

# *PM1: SAFETY PERFORMANCE MEASURES SNHPC 2022*

Southern New Hampshire Planning Commission  
Technical Advisory Committee  
February 17, 2022

Carl Eppich — SNHPC — Principal Transportation Planner  
Zachary Swick — SNHPC— Senior GIS Analyst



# 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**

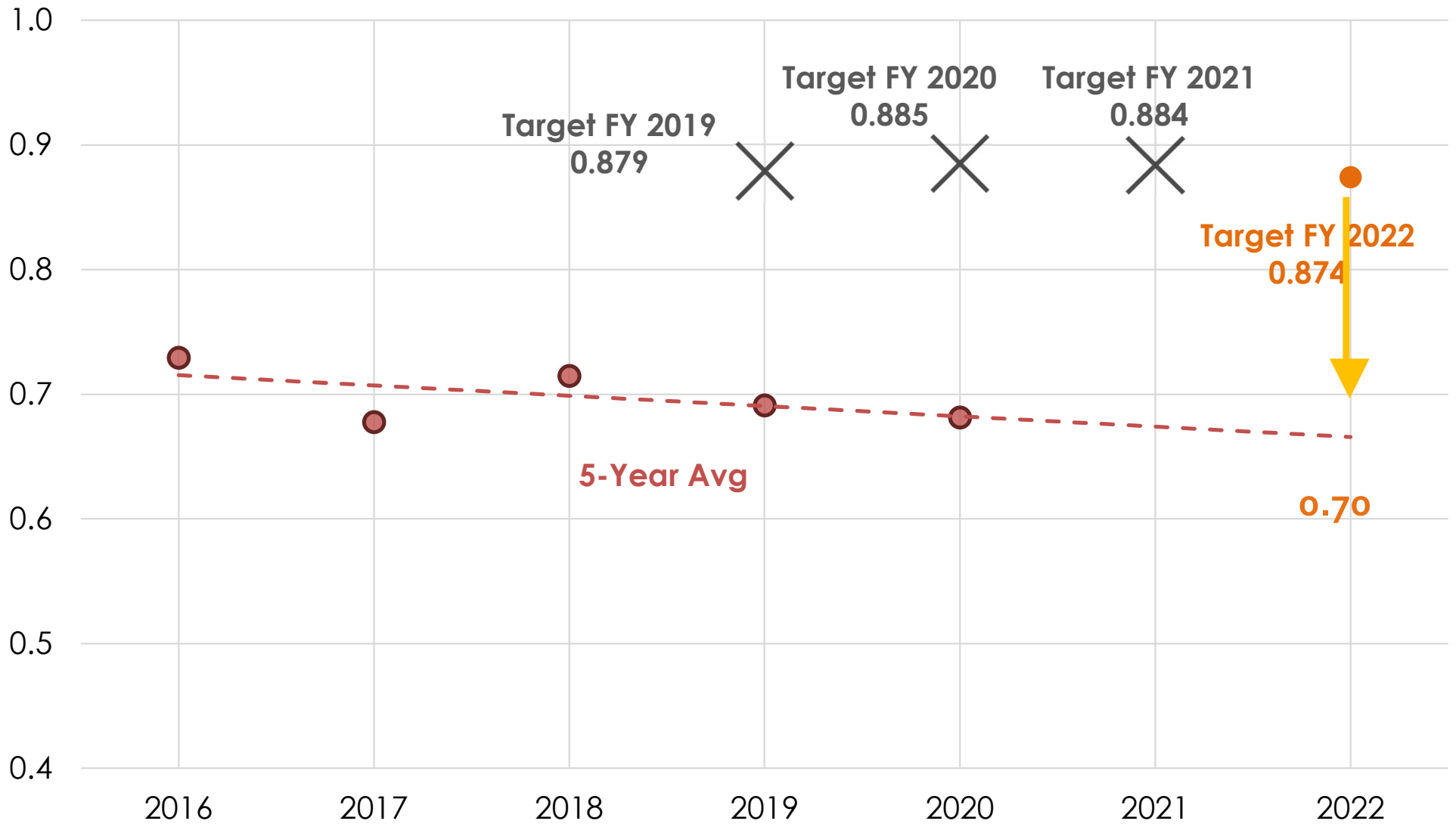
### **EXCEPT**

***That SNHPC adopt A REGIONAL target for the Fatality Rate.***

## 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	<b>Support State Target</b> (approx. 19 regionally)
Fatality Rate per 100 Million VMT	0.691	0.682	↓	↓	0.874	<b>Adopt Regional Target: 0.700</b>
Number of Serious Injuries	105.6	101.6	↓	↓	465.4	<b>Support State Target</b> (approx. 95 regionally)
Serious Injury Rate per 100 Million VMT	3.876	3.786	↓	↓	3.506	<b>Support State Target</b>
Non-Motorized Fatalities and Serious Injuries	13.0	12.0	↓	↓	38.0	<b>Support State Target</b> (approx. 10 regionally)

## Measure 2: Projected SNHPC Fatality Rate



## SNHPC 2022 Safety Performance Targets (Proposed)

Safety Measures
Number of Fatalities
Fatality Rate per 100 Million VMT
Number of Serious Injuries
Serious Injury Rate per 100 Million VMT
Non-Motorized Fatalities and Serious Injuries

State Target	SNHPC Regional Target	
2022		Action
117.8	18.7	Support State Target
0.874	0.700	Adopt Regional Target
465.4	95.0	Support State Target
3.506	3.506	Support State Target
38.0	9.7	Support State Target

# 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



Carl Eppich  
Principal  
Transportation  
Planner  
[ceppich@snhpc.org](mailto:ceppich@snhpc.org)

Zachary Swick  
GIS Analyst  
[zswick@gmail.com](mailto:zswick@gmail.com)

438 Dubuque St  
Manchester, NH  
03102  
(603) 669-4664

Questions?





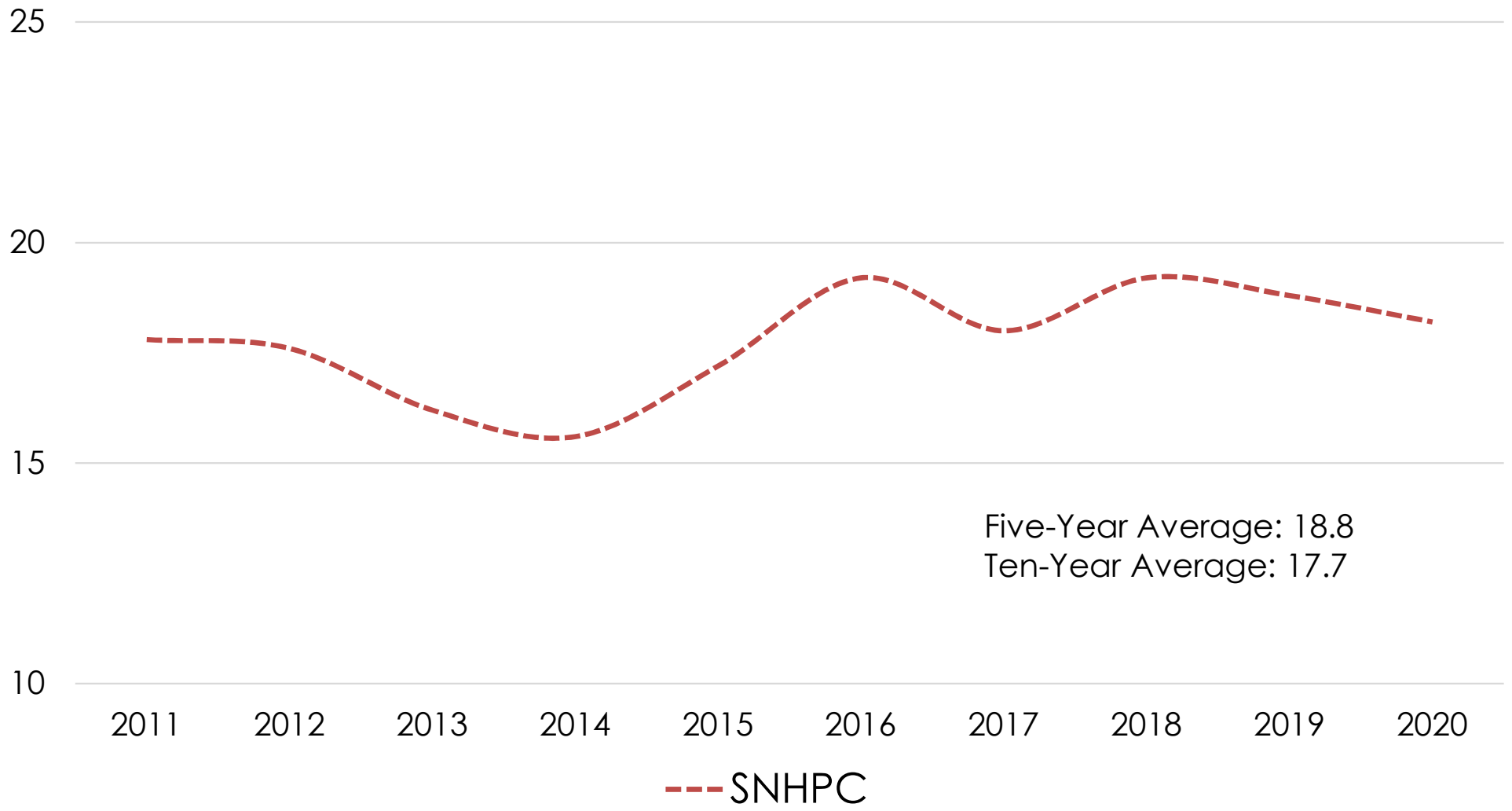
# *PM1: Safety Performance Measures*

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

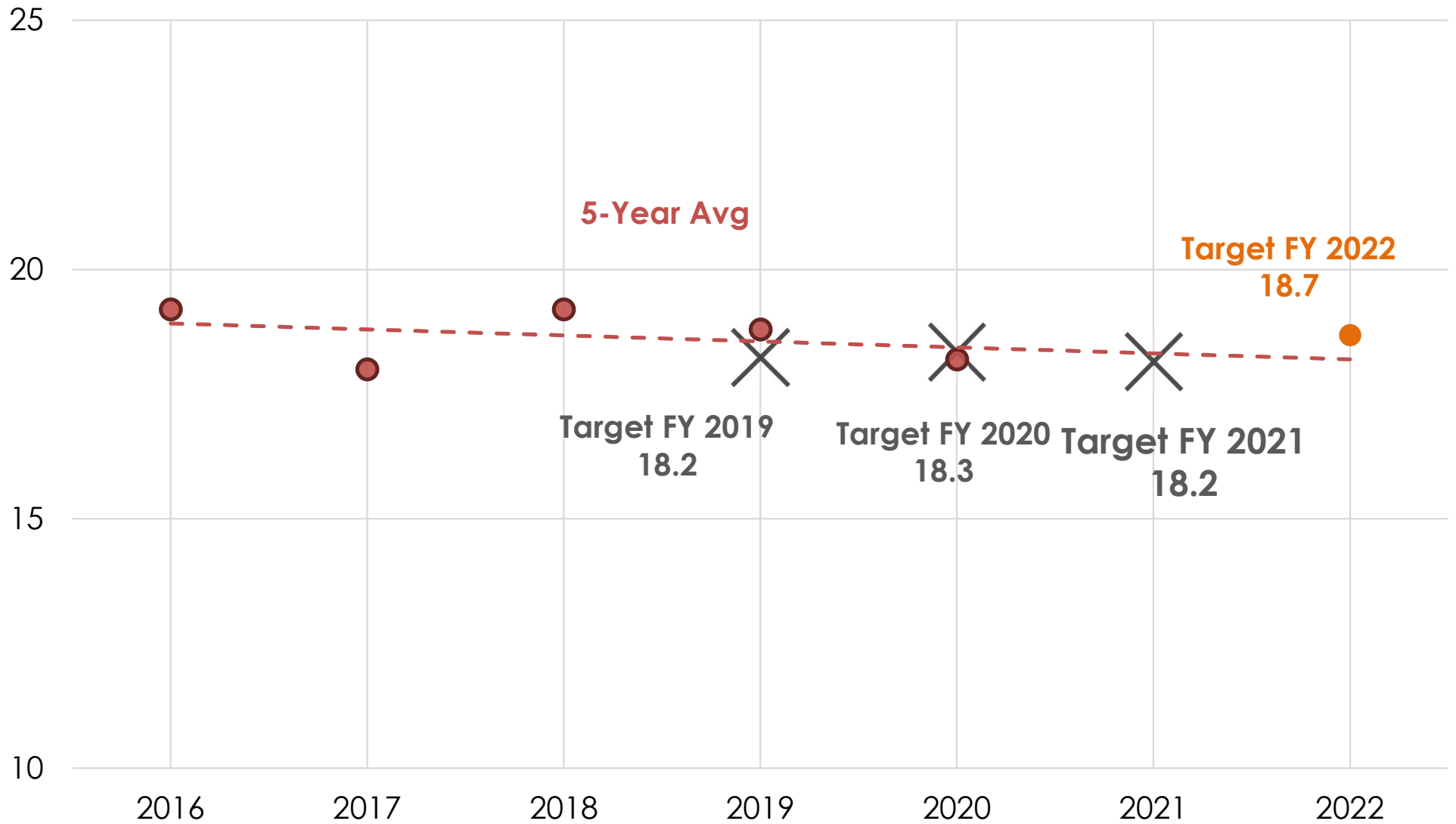
- Safety
- Pavement and bridge
- System performance/congestion
- Freight movement, and
- Congestion mitigation and air quality (CMAQ).



## Measure 1: Number of Fatalities (Five-Year Moving Average)

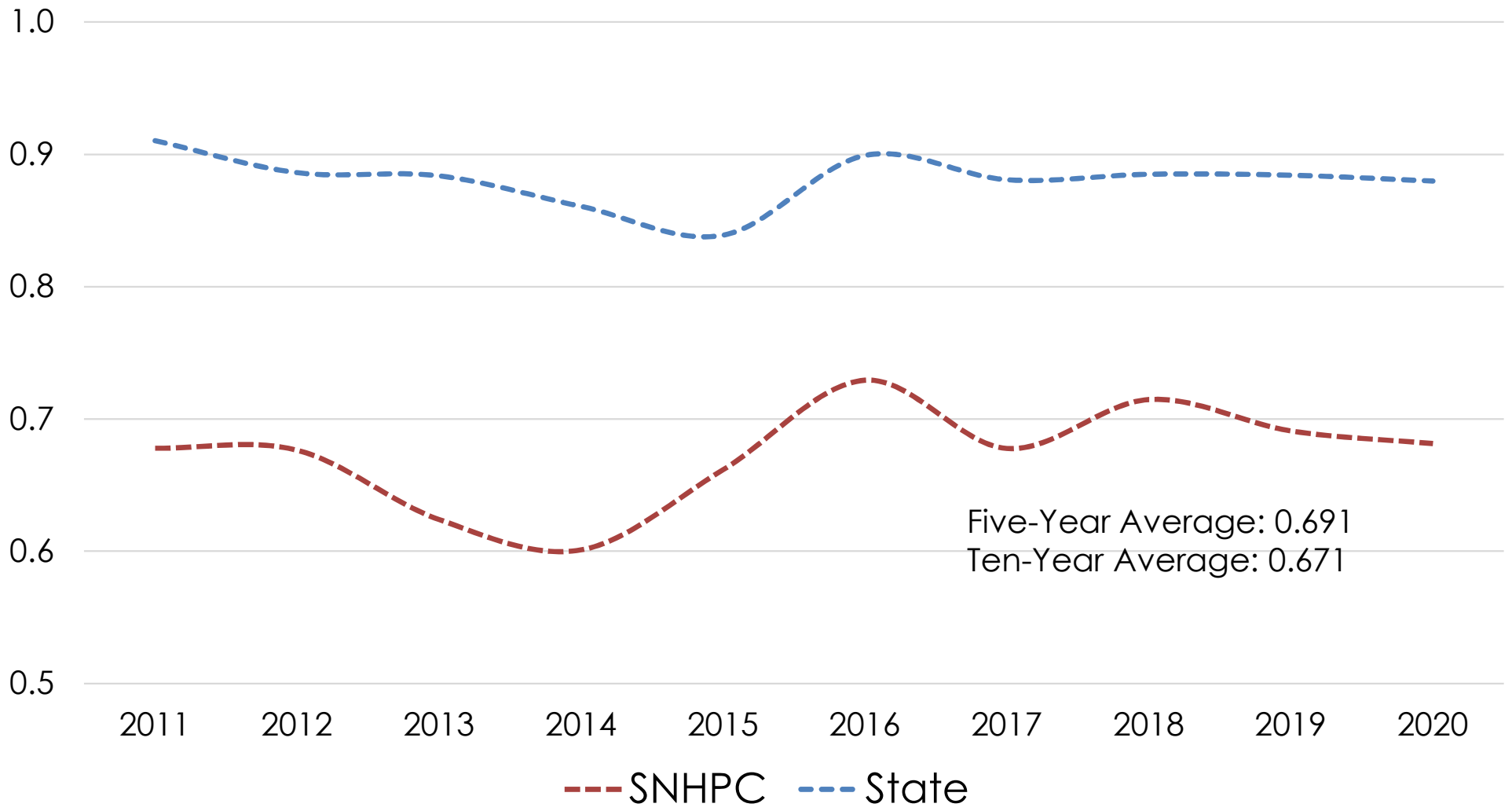


## Measure 1: Projected Number of SNHPC Fatalities

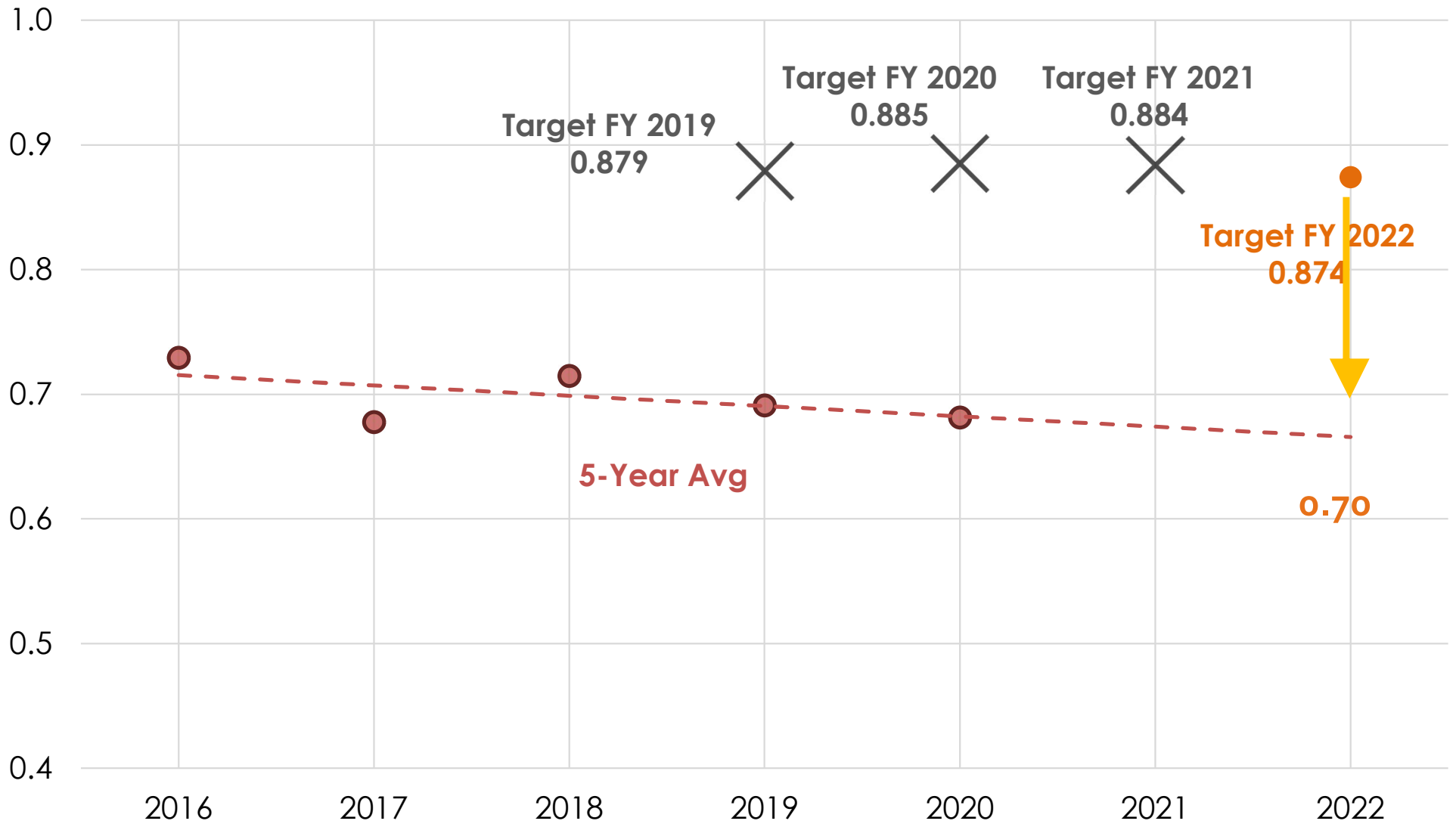


## Measure 2: Fatality Rate

(Five-Year Moving Average)

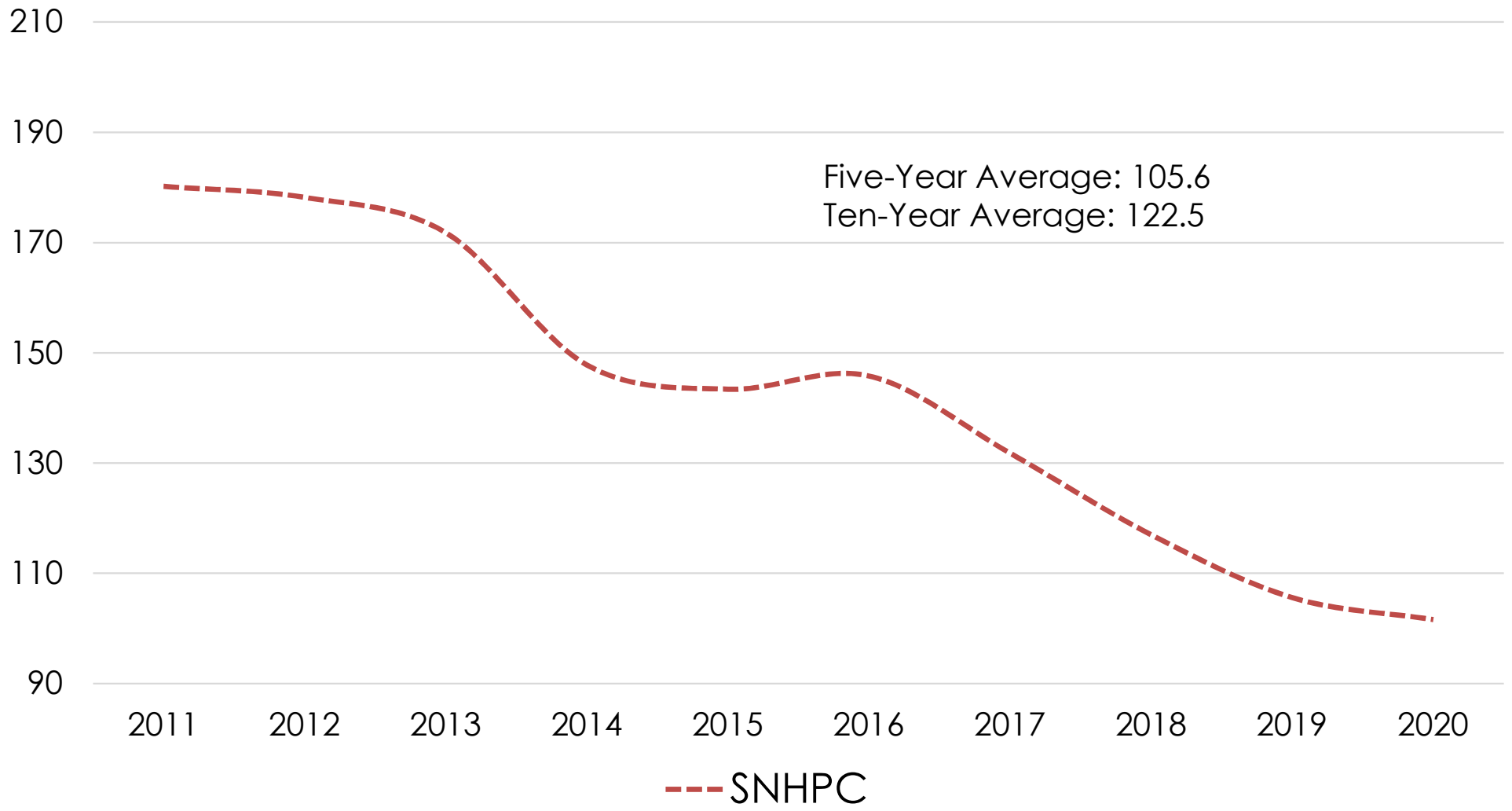


## Measure 2: Projected SNHPC Fatality Rate

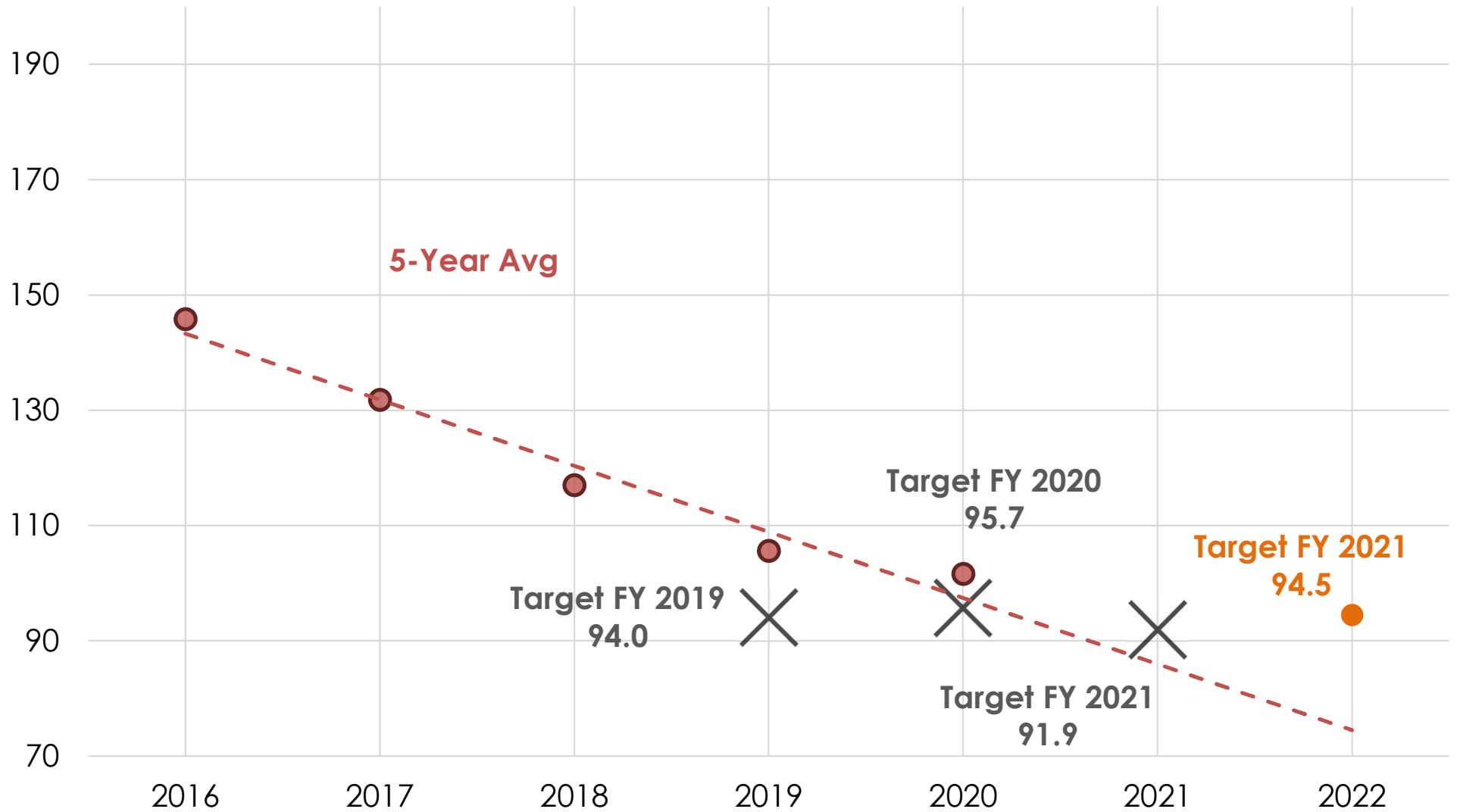




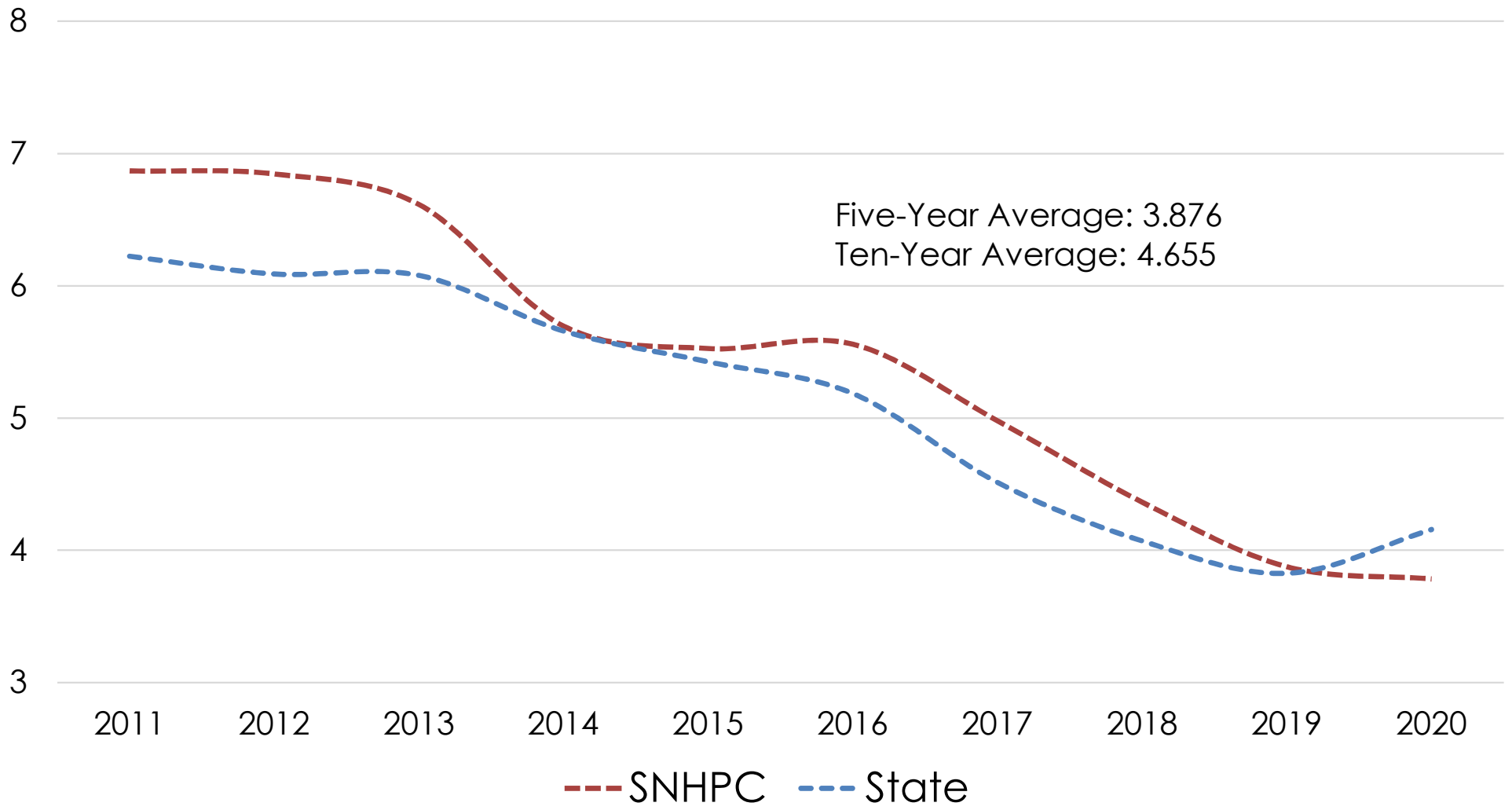
### Measure 3: Number of Serious Injuries (Five-Year Moving Average)



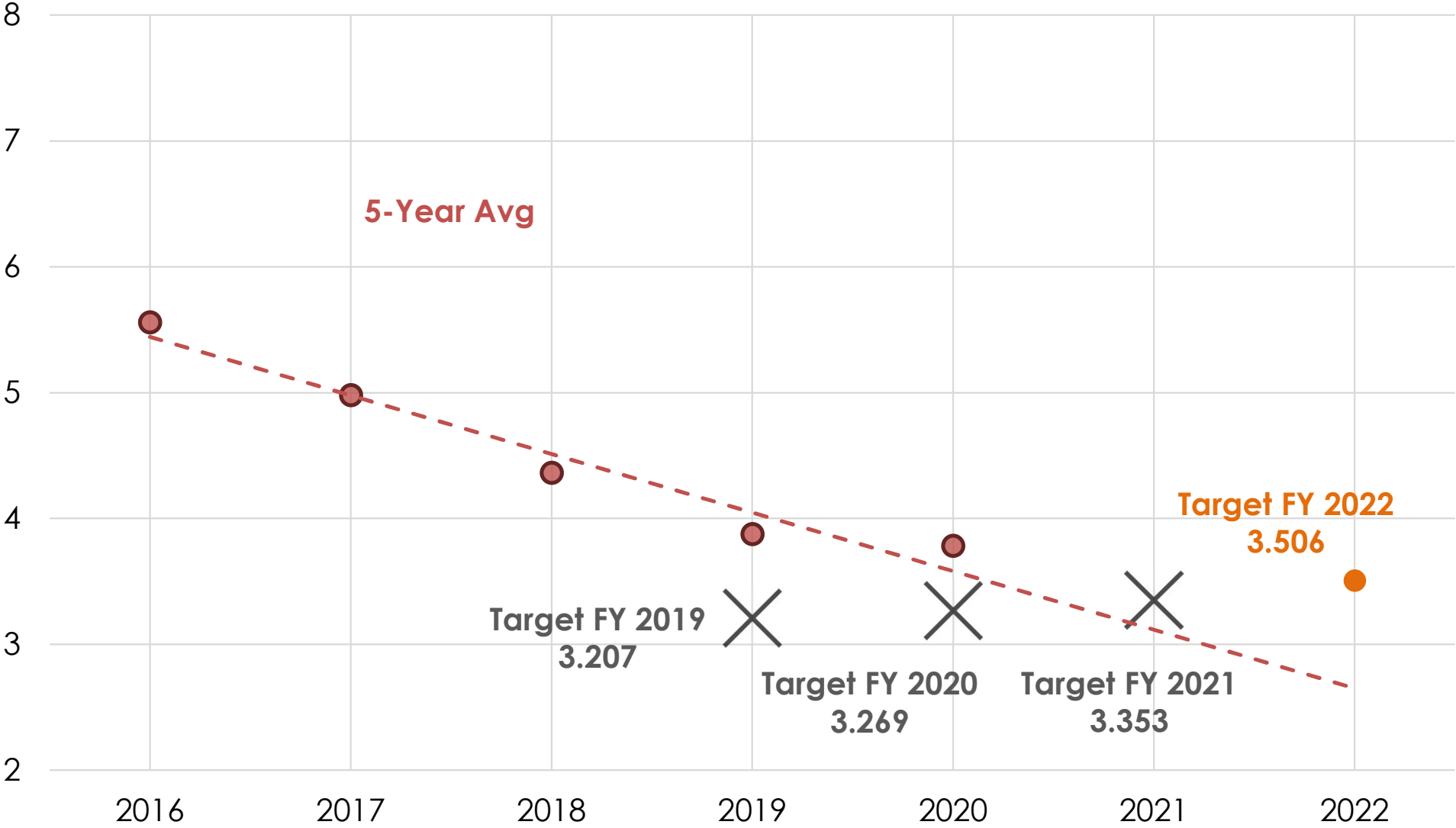
## Measure 3: Projected Number of SNHPC Serious Injuries



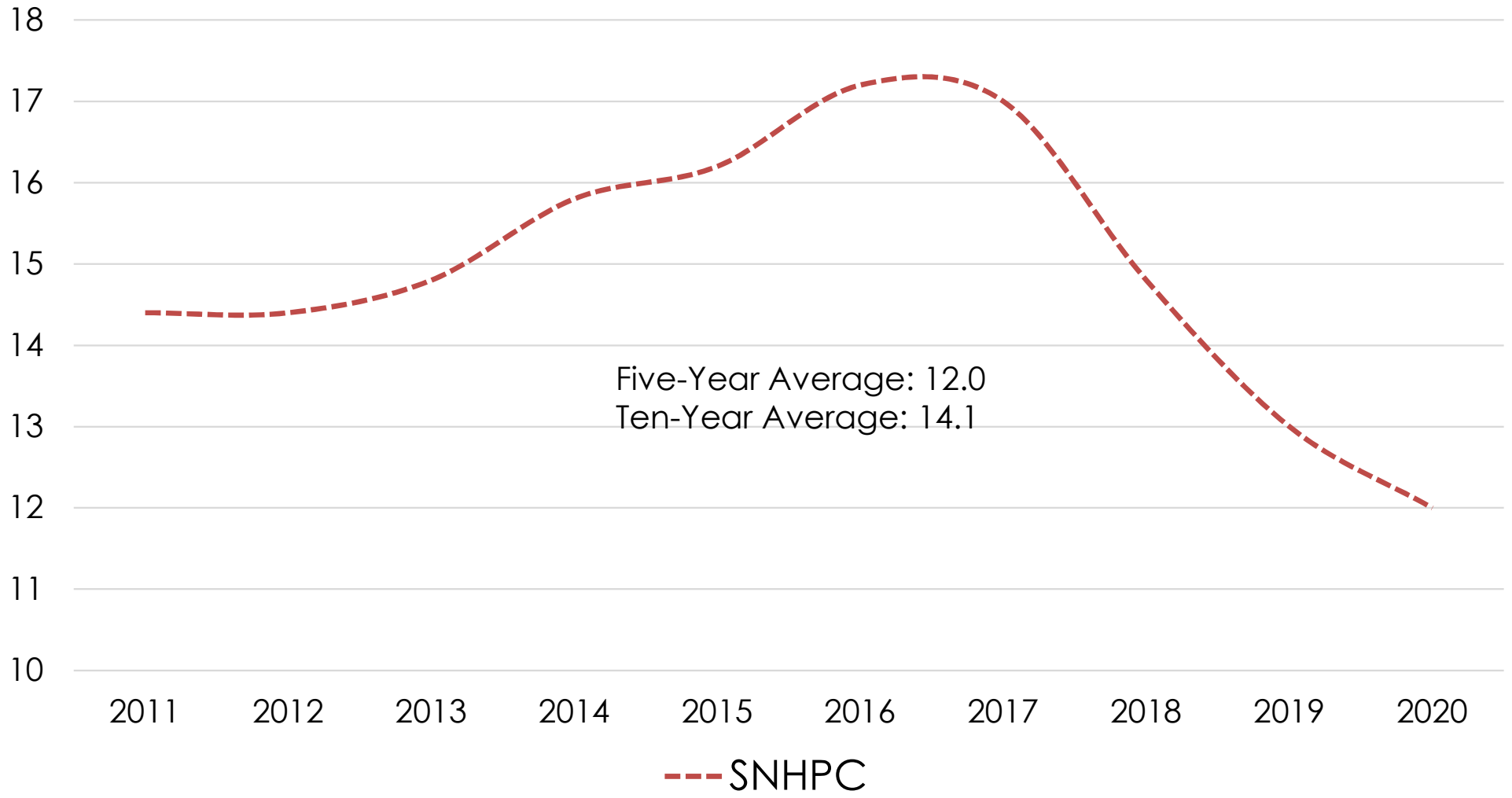
## Measure 4: Serious Injury Rate (Five-Year Moving Average)



Measure 4: Projected SNHPC Serious Injury Rate

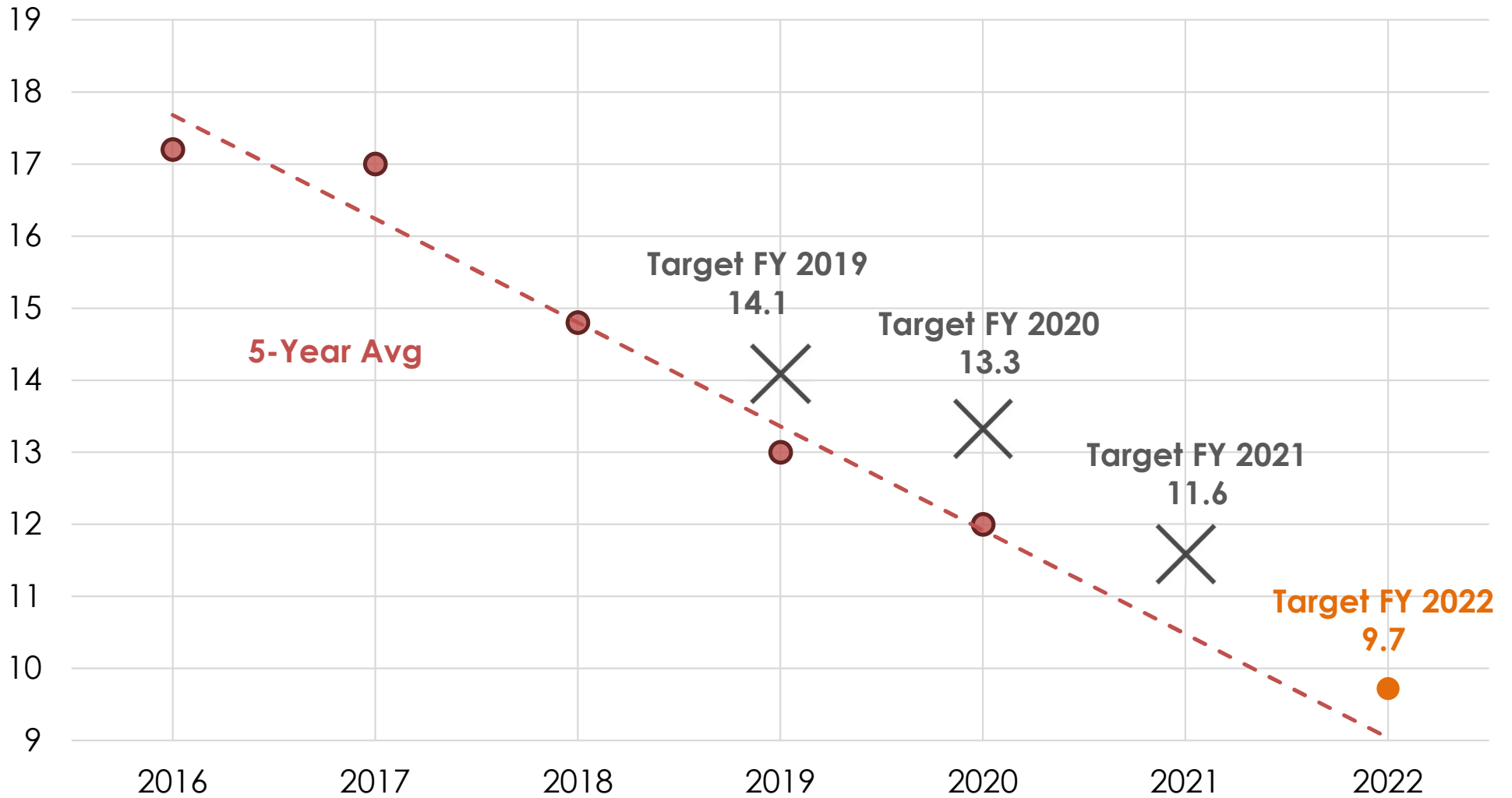


## Measure 5: Number of Non-motorized Fatalities and Serious Injuries (Five-Year Moving Average)





## 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

# 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.**