



# Pre-employment Screening Program

## Safety Analysis and Industry Impacts Report



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Office of Research and Information Technology

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# Pre-employment Screening Program

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- Started May 2010
- Provides prospective employers with:
  - Crash Data (Past 5 Years)
  - Inspection Data (Past 3 Years)
- Voluntary program with fee
- Requires driver's consent
- Drivers & motor carriers can utilize PSP



# Safety Analysis & Industry Impacts

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- Do companies improve safety by using PSP?
- How many companies use PSP?
- Do drivers use PSP?
- How do companies use PSP data?



# Safety Analysis

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- Examines carriers' Crash Rate and Driver OOS Rate
- Compares 1 year prior to PSP use to 1 year following start of PSP use
- Compares companies that use PSP with companies that don't use PSP
- Carriers divided into size classes



# Safety Analysis: Data

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- NIC Technologies:
  - Carriers using PSP
- FMCSA:
  - Crash data (MCMIS)
  - Inspection data (MCMIS)
  - Registration data

# Safety Analysis: Data

## Number of Drivers per Driver Size Class

| Driver Size Class | Number of Drivers |
|-------------------|-------------------|
| 1                 | 1–5               |
| 2                 | 6–20              |
| 3                 | 21–100            |
| 4                 | >100              |

# Safety Analysis: Data

## Number of Carriers Per Size Class

| Driver Size Class | Non-PSP Group  |  |
|-------------------|----------------|--|
| 1 (1–5)           | 368,803        |  |
| 2 (6–20)          | 43,251         |  |
| 3 (21–100)        | 11,078         |  |
| 4 (>100)          | 1,811          |  |
| <b>Total</b>      | <b>424,943</b> |  |

# Safety Analysis: Data

## Number of Carriers Per Size Class

| Driver Size Class | Non-PSP Group  | PSP Group    |
|-------------------|----------------|--------------|
| 1 (1–5)           | 368,803        | 355          |
| 2 (6–20)          | 43,251         | 1,307        |
| 3 (21–100)        | 11,078         | 2,565        |
| 4 (>100)          | 1,811          | 1,249        |
| <b>Total</b>      | <b>424,943</b> | <b>5,476</b> |



# Safety Analysis: Results

## Number of Drivers, by Size Class, Employed With Carriers in Study (Rounded)

| PSP Group         |                   | Non-PSP Group     |                   |
|-------------------|-------------------|-------------------|-------------------|
| Driver Class Size | Number of Drivers | Driver Class Size | Number of Drivers |
| 1                 | 1,500             | 1                 | 501,000           |
| 2                 | 16,600            | 2                 | 372,000           |
| 3                 | 118,000           | 3                 | 377,000           |
| 4                 | 563,300           | 4                 | 839,500           |
| <b>Totals</b>     | <b>699,400</b>    | <b>Totals</b>     | <b>2,089,800</b>  |

# Safety Analysis: Results

## Percent Change in Crash and Driver OOS Rates PSP Group vs. Non-PSP Group, by Driver Class Size

| PSP Group (%)     |              |                 | Non-PSP Group (%) |             |                 |
|-------------------|--------------|-----------------|-------------------|-------------|-----------------|
| Driver Class Size | Crash Rate   | Driver OOS Rate | Driver Class Size | Crash Rate  | Driver OOS Rate |
| 1                 | -17.1        | -14.3           | 1                 | -4.8        | +4.0            |
| 2                 | -27.8        | -13.0           | 2                 | -7.2        | -1.0            |
| 3                 | -15.8        | -13.4           | 3                 | -3.6        | -3.2            |
| 4                 | -14.4        | -17.8           | 4                 | -10.7       | -5.0            |
| <b>Totals</b>     | <b>-15.2</b> | <b>-16.0</b>    | <b>Totals</b>     | <b>-7.2</b> | <b>+1.2</b>     |

# Safety Analysis: Results

## PSP-Related Improvement in Crash Rate and Driver OOS Rate for PSP Group (Adjusted)

| Driver Size Class | Crash Rate Improvement (%) | Driver OOS Rate Improvement (%) |
|-------------------|----------------------------|---------------------------------|
| 1                 | 12.4 *                     | 18.3                            |
| 2                 | 20.6                       | 12.0                            |
| 3                 | 12.1                       | 10.1                            |
| 4                 | 3.7 *                      | 12.8                            |
| Totals            | 8.0                        | 17.2                            |

\* Not Statistically Significant



# Safety Analysis: Results Summary

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- PSP users are mainly larger motor carriers
- PSP-group and Non-PSP group showed decreased Crash and Driver OOS rates in most class sizes
- PSP-group decreased Crash and Driver OOS rates MORE than Non-PSP group



# Impacts to Industry

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- Number of users
- Types of users
- Number of inquiries
- Attitudes about PSP



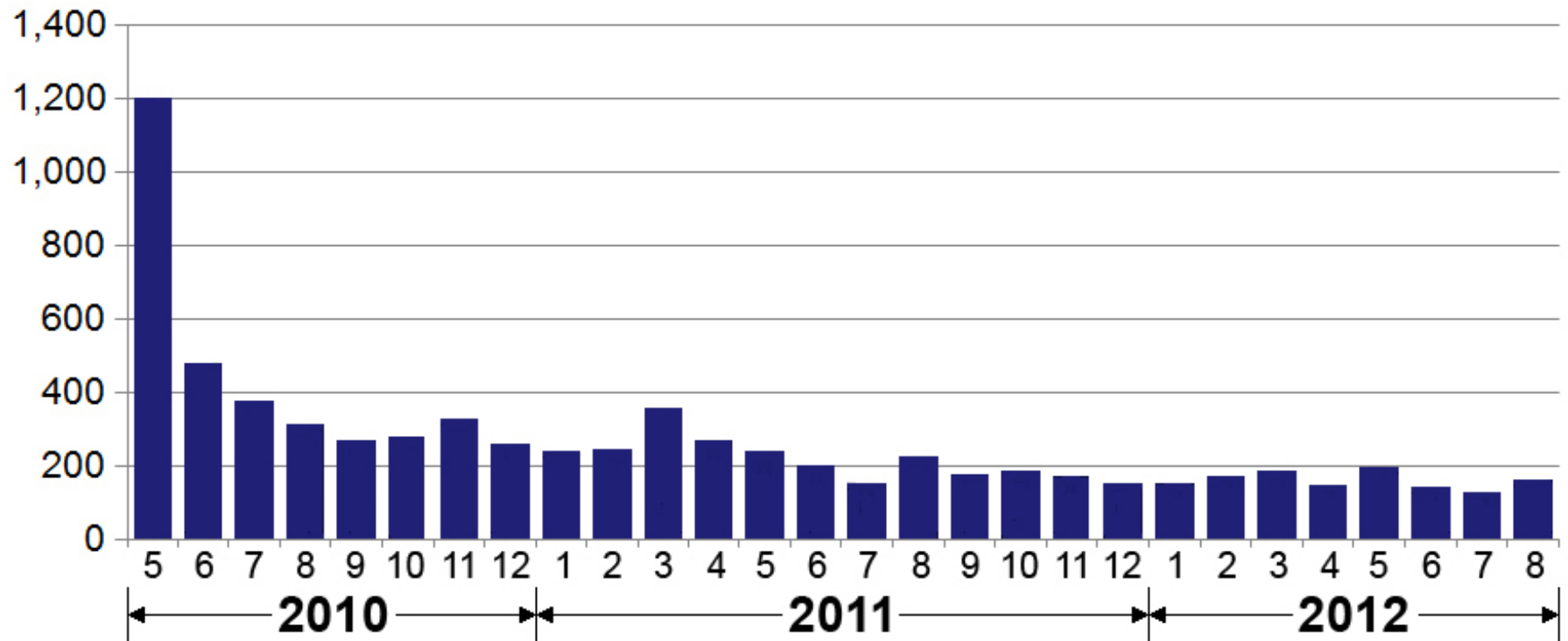
# Impacts to Industry: Data

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- Metrics provided by NIC Technologies (an FMCSA contractor)
- Informal query by FMCSA of carriers for perspectives and opinion

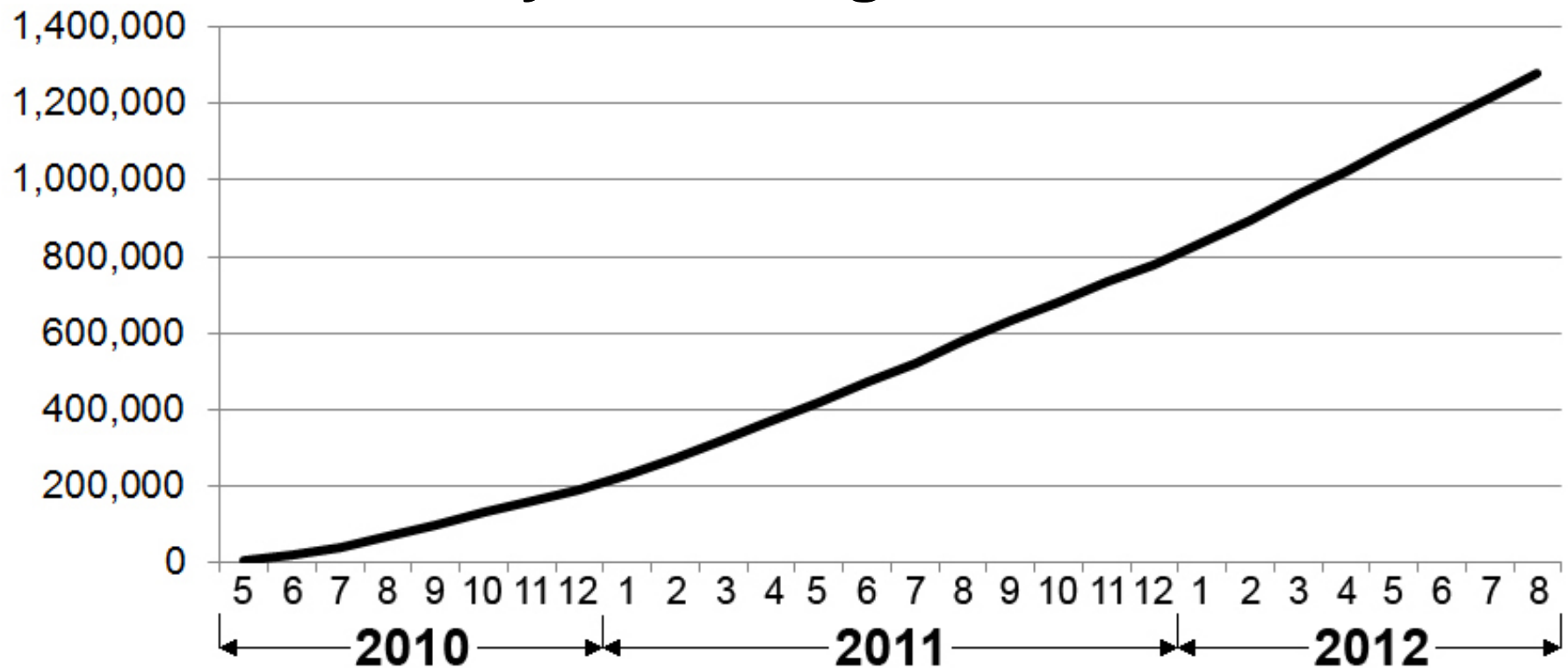
# Impacts to Industry: Results

## New PSP Account Holders by Month, May 2010–August 2012



# Impacts to Industry: Results

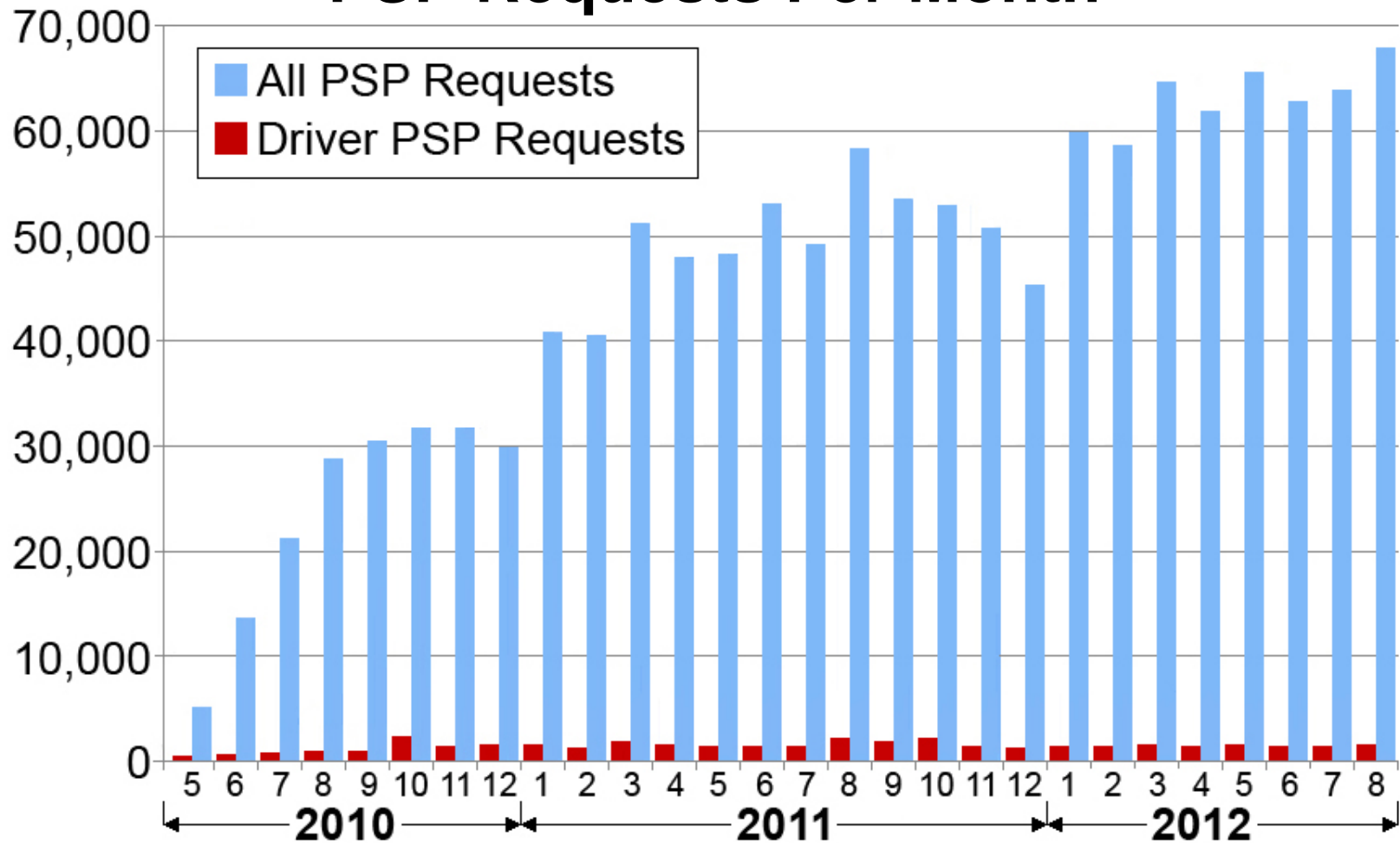
## Cumulative PSP Requests by Month, May 2010–August 2012





# Impacts to Industry: Results

## PSP Requests Per Month





# Impacts to Industry: Query

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- Informal query asked 6 motor carriers of various sizes that use PSP:
  - When did you first start using PSP?
  - Do you use it for every new driver hire?
  - How many drivers have you used it for in the past year?
    - <10
    - 10–39
    - 40–70
    - >70



# Impacts to Industry: Query, cont.

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- Informal query asked 6 motor carriers of various sizes that use PSP:
  - How do you use the PSP?
  - Do you think it improves your company's crash and inspection profile?
  - Will you continue using it?
  - Other feedback?



# Impacts to Industry: Query Results

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- Motor carriers queried like the PSP tool and will continue to use it
- All of the carriers queried indicated they use it for all of their new driver hires
- Most likely use of the report: assure drivers are being accurate and not omitting places of employment or crashes



# Impacts to Industry: Query Results

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- Motor carriers using PSP are seeking drivers that have a strong sense of safety culture
- Safer drivers could command higher salaries



# Impacts to Industry: Query Results

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- Other Feedback:
  - Desire for more information on drivers that the PSP does not provide (complete history)
  - System would probably be used more if the price per report was lower
  - PSP reveals a lack of safe drivers in industry, adding to the concern of a shortage of qualified drivers



# Conclusions

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- PSP users show improved Crash and Driver OOS rates
- Larger carriers mainly using PSP
- Steady growth
- Low number of drivers using PSP
- Motor carriers using PSP like it
- Analysis needed for driver attitudes



# Contact

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