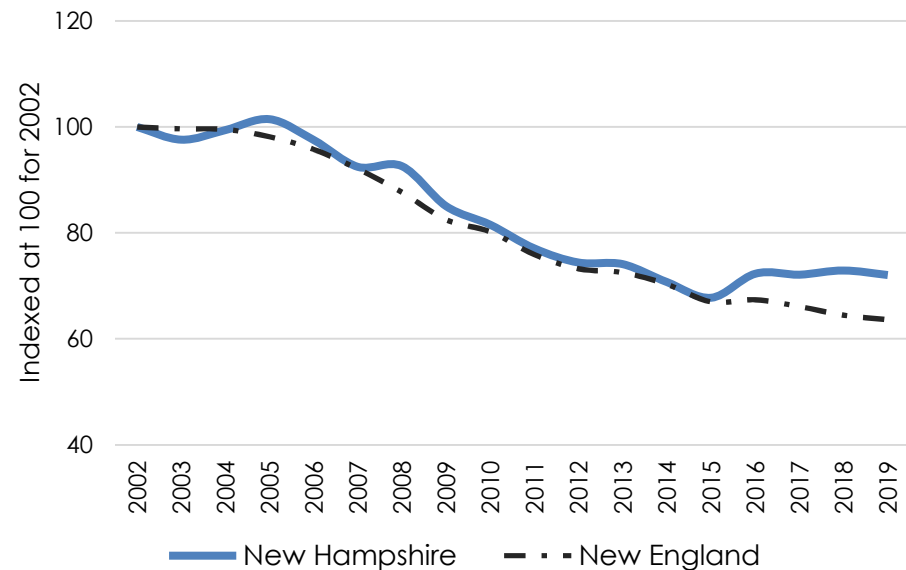
New Hampshire has an additional 17 fatalities annually
An additional \$29 million in direct economic costs

[Source: National Safety Council](#)

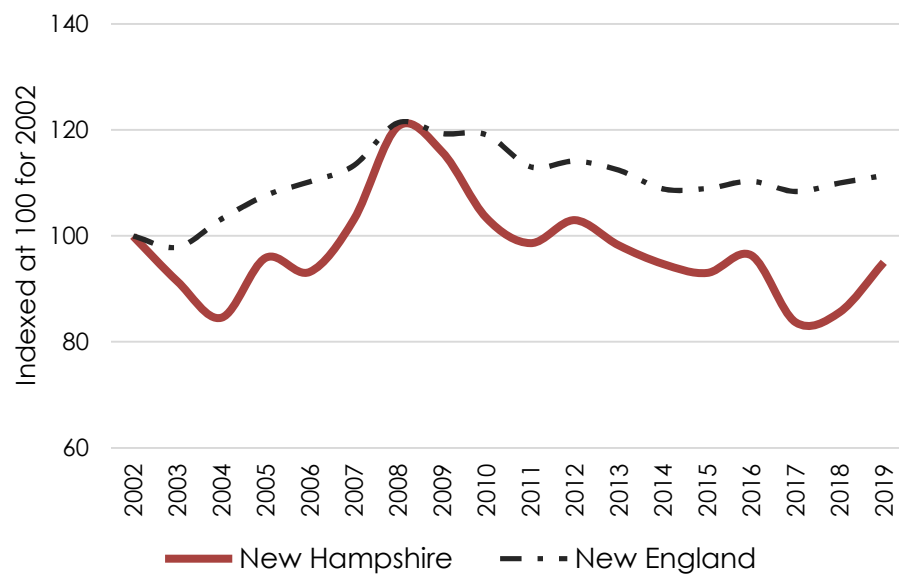
Crash Fatalities/1 Mil. VMT (5-Year Average)



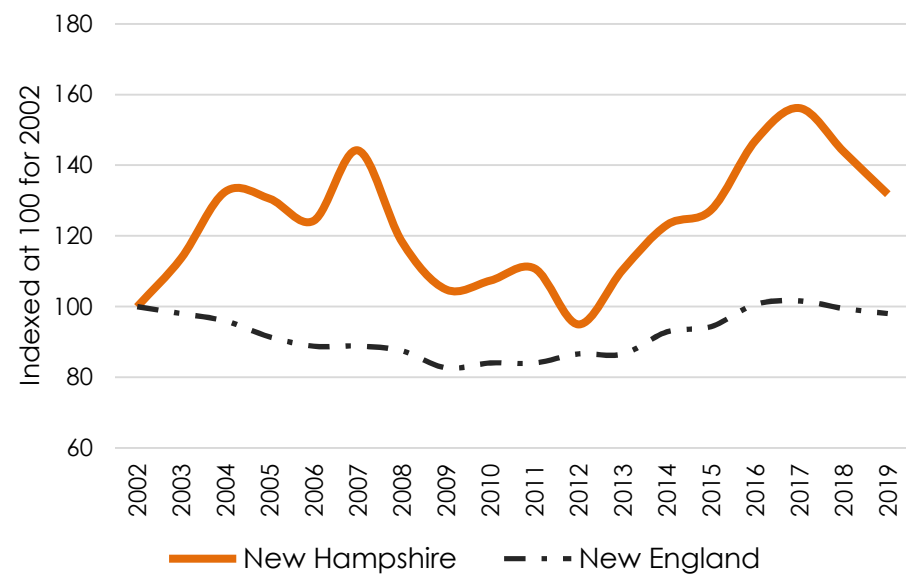
Vehicular Fatalities/1 Mil. VMT (5-Year Average)



Motorcycle Fatalities/1 Mil. VMT (5-Year Average)

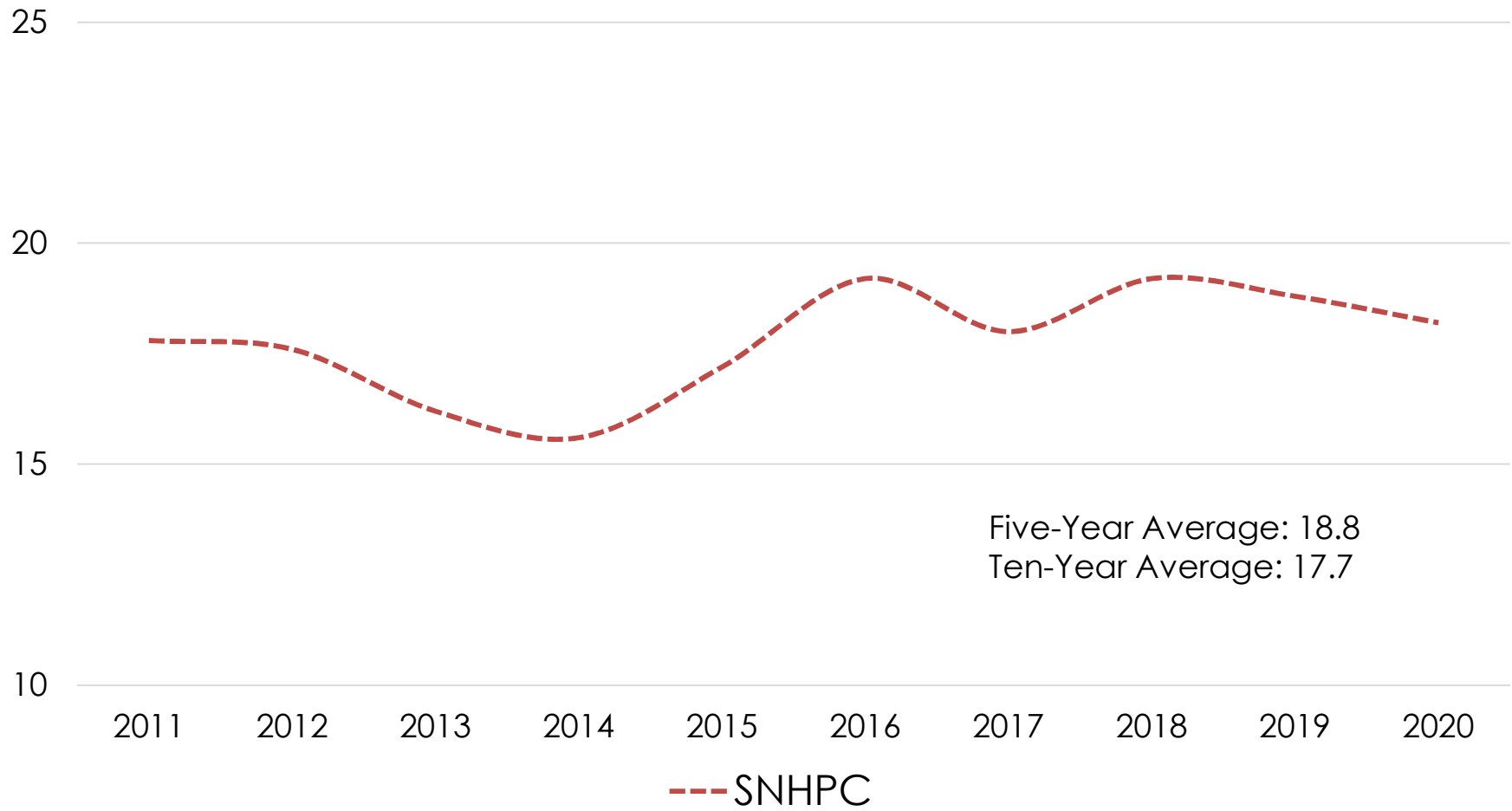


Bike-Ped Fatalities/1 Mil. VMT (5-Year Average)

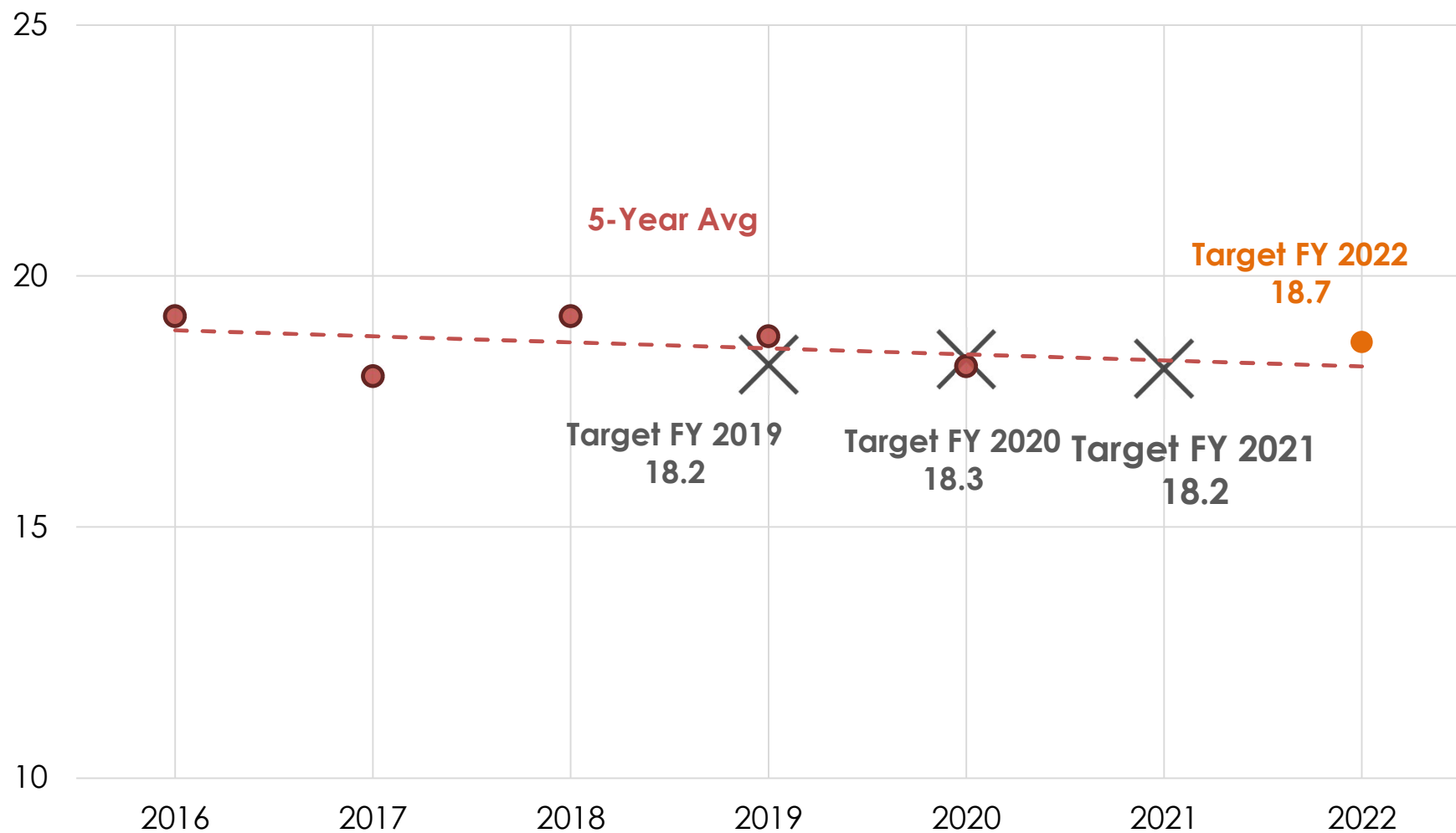


Measure 1: Number of Fatalities

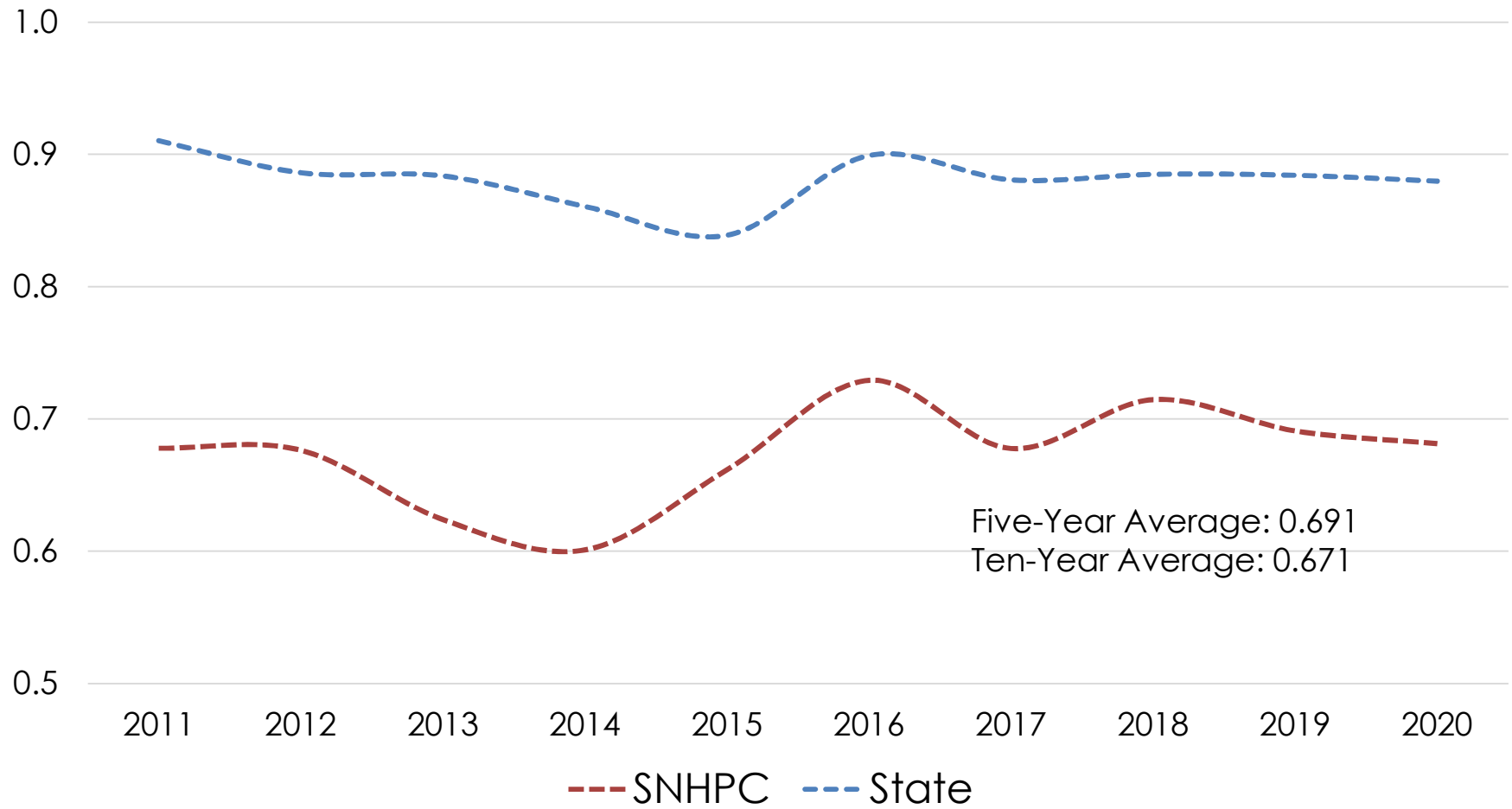
(Five-Year Moving Average)



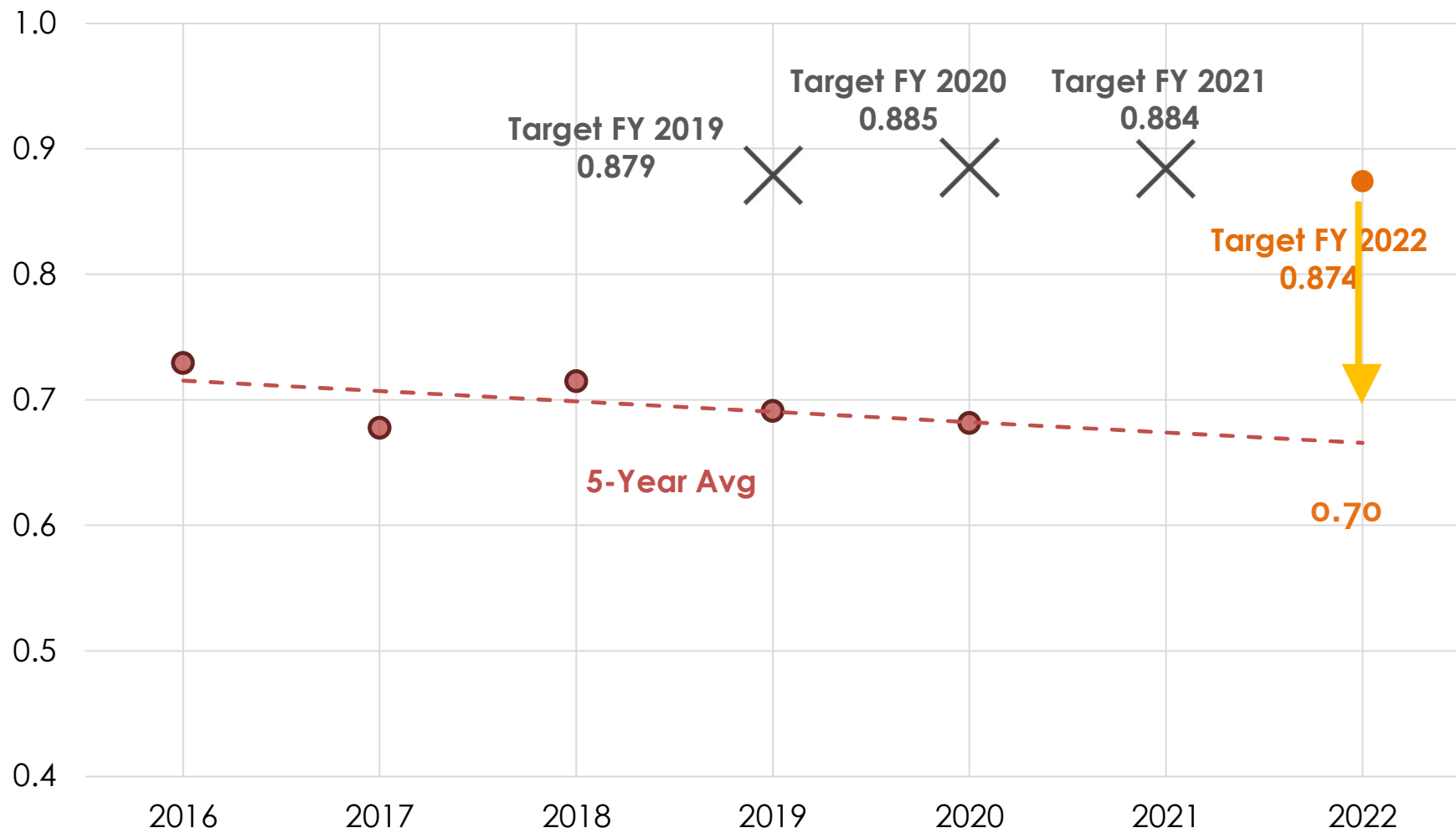
Measure 1: Projected Number of SNHPC Fatalities



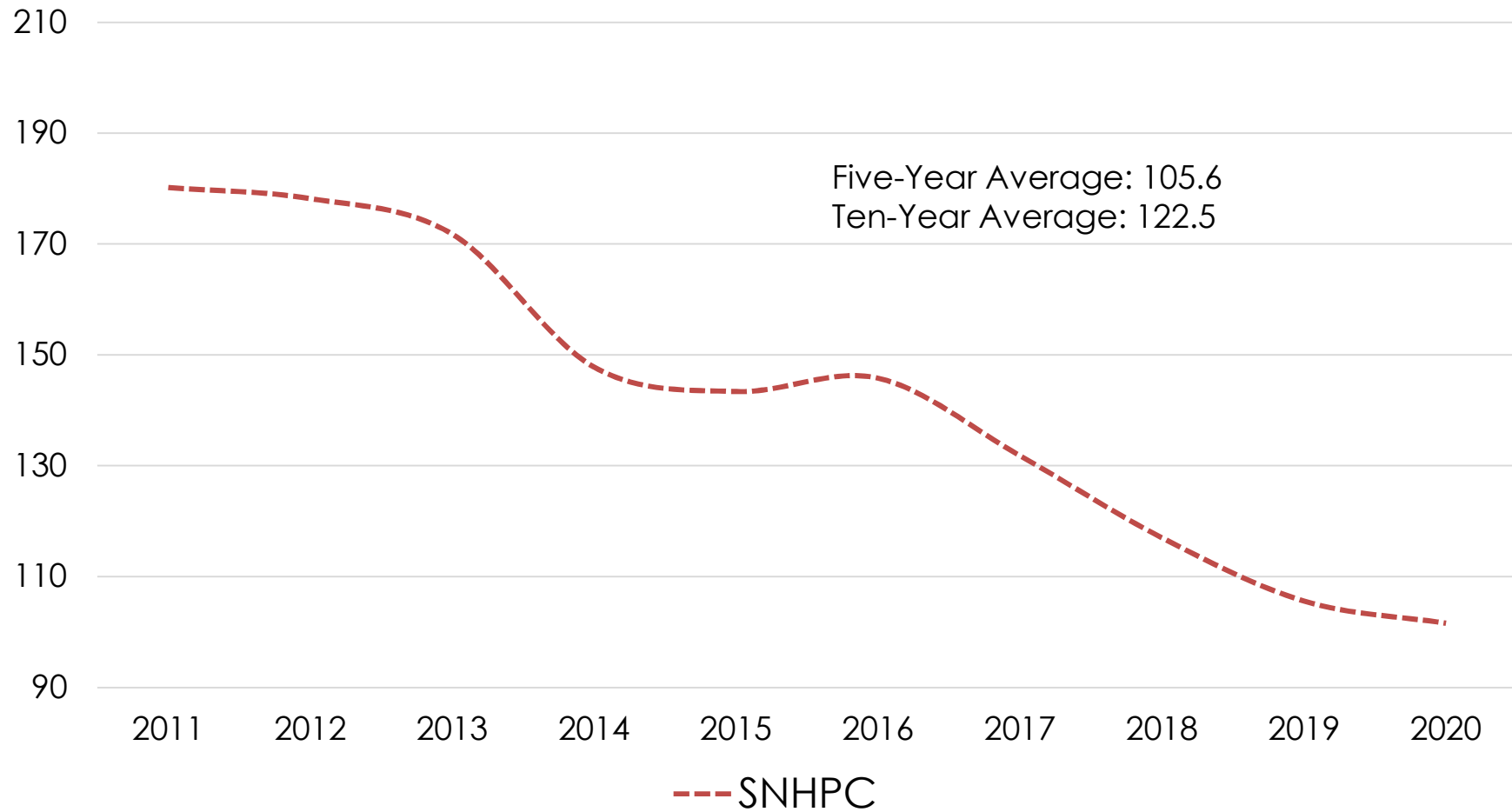
Measure 2: Fatality Rate (Five-Year Moving Average)



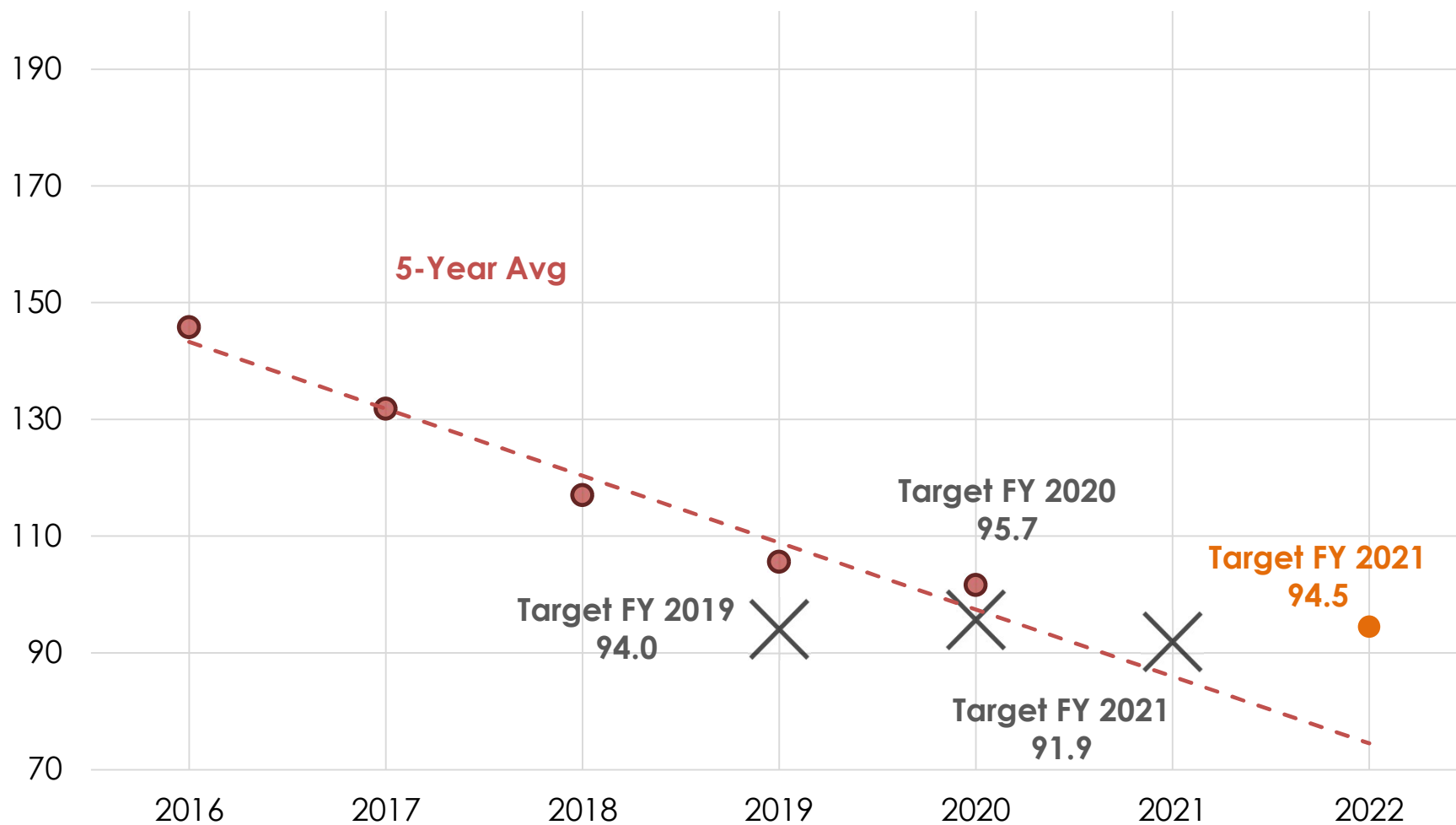
Measure 2: Projected SNHPC Fatality Rate



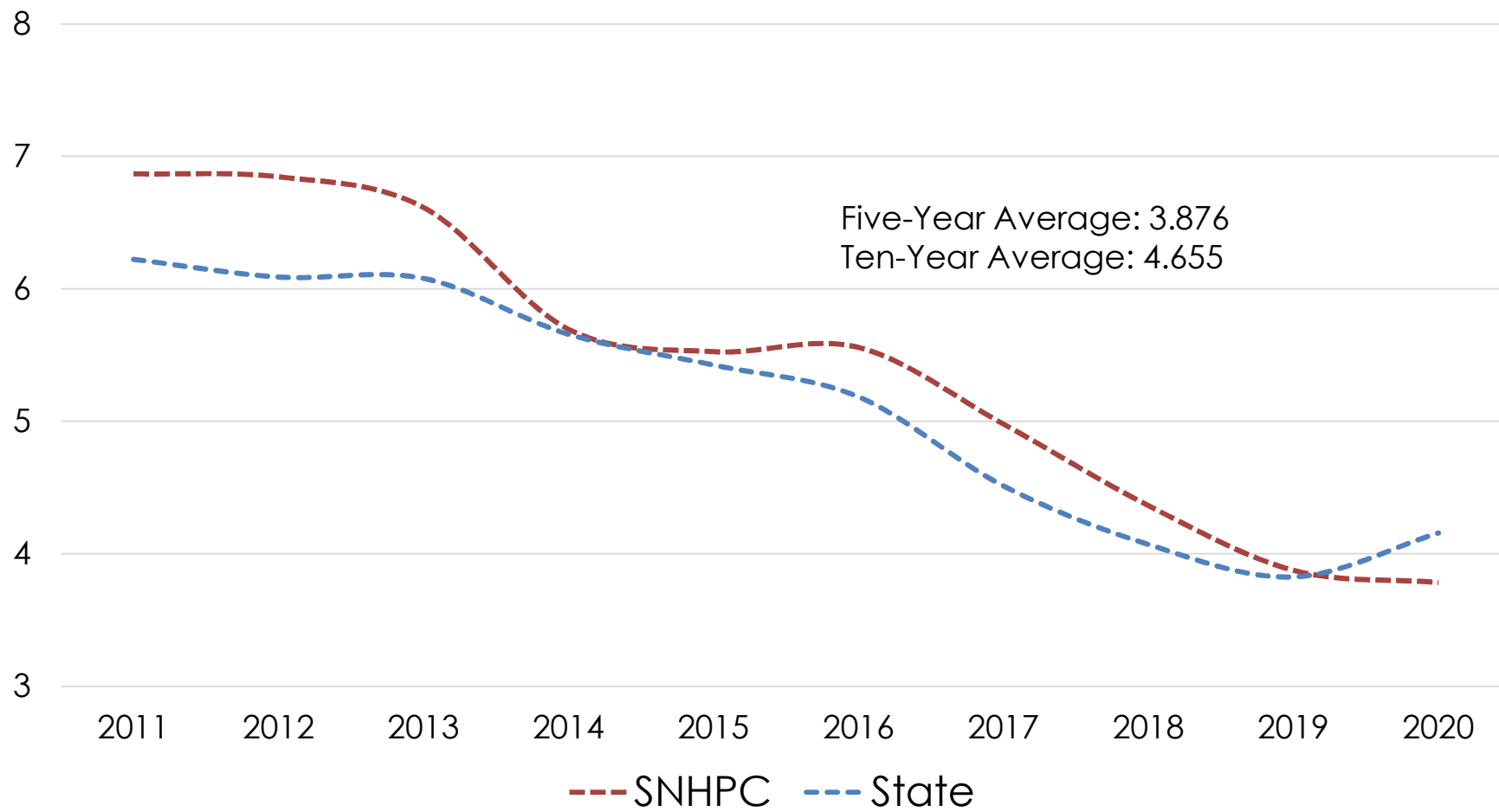
Measure 3: Number of Serious Injuries (Five-Year Moving Average)



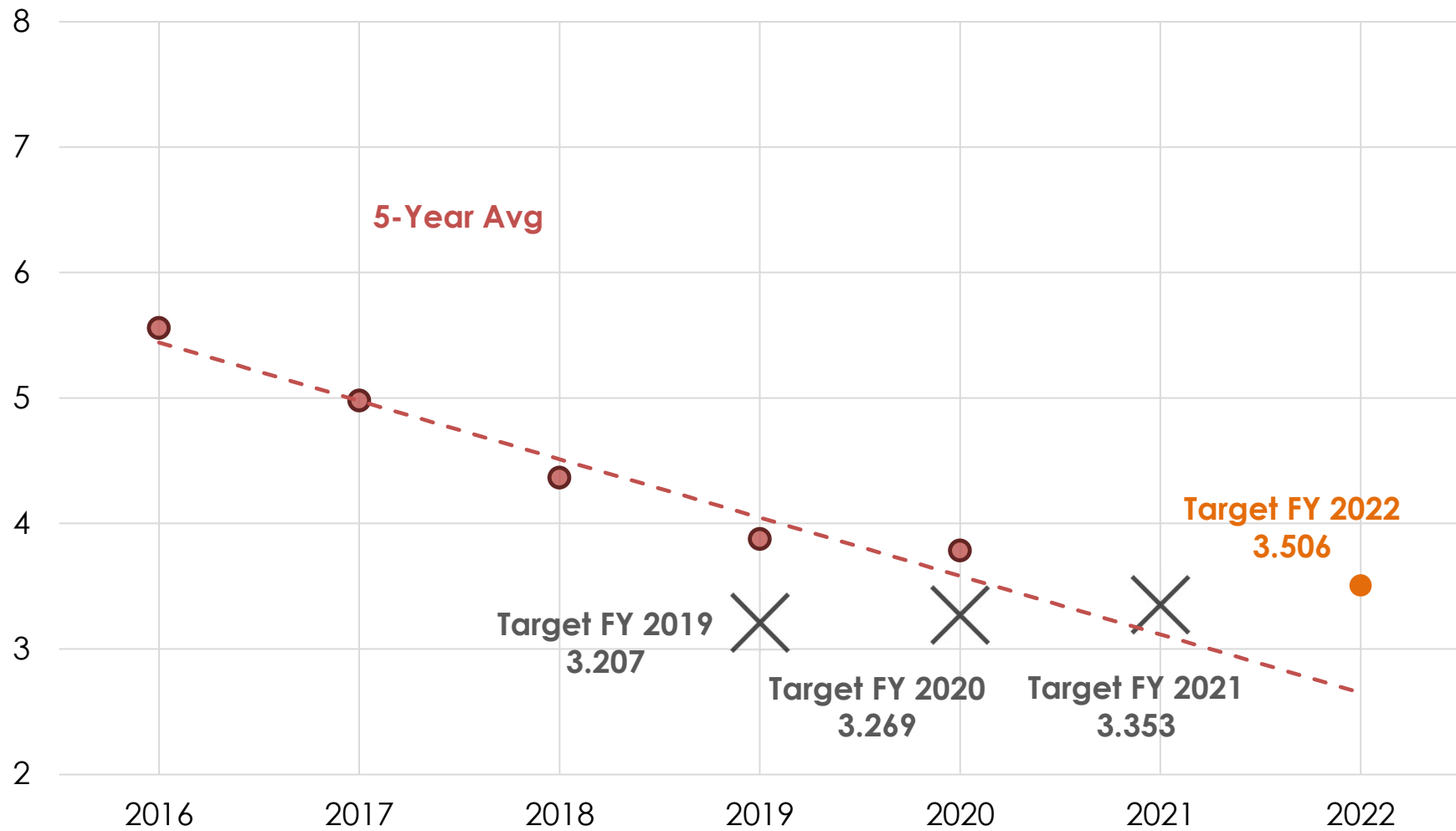
Measure 3: Projected Number of SNHPC Serious Injuries



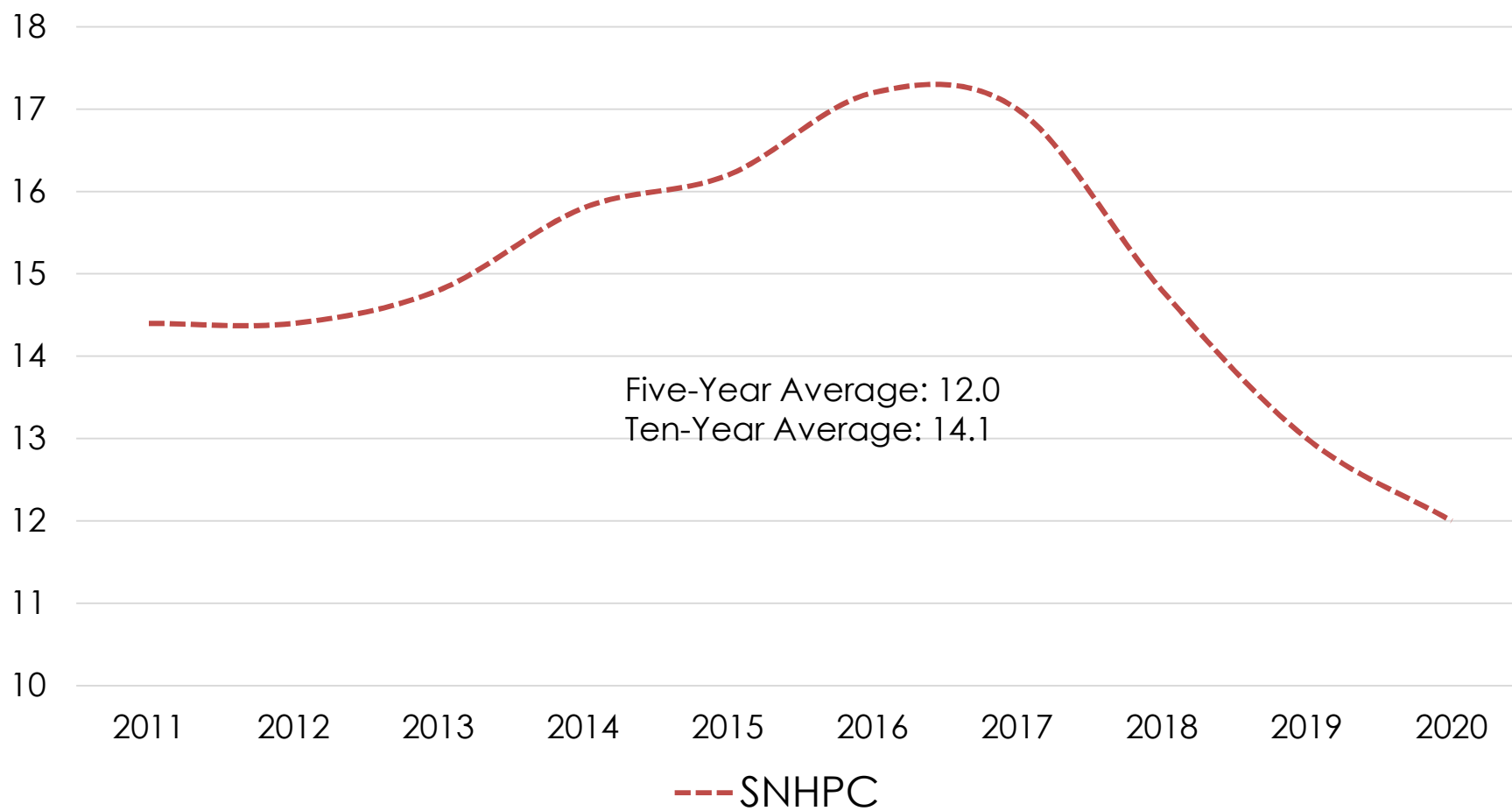
Measure 4: Serious Injury Rate (Five-Year Moving Average)



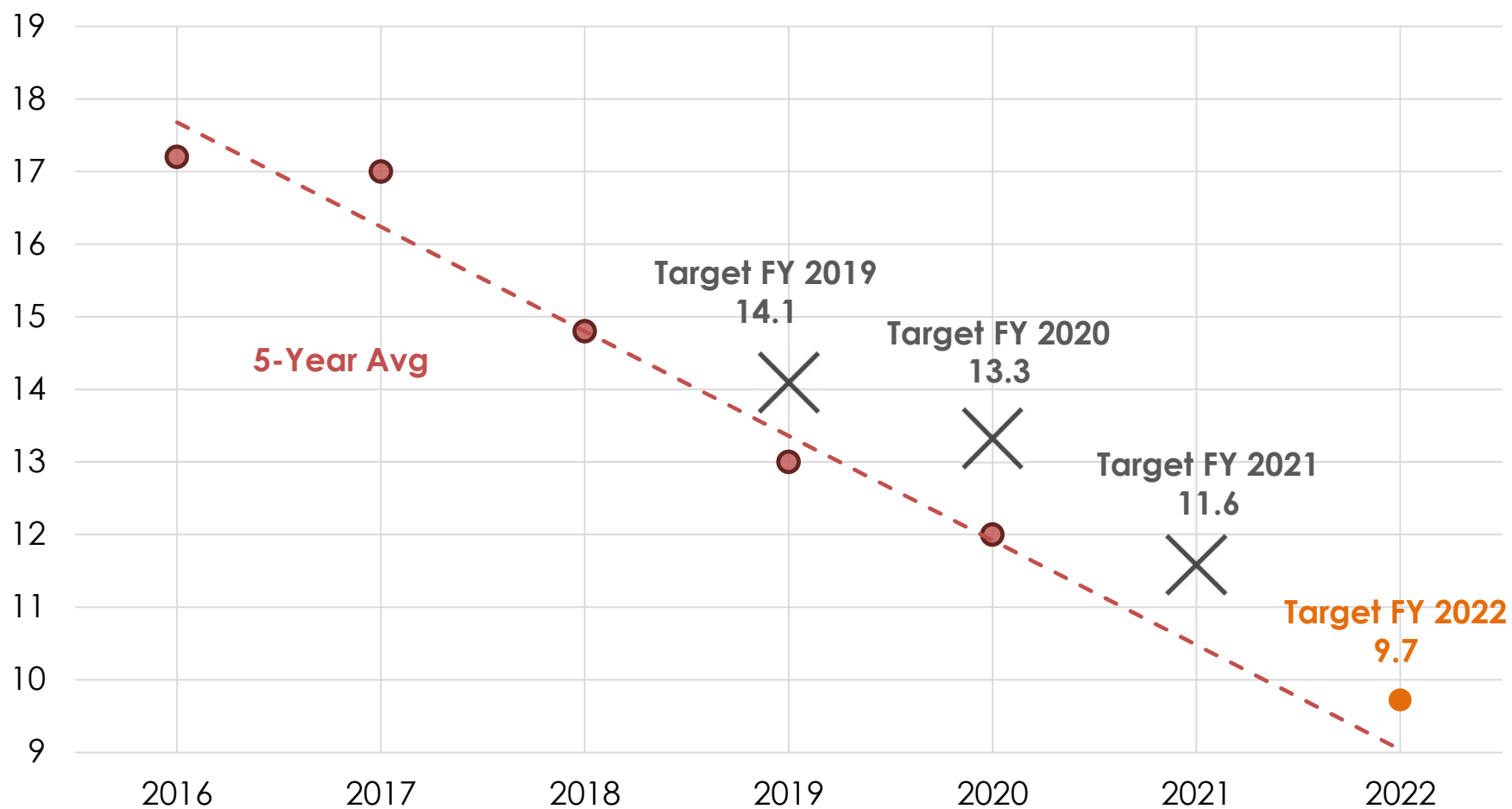
Measure 4: Projected SNHPC Serious Injury Rate



Measure 5: Number of Non-motorized Fatalities and Serious Injuries (Five-Year Moving Average)



Measure 5: Projected Number Non-motorized Fatalities and Serious Injuries



State-level 2022 Safety Performance Targets

Safety Measures	State Five-Year Rolling Average		Trends		State Target
	2015-2019	2016-2020	Recent	Desired	2022 Target
Number of Fatalities	120.0	118.0	↓	↓	117.8
Fatality Rate per 100 Million VMT	0.884	0.880	↓	↓	0.874
Number of Serious Injuries	530.2	509.6	↓	↓	465.4
Serious Injury Rate per 100 Million VMT	3.826	4.157	↑	↓	3.506
Non-Motorized Fatalities and Serious Injuries	56.0	48.6	↓	↓	38.0

2022 Proposed SNHPC Regional Safety Performance Targets

Safety Measures	SNHPC Five-Year Rolling Averages		Trends		State Target	SNHPC Recommended Target
	2015-2019	2016-2020	Recent	Desired		2022
Number of Fatalities	18.8	18.2	↓	↓	117.8	Support State Target (approx. 19 regionally)
Fatality Rate per 100 Million VMT	0.691	0.682	↓	↓	0.874	Adopt Regional Target: 0.700
Number of Serious Injuries	105.6	101.6	↓	↓	465.4	Support State Target (approx. 95 regionally)
Serious Injury Rate per 100 Million VMT	3.876	3.786	↓	↓	3.506	Support State Target
Non-Motorized Fatalities and Serious Injuries	13.0	12.0	↓	↓	38.0	Support State Target (approx. 10 regionally)

SNHPC 2022 Safety Performance Targets (Proposed)

Safety Measures	State Target	SNHPC Regional Target	Action
	2022		
Number of Fatalities	117.8	18.7	Support State Target
Fatality Rate per 100 Million VMT	0.874	0.700	Adopt Regional Target
Number of Serious Injuries	465.4	95.0	Support State Target
Serious Injury Rate per 100 Million VMT	3.506	3.506	Support State Target
Non-Motorized Fatalities and Serious Injuries	38.0	9.7	Support State Target

Safety Performance Targets for 2022

What does it mean for SNHPC?

For 2022, staff is recommending that the SNHPC again adopt the State of New Hampshire's Safety Performance Targets **EXCEPT** to set a Regional Target for Fatality Rate.

In supporting the State-level targets AND setting a Regional Target, the SNHPC will still be agreeing to:

- **Work with the State and safety stakeholders to address areas of concern for fatalities or serious injuries within the SNHPC metropolitan planning area;**
- **Coordinate with the State and include the safety performance measures and HSIP targets for all public roads in the metropolitan area in the SNHPC Long-Range Transportation Plan; and**
- **Integrate into the metropolitan transportation planning (MTP) process, the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the Strategic Highway Safety Plan.**

Safety Performance Targets for 2022

What does it mean for SNHPC to adopt a Regional Target?

In setting a Regional Target for the Fatality Rate:

-The region has had a lower rate for three consecutive years and staff believes that the region will continue to have lower Fatality Rate than the State.

-The rate we are targeting -- .7 deaths per 100 million VMT, is where we are trending to be.

SNHPC will still:

-work with the State and safety stakeholders to address areas of concern for fatalities or serious injuries within the SNHPC metropolitan planning area;
-Coordinate with the State and include the safety performance measures and HSIP targets for all public roads in the metropolitan area in the SNHPC Long-Range Transportation Plan; and
- ... Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the Strategic Highway Safety Plan.

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Questions?



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