



Blueprint for Implementing  
the Strategic Highway  
Safety Plan at the Local  
Level

# Why are we here?

- ▶ Understand and embrace the SHSP as a guiding document
- ▶ Propose a methodology for data analysis, stake holder engagement and task implementation
- ▶ We don't have the answers...
  - ▶ trying to empower locals to improve traffic safety in their community using statewide and local tools



Strategic Highway Safety Plan (SHSP)



Highway Safety Plan (HSP)

Highway Safety Improvement Program (HSIP)

Traffic Safety Commissions (TSCs)

- Community Maps
- 511
- WisTransPortal
- County Profiles
- TSC Guidelines

*informs statewide behavioral safety decisions*


*informs statewide highway safety decisions related to infrastructure*

Traffic and Criminal Software (TraCS)

Mobile Architecture for Communications Handling (MACH)

# Strategic Highway Safety Plan

- ▶ 3-year plan that articulates strategies for Wisconsin to address highway safety challenges
- ▶ Identifies:
  - ▶ the foremost highway safety problems in the state
  - ▶ opportunities and processes to address those problems
  - ▶ determines the appropriate approaches and countermeasures
- ▶ Requires the coordination of:
  - ▶ Local governments and state agencies
  - ▶ The private sector, community organizations, and individual citizens
- ▶ Local implementation of this plan is a major priority.



## Wisconsin Strategic Highway Safety Plan 2017 – 2020

- ▶ Survey (over 1000 people)
- ▶ Peer Exchange
- ▶ Task Forces
- ▶ Writing up the document

*Published by the Wisconsin Department of Transportation*

*Dave Ross, Secretary*

*David Pabst, Chair*

*Wisconsin DOT Traffic Safety Council*

# Top 10 Issue Areas

- ▶ Reduce Driver Distraction/Improve Driver Alertness
- ▶ Reduce Alcohol & Drug-Impaired Driving
- ▶ Reduce the Incidence and Severity of Motorcycle Crashes
- ▶ Improve Driver Performance (Teens, Older, Competent)
- ▶ Improve Non Motorist Safety
- ▶ Improve Safety of Intersections
- ▶ Increase Occupant Protection
- ▶ Curb Aggressive Driving/ Reduce Speed-Related Crashes
- ▶ Reduce Lane Departure Crashes
- ▶ Improve Safety Culture, Safety Data, Safety Technology

# Active Work Groups

- ▶ Reduce Driver Distraction/Improve Driver Alertness
- ▶ Reduce Alcohol & Drug-Impaired Driving
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Strategic Highway Safety Plan (SHSP)



Highway Safety Improvement Program (HSIP)





# Highway Safety Improvement Program (HSIP)

- ▶ Safety-related infrastructure improvements—data-driven and crash-based selection of projects
- ▶ The Strategic Highway Safety Plan is a requirement for WisDOT's Division of Transportation Investment Management to apply for funds to improve highway safety through the Federal Highway Administration's (FHWA) HSIP.
- ▶ Funds safety projects designed to reduce the number and severity of crashes on all roadways in the state, including the local system.
- ▶ \$31 million/year, 10% state or local match
- ▶ Four year project cycle, applications for SFY 2018-2021 are due 8/15/17
- ▶ Spot projects can include intersection safety improvements, straightening isolated curves or hills, improving sight distance, access modifications, constructing lanes, eliminating a roadside obstacle, installing guardrails or other barriers, or installing signs or pavement markings.
- ▶ Corridor-level projects can include signal upgrades, larger or additional signing, chevrons, pavement markings, rumble strips, eliminating encroachments, or pedestrian countdown timers.
- ▶ DTIM improves some high risk rural roads through this HSIP, focusing on local rural collectors, roads with many run-off-the-road crashes or fatal and serious injury crashes

Strategic Highway Safety Plan (SHSP)



Highway Safety Plan (HSP)



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# Highway Safety Plan

- ▶ \$11.6 million annually for behavioral highway safety countermeasures
- ▶ Annual plan and application for funding from BOTS to NHTSA
- ▶ Major program areas include occupant protection, impaired driving, police traffic, traffic records improvement, EMS improvement, motorcyclist safety, pedestrian and bicyclist safety, community traffic safety, and media and outreach.
- ▶ Each major program area identifies countermeasures and projects to address behavioral highway safety problems.



# Strategic Highway Safety Plan (SHSP)



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# Traffic Safety Commission

## Wisconsin Statute 83.013

13

Every county is “required” to have a TSC, however..

Opportunity to create **grassroots traffic safety initiatives** that can directly impact what is happening on roadways.

Vital component and stakeholder in the creation and implementation of the Strategic Highway Safety Plan.

DOT/BOTS is committed to providing support and resources towards the effectiveness of the TSC's.

## Primary Role of the TSC

- ▶ The review of crashes (fatal, serious injury, and even frequent crash areas) is a foundational component of the TSC .
- ▶ One of the purposes of having stakeholders from a multitude of disciplines around the table is for them all to weigh-in on the prior quarter's crash review from their individual area of expertise and/or personal knowledge.
- ▶ The review of crashes should always include showing the crash location (and surrounding area) so participants are able to visualize what happened, where it happened, and discuss all possible factors in why the crash happened – all with the goal of determining what if any countermeasures might be used to prevent future crashes.
- ▶ This can be done in multiple ways, such as Community Maps and squad video presentations.

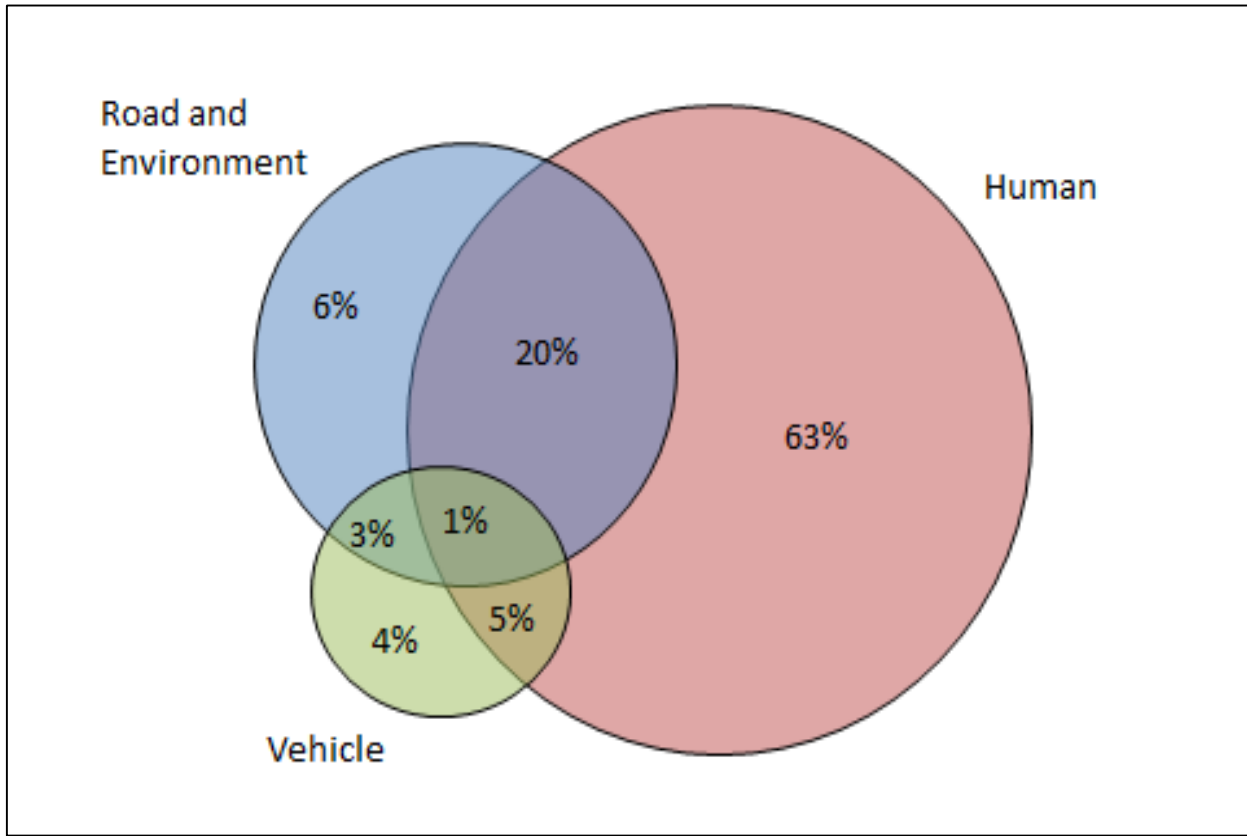


Figure 2: Contributing Factors to Traffic Fatalities





# NHTSA / WisDOT / DSP / BOTS

- ▶ Your Traffic Safety Partners (≤ not ≥ or even =)
- ▶ Support, tools, resources
  - ▶ Potential solutions – not answers
- ▶ BOTS Staff
  - ▶ Analysts
  - ▶ RPMs
  - ▶ LELs

# Traffic Safety Commission Guidelines



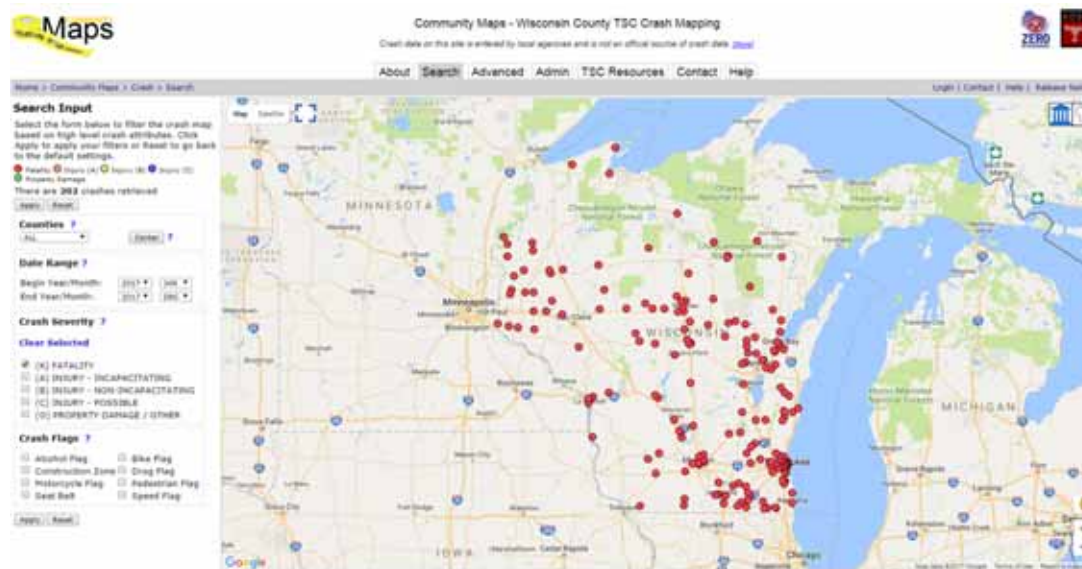
# County Profiles

## Anatomy of Traffic Safety – Winnebago County Bureau of Transportation Safety



Revised: 12/22/16

# Community Maps



# WisTransPortal



## Wisconsin Traffic Operations and Safety Laboratory The WisTransPortal System

The WisTransPortal system serves the computing and data management needs of the [Wisconsin Traffic Operations and Safety \(TOPS\) Laboratory](#). The project scope includes support for ITS data archiving, real-time traffic information services, transportation operations applications, and transportation research. [Learn more.](#)

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### Welcome to the WisTransPortal

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WisTransPortal data requests and login account information.

[Authors](#)

#### [Data Products](#)

Traffic operations and engineering datasets and related resources.

[Contact](#)

#### [Web Applications](#)

WisTransPortal data retrieval and analysis tools, other applications.

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#### [Documentation](#)

Database documentation, project architecture, and other documentation.

#### [WisDOT Traffic Video](#)

LINK video sharing and public safety information service.

#### [Developer Resources](#)

Resources for TOPS and WisTransPortal system development.

#### Quick Links

[Crash Data](#)

[Traffic Data](#)

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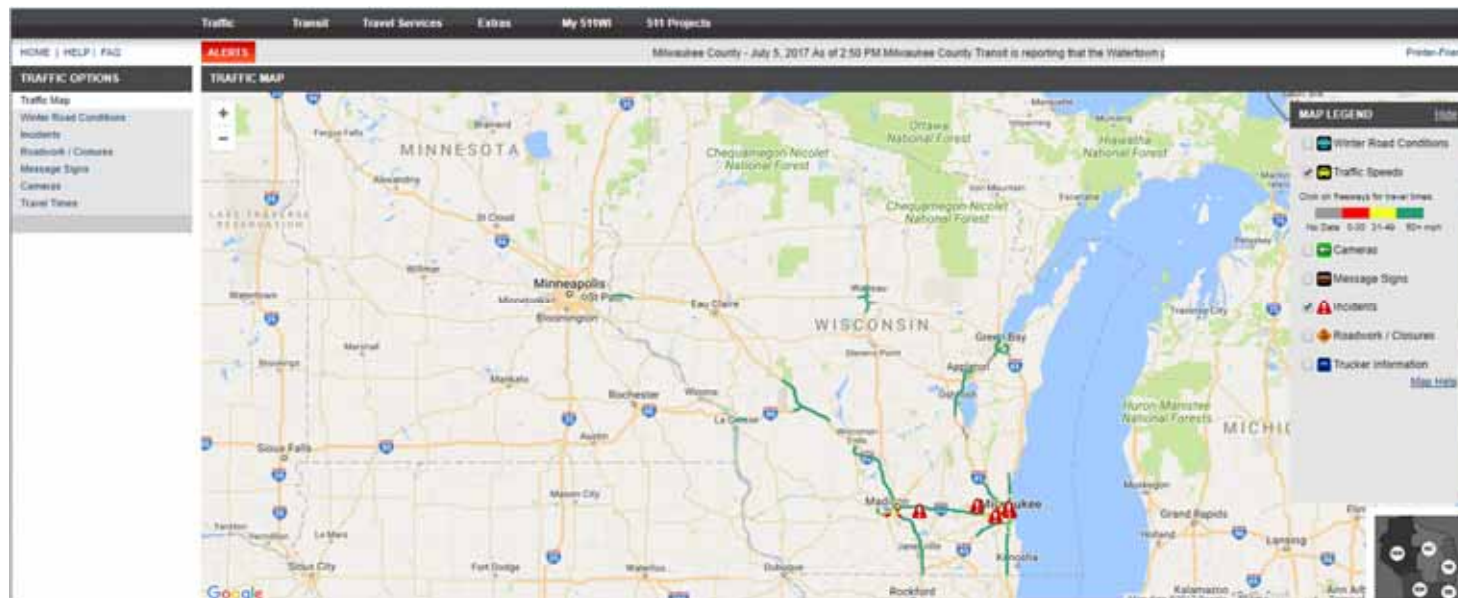
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# 511 Wisconsin



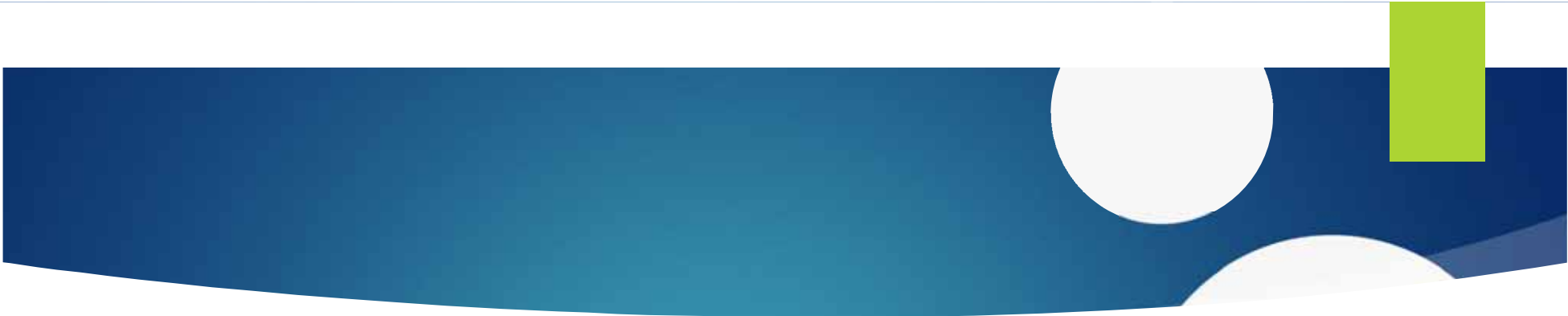
# Where do you go from here?

- ▶ Identification of local problem areas
  - ▶ No perfect county, all relative
  - ▶ Low hanging fruit
- ▶ Identify stakeholders and programs already active in your community
  - ▶ Are they at the TSC table
  - ▶ Are they aware of the SHSP > common goals
  - ▶ Are they an untapped resource
- ▶ Recognize limitations of TSCs quarterly meeting time

# Starting a TSC Sub-Committee

- ▶ Grab stakeholders first
- ▶ Determine what data is available at the state level, but also at the local level.
- ▶ Research possible countermeasures that the state recommends in the SHSP.
  - ▶ Compare and contrast with local efforts



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- ▶ Not limited to SHSP countermeasures
  - ▶ Create new pilot projects that respond to local concerns.
  - ▶ TSC sub-committees are encouraged to view pilot projects as an opportunity to identify holes in the state traffic records system and to report back to the DOT on suggested improvements.
    - ▶ Knowledge sharing with DOT and other TSCs

# Building the Blueprint

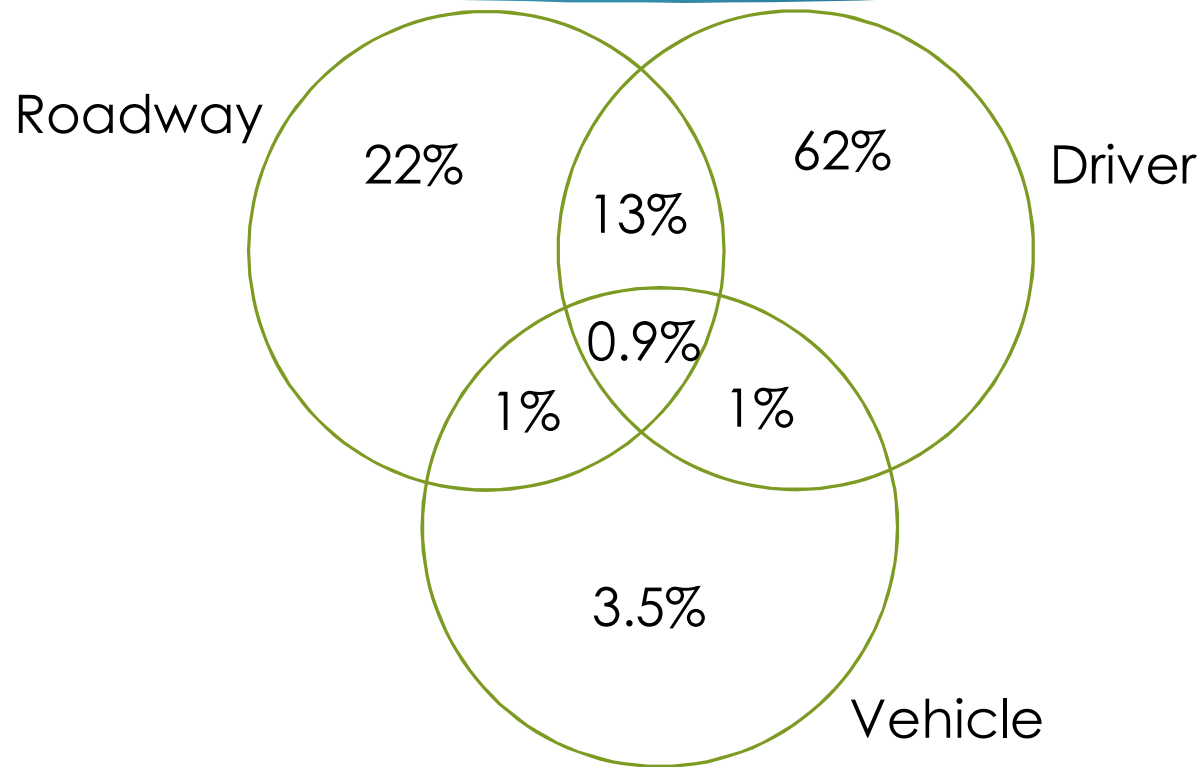


COUNTY	Population	Center Miles	14'-16' average VM (in 100 million)	TOTAL (14'-16') Run off the Road Crashes	3-Year Ave Number Run off the Road Crashes (14'-16')	Run off the Road Crash Rate
BROWN	257,897.00	2,336.50	22.84	2,585.00	861.67	37.73
LANGLADE	19,995.00	1,159.15	2.56	334.00	111.30	43.44
RACINE	195,294.00	1,332.90	14.76	2,799.00	933.00	63.21
WALWORTH	102,593.00	1,533.23	11.20	1,524.00	508.00	45.35
STATE FIGURES	5,775,120.00	115,457.02	605.57	92,837.00	30,945.67	51.10

COUNTY	Population	Center Miles	14'-16' average VM (in 100 million)	TOTAL (14'-16') Number of Run Off the Road Fatalities	3-Year Average Number of Run Off the Road Fatalities	Run off the Road Fatality Rate
BROWN	257,897.00	2,336.50	22.84	17.00	5.67	0.25
LANGLADE	19,995.00	1,159.15	2.56	6.00	2.00	0.78
RACINE	195,294.00	1,332.90	14.76	16.00	5.33	0.36
WALWORTH	102,593.00	1,533.23	11.20	26.00	8.67	0.77
STATE FIGURES	5,775,120.00	115,457.02	605.57	799.00	266.33	0.44

Frequency  
versus Rate

# 3 Years ROR Data







Without Safety Edge



With Safety Edge

# Lane Departure Tasks

2016 HRRR State Wide Map



Blue represents corridors from the first set and green represents corridors from the second set.

COUNTY	Population	Center Miles	14'-16' average VMT	TOTAL (14'-16') Alcohol-Related Fatalities	3-Year Average of Alcohol Related Fatalities (14'-16')	Alcohol-Related Fatalities Rate
BROWN	257,897.00	2,336.50	22.84	14.00	4.67	0.20
LANGLADE	19,995.00	1,159.15	2.56	5.00	1.67	0.65
RACINE	195,294.00	1,332.90	14.76	20.00	6.67	0.45
WALWORTH	102,593.00	1,533.23	11.20	18.00	6.00	0.54
STATE FIGURES	5,775,120.00	115,457.02	605.57	495.00	165.00	0.27

COUNTY	Population	Center Miles	14'-16' average VMT (in 100 million)	TOTAL (14'-16') Alcohol-Related Crashes	3-Year Ave of Alcohol-Related Crashes (14'-16')	Alcohol-Related Crashes Rate
BROWN	257,897.00	2,336.50	22.84	583.00	194.33	8.51
LANGLADE	19,995.00	1,159.15	2.56	48.00	16.00	6.20
RACINE	195,294.00	1,332.90	14.76	533.00	177.67	12.04
WALWORTH	102,593.00	1,533.23	11.20	316.00	105.30	9.4
STATE FIGURES	5,775,120.00	115,457.02	605.57	15,259.00	5,086.33	8.40



# Takeaways – Wrap Up

- ▶ Proactive versus reactive – with a twist
- ▶ Grassroot, local programs can be more effective than state/federal programs
  - ▶ Better data/better knowledge
  - ▶ Not impossible to receive funding for locally grown programs
- ▶ State doesn't have all the answers
- ▶ Who has extra time to do more?
  - ▶ Working smarter - together



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