



Model Performance in Community Risk Reduction

SYMPOSIUM 2018

School Inspection Effectiveness

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OBJECTIVES

Goal & Objectives

- Goal: Reduce the impact and severity of fires in schools
- Objectives:
 - Improve life safety
 - Ensure adequate egress
 - Reduce ignition scenarios
 - Provide automatic fire protection systems





FORMATIVE EVALUATION

History – School Inspections

- July, 1986 & January, 1987 – Two significant school fires in Minnesota
- State Legislature is concerned with the age of school buildings in Minnesota:
 - Passes public school inspection program (effective 8/1990)
 - Program begins – 9/1990
 - Initial budget – \$200,000 per year



History – School Inspections

- Researched “baseline” data:
 - Number of educational occupancy fires
 - Common areas of origin / causes
 - Fire loss (total, average per fire, etc.)
- Prior to the program’s start-up and for first few years, there was a major school fire at least once every two years:
 - From 1995-2013, there were none



PROCESS EVALUATION

Process Evaluation

- Portable computers purchased
- Computerized database developed:
 - Inspections
 - Violations
- Divided state into “territories” or zones
- Inspectors bid based on seniority

Process Evaluation

- Close working relationship with Minnesota Department of Education (MDE)
- Philosophy: Work with schools instead of aggressive enforcement
- Toured with MDE to train school officials





IMPACT EVALUATION

Impact Evaluation

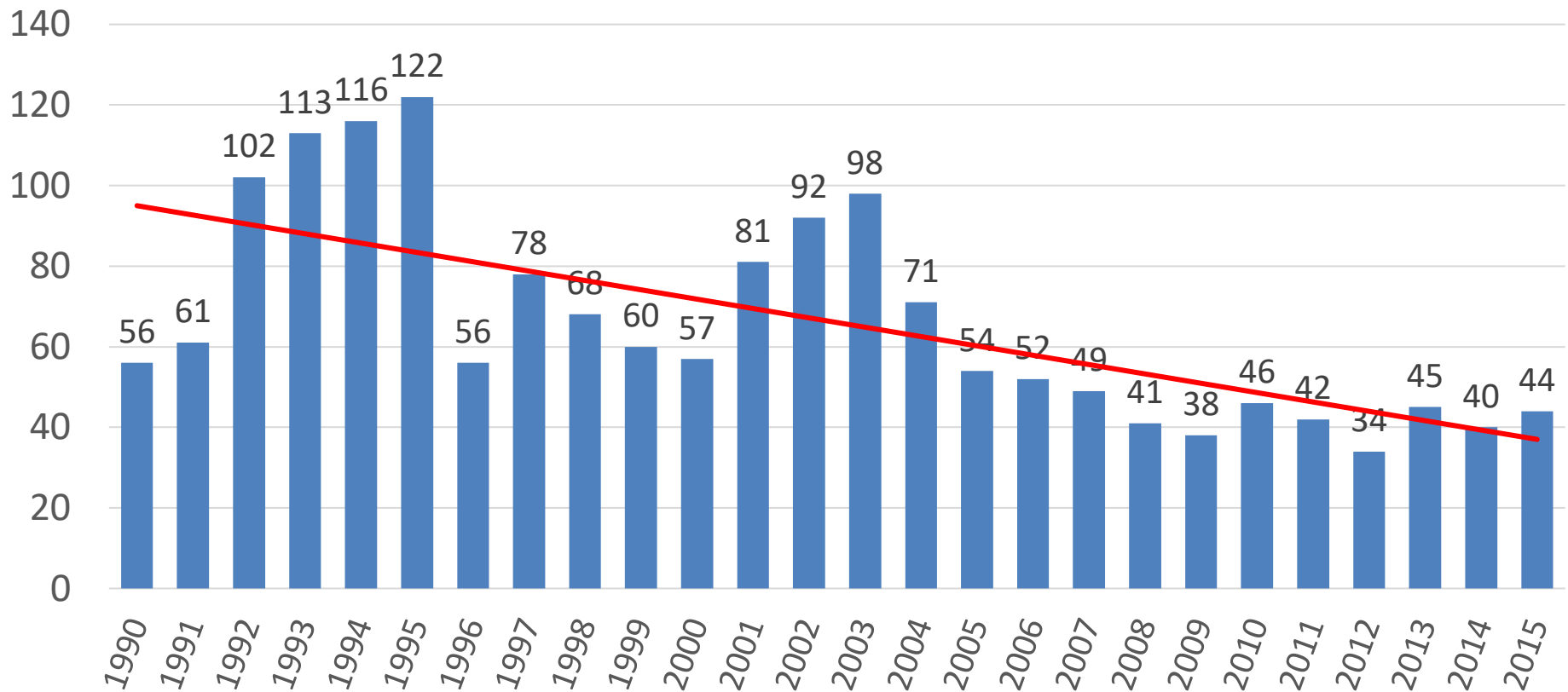
- Initially saw an increase in the number of school fires
- Using the data collected additional training was conducted:
 - Most common violations
 - By type of school
- Experienced 54% decrease in number of fires



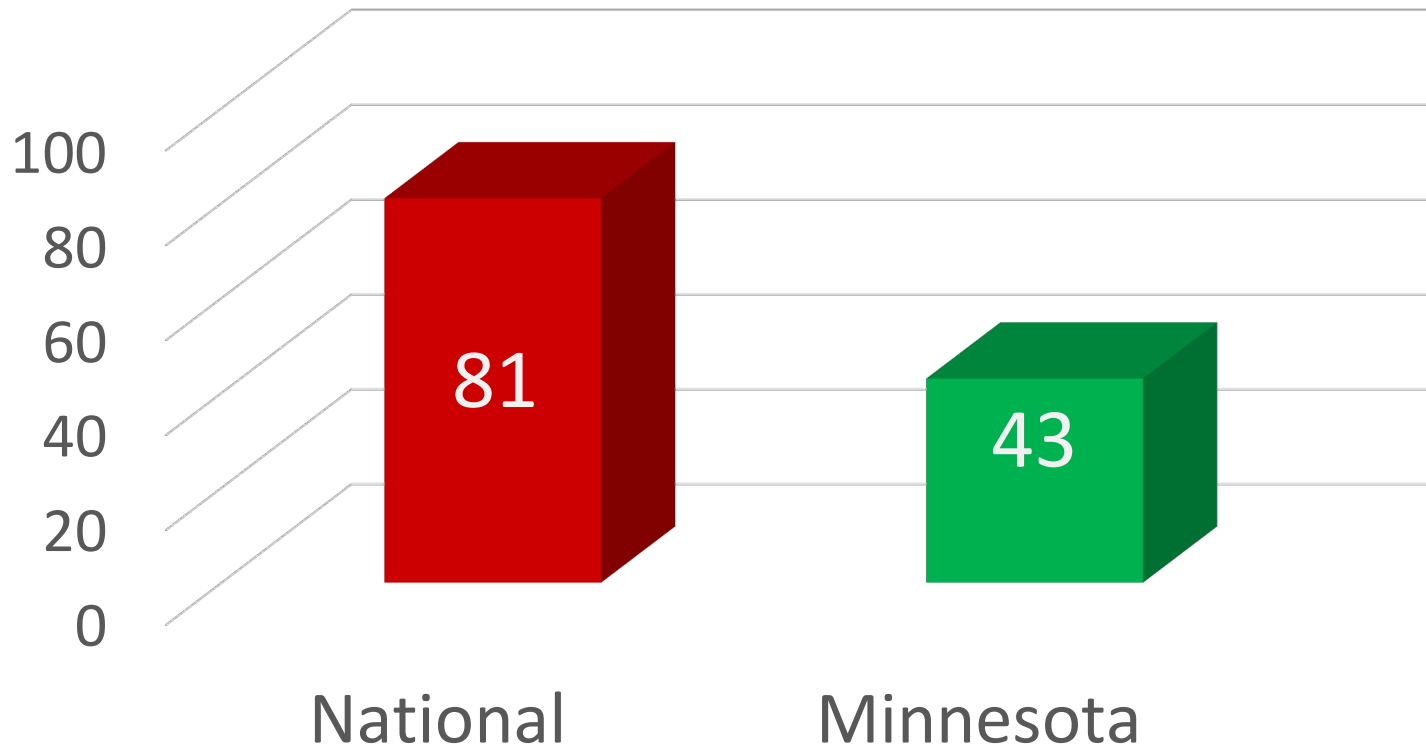


OUTCOME EVALUATION

Minnesota School Fires per Year

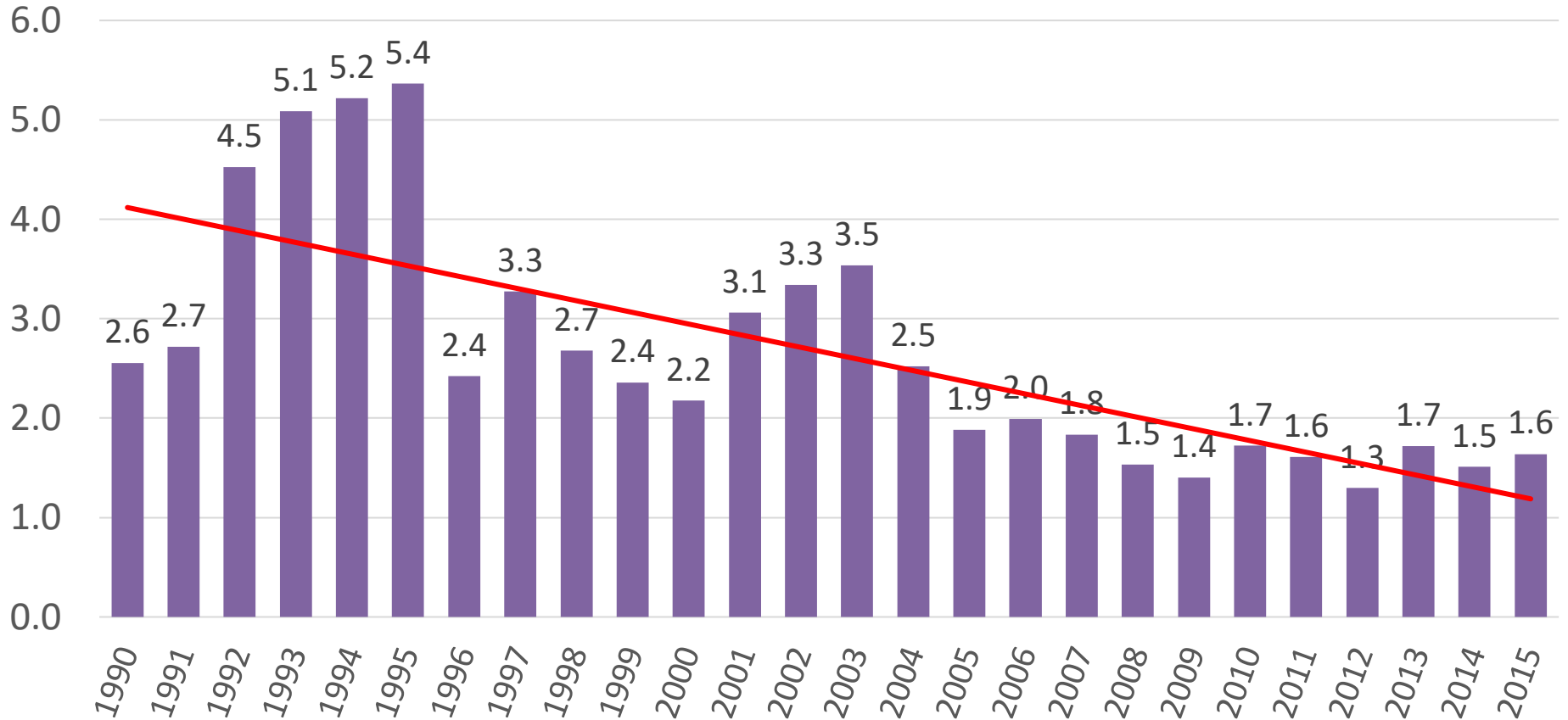


School Fires per Year – National Average vs. Minnesota

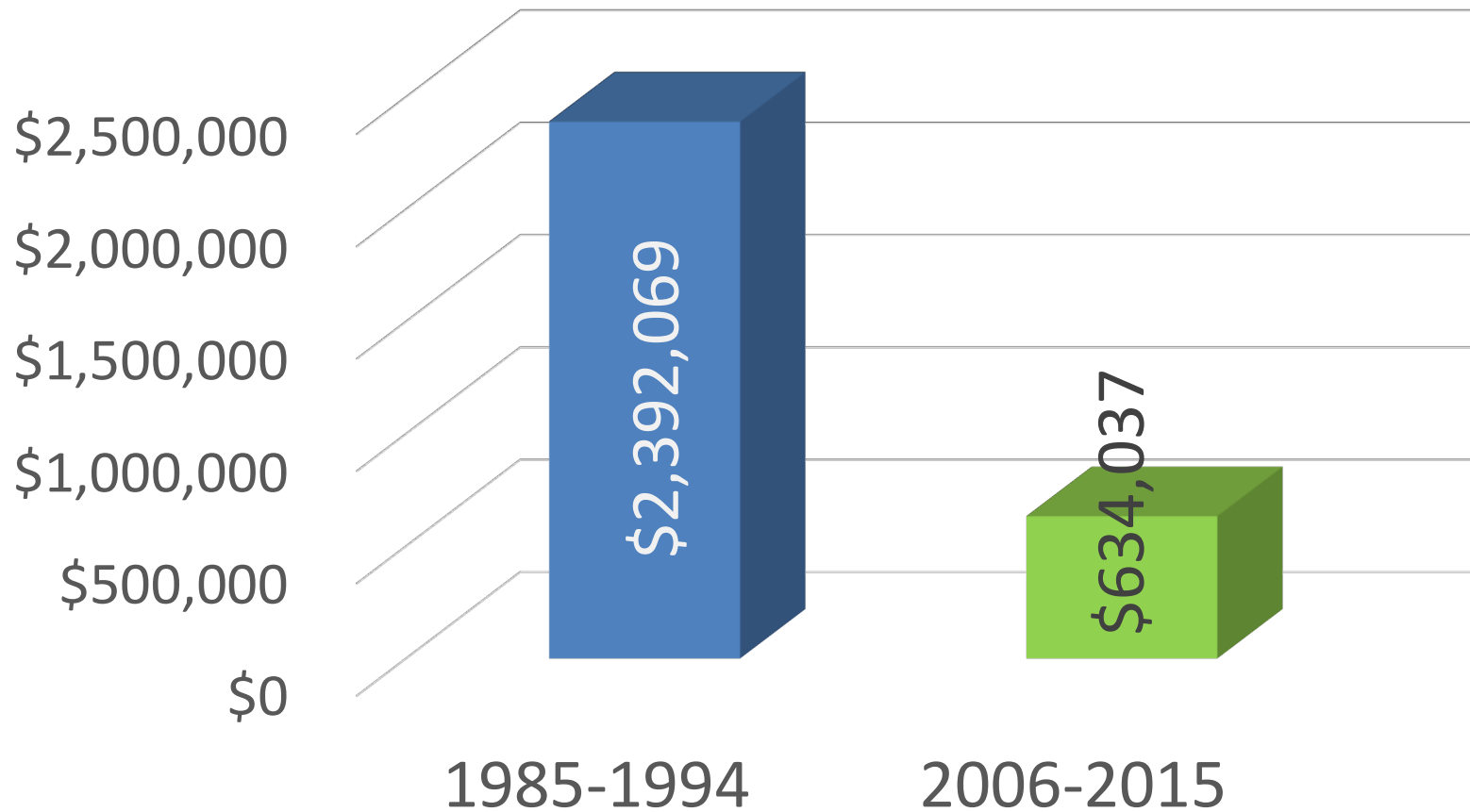


Minnesota School Fire Rate

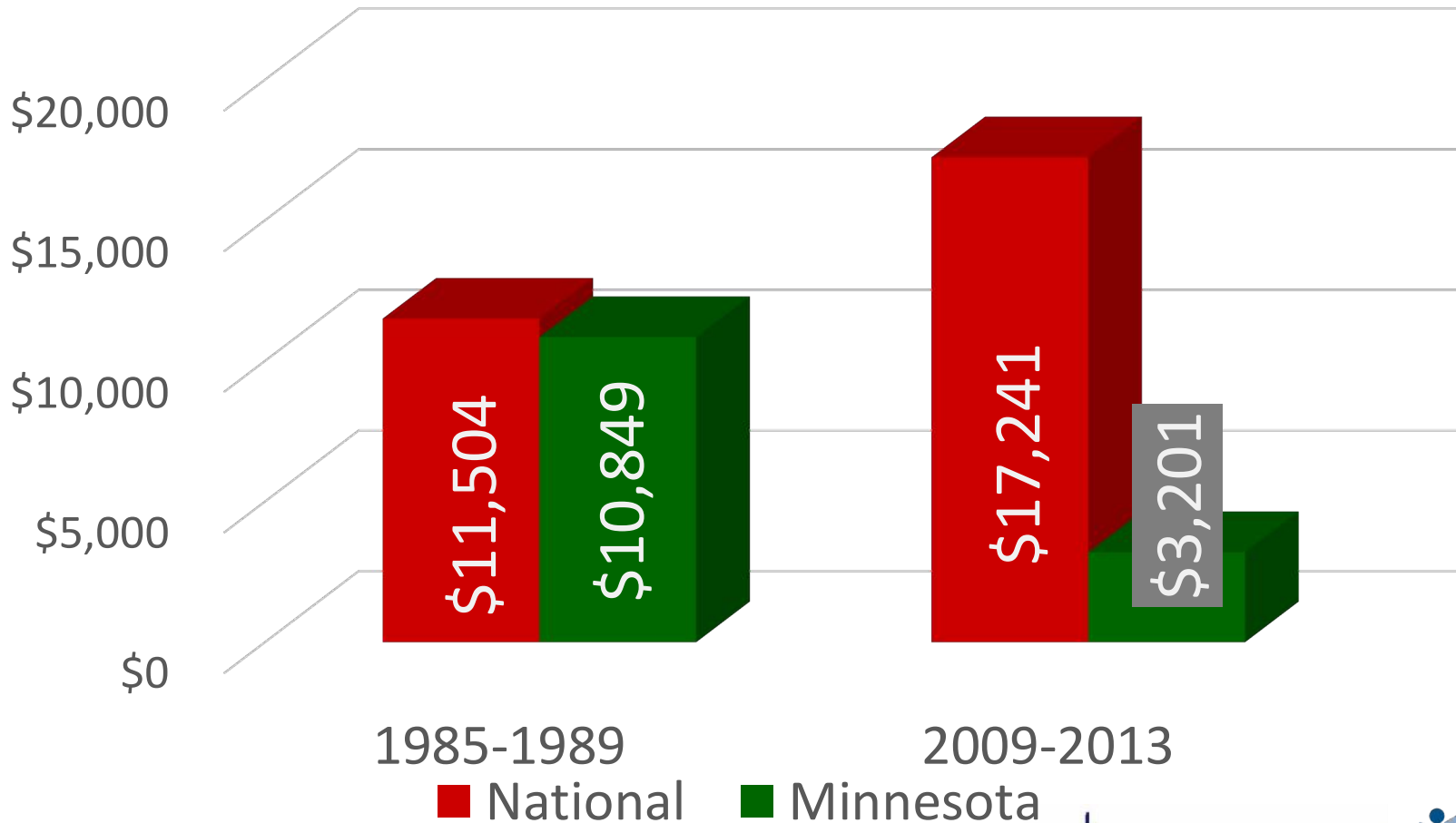
Fires per 100 Schools



Average School Fire Loss / Year



Average Loss Per School Fire



Outcome Measures

- The number of school fires in Minnesota is 40% less than the national average
- School fire rate in Minnesota (fires per 100 schools) is 29% less than the national rate
- Average school fire loss is:
 - 70% less than before the program
 - 81% less than the national average



RECOMMENDATIONS

Recommendations

- Research school fire loss – nationally and in your state/community
- Partner with your state department of education
- Use an educational and cooperative approach; avoid “heavy-handed” enforcement tactics
- Prioritize on control of ignition sources and preventing fire spread



Recommendations

- Encourage, wherever possible, the use of automatic fire protection systems
- Understand that passive fire protection construction features can run counter to what schools need to educate students
- Be prepared to give schools time to comply
- Set-up some sort of data system to measure violations and inspection activity

Questions

