

January 2008 Draft Presentation
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Our main areas of focus:

- **Monitor and Affect Vehicle Safety Regulation & Legislation**
- **Vehicle Defects Investigation, Non-Compliance, Recalls and 3rd Party Crash Testing**
- **Intelligent Transportation System (ITS)/Vehicle Infrastructure Integration (VII) activities**
- **Manage/Coordinate/Expand TMC Safety Research w/Outside Entities**





For Regulation & Legislation, main government organizations of focus

National Highway Traffic Safety Administration (NHTSA)

- FMVSS, vehicle compliance and defects/recalls
- NCAP testing



Congress

- Vehicle Safety Legislation



Federal Communications Commission (FCC)
Research, Innovation and Technology Administration (RITA)
Federal Highway Administration (FHWA)

- ITS/MI activities





Industry Voluntary Standards

- Vehicle Crash Compatibility



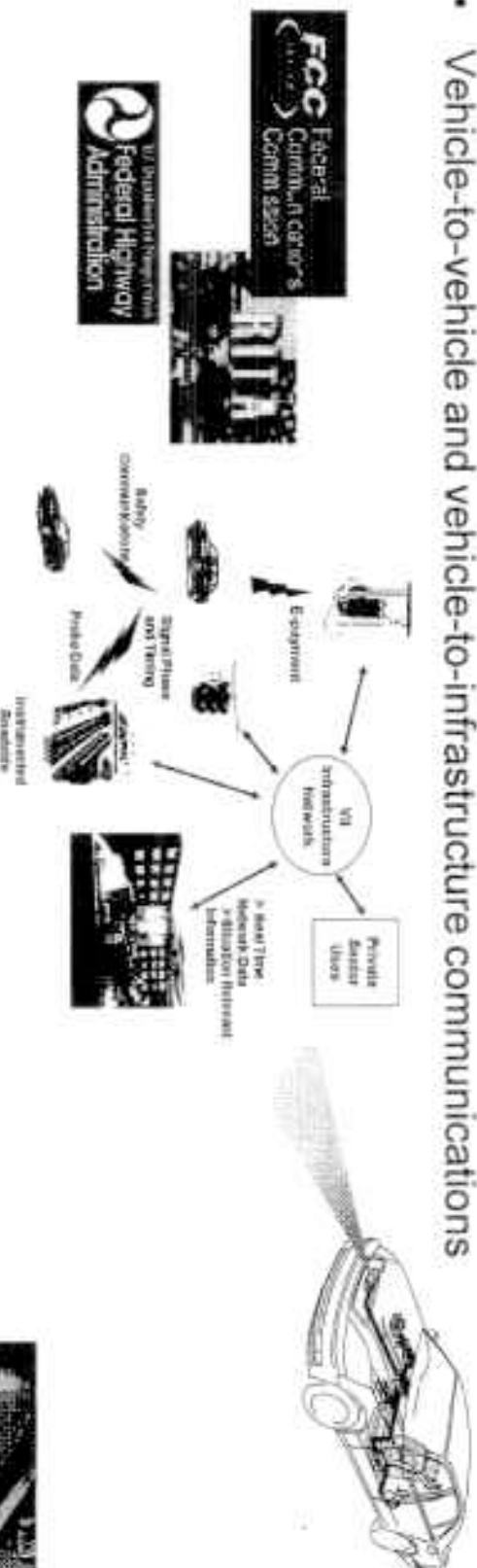
Rulemaking

- New Side Impact Final Rule (FMVSS 214)
- Rollover
 - Occupant 'Containment'
 - FMVSS 216 Roof Crush
- Child Passenger Safety
 - 'Kids in Cars' Bill (Congressional)
 - Child Restraint Systems (CRS)
- NCAP (New Car Assessment Program)
 - 'Stars on Cars'
 - Upgrade of NCAP program



US Government focus is shifting from passive (crash) safety, towards "active safety", including ITS/IVI

- Recognition of potential benefits growing - ESC Final Rule (~5-10,000 lives/yr)
- Includes Pre-collision systems, lane keep assist, blind spot warning, etc.
- Vehicle-to-vehicle and vehicle-to-infrastructure communications



Big interest in Drunk Driving Prevention

- 17,000 people per year are killed in Drunk Driving related accidents
- 'In-vehicle alcohol interlock' technology is target solution



Defects and Compliance Investigations / Recalls

- # of UIO and overall sales is increasing rapidly (i.e. increased exposure)
- NHTSA is testing more vehicles
- NHTSA's new, more aggressive management includes more attorneys at the agency, with little/no engineering background

Current 'OPEN' Investigations

- '04-'06 Sienna Hatch Struts - EA Investigation
 - NHTSA will request a recall in January
- '03-'04 Pontiac Vibe glass Shattering – PE Investigation
 - Very high number of claims, Working with GM/NUMMI on response
- '05-'07 Tacoma Throttle Surge - Compliance Investigation
 - Nashville News reporter, NHTSA 124 IR letter



As a result of Toyota's rapid expansion in the US, expectations are rapidly rising from NHTSA, Alliance (OEMs), and the Public for more participation and involvement

Toyota is recognized as the most successful car company



Toyota's leadership in the safety area is not only welcomed, it is expected

Expectations include:

- **Technical Presentations** (Gov't Public Hearings, NGO Conferences, NHTSA Technical meetings)
- **Participation/Leadership** at Alliance WGs/NHTSA/TWG
- **Contributions in NHTSA/Alliance Research**
- **NGO/Research Sponsorships**



Proactive participation and leadership in regulatory areas

- Regular Technical Meetings with NHTSA, docket comments
- Cooperative efforts with other OEMs (e.g. GM/CAT) on drunk driving, compatibility, ITS
- Chair of Alliance Safety Policy Committee (SPC)
 - Participation on 60+ technical WGs in Alliance
- Chair - Alcohol interlock specifications WG
- Public safety presentations
- Board memberships (ACTS, Children's Hospital, Wayne State)

Represent Toyota on Key ITS/VII initiatives

- Executive Leadership Team (ELT)
- VII Consortium, National VII Coalition
- ITS America



Sponsorships of Crash Safety Research/Conferences/NGOs

- Wake Forest CIREN center, VT, UVA, STAPP, AAAM, OSU, Mothers Against Drunk Driving (MADD)


Enhancing Affiliate Communication

- TEMA/TMA Safety Meetings, Anzen-Kento-Kai meetings @ TMC

Safety/Quality/Compliance issues

- Close relationship with staff and management at NHTSA
 - Early/timely information
 - Strong negotiations with agency on difficult issues
- Attend all NHTSA Compliance testing
- Close relationship with 3rd party testing organizations e.g. Insurance Institute for Highway Safety (IIHS)
 - Provide vehicles voluntarily for top scores
 - Tundra "Top Best Pick" – 1st and only PU truck to be awarded TSP



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- **The regulatory environment for safety continues to change rapidly and present challenges**
 - NHTSA/US Government is growing more aggressive on active safety
 - Expectations on Toyota continue to grow
 - **Toyota (TMA) is an proactive participant in US rulemaking and ITS initiatives**
 - Challenges remain
 - **On Quality Issues**
 - Some of the quality issues we are experiencing are showing up in defect investigations (rear gas struts, ball joints, etc)
 - NHTSA's management is aggressive, and not technical
 - Although we rigorously defend our products through good negotiation and analysis, we have a less defensible product
 - TMA has been quite successful in mediating difficult issues (ex: ES 350/Camry floor mat recall), but it is becoming increasingly challenging
 - Toyota must remain vigilant to guard its quality reputation





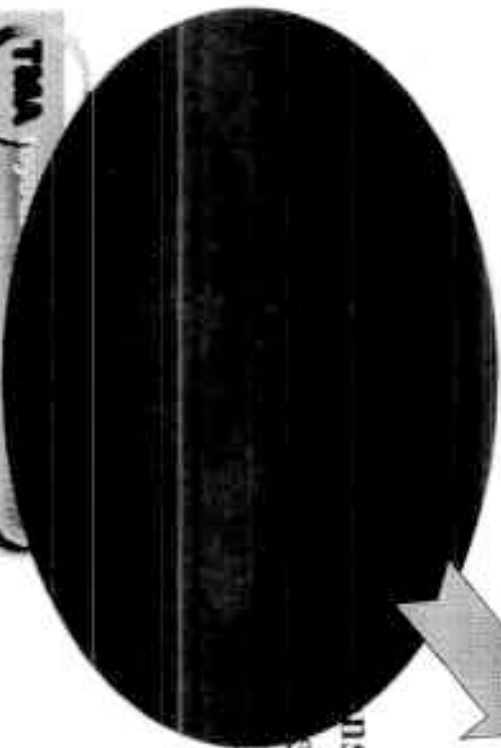
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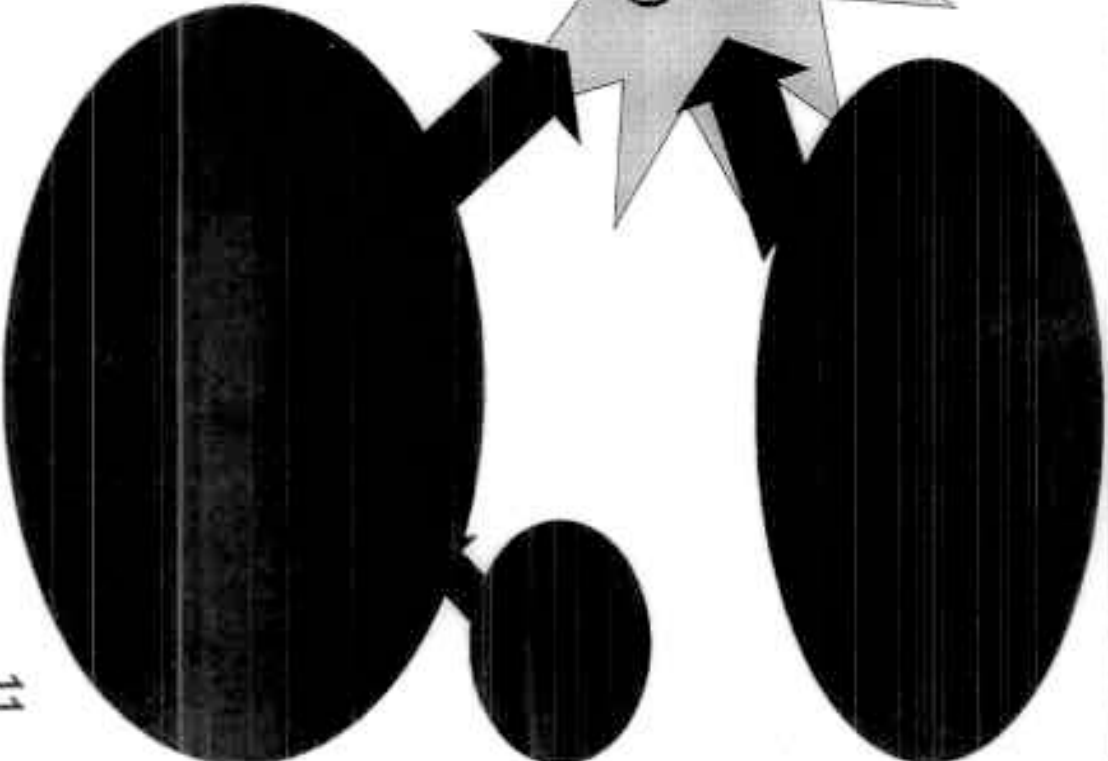


Public

- Sponsor University Research (Viviane, IV-A, VI, etc.)
- Board membership
- Special contributions



ponsorship
(selection)
(HOP, WSU)



Slide Notes

Slide 1:

Monitor and Affect Regulatory and Legislative Movement

NHTSA, OMB, Congress, etc.

Act Through Alliance, Toyota independently

Technical Meetings with Automakers

Comments, Private mtgs, Industry

Vehicle Defect/Non Compliance Issues

NCAP consumer information/IIHS/3rd party testing

Attend tests, Provide data and analysis

Negotiation with stakeholders/Gov/Test labs

Manage/Coordination TMC safety research w/ Outside entities

Universities/Labs, etc.

Monitor market trends related to safety

Competitors, media, NGOs

Support PR activity to enhance Toyota's image w/Gov/public

Work with TMS PR

Improved understanding amongst affiliates/technical briefings

Media interviews/background

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Slide 3:

Ok - now I will update you on progress of the 4 areas we listed as High priority.

First, Compatibility - - - - Toyota's Position was that in the mid term, we should develop and propose a test method and criteria to evaluate both geometry and stiffness matching.

However, due to pressures from Congress and NHTSA, we must also propose a proper test method for the short term solution. NHTSA has been pushing OEMs for an easy test they can use in their NCAP program

For our activities - For mid term solutions, we met with NHTSA and explained our ongoing research. TMA presented our full scale test results, and appealed for the necessity of not only a geometry improvement but also stiffness improvement. NHTSA researchers agreed, and are awaiting the output from Toyota and GM joint research.

NEXT

Slide Notes

Slide 4:

However, NHTSA is currently focusing more on Active Safety vs. Passive safety - Administrator's interests

Recognition of potential benefits growing

ESC Final Rule (est. 5-10,000 lives saved per year)

NHTSA also recognizes it can't keep up with advances in technology - looking to industry for help

Situation - NHTSA struggling with new technology evaluation procedure

Struggling with effectiveness measures

ACAT R&D project/SIM development

NHTSA struggling with safety benefit assessment

Asking OEMs to devise method

NCAP upgrade (public hearing to include Active safety ratings)

Alliance studying GM proposal for Volvo 37 car crash patterns to approximate effectiveness

TMC Action - continue SIM /Act work, input into alliance WG proposals

Slide 5:

07-08 ES350?Camry AWM - Closed w/ Limited equipment recall

ES350/Camry Mat Recall; Resolved - limited recall; No Vehicle Defect; Equipment Recall Only

Highlander Hybrid Steering, RX330 Brake Lamp Stop Switch - Closed - No recall

Pending for 08CY

04-06 Sienna Hatch Struts - OPEN Investigation

Demold at NHTSA courtyard;

05-07 Tacoma Throttle Surge Allegations Compliance Investigation

NHTSA 124 IR letter, Toyota Internal Investigation

Met with Representative Bart Gordon's (D-TN) office

Slide Notes

'03-'04 Pontiac Vibe glass shattering OPEN investigation

Working with GM/NUMMI

Vehicle Compliance

Testing - Camry/Prus rear; Camry/Prus front; Yaris side; Camry/FJ/Yaris head impact

'Trained' NHTSA labs on 305 electrolyte spillage and electric shock prevention

Tacoma compliance IR outstanding

Vehicle recalls lowest in years

Improvements in quality and safety deemed a success

Detroit Free Press 01/05/2008

Author: Justin Hyde

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WASHINGTON - In 2007, U.S. automakers issued the lowest number of safety-related recalls on their cars and trucks in at least four years; another sign that new vehicle quality continues to improve.

Automakers say the drop in recalls stems from their efforts to flag and correct problems before a vehicle rolls off the assembly line.

Slide 6:

As a result of Toyota's rapid expansion in the US, expectations are rising from NHTSA, Alliance, etc. for more participation/involvement

Toyota recognized as the most successful car company

Toyota is the only Japanese OEM with the right to vote in the Alliance

Toyota's leadership in the safety area is not only welcomed, it is expected by both the agency and the Alliance

Expectations include:

Technical Presentations

Public Hearings, Conferences, Technical meetings

Participation/Leadership at Alliance Working Groups/ NHTSA

Slide Notes

Contribution on Research Activities/Testing

Sponsorships

Slide 9:

Our ability to manage the tide of safety investigations rests largely on our ability to work well with NHTSA.

Over the last few years, we have seen our relationship begin to slip slightly with NHTSA. The reasons are complex. They include a combination of increased recalls, more investigations, and tougher negotiations between Toyota and the agency.

Not all of the recall increase can be blamed on slipping Toyota quality. The Congressional TREAD Act now requires faster and broader reporting and filing of recalls - all resulting in more pressure on the OEMs. In addition, the current NHTSA management is much more aggressive than in the past.

NHTSA is also much more sensitive to public and Congressional criticism and pressure.

There is a "new dynamic" in the US. As your face to NHTSA, we ask TMC to trust our judgment when we need your urgent help in getting issues resolved. We need faster information flow, and more technical support when hot issues arise.

Slide 11:

US Situation

Pressure Increasing on Toyota

I will explain this graph in detail during this presentation - but this illustrates the sources of the increasing pressure on Toyota from the outside in the technical area: from NHTSA for ..., NGOs for ..., Public for ... and Alliance ... all of which are demanding more active participation from Toyota

