

Doubtful Return on \$141 Million Investment in Poorly Managed Vehicle Inspection Programs



A presentation to the Joint Legislative
Program Evaluation Oversight Committee

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Evaluation Rationale

- **North Carolinians spend \$141 million on inspection fees**
- **Inspections also pose \$24 million in indirect costs to motorists**
- **As of October 2008, safety inspection cost increased by \$4.50 or 50%**



Overview

- **Safety inspection program not effective in reducing accidents**
- **Effect of emissions inspection program is difficult to gauge**
- **DMV and DAQ have \$16.6 million in unencumbered balances**



Overview

- **Recommend the General Assembly should:**
 - **Repeal safety inspection program or exempt recent model years from safety inspection**
 - **Consider exempting recent model year vehicles from emissions inspections**
 - **Require DMV to improve program management and report on program performance**



The Vehicle Safety Inspection Program

The Vehicle Emissions Inspection Program



Data Sources

- **Agency data**
 - 6.3 million inspection records from Calendar Year 2007 from counties with electronic data
 - Crash statistics from 2000-2005
 - Audit data from 5,300 inspection stations
- **Operations**
 - Observations of inspections
 - Safety and emission personnel activity logs (CY 2007)
 - Fiscal data
 - Policies & procedures
- **Other data**
 - Interviews with other states' inspection administrators
 - Literature review



Vehicle Safety Inspection Program: Background



- Created to mitigate number of driving related accidents and fatalities
- All vehicles less than 35 years old subject to safety inspection
- 9 items are inspected
- As of November 2008, inspection tied to registration

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Vehicle Safety Inspection Program: Background



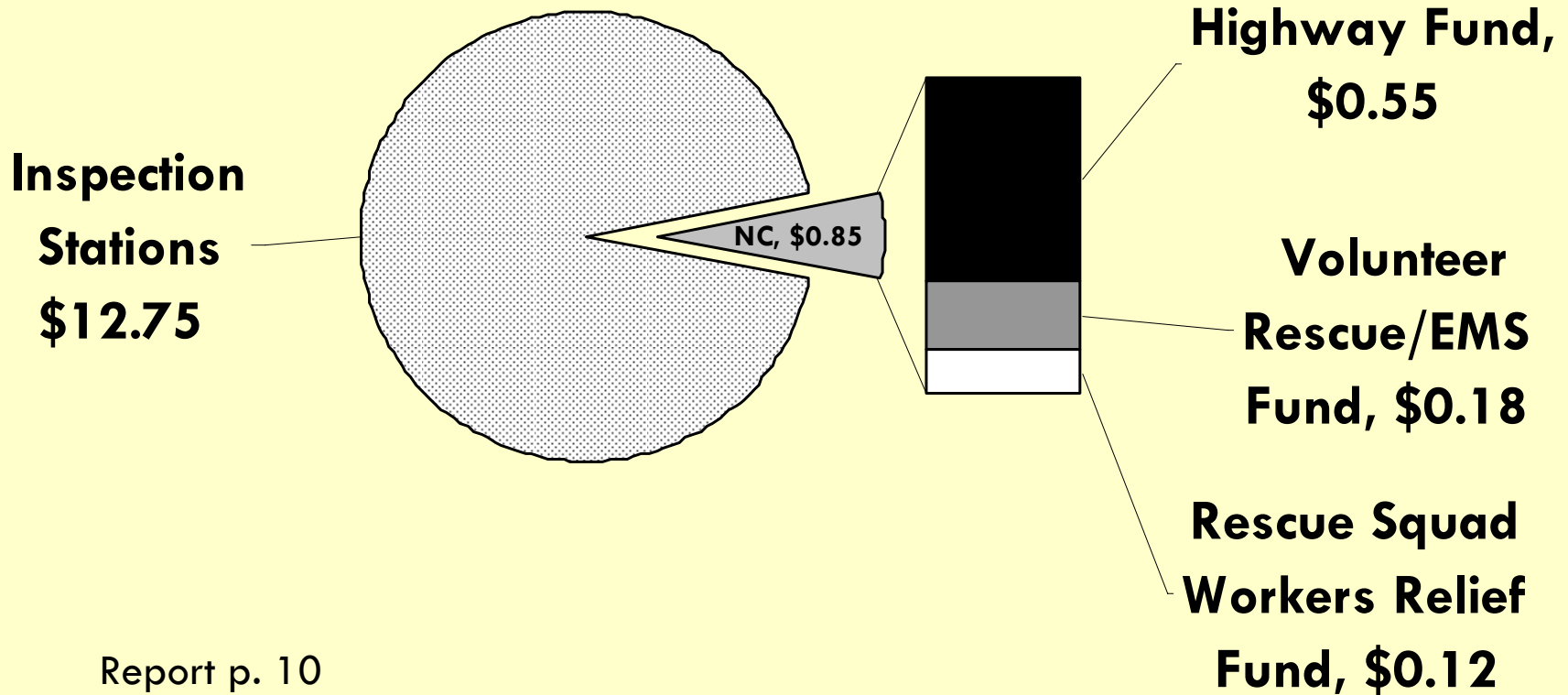
- Inspections performed at private inspection stations, by state-licensed technicians
- DMV License & Theft Bureau responsible for program management & oversight
 - 88 Theft Inspectors
 - Safety inspection program oversight tasks = 2.5% of duties

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Cost of Safety Inspection

**Distribution of \$13.60 Safety Only Inspection Fee
94% to inspection station, 6% to North Carolina**



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Vehicle Emissions Inspection Program: Background



- **Part of state strategy to meet federal Clean Air Act standards**
- **1996 and newer model year vehicles in 48 counties subject to inspection**
- **On Board Diagnostic (OBD) + visual system check = emissions inspection**

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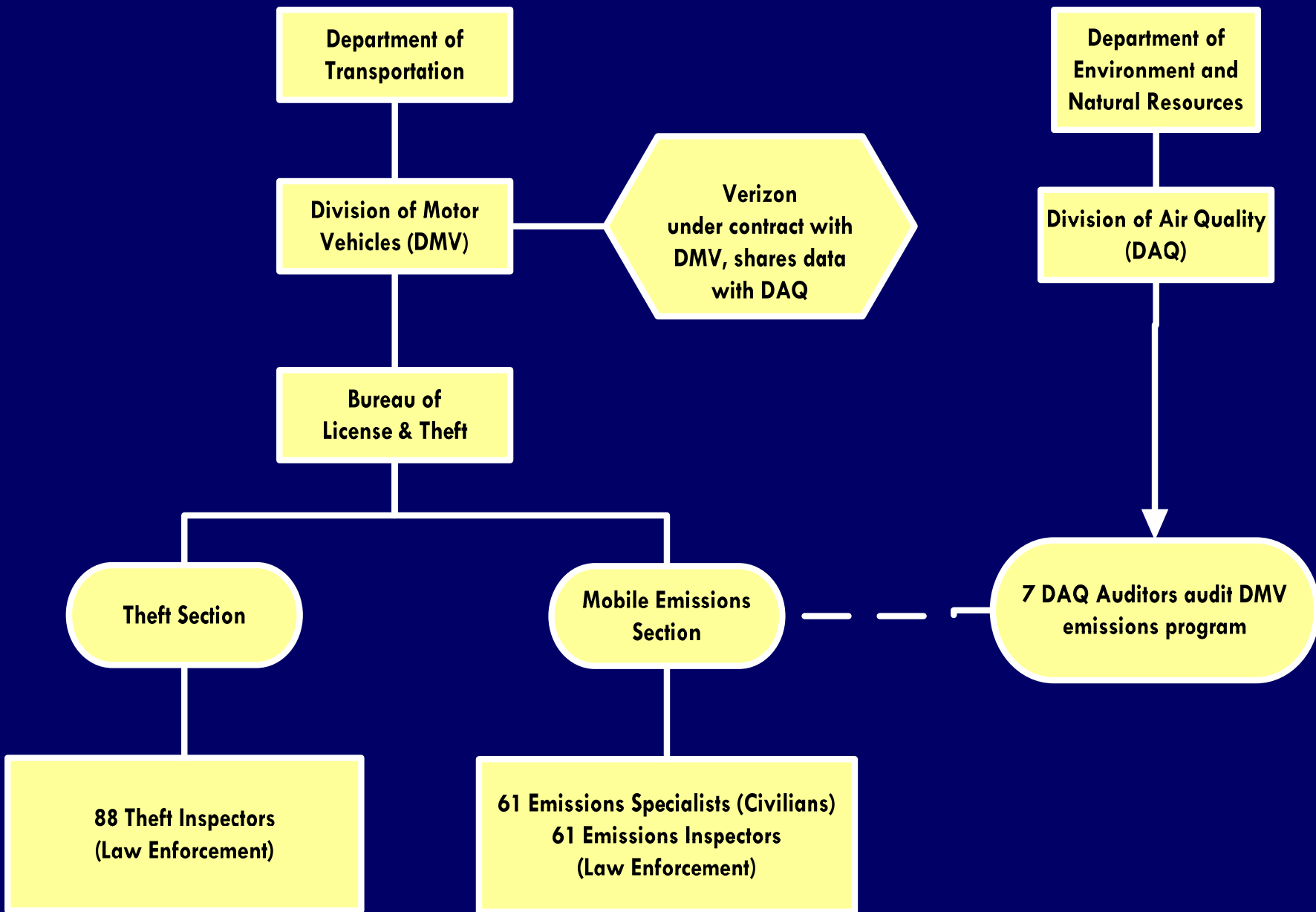
Vehicle Emissions Inspection Program: Background



- **Performed at private inspection stations, by state-licensed technicians**
- **DMV responsible for management and oversight of program**
 - **122 emissions specialists and inspectors**
 - **4 overt and 2 covert audits per station**
- **DAQ audits DMV program management**

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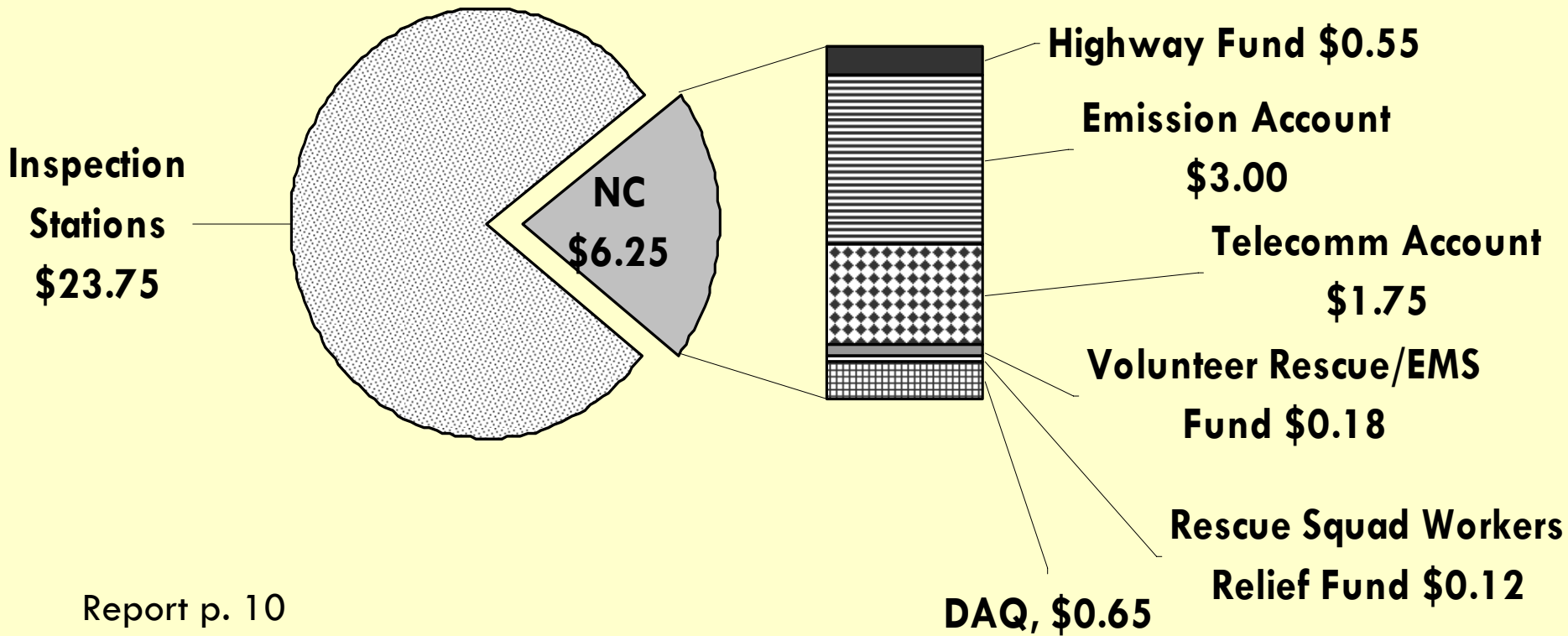


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Cost of Emissions Inspection

Distribution of \$30 Emissions Inspection Fee
79% to inspection stations, 21% to North Carolina

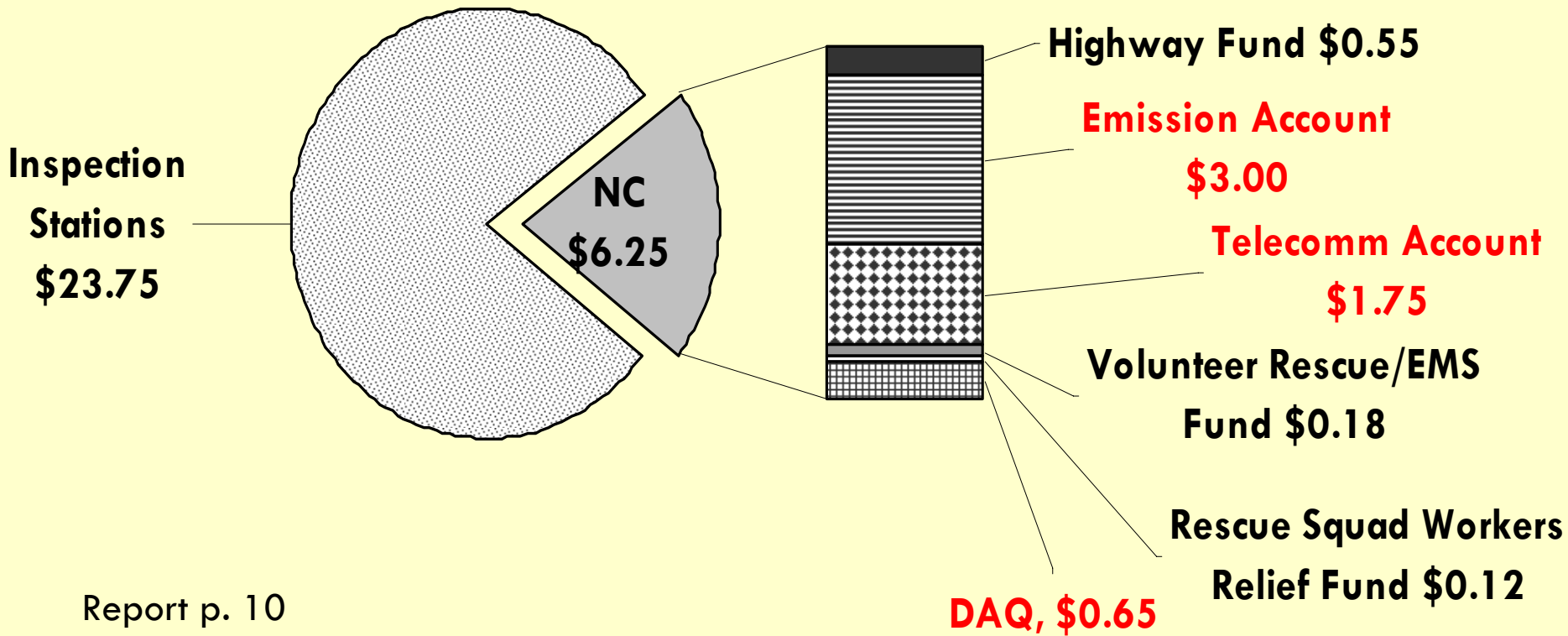


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Cost of Emissions Inspection

Distribution of \$30 Emissions Inspection Fee
79% to inspection stations, 21% to North Carolina



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Findings & Recommendations



Finding 1: The Safety Inspection Program Is Not Effective



- **No connection between safety inspection programs and accident reduction**
- **NC data show vehicle defects identified in less than 1% of accidents**
- **Safety inspection has outlived its original purpose**

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Finding 2: Difficult To Quantify The Degree To Which Vehicle Emissions Program Improves Air Quality



- **North Carolina's air quality is improving**
- **Monitoring stations across the state collect data about levels of pollutants in the air**
- **Monitoring stations do not distinguish between sources of pollution**

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Finding 3: Inspection Duration Indicates Lack Of Thoroughness



- Analysis of 6,122,921 inspections revealed short time spent on inspections

Type of Inspection	Total Inspections Performed in CY 2007	Time Per Inspection	
		Expected	Actual Per Data
Safety Only	1,786,901	20 minutes	5 minutes
Safety/Emissions	4,336,020	30 minutes	6 minutes

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Finding 4: DMV's Oversight Of The Inspection Programs Is Insufficient



- **Operations data not used for safety or emissions program management and improvement**
- **DAQ audits found DMV deficient in several oversight areas**

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Finding 4: DMV's Oversight Of The Inspection Programs Is Insufficient

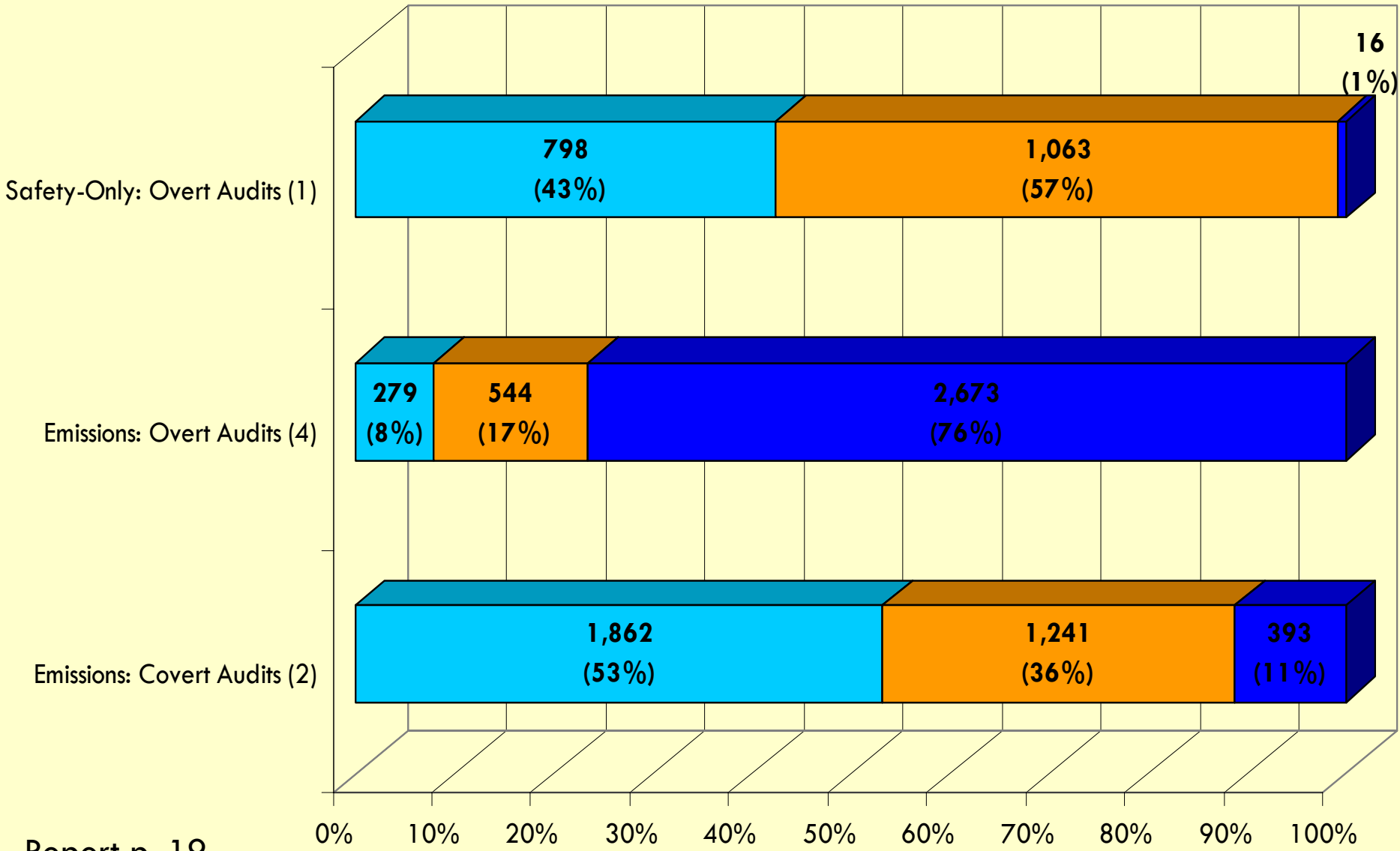


- **Program Evaluation Division analyzed audit data for:**
 - **1,877 safety inspection stations**
 - **3,496 emissions inspection stations**
- **Not enough covert audits**
- **Some stations get more overt audits than required**

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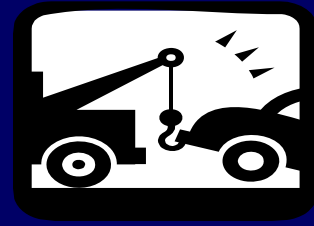
■ Audited Less Often Than Required
 ■ Audited As Required
 ■ Audited More Often Than Required



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Finding 5: Older Vehicles More Likely To Fail Inspection



- There is a relationship between vehicle age and failure rate
- Newer vehicles have lower failure rates
- Older vehicles have higher failure rates
 - Safety: model years 1981-2001
 - Emissions: model years 1996-2001

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Finding 6: Inspection Program Costs Have Not Been Reviewed Since 2000



- Fees last reviewed when emissions inspection program expanded
- Fiscal Research Division recommended review of emissions program finances in 2001
- 2008 Legislation directed DOT to review expenditure patterns during 2007-08 short session

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Recommendation 1: Consider Two Options For Safety Inspection Program

- **Option 1: Repeal safety inspection**
 - Save taxpayers \$33 million in fees
 - Program not effective
- **Option 2: Exempt newest three model years from safety inspection**
 - Save taxpayers \$2.2 million in fees
 - Newer cars have lower failure rates

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Recommendation 2: Consider Exempting Vehicles From Three Newest Model Years From Emissions Inspection

- **Relieve emissions inspection requirement for 19% of vehicles in emissions counties**
 - **Save taxpayers \$31 million in fees**
- **DAQ should run a more in-depth analysis to determine impact of exemption on State Implementation Plan**

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Recommendation 3: DMV Should Prepare Plan To Improve Management

- **By June 2009 DMV should:**
 - **Develop data management plan**
 - **Define performance metrics for program assessment**
 - **Determine how program information is collected, analyzed, monitored, and reported**
 - **Assess allocation of program resources for maximum effectiveness and efficiency**
- **By March 2010 begin annual reporting to General Assembly on program performance**

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Summary

- **\$141 million public investment**
- **Safety inspections not effective**
- **Effect of emissions inspections hard to measure**
- **Better program management needed**



Doubtful Return on the Public's \$141 Million Investment in Poorly Managed Vehicle Inspection Programs

**[http://www.ncleg.net/PED/Reports/Topics/
TransportationandHighwaySafety.html](http://www.ncleg.net/PED/Reports/Topics/TransportationandHighwaySafety.html)**

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