AN OVERVIEW OF FDOT’S MOTOR CARRIER SIZE AND WEIGHT PROGRAM

NORTHEAST FLORIDA FREIGHT MOVEMENT FORUM
LAKE CITY, FL
JANUARY 25, 2017
OVERVIEW

• WHY DO WE EXIST
  • BRIEF BACKGROUND

• WHO IS MOTOR CARRIER SIZE AND WEIGHT (MCSAW)
  • STAFF AND STATION MAKE UP

• WHAT DO WE DO
  • HOW MCSAW FUNCTIONS TODAY

• THE FUTURE
  • HOW DOES MCSAW KEEP UP WITH THE INCREASE IN COMMERCIAL VEHICLE TRAFFIC AND MAKE THINGS MORE EFFICIENT FOR THE INDUSTRY TOMORROW
WHY

**ESAL 101 (Equivalent Single Axle Loads)**

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<th>80,000-lb</th>
<th>100,000-lb</th>
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<tbody>
<tr>
<td><strong>Class 9 GVW</strong></td>
<td>4.2</td>
<td>11.2</td>
</tr>
<tr>
<td><strong>ESAL</strong></td>
<td>26,000</td>
<td>70,500</td>
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**Pavement Damage**

- 18-Kip ESALS

**CLASS 9 TRUCK**

**GROSS VEHICLE WEIGHT (LBS)**

Dr. Andrew P. Nichols - data
WHO IS MCSAW

• 185 MCSAW STAFF MEMBERS
  • 1 STATEWIDE MANAGER
  • 2 REGIONAL MANAGERS
  • 12 SUPERVISORS
  • 161 INSPECTORS
  • 5 SCALE MAINTENANCE/DESIGN/CONSTRUCTION
  • 4 ADMINISTRATIVE STAFF

• 32 WEIGH STATIONS OR STATIC SCALES
  • 20 INTERSTATE WEIGH STATIONS (MCSAW)
  • 7 STATIC WEIGH STATIONS (MCSAW)
  • 5 STATIC WEIGH STATIONS (FHP-CVE)
WHAT

STATIC SCALES

• SINGLE STATIC SCALE
• EVERY TRUCK STOPS ON STATIC SCALE
• SLOW PROCESS, VERY INEFFICIENT
WHAT

WEIGH-IN-MOTION TECHNOLOGY

1. License Plate Reader, Overview and Sensors
2. 3D Lasers – Vehicle Dimensioning System (VDIM)
3. Weigh in Motion Scales
4. Sort Signals
WHAT

WEIGH-IN-MOTION WEIGH STATIONS

• WEIGH-IN-MOTION SENSOR TO SORT TRUCK TRAFFIC AS IT ENTERS THE WEIGH STATION
• BYPASS LANE
• DUAL PLATFORM STATIC SCALES
• INCREASED CAPACITY
• INCREASED EFFICIENCY
WHAT

2015 OPERATIONS

• WEIGH-IN-MOTION WEIGHED 16.9 MILLION
• STATIC WEIGHED 6.9 MILLION
• ISSUED 36,317 WEIGHT CITATIONS
• ISSUED 10,064 PERMIT VIOLATION CITATIONS
• $7.3 MILLION DOLLARS IN FINES AND FEES
• OVER $46,000 PER WEIGHT INSPECTOR
• $1.4 MILLION IN OVERDUE CITATION COLLECTIONS
THE FUTURE

SMART INTERCONNECTED WEIGH STATION SYSTEM

• THE DEPARTMENT IS RESEARCHING HOW TO INTERCONNECT SEVERAL SYSTEMS RELATING TO COMMERCIAL VEHICLES

• THE BENEFIT TO THE TRUCKING COMMUNITY WOULD BE HUGE

• THE FOLLOWING WILL PROVIDE A HIGH LEVEL OVERVIEW OF WHAT IS BEING EXPLORED.
THE FUTURE

SMART INTERCONNECTED WEIGH STATION SYSTEM

- As a truck enters the scales we already know the following:
  - Number of axles and spacing
  - Weight on each axle/axle group
  - Overall gross weight
  - License plate number
  - US DOT number

How do we use this data more effectively?
THE FUTURE

SMART INTERCONNECTED WEIGH STATION SYSTEM

• THE DEPARTMENT IS LOOKING AT THE FOLLOWING:
  • HOW DO WE USE THE DATA TO BYPASS TRUCKS
    • ONCE THE VEHICLE WEIGHT IS VERIFIED IN THE SYSTEM ALLOW THE TRUCKS TO BYPASS ADDITIONAL WEIGH STATIONS AS LONG AS THEY ARE IN A CERTAIN WINDOW OF TIME
  • USE MAINLINE TECHNOLOGY TO PROCESS VEHICLES
    • USE MAINLINE WIMS, LPRS, AND USDOT READERS TO PROCESS VEHICLES AND MAKE SORT DECISIONS ON THE MAINLINE, KEEPING TRUCKS MOVING AT HIGHWAY SPEEDS
THE FUTURE

SMART INTERCONNECTED WEIGH STATION SYSTEM

• PRESENTLY PERMITTED LOADS ARE REQUIRED TO ENTER EVERY WEIGH STATION

• THE DEPARTMENT IS LOOKING AT THE FOLLOWING:
  • HOW CAN WE IDENTIFY PERMITTED LOADS ELECTRONICALLY
  • ONCE VALIDATED, FOR PERMIT CONDITIONS, HOW CAN WE BYPASS PERMITTED VEHICLES
QUESTIONS OR COMMENTS

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