

# Connecticut State Police Staffing Standards

Legislative Program Review & Investigations Committee  
Staff Report  
March 5, 2013

# Study Focus

- **PRI committee charged by P.A. 12-1 (June 12 Special Session) with developing standards for use in determining the proposed level of staffing for the Division of State Police**

# Presentation Outline

- Methodology
- Background on CSP and Municipalities
- Staffing level trends
- Factors considered for the Model
- Summary of Staffing Level Standards

# Methodology

- Goal of CSP to keep the public and troopers safe
- # of officers needed depends on how staffing level changes benefit or harm public and trooper safety
- If there is an association, considered as a potential staffing level standard
  - No association found, not included in Model

# The public is safer when CSP:

1. Responds to 9-1-1 calls in a timely manner
2. Deters crimes from being committed
3. Solves crimes when they are committed
4. Promotes highway safety so accidents/  
fatalities kept to a minimum
5. Satisfies citizen's expectations

## 6. Troopers are safer when:

- Accidents in police cruisers are kept to a minimum
- There are fewer assaults on officers
- Workers' compensation/injuries on the job are kept to a minimum

## Additional public safety related areas:

7. Functions explicitly stated in statute provided
8. Obligations to provide Resident State Troopers met
9. Adequate number of troopers to staff patrols (Shift Relief Factor)
10. Supervision sufficient (Span of Control)

# Additional trooper safety related areas:

11. Two-officer minimum for certain service calls met
12. Overtime levels not steadily increasing

# Study Information Sources

- Time period: FY 09-FY 12
- CORE-CT
- Computer Aided Dispatch (CAD)/Record Management System (RMS)
- Uniform Crime Reports
- 9-1-1 Call Data
- Citizen Complaints and Commendations
- Department Accident Records

# Study Information Sources, Cont'd

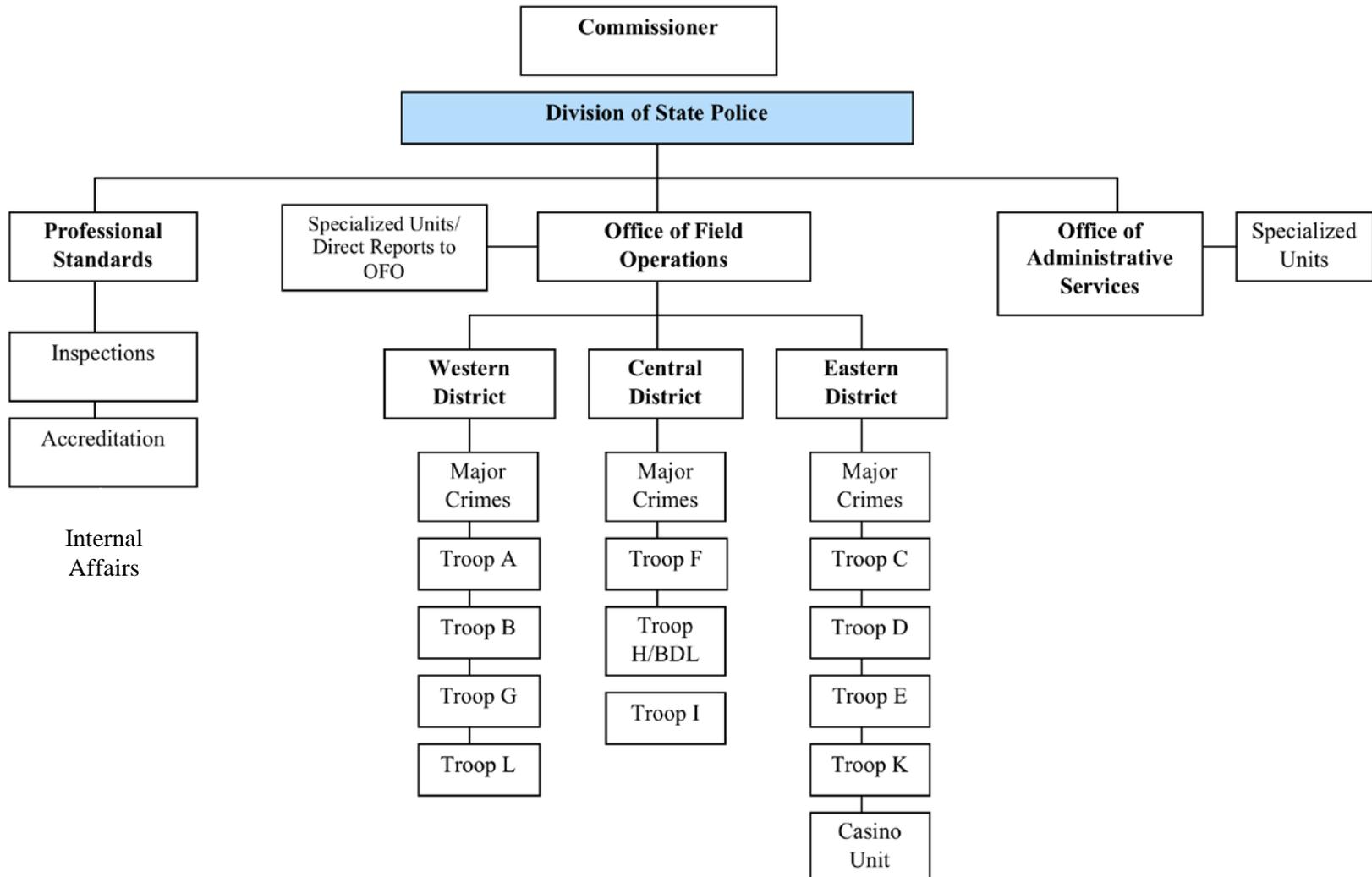
- Traffic Ticket Data
- Budget and Overtime Information
- Interviews and Visits with CSP Personnel
  - Troops and Field Operations
  - Specialized Units
  - Administrative Units
- Meetings with external key stakeholders
- Other states, literature review

# Background

# Department of Emergency Services and Public Protection

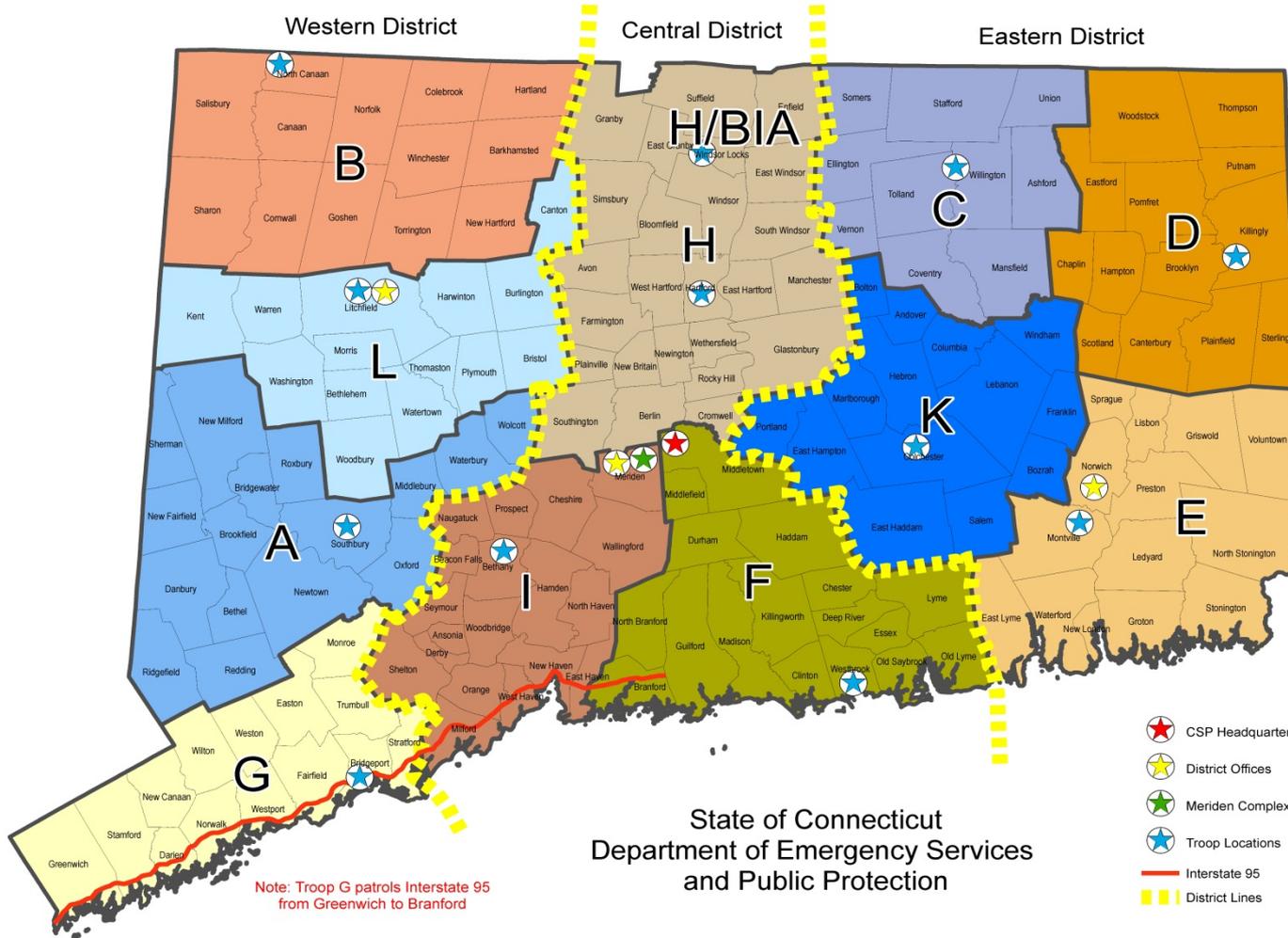
- Six Divisions under Commissioner
  - Scientific Services
  - Office of Statewide Emergency Telecommunications
  - CT Fire Academy Police Board
  - **DIVISION OF STATE POLICE**
  - Police Officer Standards and Training Council
  - Division of Emergency Management and Homeland Security
  
- Other support functions
  - E.g. Human Resources, Fiscal Services.

**Department of Emergency Services and Public Protection  
Division of State Police**



Internal  
Affairs

# Connecticut State Police Facilities

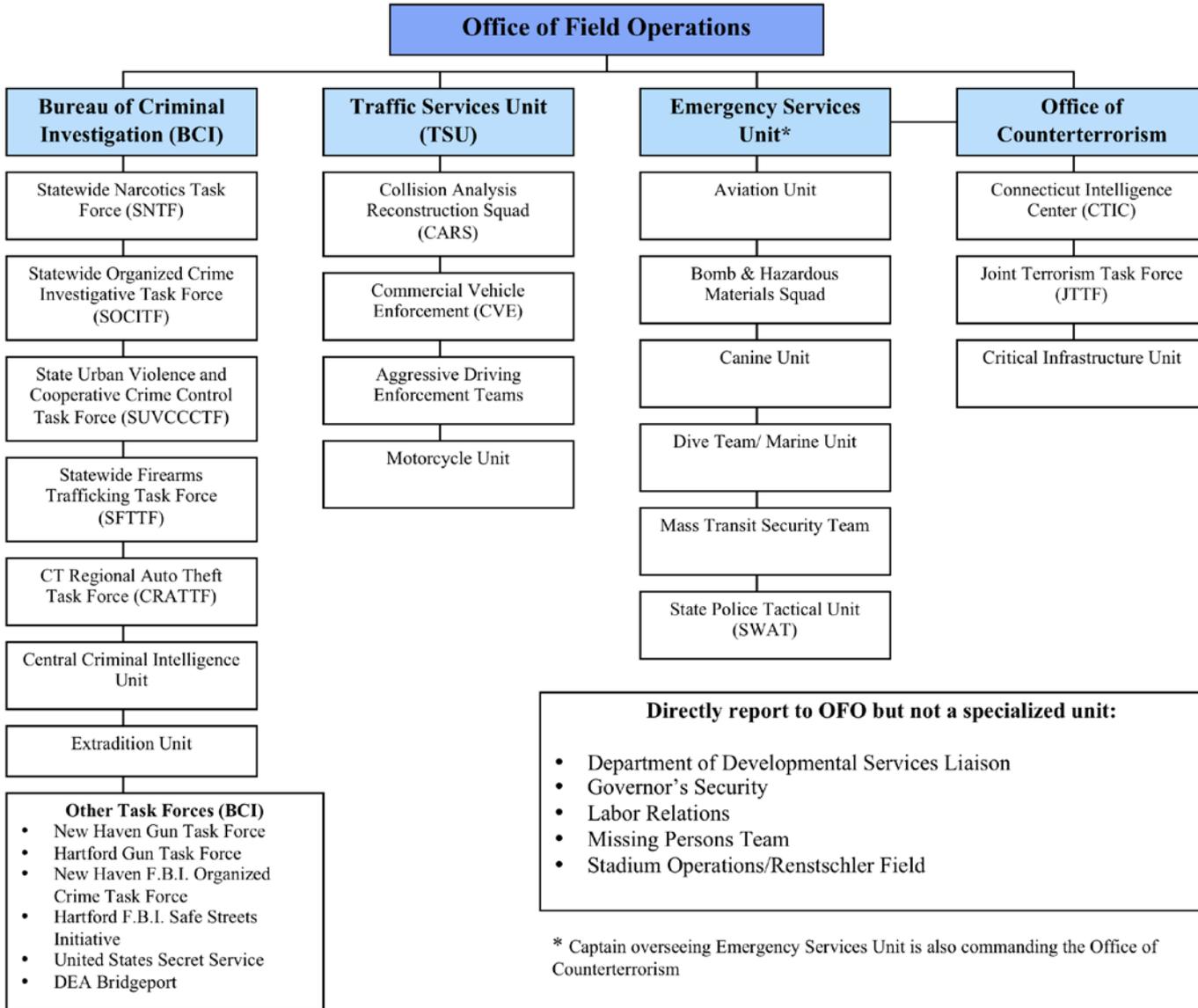


Map Prepared by OSET GIS Division  
16 August 2012

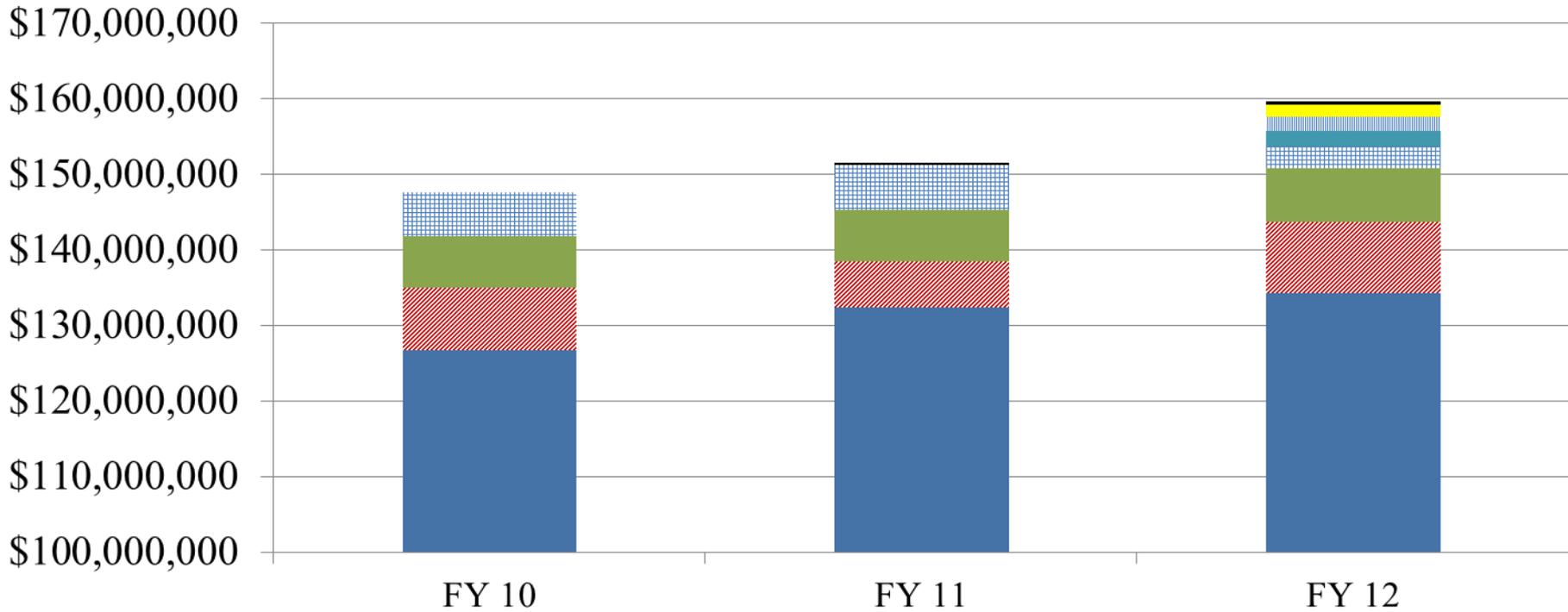
# Specialized Units and Functions

- Specialized units are primarily within OFO and OAS
  - Created by legislation and department
- Most functions performed by units are not visible outside department
- Conduct complex and in-depth investigations
- Collaborate with state, local, and federal partners

## Specialized Units under the Office of Field Operations



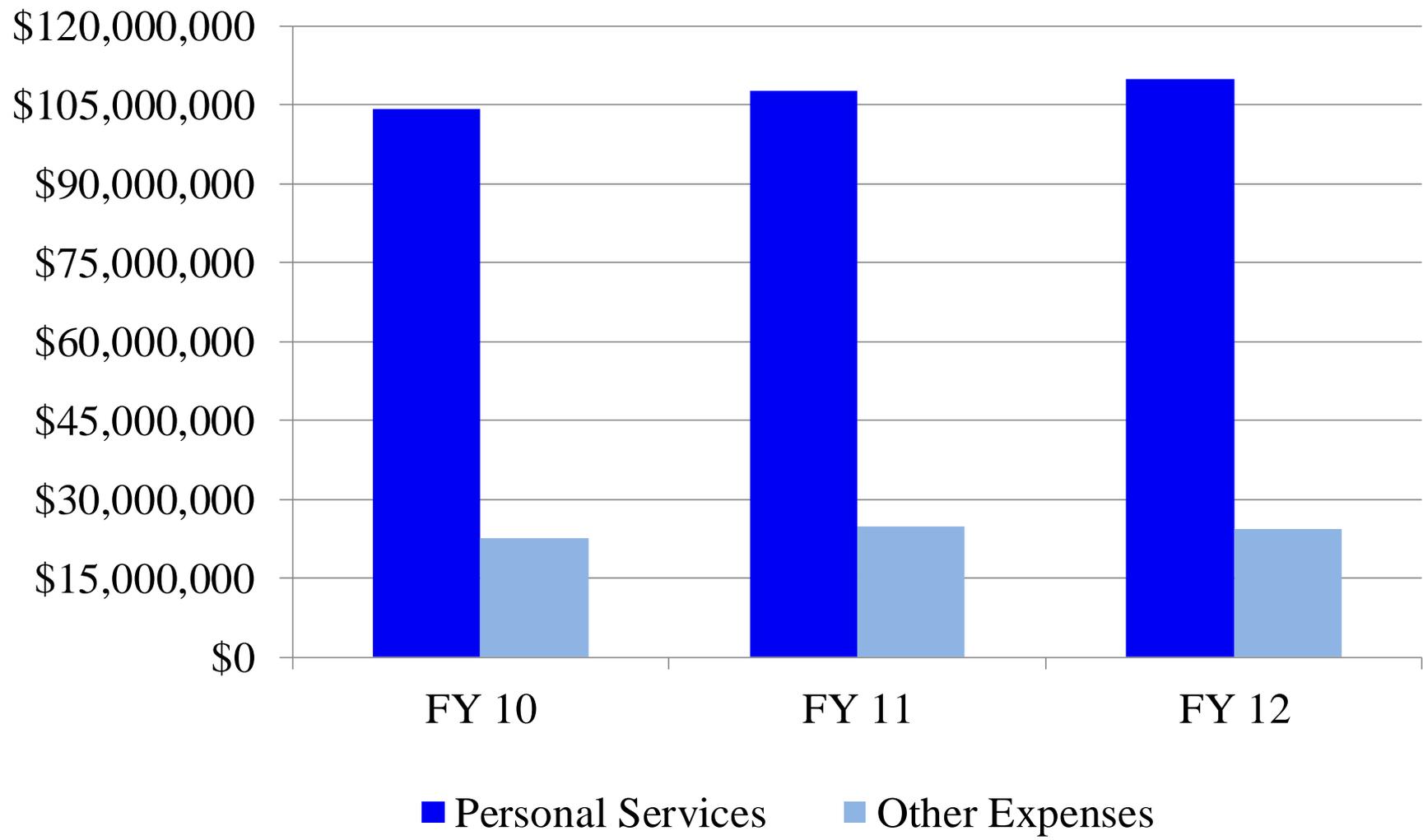
## DESPP General Fund Expenditures: FYs 10-12 (Personal Services/Other Expenses)



- Policing
- Forensic Svcs.
- POST
- Emerg. Mgt.

- ▨ Agency Mgt. Svcs.
- ▩ Fire Inv./Bldg./Telecomm. Svcs.
- ▤ Fire Prevention
- Protective Svcs.

# General Fund Expenditures: Police Services



Source of data: DESPP Fiscal Services

## Operational Costs by Troop: FYs 2010-2012.

Troop	FY 10	FY 11	FY 12	% Change
<b>A</b>	\$6,997,977	\$7,522,230	\$8,346,807	19.3%
<b>B</b>	\$4,731,153	\$4,822,301	\$5,046,068	6.7%
<b>C</b>	\$7,477,627	\$8,064,115	\$8,783,505	17.5%
<b>D</b>	\$6,268,443	\$6,765,612	\$7,031,570	12.2%
<b>E</b>	\$7,017,729	\$7,040,825	\$7,753,439	10.5%
<b>F</b>	\$6,844,313	\$7,125,939	\$7,667,239	12.0%
<b>G</b>	\$9,103,499	\$9,203,991	\$9,896,917	8.7%
<b>H</b>	\$7,148,362	\$7,210,974	\$8,571,199	19.9%
<b>I</b>	\$5,625,334	\$5,347,306	\$5,544,898	-1.4%
<b>K</b>	\$7,091,887	\$7,095,186	\$7,496,686	5.7%
<b>L</b>	\$5,948,144	\$6,349,694	\$7,056,480	18.6%
<b>W</b>	\$1,301,956	\$1,560,227	\$876,477*	-32.7%
	\$75,556,424	\$78,108,400	\$83,194,808	11.3%

\*Troops W and H merged in March 2012.

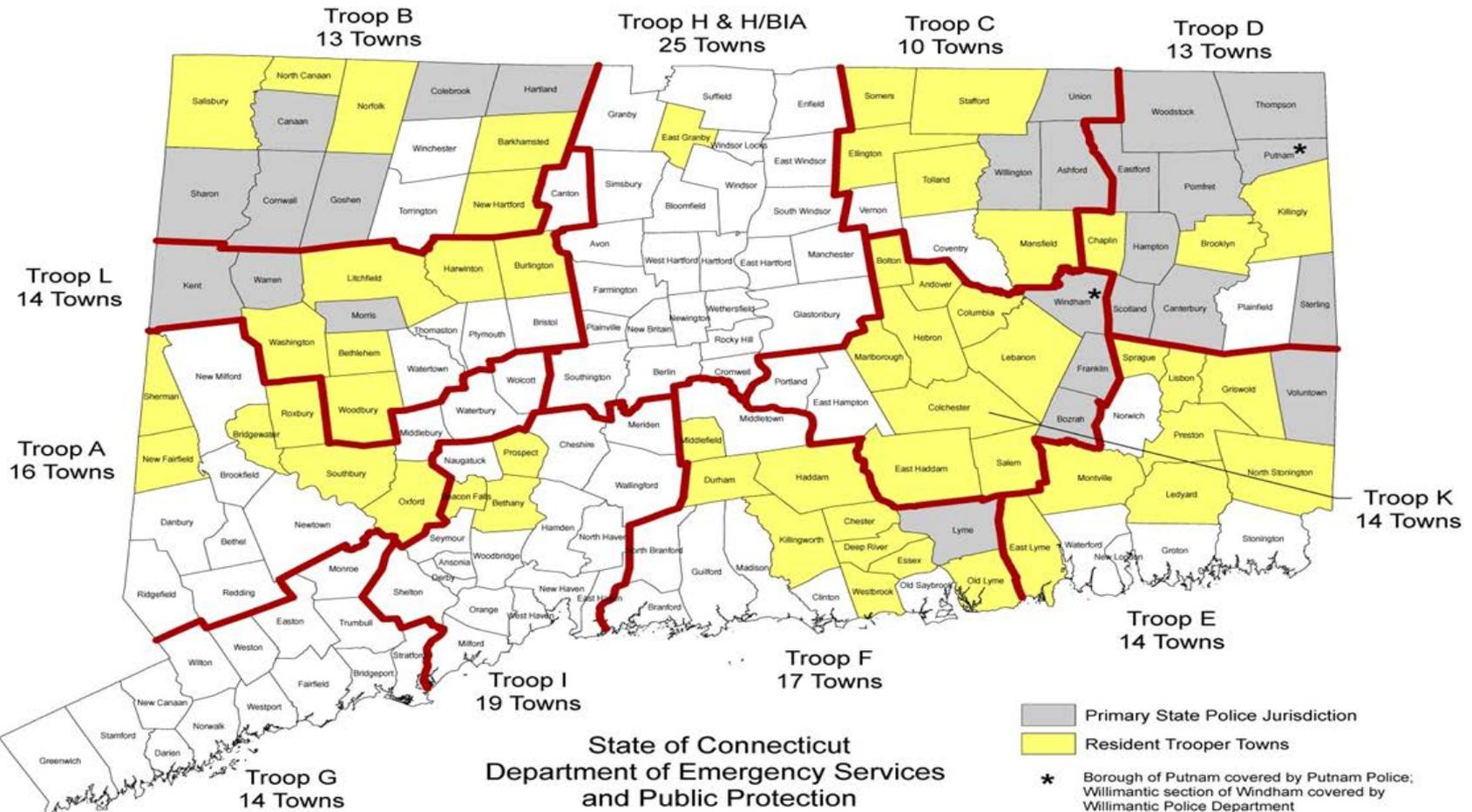
Source of data: DESPP Fiscal Services

# Municipal Police Policy and Staffing Levels

# Municipal Police Policies/Staffing

- Type of law enforcement protection is a local policy decision
- Municipalities currently have four options from which to base their policy decision:
  - Local Police Department
  - Resident State Trooper (without Special Constables)
  - Resident State Trooper (with Special Constables)
  - State Police

# Connecticut State Police Town Coverage



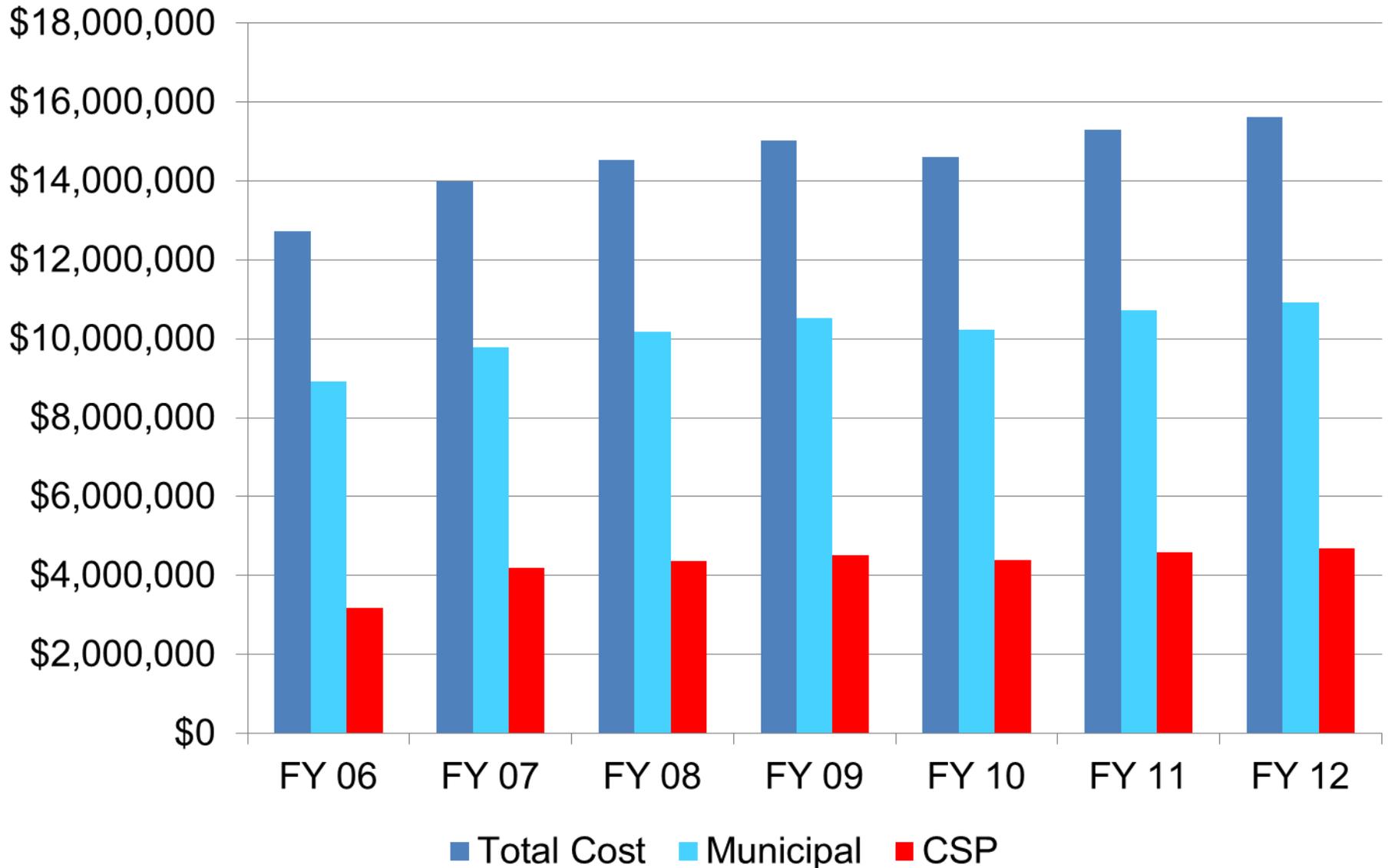
Map Prepared by OSET GIS Division  
15 August 2012

- Local Police Department: 88 Towns (52%)
- RST (w/ Special Constables): 34 Towns (20%)
- RST (w/out Special Constables): 21 Towns (12%)
- State Police Jurisdiction: 26 Towns (15%)

# Municipal Police Policies/Staffing

- **Municipal decisions affect CSP staffing**
  - **The number of Resident Troopers has accounted for roughly 20% of CSP patrol troopers and 10% of all sworn personnel in each of the last four years (13% of state's population; 34% geographic area)**
  - **Additional CSP staffing resources are necessary to cover 26 towns without municipal police services (3% of state's population; 18% geographic area)**

# Resident State Trooper Costs: Total, State, Municipal\* FYs 2006-12



\*Amounts do not include overtime expenses  
Source of data: CSP

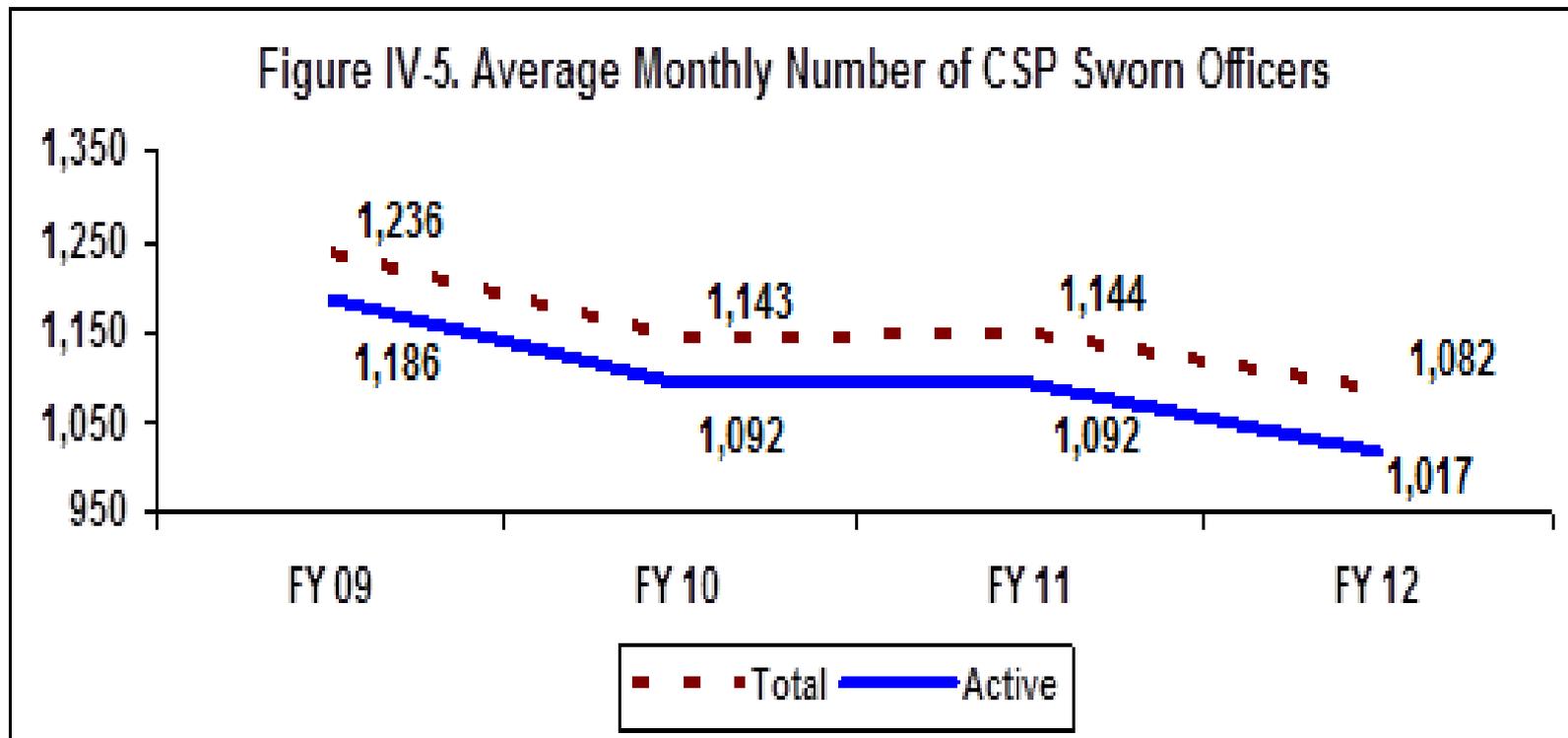
# Municipal Police Policies/Staffing

- Regionalized police service efforts exist throughout Connecticut; full impact on State Police staffing levels unclear
- CSP Specialized Units have capacity to assist all municipalities, regional law enforcement, and State's Attorney's offices
  - Provided almost 29,000 hours of service (9/11-9/12)

# CSP Staffing Levels

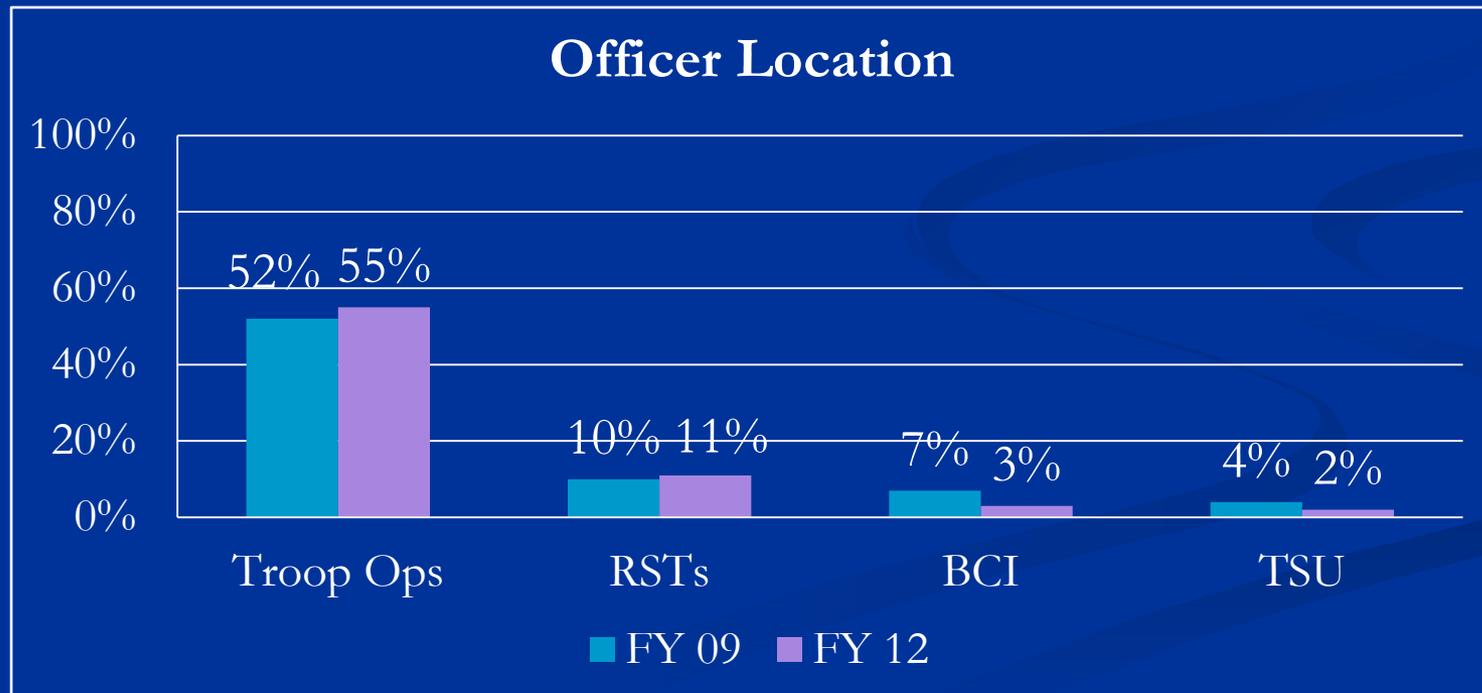
# Staffing Level Trends

- The number of CSP sworn personnel declined 12-14% from FY 09 to FY 12



# FY 09 to FY 12 Staffing Level Trends

- Largest decreases in the specialized units, such as Traffic Services and Bureau of Criminal Investigation
- Slightly more than half sworn staff in Troop Operations
- Approx. 10% of sworn staff in Resident State Trooper program

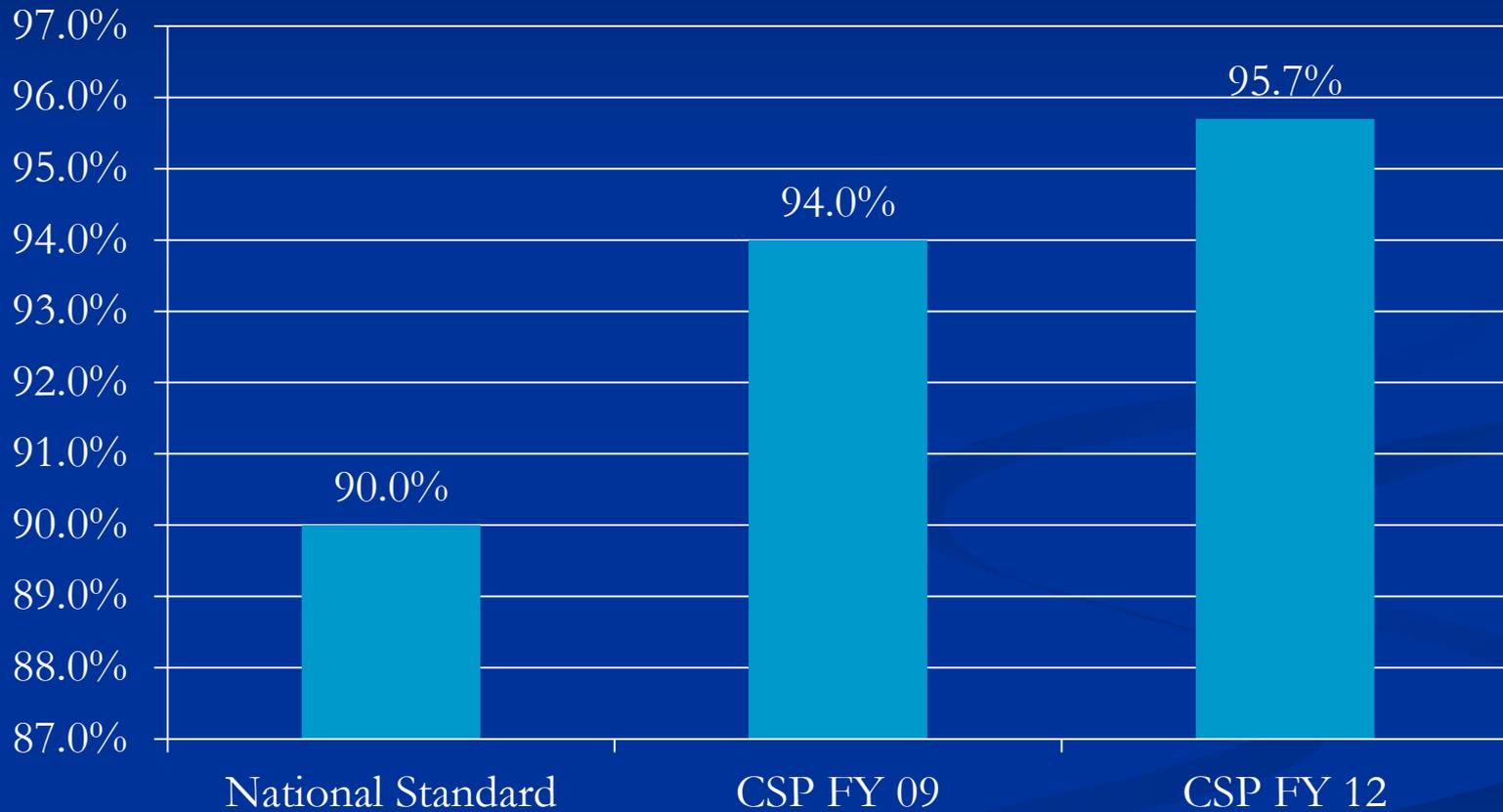


# Factor 1: Response Time

- The public is safer when CSP responds to 9-1-1 calls in a timely manner
- Theory being tested: As staffing levels decreased, response time increased

# The number of seconds needed for CSP dispatch operators to answer 9-1-1 calls has been improving

% Answered within 10 seconds



# Officer Response Time

- Defined as amount of time between 9-1-1 call and first officer arriving on the scene
- Rapid response associated with risk reduction and likelihood of apprehending criminal
- There were over 215,000 calls for service in FY 12
  - This is a 3.5% decrease from FY 09
- The median response time rose 1 minute, from 9 minutes in FY 09 to 10 minutes in FYs 10-12

# Officer Response Time

- In 1997 CSP did a study to determine how many state police were needed
- The Police Allocation Methodology (PAM) was used and response time analyzed
- CSP decided to adopt a policy of a 15 minute average response time for each Troop
  - Considered reasonable given the large areas patrolled
- CSP currently has no response time standard

# 15 minute response at least 50% of the time

Time	Percent
1-5 minutes	31%
6-10 minutes	22%
11-15 minutes	14%
16-20 minutes	9%
21-25 minutes	5%
26-30 minutes	4%
31-45 minutes	6%
46-60 minutes	3%
1-2 hours	4%
More than 2 hours	3%

# Response time for Troops

- In all four years, all 11 Troops responded to over half of calls for service within 15 minutes or less
- Response times for Troops varied. In FY 12:
  - 77% of Troop H calls met the 1997 goal
  - 50% of Troop D calls met the goal
- The two Troops have very different types of patrol areas:
  - Troop H in Hartford has primarily a highway patrol
  - Troop D in Danielson is a more rural patrol

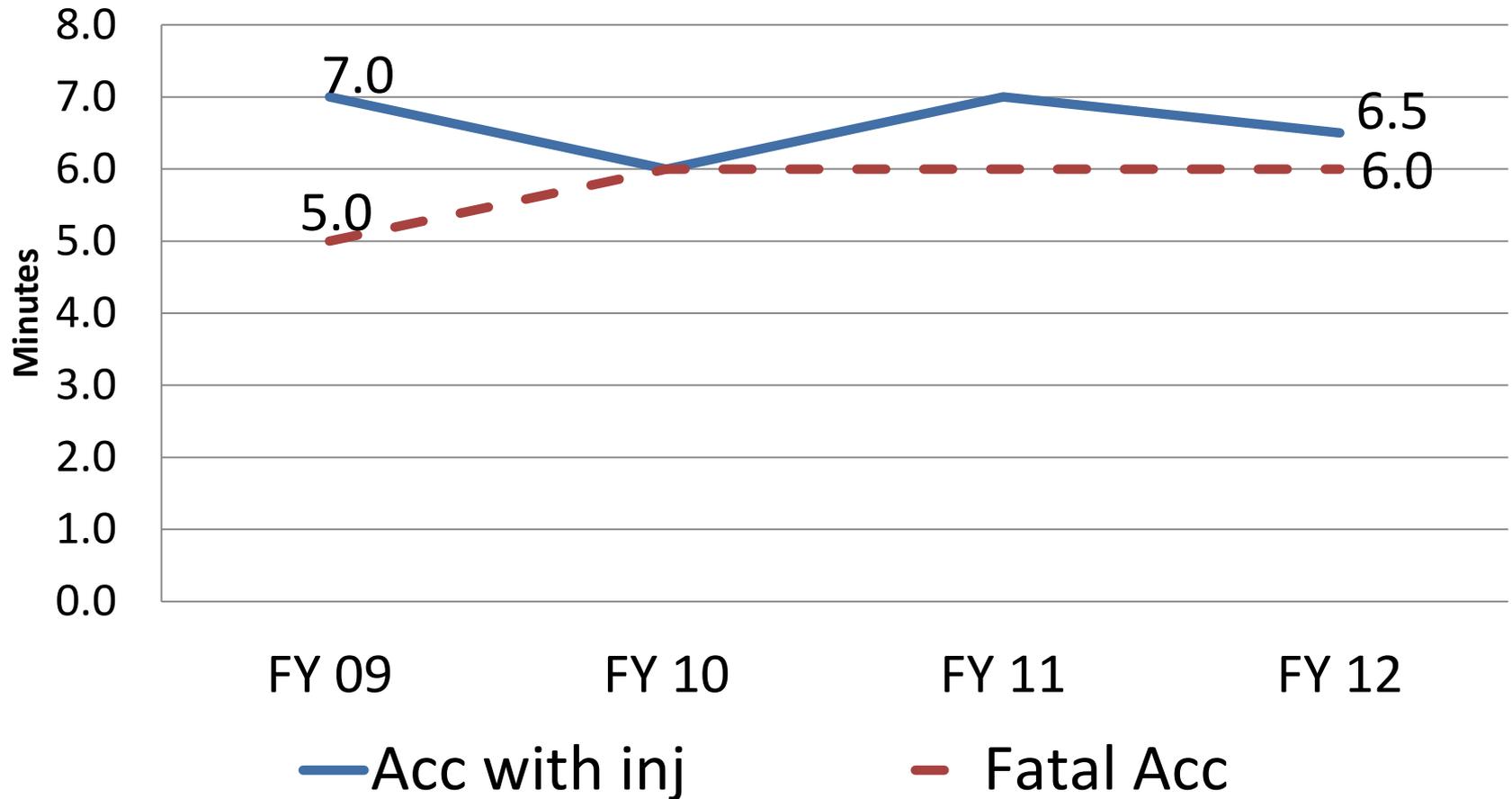
# Response times for urgent calls for service

- Some types of calls are more urgent than others
- The following types of calls are generally understood to be urgent:
  - Accidents with fatalities or injuries
  - Domestic violence calls
  - Robberies
  - Assaults
  - Untimely deaths

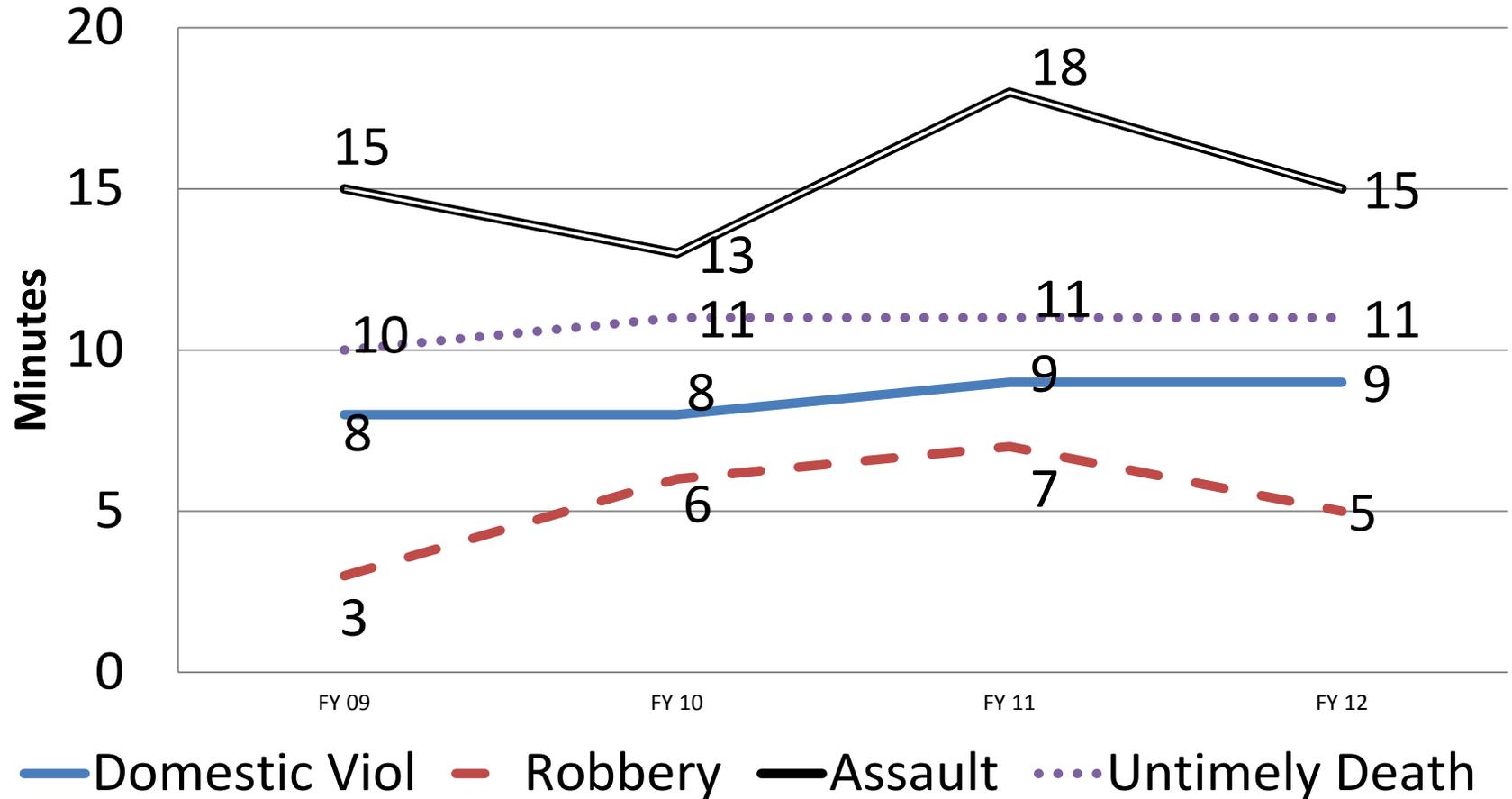
# Number of Urgent 9-1-1 Calls Received in FY 12

Call Type	# of Calls
Accidents with non-fatal injuries	2,433
Accidents with fatalities	103
Domestic violence calls	944
Assaults	379
Untimely deaths	227
Robberies	33

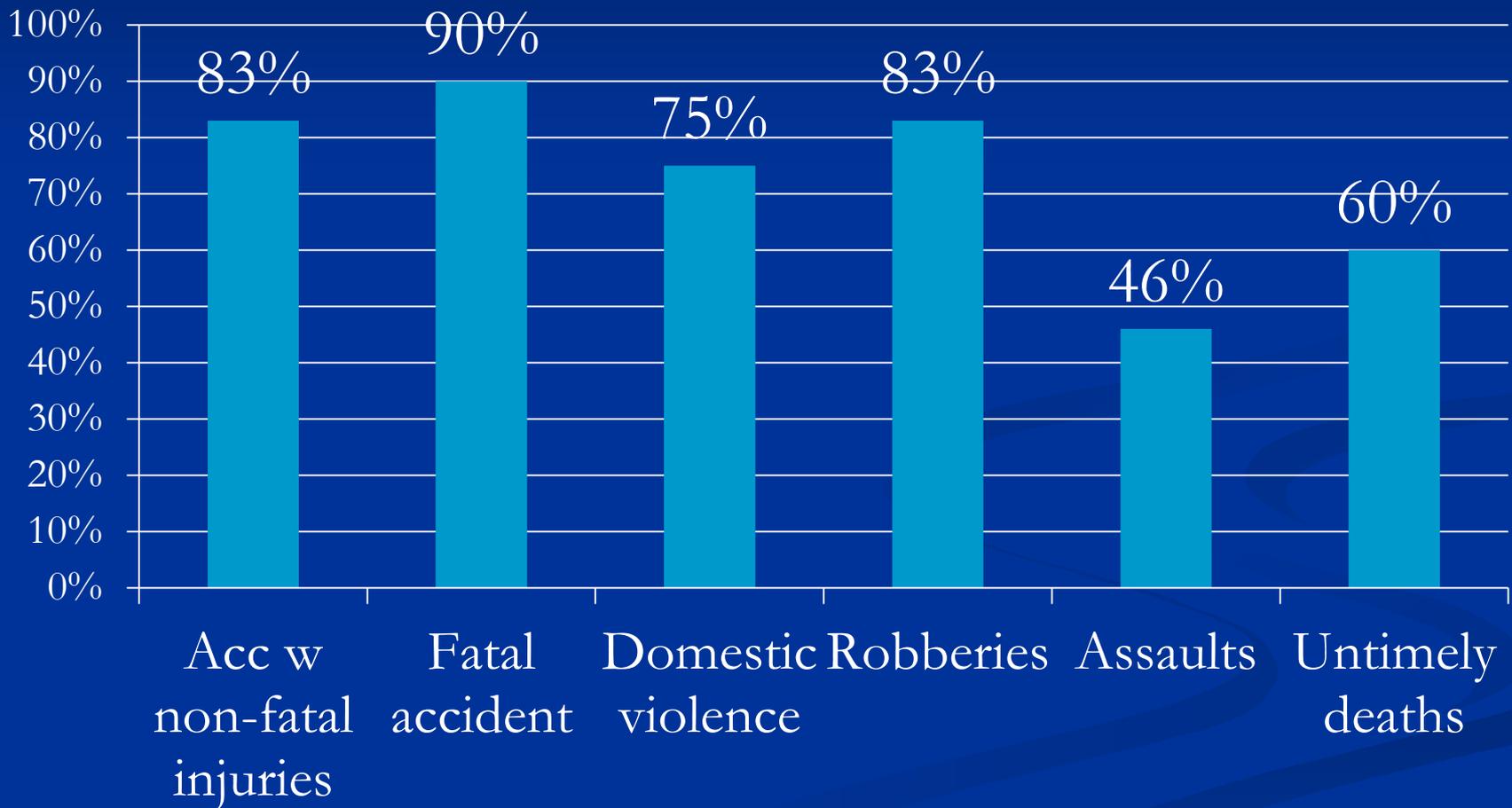
# Response Time for Accidents with Injuries and Fatalities



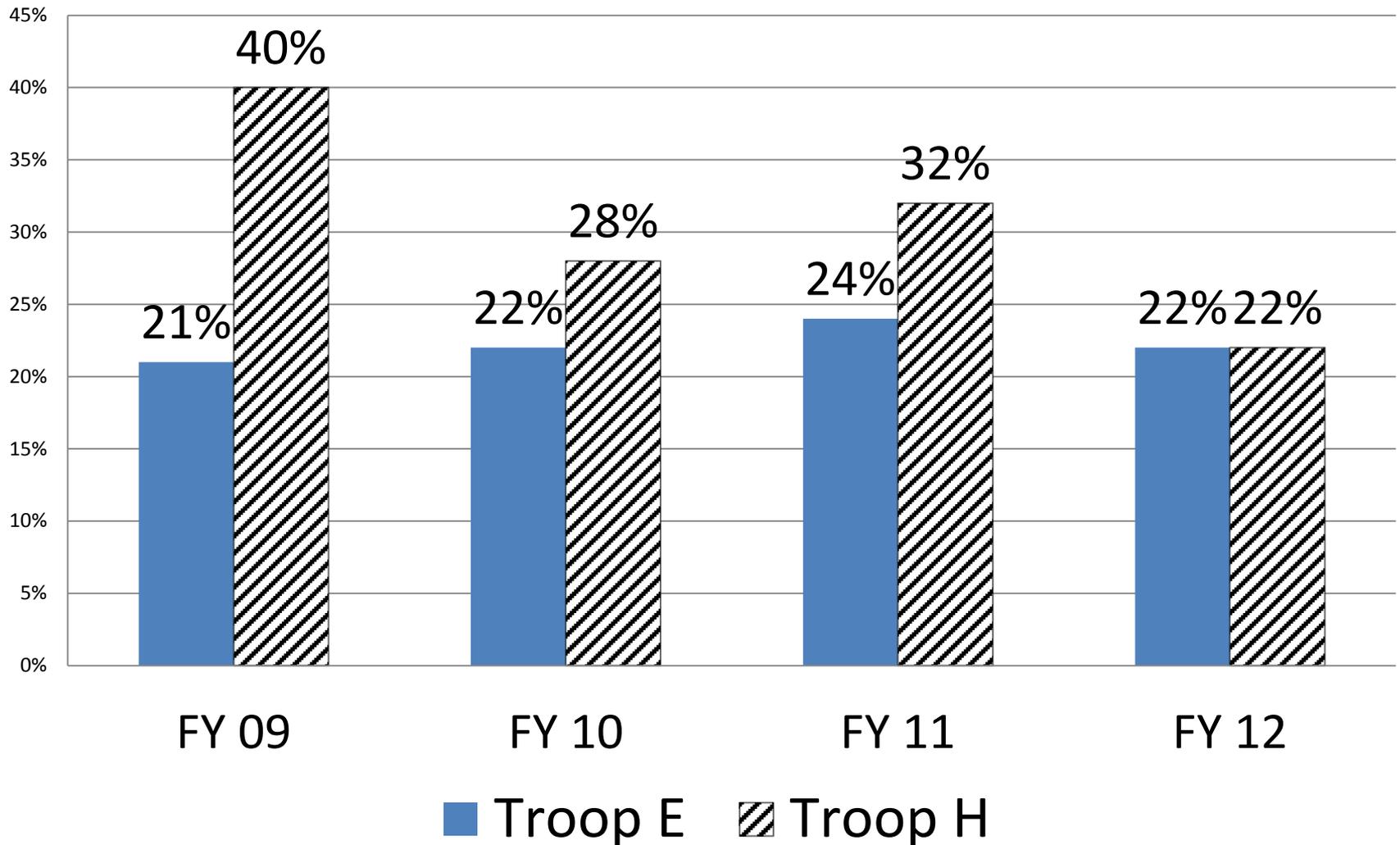
# Response Times for Other Serious Calls



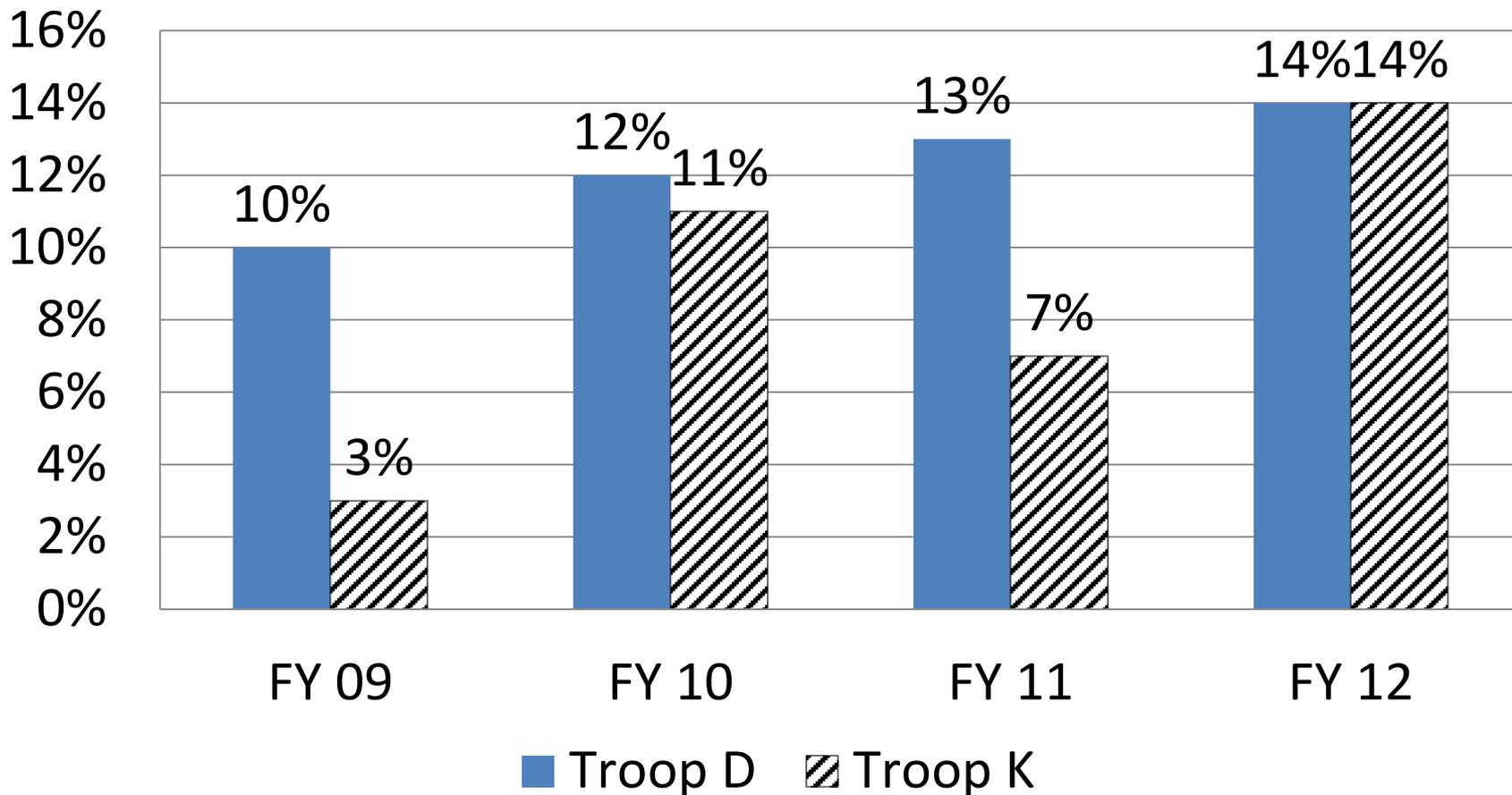
# Percent of Urgent Calls Responded to Within 15 Minutes



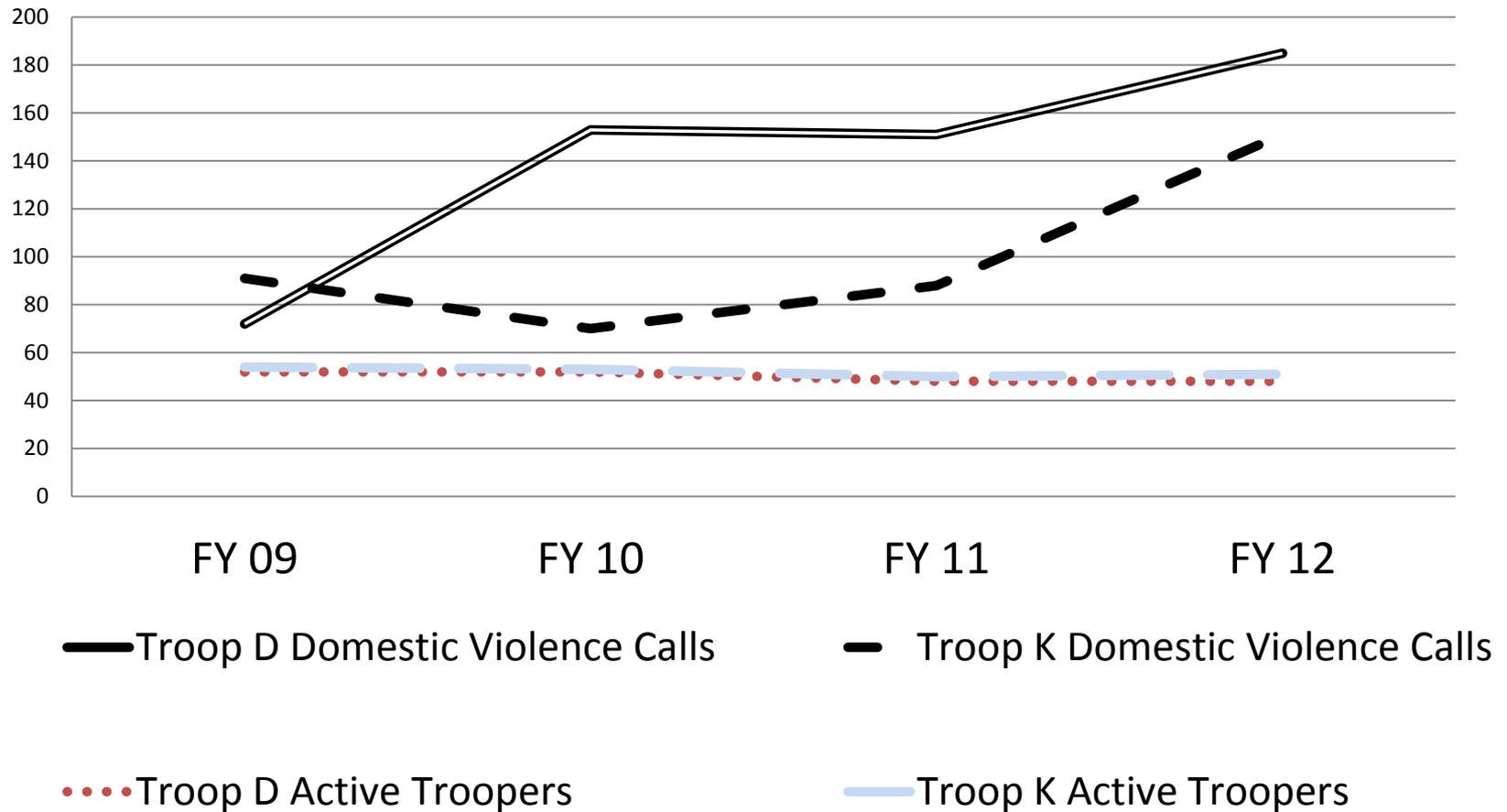
# Percent of Assault Calls with Response Rates Greater Than 30 Minutes



# Percent of Domestic Violence Calls with Response Rates Greater Than 30 Minutes



# # of Domestic Violence Calls and # of Troopers



# Summary of Factor 1: Response Time

- Theory SUPPORTED
  - As staffing levels decreased, response times tended to increase
- Propose Standard 1: Officers respond to 9-1-1 calls within 15 minutes at least 50% of the time
- CSP further development of Standard 1:
  - CSP needs more stringent response time standards for the most serious calls for service

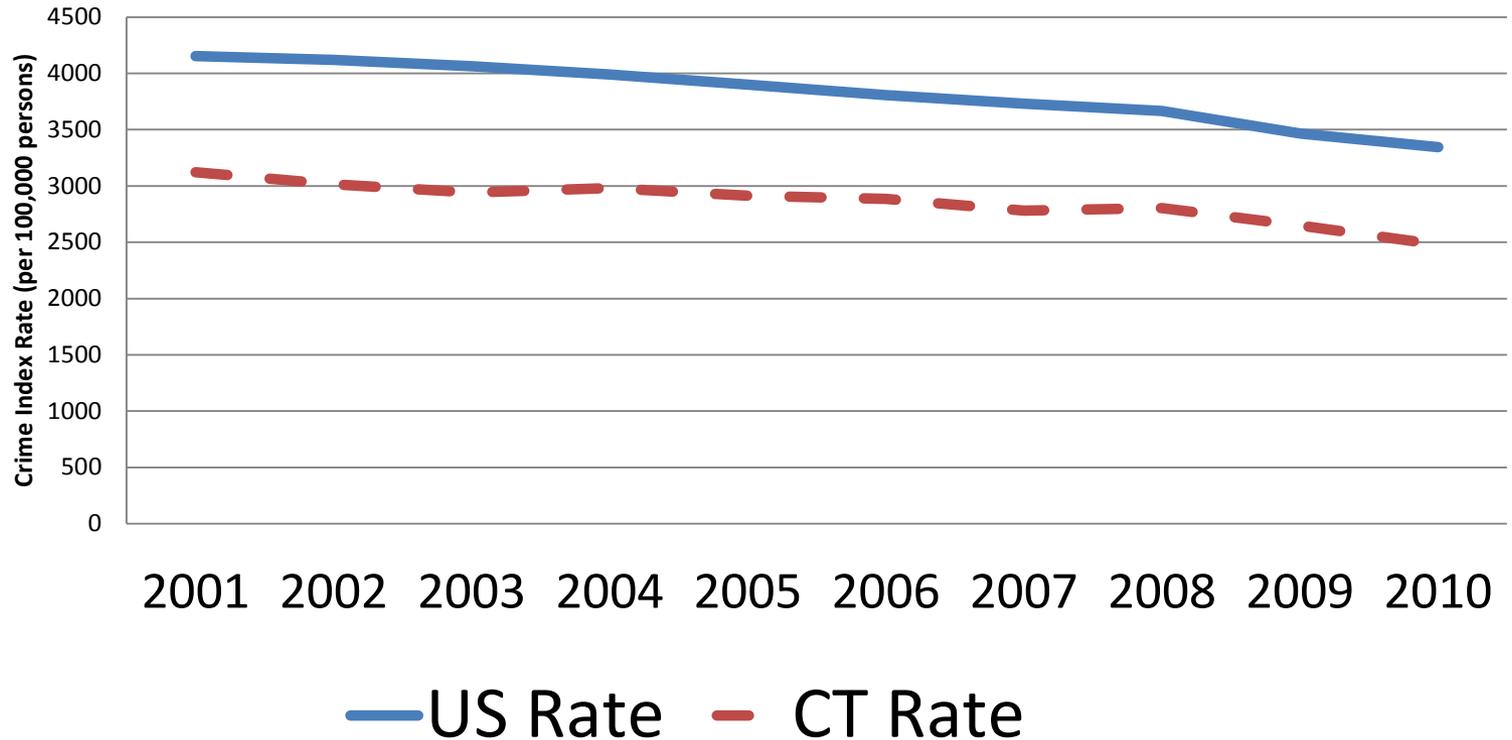
# Factor 2: Crime Rate

- The public is safer when CSP deters crimes from being committed
- Theory being tested: As staffing levels decreased, crime rates increased

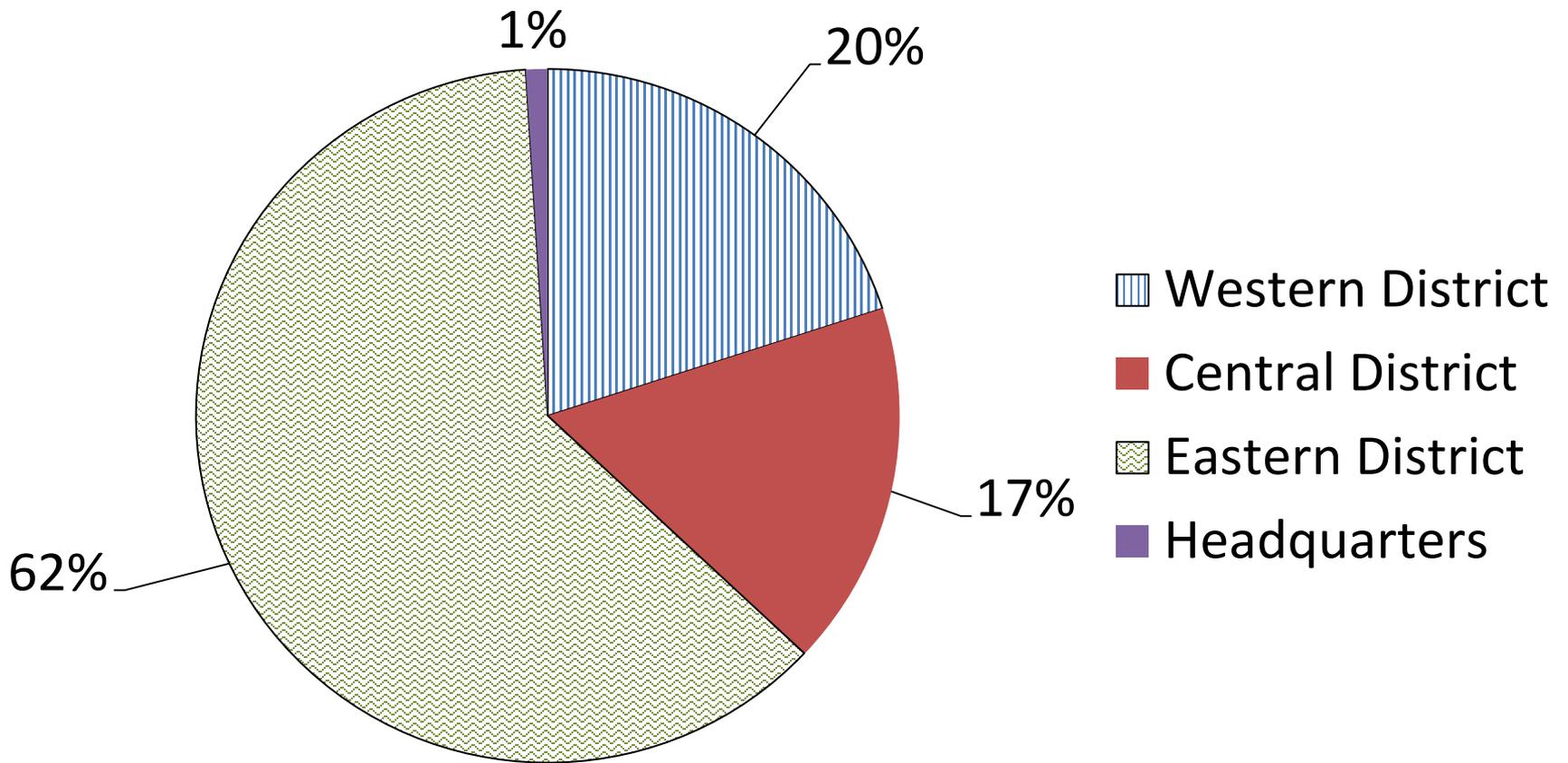
# Information Collected About Crime

- CSP Crimes Analysis Unit compiles info on the “Crime Index”
  - National measure of the most serious crimes committed:
    - Murder
    - Rape
    - Robbery
    - Aggravated assault
    - Burglary
    - Larceny-theft
    - Motor vehicle theft

# Connecticut Follows the National Trend of Decreasing Crime Index Rate



# Approximately two-thirds of FY 11 Crime Index offenses occurred within the CSP Eastern District



# Trends in Other Crimes

- Rate of other serious crimes also decreased
- Rate of some less serious offenses decreased:
  - Disorderly conduct
  - Trespassing
- Rate of DUI increased 20%
- Auto theft rates unrelated to 79% decline in CSP Auto theft Unit

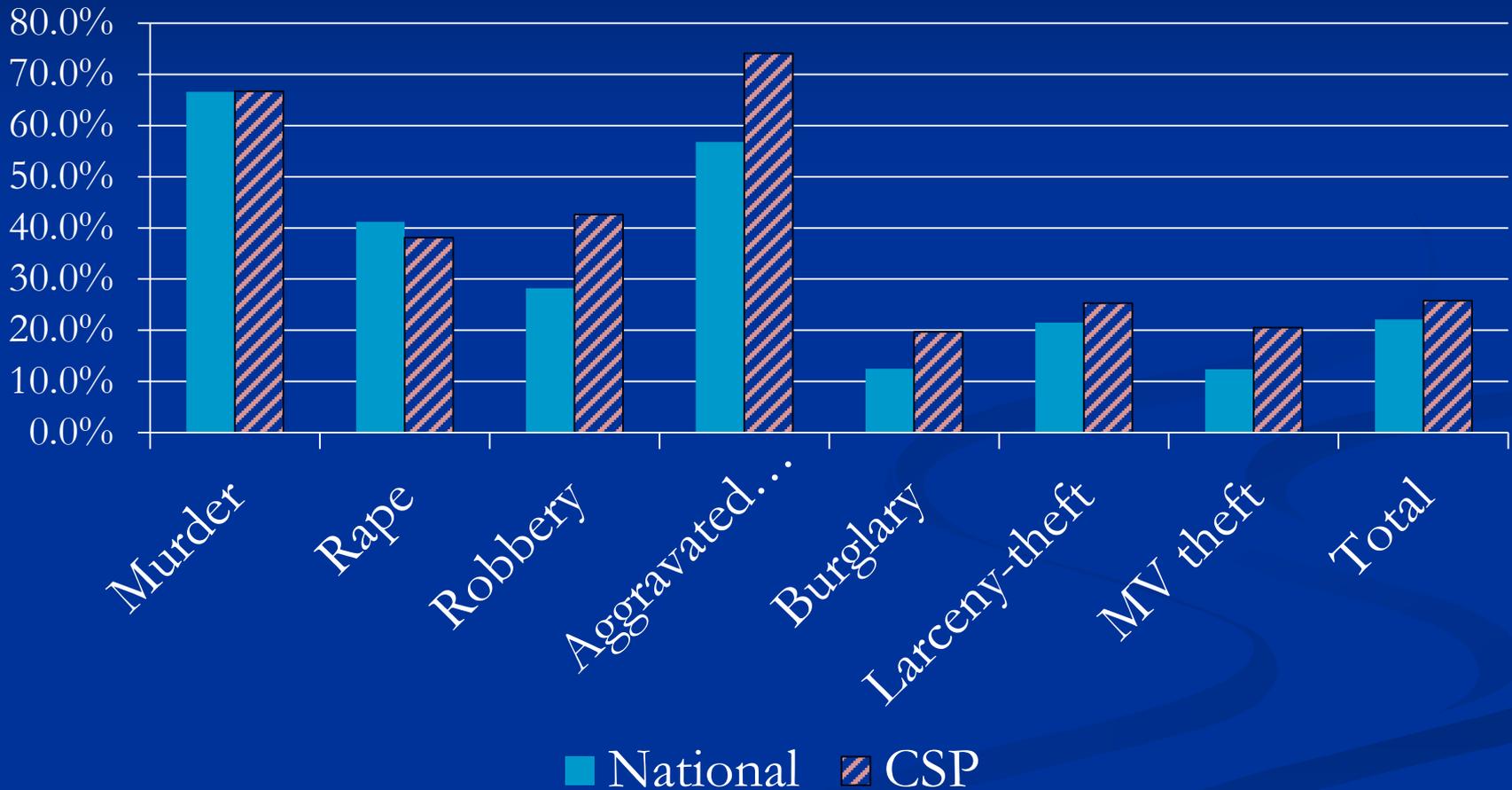
# Summary of Factor 2: Crime Rate

- Theory NOT SUPPORTED
  - Crime in CT is down, and this occurred at the same time CSP staffing levels declined
  - No association with staffing level was found
- BUT:
  - DUI increased as overall staffing levels decreased, however, no consistent pattern found in the Troops
- No Standard Proposed

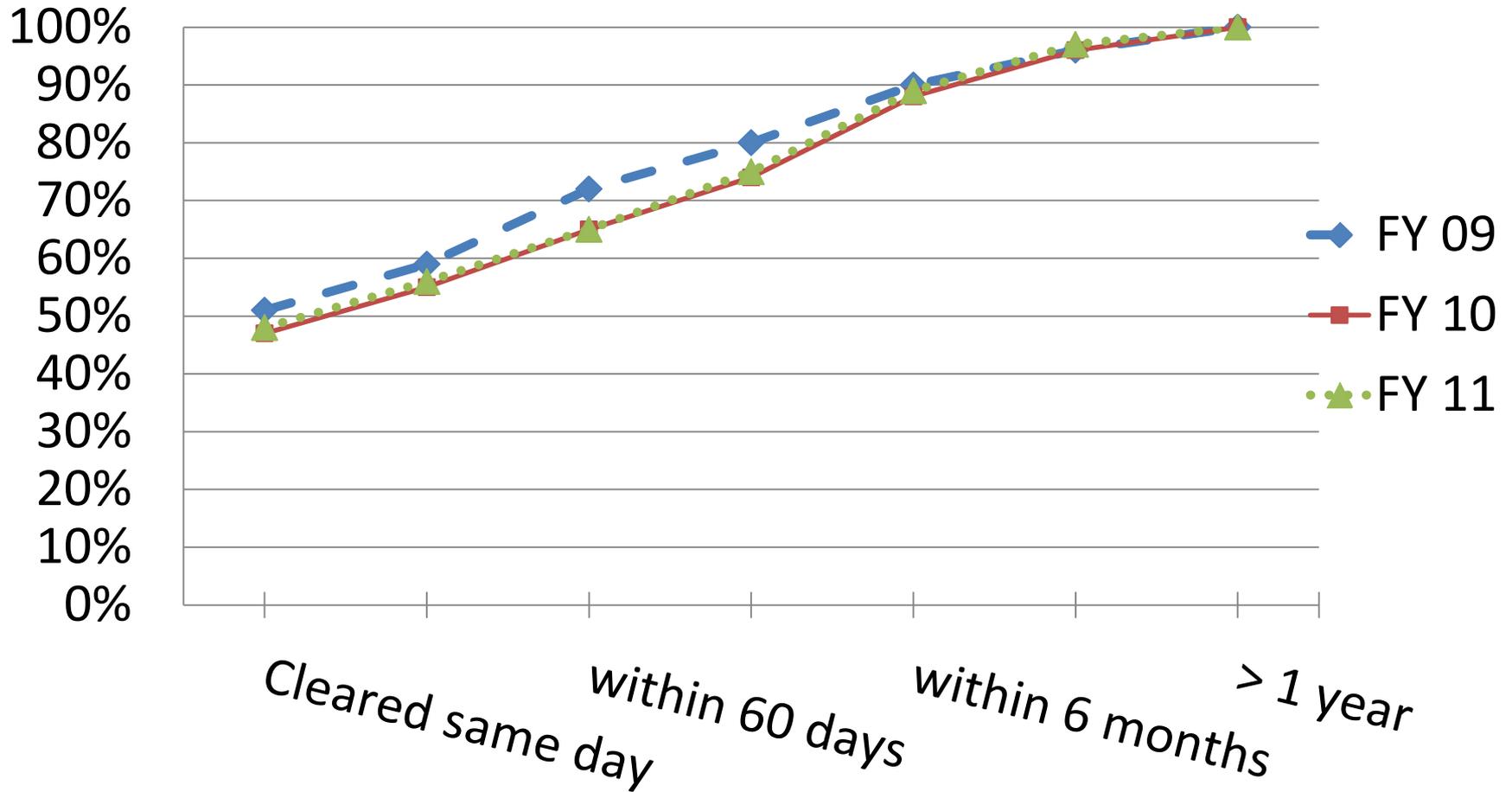
# Factor 3: Crime Clearance Rate

- The public is safer when CSP solves crimes when they are committed
- Theory being tested: As staffing levels decreased, crime clearance rates decreased

# 2011 CSP Crime Index Clearance Rates Compare Favorably with National Rates



# Crime Index Offenses Took Longer to Clear



# Summary of Factor 3: Crime Clearance Rate

- Theory NOT SUPPORTED
  - Crime clearance rates remained unchanged, despite decreases in staffing levels
- BUT:
  - The time needed to clear Crime Index offenses increased at the same time staffing levels decreased
  - Possible explanation due to more sophisticated investigative techniques
- No Standard Proposed

# Factor 4: Highway Safety

## Theory Tested:

As staffing levels decreased,  
highway safety decreased (FYs 09-12)

# Highway Safety

- **Measures examined** (for roadways under CSP jurisdiction)
  - Total Accidents
  - Accidents with Injury
  - Tickets
  - Fatal accidents
  - Intoxicated Driving (DWI)

# Accidents and Accidents w/ Inj.

	FY 09	FY 10	FY 11	FY 12
# Accidents	34,761	34,266	33,475	31,888
# Accidents with Injuries	4,937	4,867	4,791	4,734
% of Accidents with Injuries	14.2%	14.2%	14.3%	14.8%
# Active Sworn	1,186	1,092	1,092	1,017
Source: CAD Data ("actual call type") and CORE-CT personnel data.				

- Finding: No statistically significant correlation between sworn personnel staffing levels and total number of accidents or accidents with injury

# Issuance of Tickets and Staffing

	FY 09	FY 10	FY 11	FY 12
# Tickets Issued	176,376	179,159	198,129	179,944
% change in tickets issued from previous year		+1.6%	+10.6%	-9.2%
# Active Patrol/ Resident State Troopers and TSU Sworn Personnel	605	591	578	568
% change in Staffing Level		-2%	-2%	-2%

Source: CAD Data and CORE-CT personnel data.

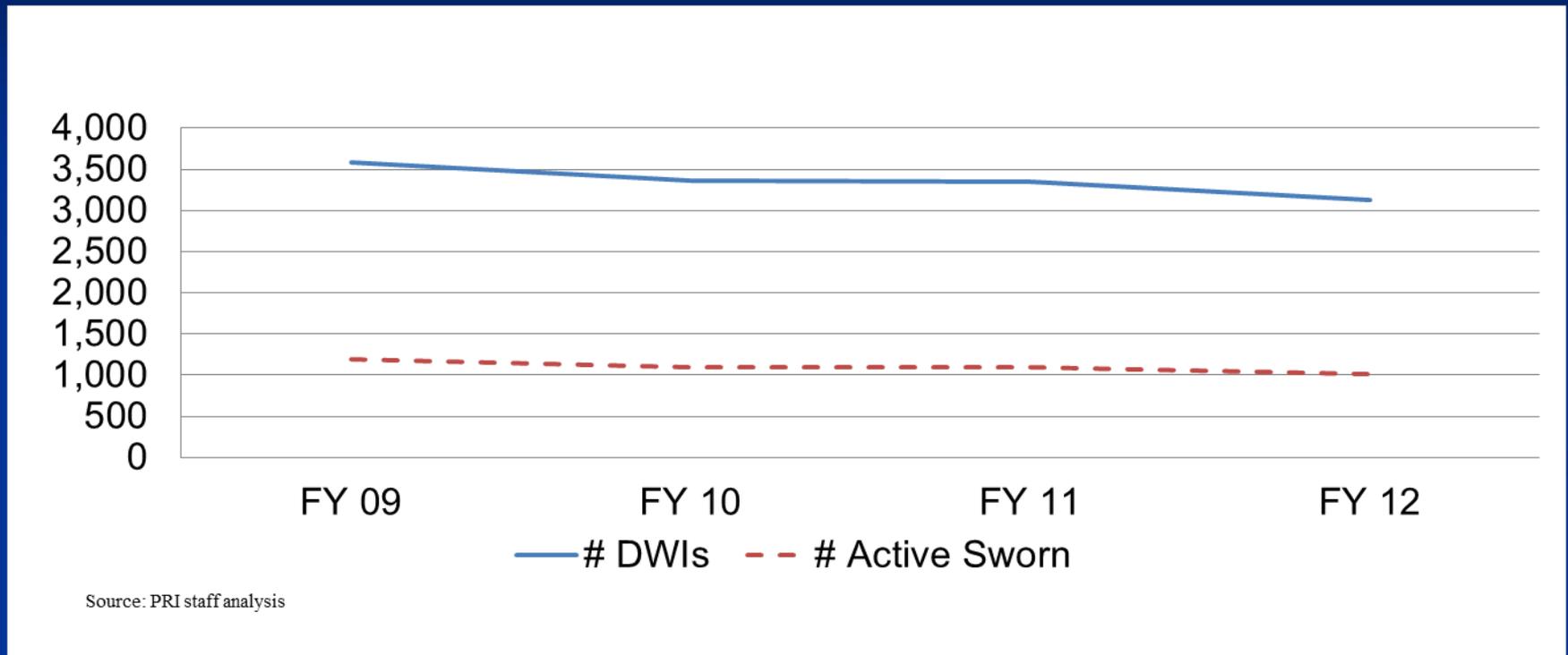
- **Finding: No statistically significant relationship between the number of tickets issued and the number of active sworn personnel** (including resident troopers and Traffic Services troopers)

# Fatal Accidents and Staffing

	FY 09	FY 10	FY 11	FY 12
# Fatal Accidents	97	126	103	87
# Active Troopers	564	555	544	539
Total # Active Sworn	1,186	1,092	1,092	1,017
Source: CAD Data and CORE-CT personnel data.				

- Findings: There was no association between the number of fatal accidents and number of active troopers, nor was there a relationship between fatal accidents and tickets issued.

# DWI and Sworn Personnel Staffing



- Findings: There was a similar trend in DWI incidents and sworn staffing. There was no statistical association between number of DWIs and accidents with injuries in the Troops, although patterns were found in some troops.

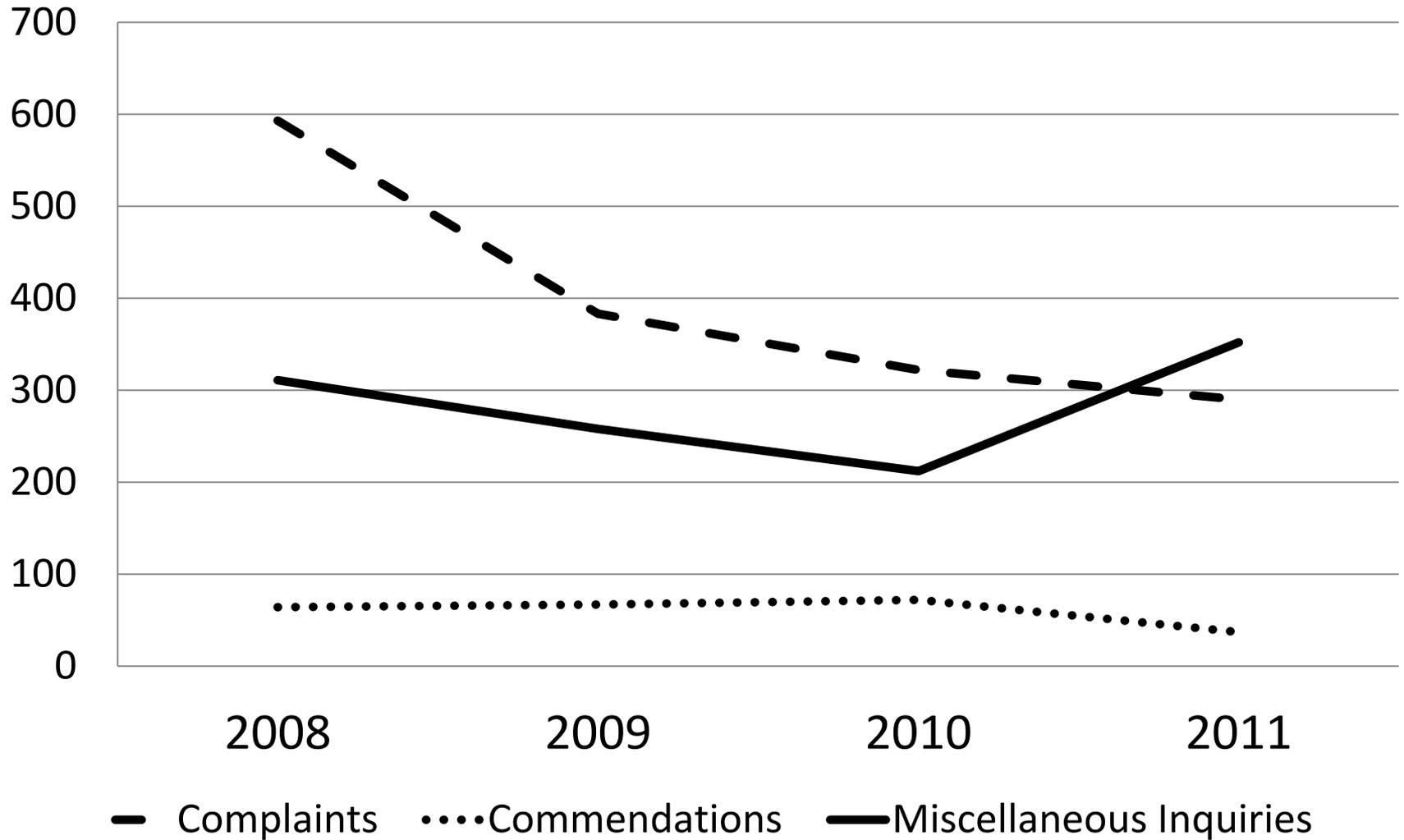
# Summary of Factor 4: Highway Safety

- Theory NOT SUPPORTED
  - As staffing levels decreased, there was not a corresponding increase in the number of traffic accidents, accidents with injury, or fatal accidents
- BUT DWI incidents tended to decrease as staffing levels decreased, indicating a positive trend
- No Standard Proposed

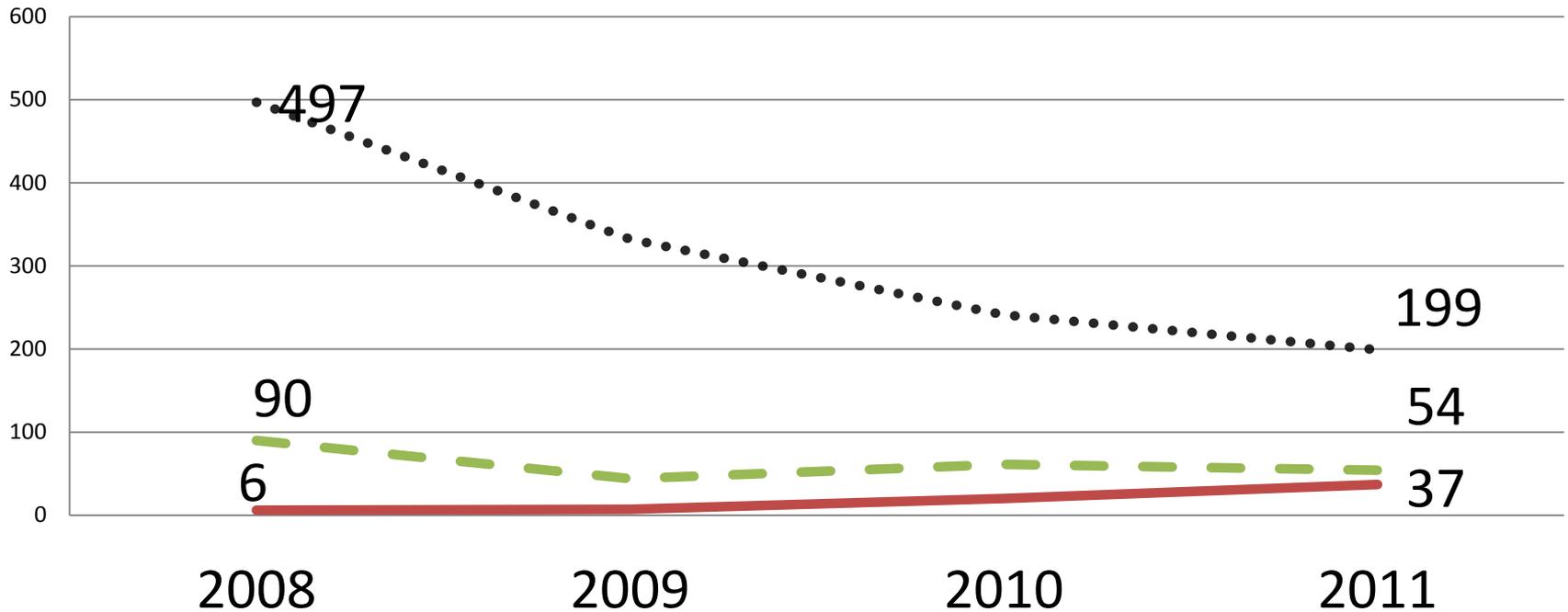
# Factor 5: Citizen Satisfaction

- The public is safer when CSP satisfies the citizen's expectations
- Theory being tested: As staffing levels decreased, citizen satisfaction decreased

# Complaints and Commendations: CY 2008-2011



# Level of Complaint Severity

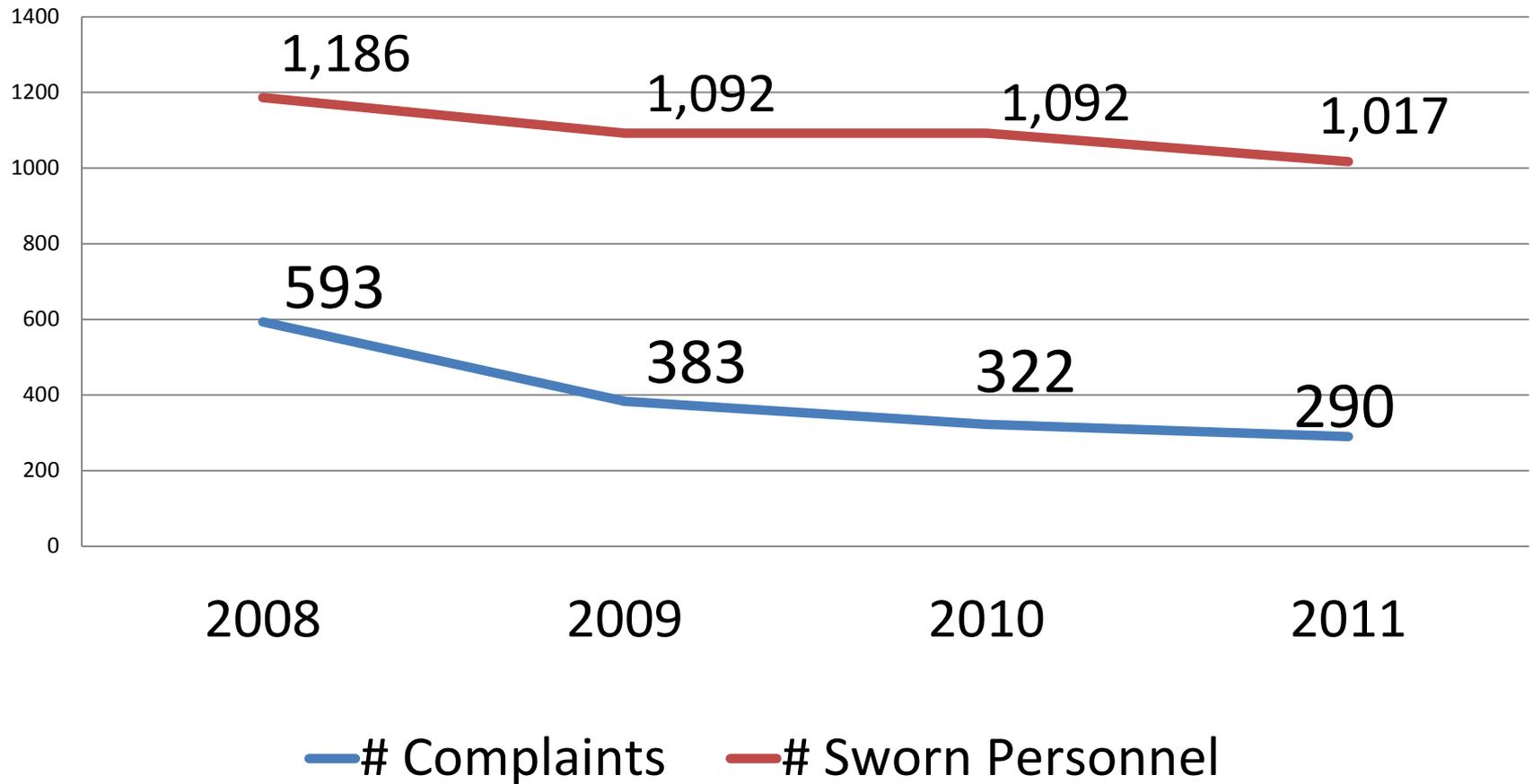


•••• Low-level Complaints

— Internal Affairs Investigations

— Administrative Inquiry Complaints

# Number of Sworn Personnel and Complaints



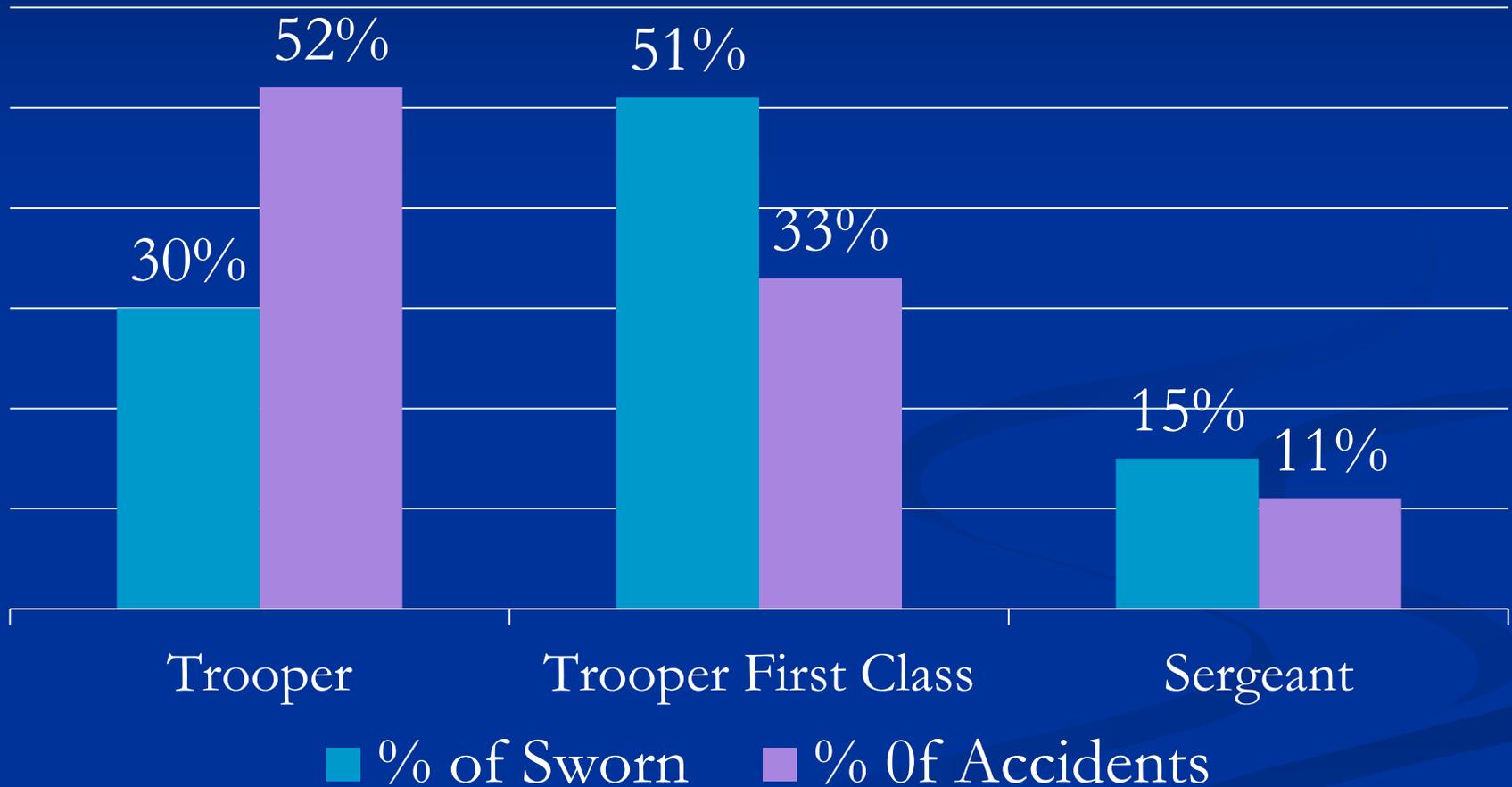
# Summary of Factor 5: Citizen Satisfaction

- Theory NOT SUPPORTED
  - The number of citizen complaints or commendations was unrelated to staffing levels
- No Standard Proposed

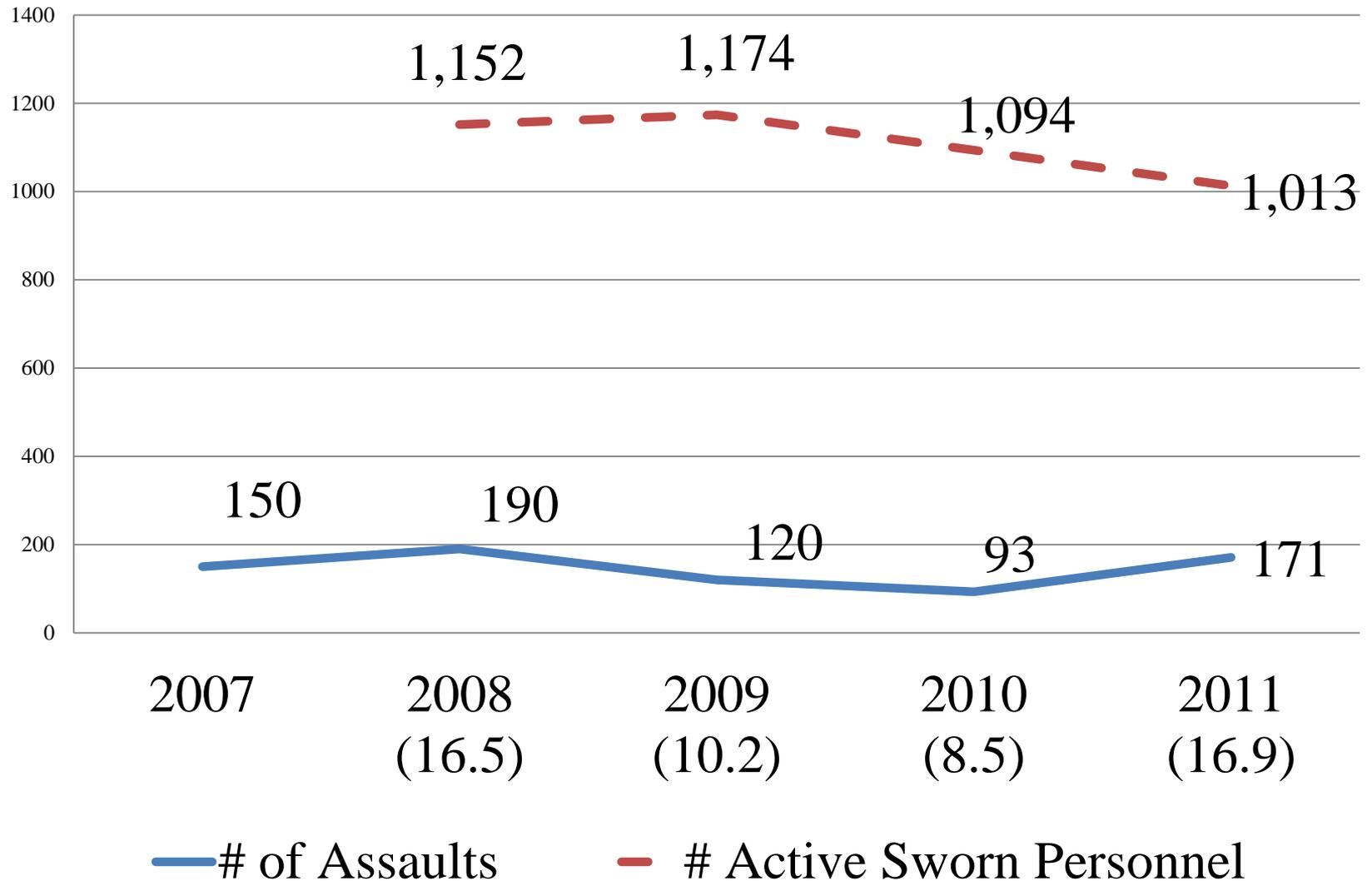
# Factor 6: Trooper Injuries

- Troopers are safer when:
  - Accidents in police cruisers are kept to a minimum
  - There are fewer assaults on officers
  - Workers' compensation/injuries on the job occur at acceptable rates
- Theory being tested: As staffing levels decreased, officer safety was adversely impacted

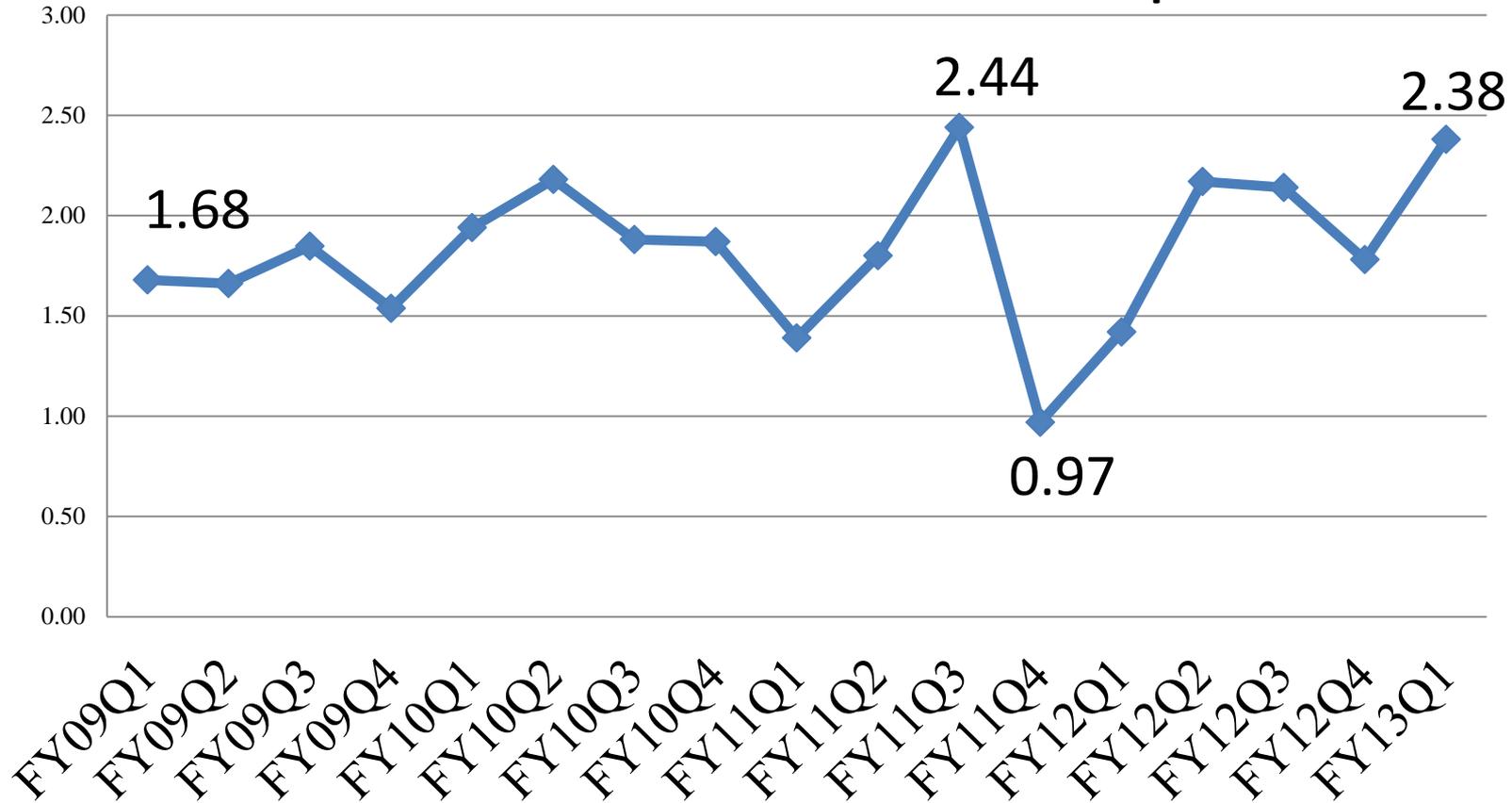
# Accidents in Police Cruisers



# Assaults on Officers and # of Sworn Personnel



# Incidence of Workers' Compensation Per 100 Sworn Personnel in Troops



# Summary of Factor 6: Trooper Injuries

- Theory NOT SUPPORTED
  - Accidents, officer assaults, and workers' comp. did not increase as staffing levels decreased
- BUT:
  - Training and safety programs for newer officers may reduce risk of accidents
  - Given increases in most recent data, monitor future officer assaults and workers' comp. rates
- No Standard Proposed

# Factor 7: Statutorily Required Functions

- Functions explicitly stated in statute are provided by CSP
  - There are 15 Units or Task Forces CSP is required to provide
  - In FY 12, the # of sworn personnel in the Units/Task Forces ranged from 1-32

# Sworn Personnel in Statutorily Mandated Units/Task Forces

- Unlike the Troop Patrols, there are no minimum staffing requirements
- Declines occurred for 7 of the 12 examined
- Traffic Services lost the most sworn personnel (18-19 officers, or 37%)
- Firearms Trafficking Task Force had the largest percent decline—73%—from 8.6 to 2.3 officers

# Summary of Factor 7: Statutorily Required Functions

- Findings:
  - Units put in statute to protect the citizenry of CT
  - Some units have decreased 73%
- Propose Standard 2: Functions explicitly stated in statute are provided by CSP
  - An alternative is elimination of the function or unit
- CSP further development of Standard 2:
  - CSP needs to establish minimum staffing levels for these statutorily required functions

# Factor 8: Fulfillment of Contractual Obligations

- Obligations to provide Resident State Troopers met
  - Some towns have contracts with CSP to provide Resident State Troopers
  - These obligations need to be taken into account when determining CSP staffing level

# Summary of Factor 8: Fulfillment of Contractual Obligations

- Findings:
  - Currently commitments to provide approximately 110 resident state troopers and 13 resident state sergeants to 55 municipalities
  - Towns are counting on CSP to provide this resource
- Propose Standard 3: CSP fully meets contractual obligations to towns to provide resident state troopers

# Factor 9: Shift Relief Factor to Calculate Number of Patrol Staff Needed

- Adequate number of troopers to staff patrols  
(Shift Relief Factor)
  - There are approximately 230 CSP daily patrols that need to be staffed
  - Calculation of a Shift Relief Factor determines how many personnel are needed to staff the patrols

# Shift Relief Factor (SRF)

- Mathematical formula
- Takes into account the amount of hours a trooper is available to work
- SRF considers time for vacation, regular days off, sickness, training, etc.
- SRF is the number of patrol troopers required to staff one shift position 365 days per year

# Application of SRF

- SRF was developed using FY 12 information on actual vacation, sick, training ,etc.,
- SRF was 1.95, meaning almost two patrol troopers are needed to staff each patrol

	# patrol troopers needed	Avg # patrol troopers available	Shortage/ Surplus
FY 09	449.6	456	+6.4
FY 10	449.6	456	+6.4
FY 11	445	446	+1
FY 12	449.6	448	-1.6
FY 13	449.6	439	-10.6

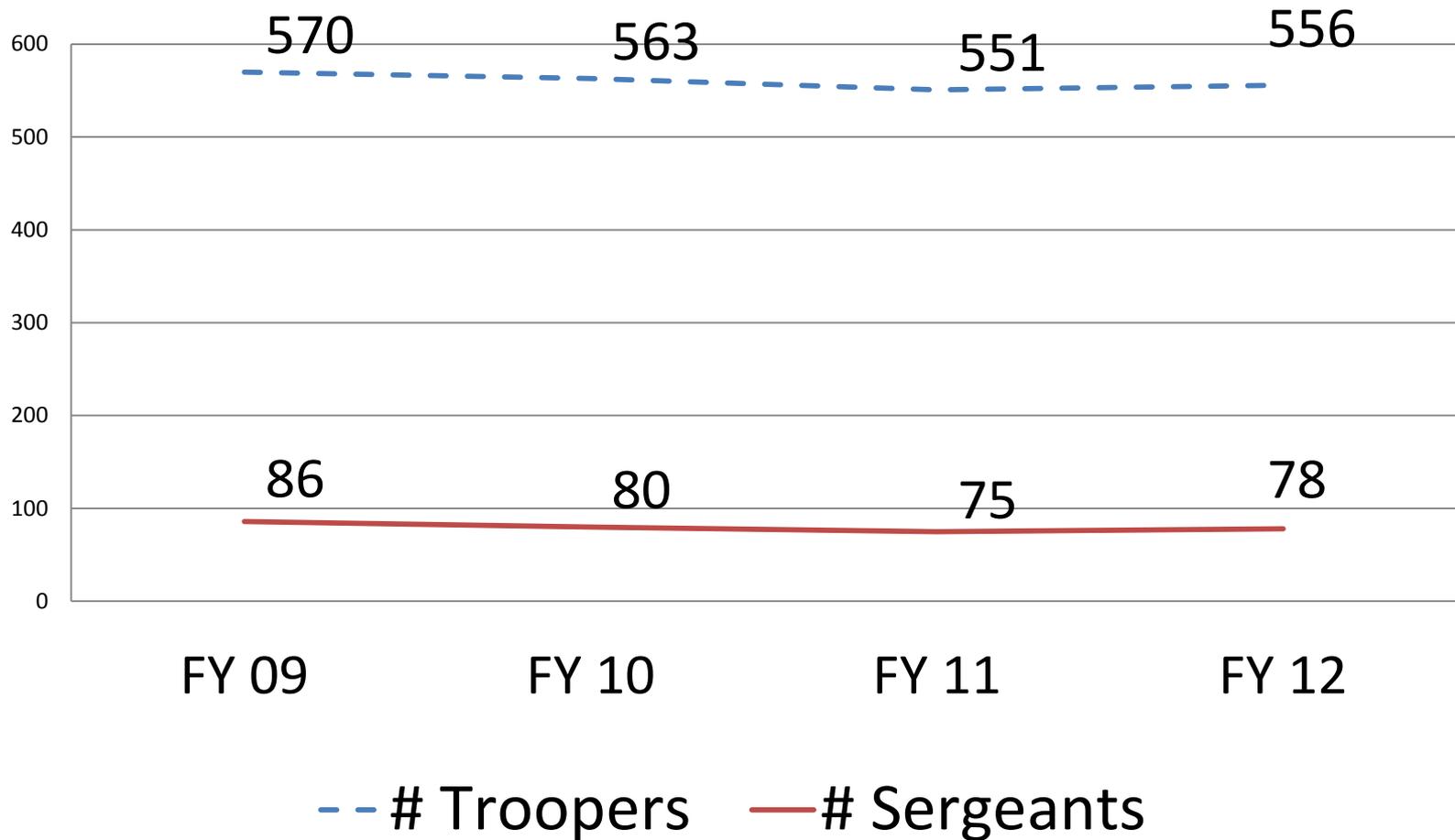
# Summary of Factor 9: Shift Relief Factor to Calculate Number of Patrol Staff Needed

- Findings:
  - The Shift Relief Factor was developed using FY 12 information and found to be 1.95
  - Preliminary FY 13 information shows a potential shortfall of 10-11 patrol troopers
- Propose Standard 4: There is an adequate number of troopers to staff the 230 patrols, taking into consideration the shift relief factor

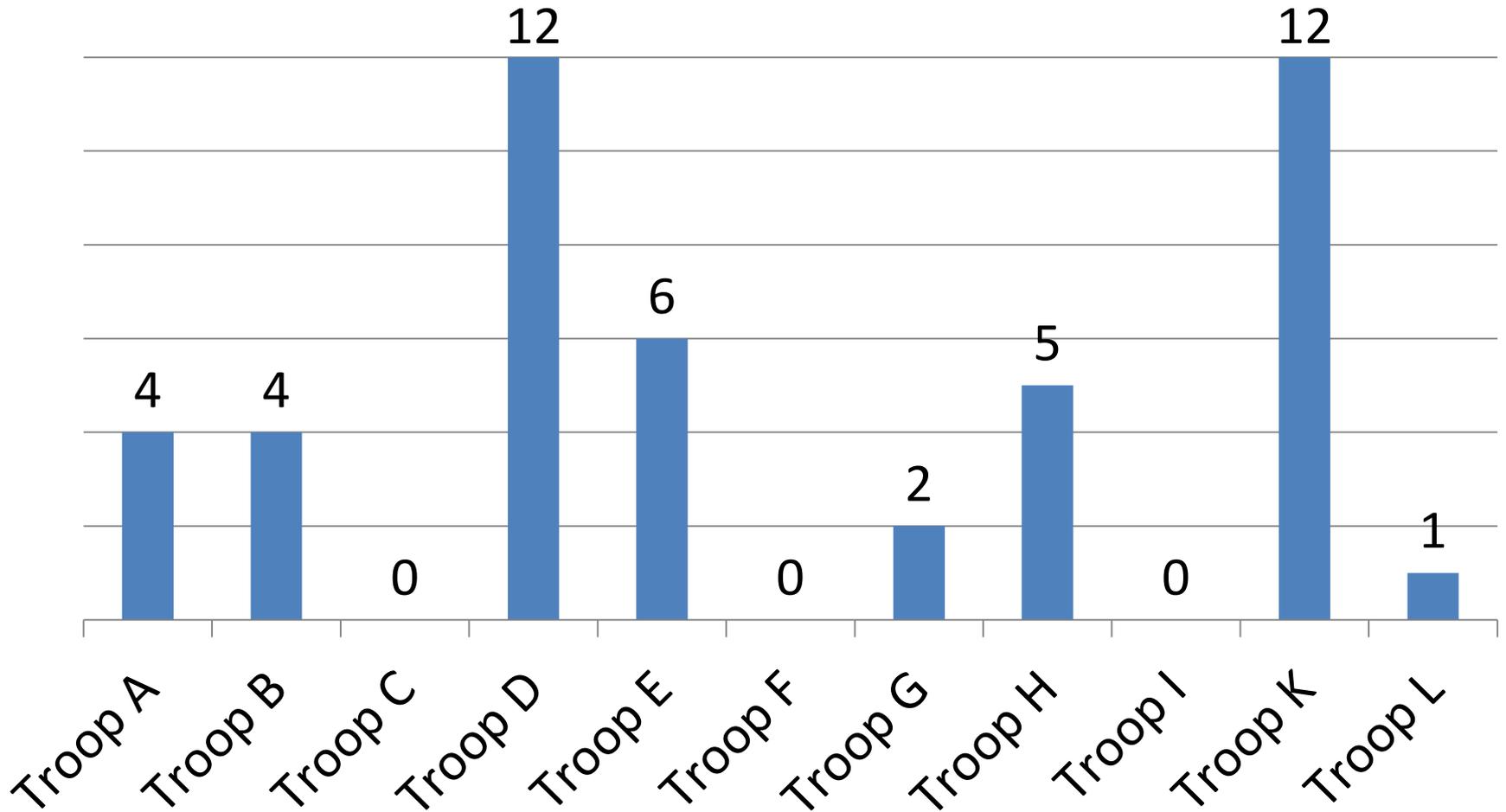
# Factor 10: Patrol Staff Supervision Using Span of Control

- Supervision sufficient (Span of Control)
  - Span of control is the number of persons reporting to any one supervisor
  - CSP optimum span of control is one sergeant for every 6-8 patrol/resident state troopers

# Number of Troopers and Sergeants in the Barracks



# # of Months 1:8 Span of Control Exceeded



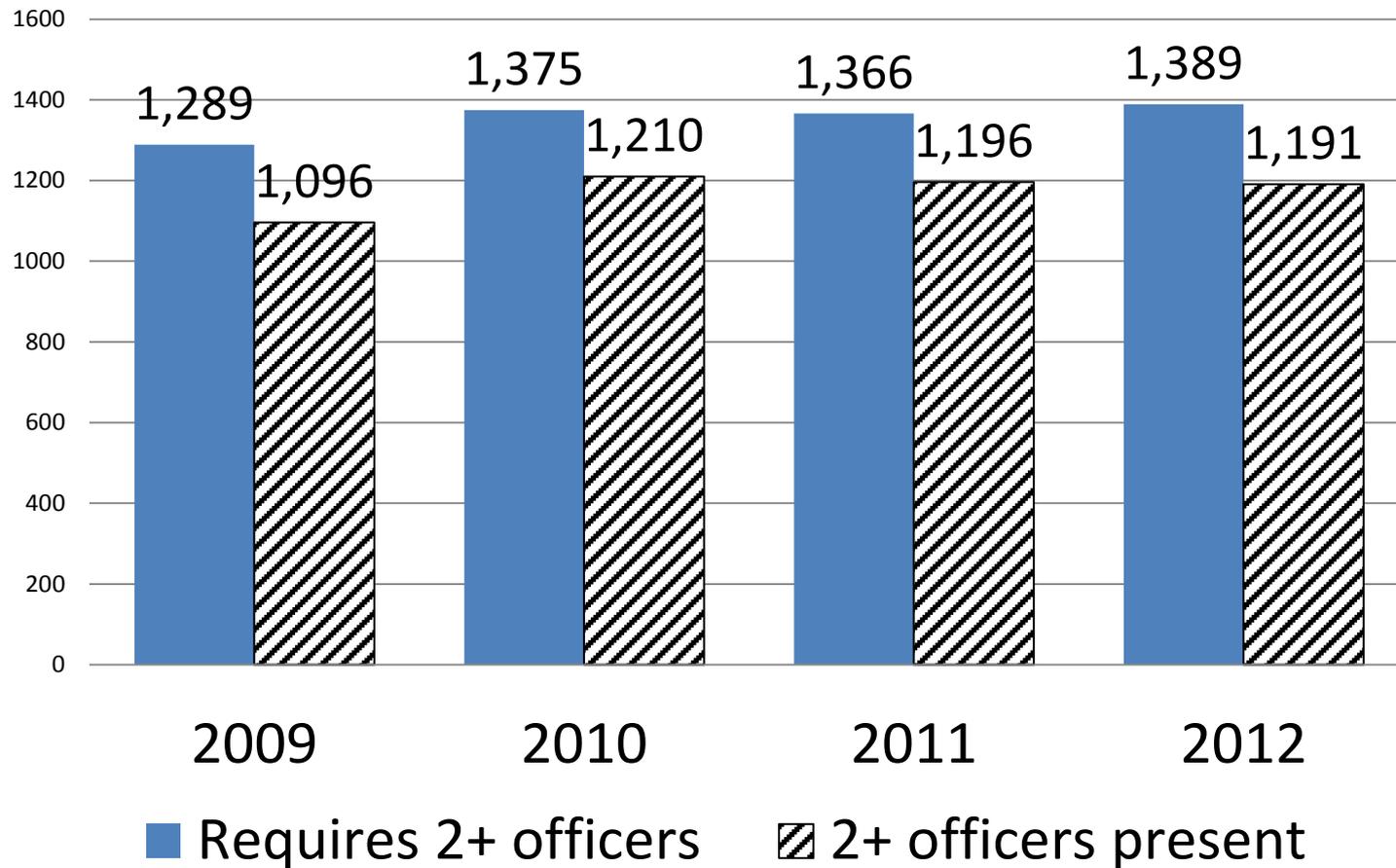
# Summary of Factor 10: Patrol Staff Supervision Using Span of Control

- Findings:
  - From FYs 09-12, the overall ratio of troopers to sergeants in the Barracks is within the 1:8 CSP guideline
  - Span of control ratios not uniform across Troops, with some Troops as high as 1:12 ratio
- Propose Standard 5: Patrol and resident state trooper supervision is sufficient based on a 1:8 span of control

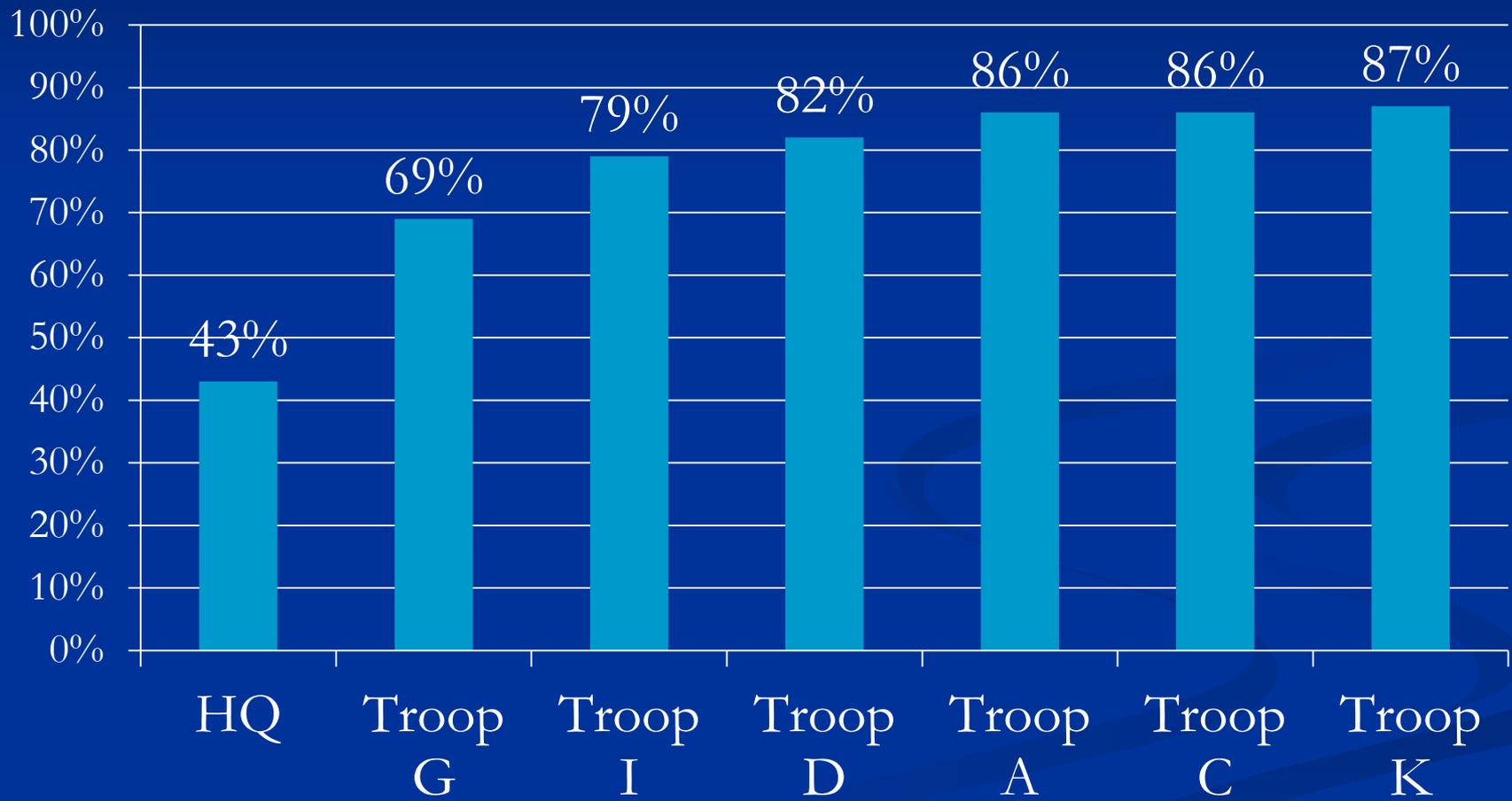
# Factor 11: Two-Officer Minimum

- Two-officer minimum for certain service calls met
  - CSP requires at least two officers present for:
    - Domestic violence situations
    - Fatal accidents
    - Untimely death/homicide

# Number of Calls for Service Requiring at Least Two Officers



# Troops with Less Than 90% of Domestic Violence Calls Meeting the 2-Officer Goal in FY 12



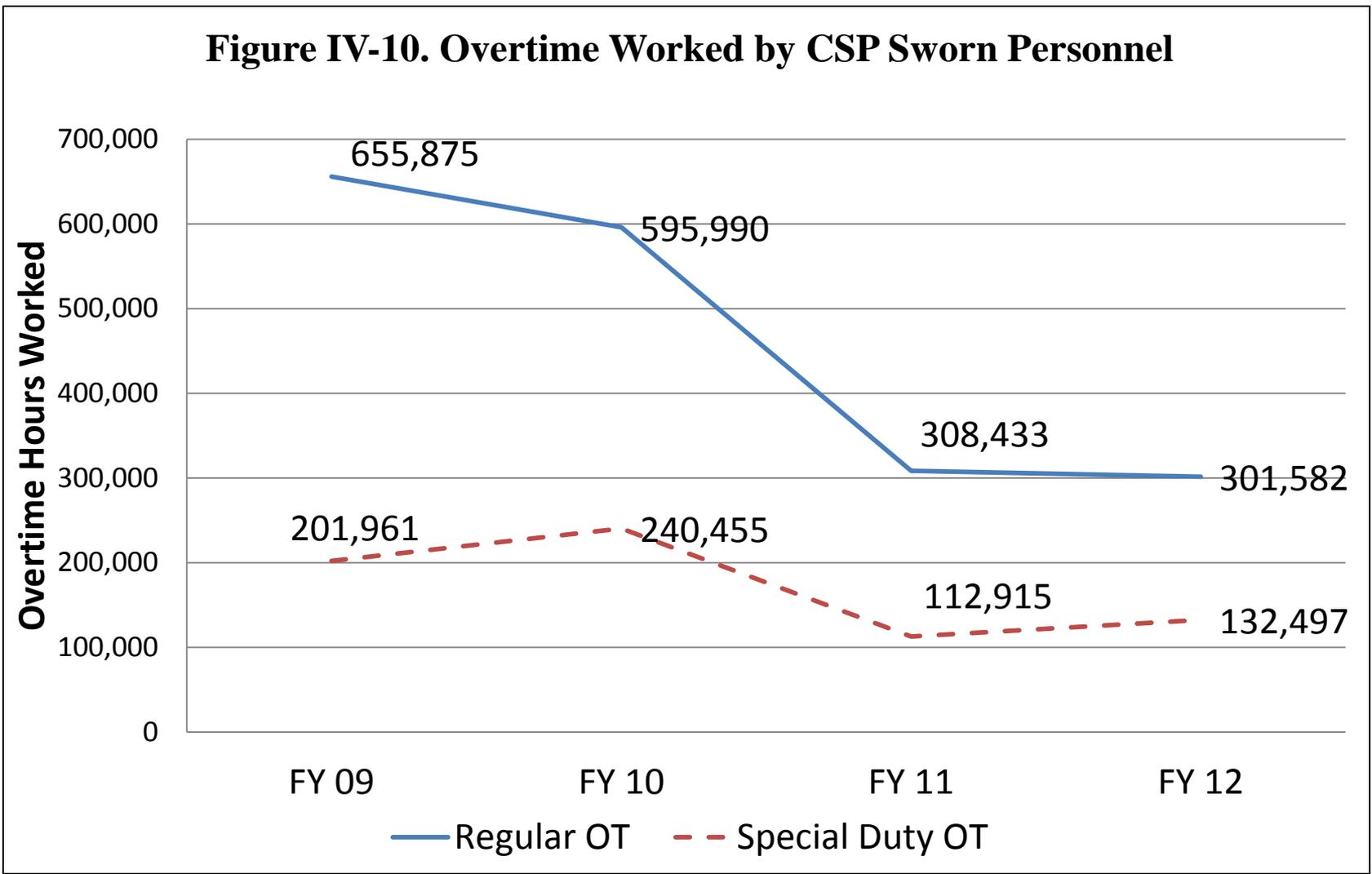
# Summary of Factor 11: Two-Officer Minimum

- Findings:
  - 13-31% of the time certain Troops are responding to domestic violence calls alone
  - CSP also needs a policy on who can respond to these calls given 43% noncompliance by HQ officers
- Propose Standard 6: The two-officer minimum requirement for domestic violence, fatal accidents and untimely death/homicide calls for service are being met [at least 90% of the time]

# Factor 12: Amount of Regular Duty Overtime

- Overtime levels not steadily increasing
  - Two types of overtime: regular duty vs. special duty
  - A sustained increase in regular duty overtime could be indicator of insufficient staffing levels

# Regular duty OT ↓ by 54% From FY 09-FY 12



# Summary of Factor 12: Amount of Regular Duty Overtime

- Findings:
  - There was a 54% decrease in regular duty overtime from FYs 09-12, attributed to policy decision to sharply limit overtime
  - Future sustained increases in overtime a possible indicator of insufficient staff
- Propose Standard 7: The use of regular duty overtime has not shown a sustained increase [three years in a row]

# Other areas under study charge

# Technology

- Application of technology has enhanced policing over time
- Field Technology Unit is primary resource for technology procurement for patrol function
  - Several ongoing projects
- No formal plan however, units collaborate to prioritize

# Civilianization

- Department has evaluated and civilianized positions in 5 areas
  - Evaluating number of sworn officers needed
- PRI staff reviewed an additional 6 areas
- Conclusion
  - Positions have a mix of duties that could be completed by a civilian and others requiring a sworn officer

# Summary of Proposed Standards

# Summary of Proposed Connecticut State Police Staffing Level Standards

- 1. Officers respond to 9-1-1 calls within 15 minutes at least 50% of the time
- 2. Functions explicitly stated in statute are provided by CSP
- 3. CSP fully meets contractual obligations to towns to provide resident state troopers
- 4. There is an adequate number of troopers to staff the 230 patrols, taking into consideration the shift relief factor

## Summary of Proposed Connecticut State Police Staffing Level Standards, Cont'd

- 5. Patrol and resident state trooper supervision is sufficient based on a 1:8 span of control
- 6. The two-officer minimum requirement for domestic violence, fatal accidents and untimely death/homicide calls for service are being met [at least 90% of the time]
- 7. The use of regular duty overtime has not shown a sustained increase [three years in a row]