

# Evaluating the Automated Red Light Enforcement Program

House Transportation Committee

Dennis Lebo, Gannett Fleming

*November 14, 2011*

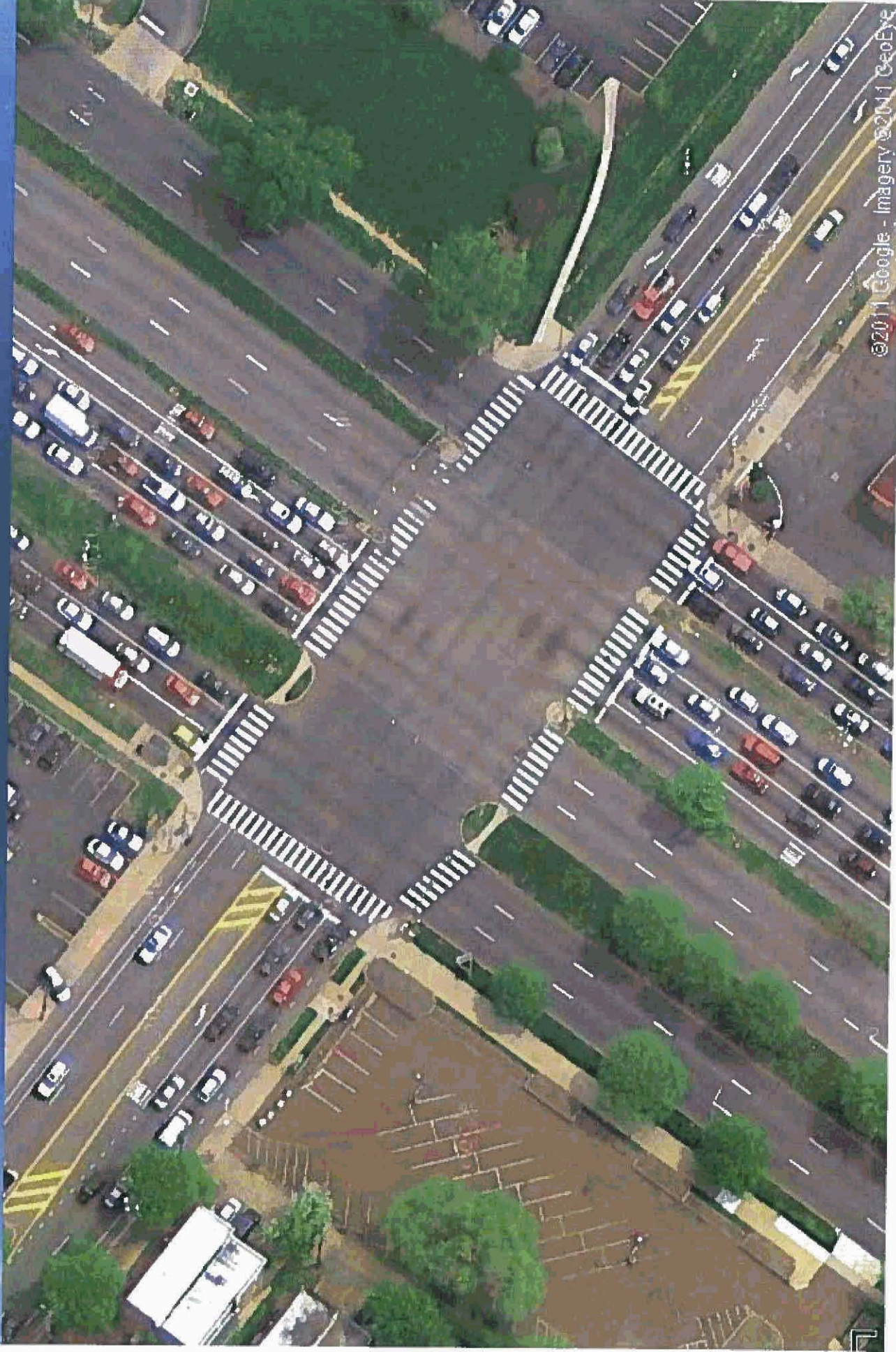
# The Philadelphia Story

- **Only municipality granted authority**
- **PPA as administrator**
- **ATS as primary vendor**
- **PennDOT reviews and approves intersections for ARLE**



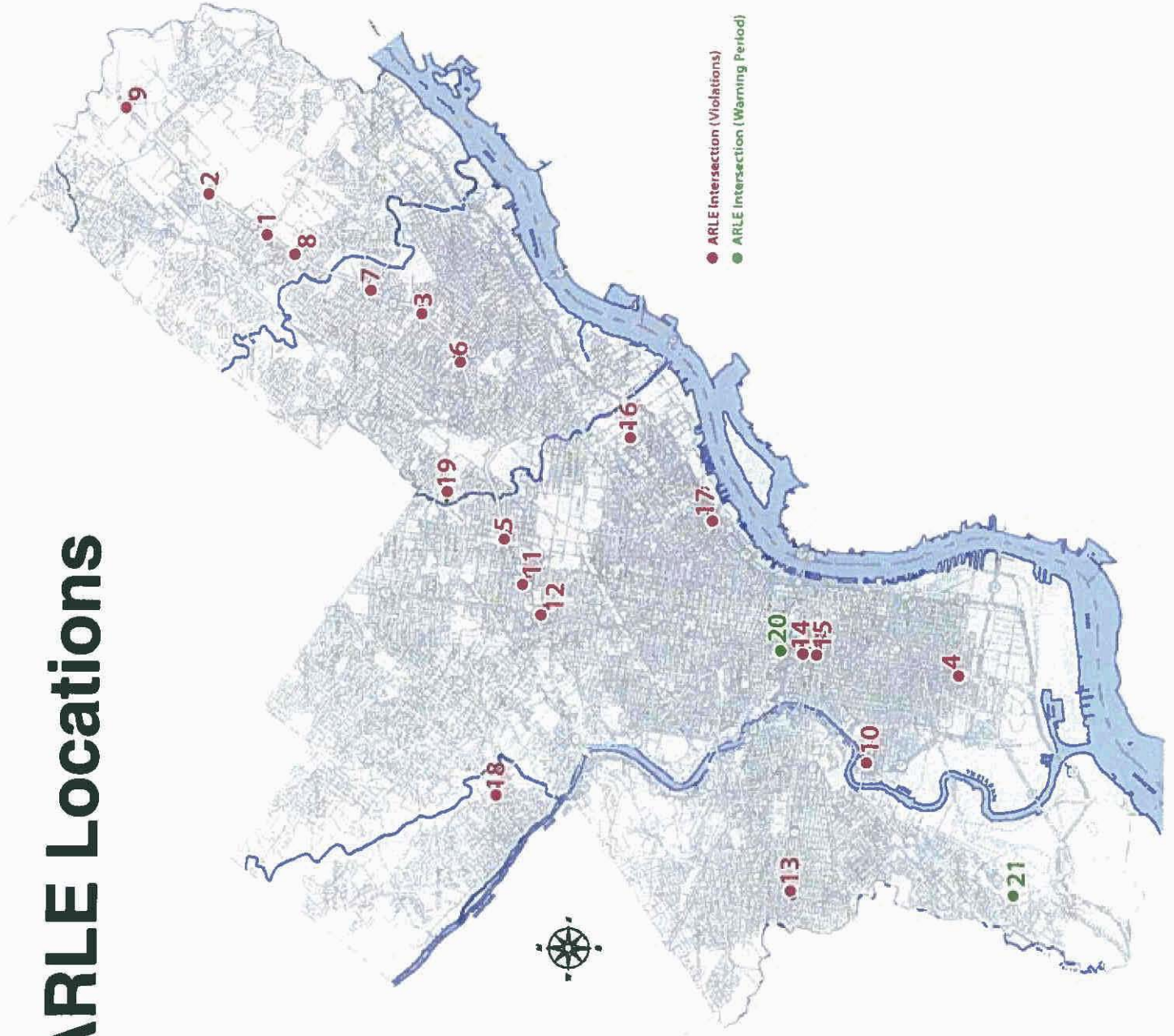


# Typical ARLE Intersection





# ARLE Locations



DATE TIME SPEED PHASE RTIME LANE FRAME

8/31/2007 11:56:45.8 AM 30 R 0.95 2 A

P009-DEMO N/B ROOSEVELT BLVD @ RED LION RD





**DATE** 8/31/2007 **TIME** 11:56:46.8 AM **SPEED** 30 **PHASE** R **RTIME** 1.95 **LANE** 2 **FRAME** B  
P009-DEMO N/B ROOSEVELT BLVD @ RED LION RD





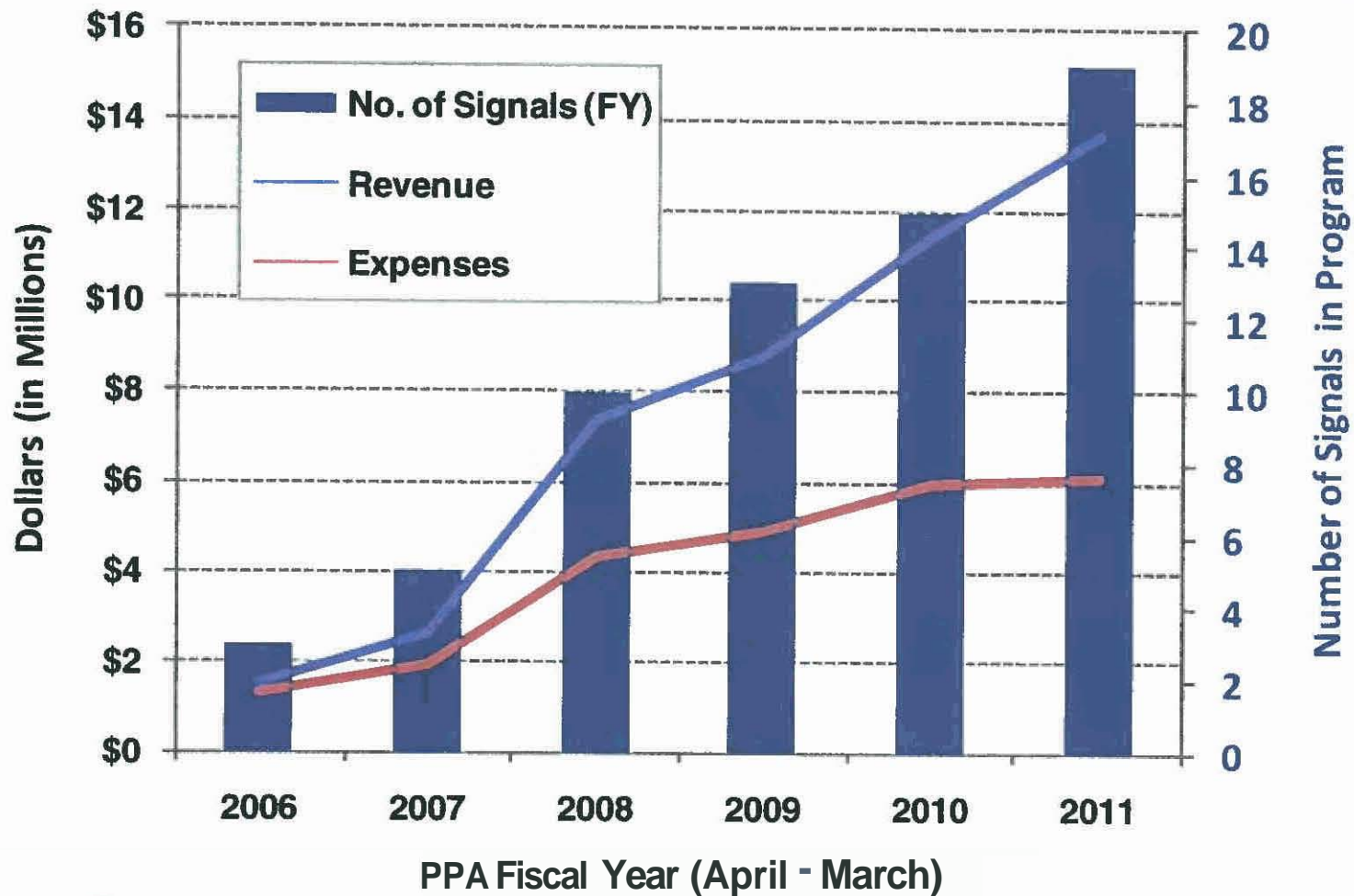
# Ticketing Red Light Violators



Pennsylvania State  
Transportation Adv



# Program Revenue and Expenses



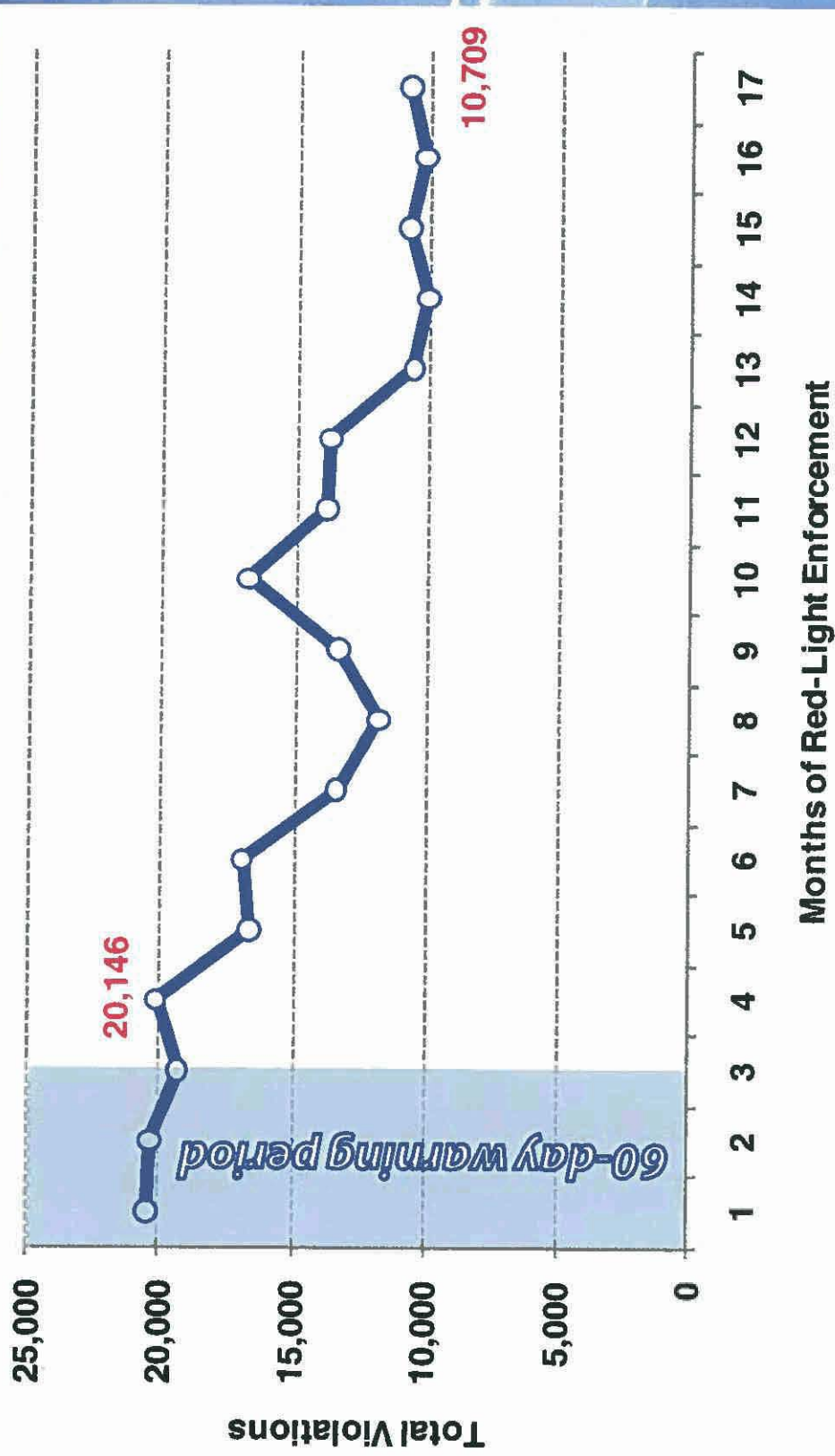




# **ARLE Safety Benefits & Violation History**

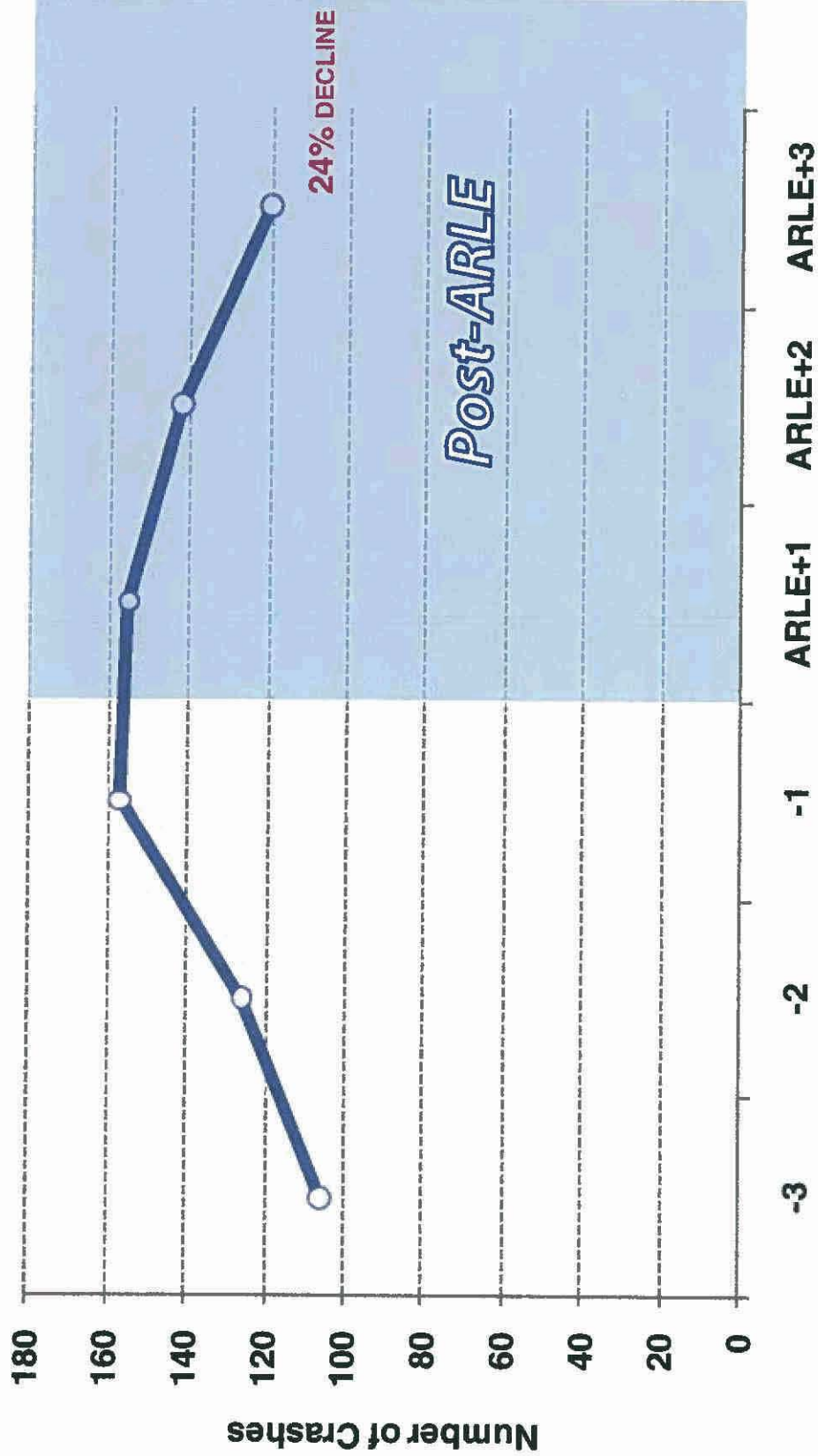


# Overall Violations





# Crash Analysis

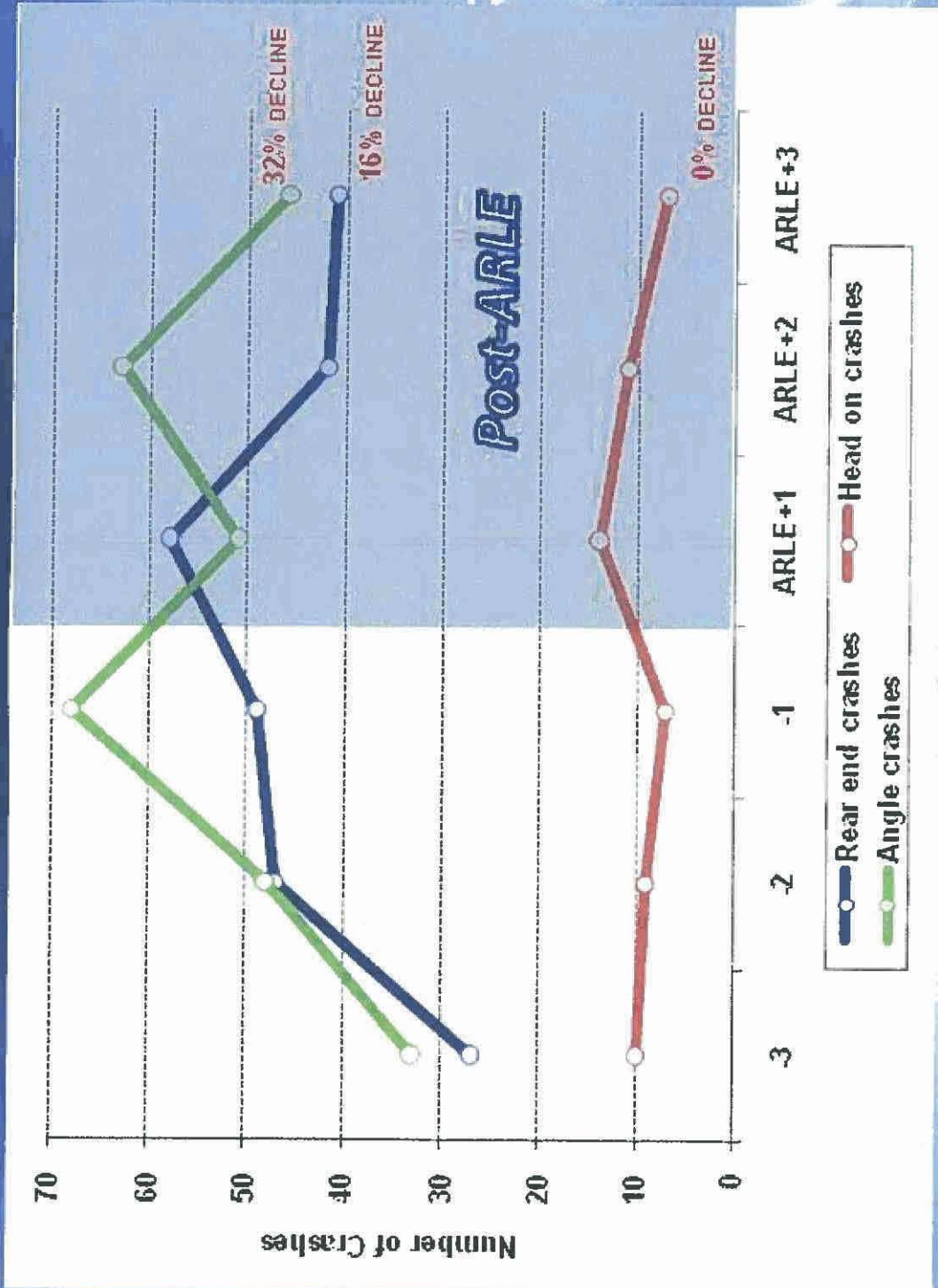


Years Before and After ARLE Implementation





# Other Crash Types

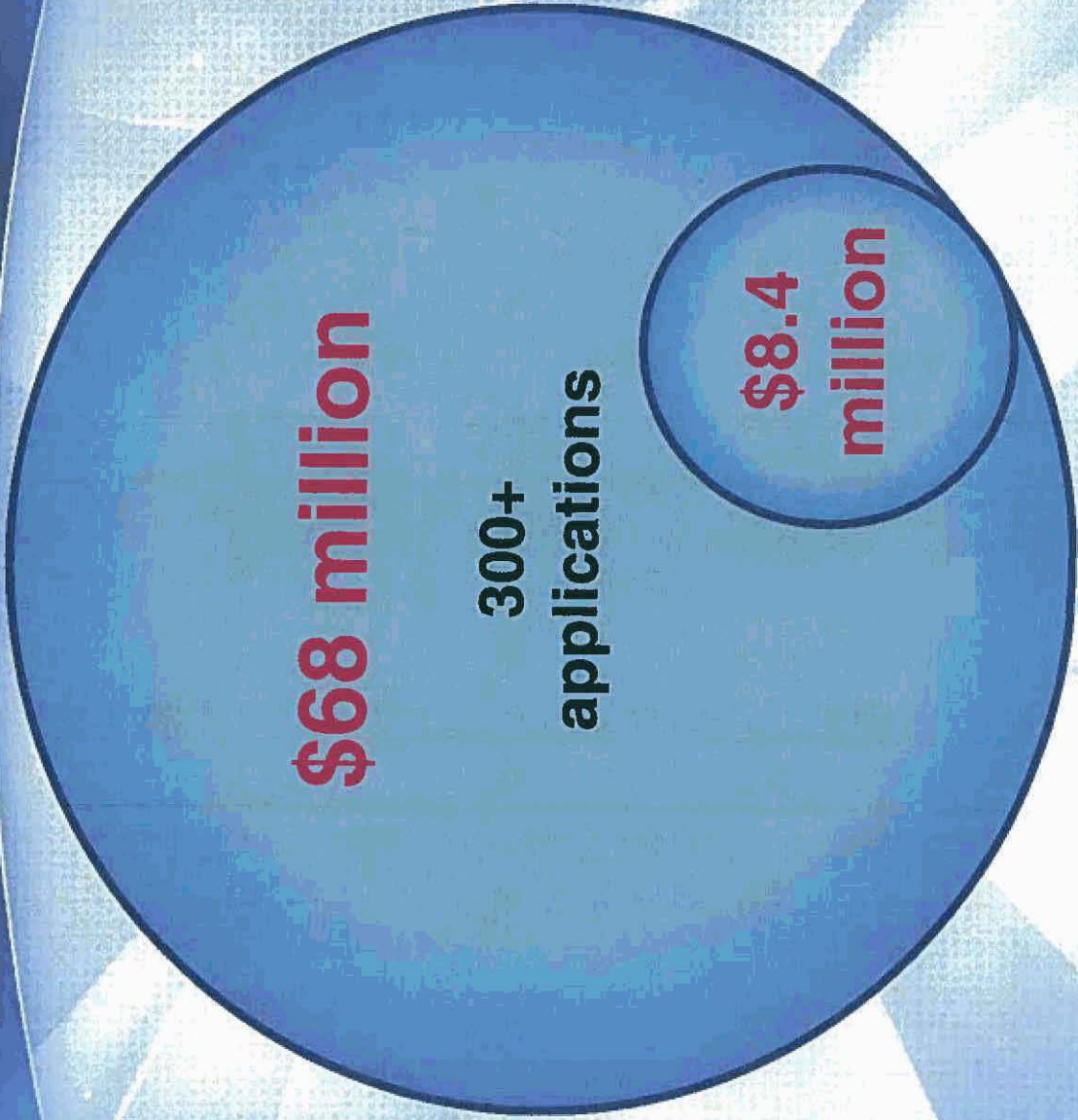




# ARLE Funding Program



# Program Demand



Pennsylvania State  
Transportation Advisory Committee







# **Red Light Enforcement in Other States**







# Mitigating ARLE Misconceptions

## Typical Complaint

- Invasion of privacy
- For revenue, not safety
- Increases crashes
- Cameras inaccurate

## Pennsylvania's Approach

- Vehicle (not driver) identified
- Only rear photo taken  
Records destroyed after —  
1 year of event  
Flat fee to vendor  
PennDOT evaluates  
crash history and data  
PPA inspects each site  
weekly

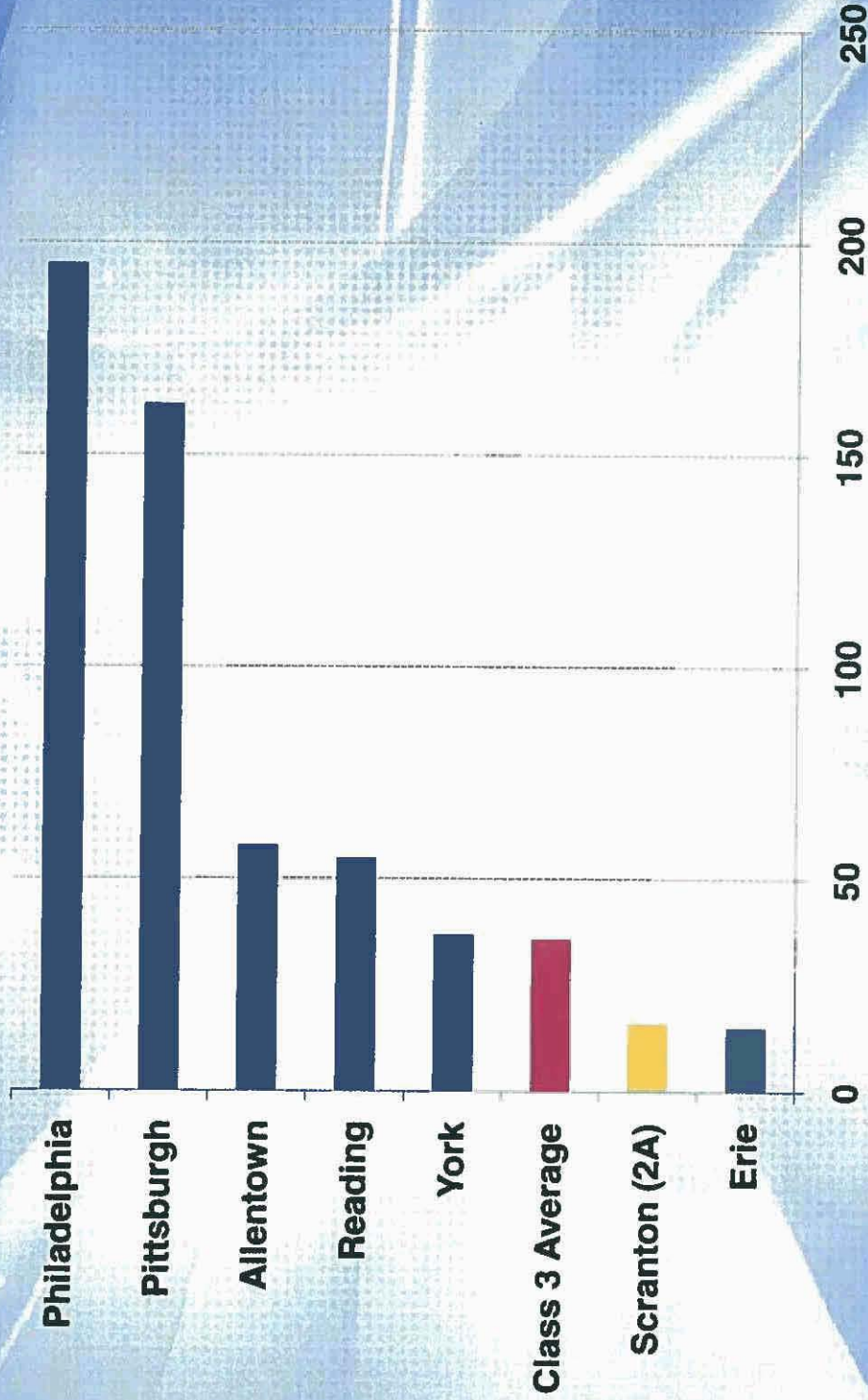


# Proposed Legislation



# NHTSA: Aggressive Driver Crash Rate

## Selected Cities



Pennsylvania State  
Transportation Advisory Committee



# Analysis of Potential Expansion

- **Independent of municipal class**
- **Acknowledge aggressive driving environment**
- **Capacity of municipalities (and PennDOT) to administer**
- **Not likely to be self-sustaining at a municipal level outside Philadelphia and Pittsburgh**
- **Proceed with caution**





# Findings and Recommendations



# ARLE Findings

- **Violations drop by 48 percent within first year**
- **Total crashes decline by 24 percent**
- **Approx. 10½ violations recorded daily per intersection to be self-sustaining**
- **PA legislation well crafted**
- **ARLE Funding Program has been successful, with \$8.4 million each to City and State project sponsors**





# ARLE Recommendations

- **Continue the ARLE program in Philadelphia**
  - Self-sustaining, incremental growth
  - Responsible role for PennDOT
- **Expand the ARLE program**
  - Based on solid engineering review
  - Program revenue to support PennDOT expenses
  - Administrative structure
  - Proceed cautiously





# ARLE Recommendations (Cont'd.)

- **Continue the ARLE Funding Program**
  - Program automation
  - Evaluate project selection criteria





# Questions?



Pennsylvania State  
Transportation Advisory Committee

