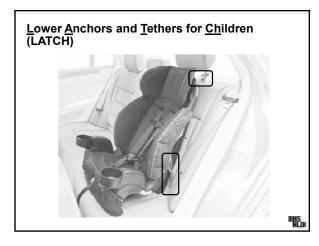**IIHS HLDI**
Insurance Institute for Highway Safety
Highway Loss Data Institute

A closer look at the IIHS LATCH ratings
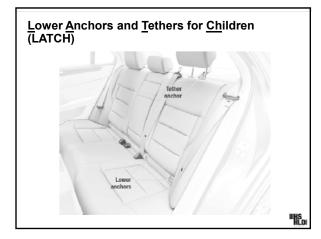
Lifesavers Conference
Long Beach, CA
April 5, 2016

Jessica S. Jermakian

iihs.org

Lower Anchors and Tethers for Children (LATCH)

IIHS HLDI

Lower Anchors and Tethers for Children (LATCH)

IIHS HLDI

Why focus on LATCH?

▸ LATCH is intended to make child restraint installations easier but …
  – About a third of child restraints installed in LATCH-equipped seats aren't installed with LATCH
  – Many parents report that LATCH is difficult to use
  – About half of forward-facing restraints installed without top tethers
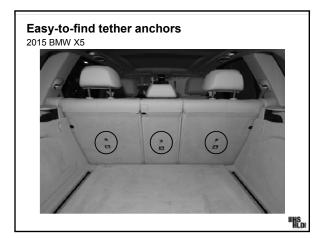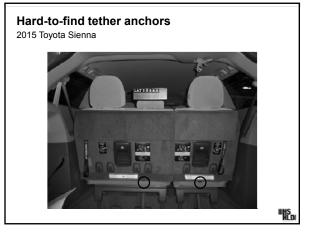▸ Parents who use LATCH are more likely to install child restraints correctly

LATCH ease-of-use criteria

‣ Lower anchors must have
  – Depth in seat bight less than 2 cm (¾ inch)
  – Attachment force less than 40 lbs (178 N)
  – Clearance angle greater than 54°
‣ Tether anchors must
  – Be located in an easy-to-find location on the rear deck in sedans or middle of the seatback in other vehicle types
  – Have no hardware that could be confused for a tether anchor or the tether anchor must be clearly labeled
‣ If the vehicle has a tether router, it must accommodate the tether router tool passing through

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Lower anchor accessibility

Easy-to-find tether anchors
2015 BMW X5

3

Hard-to-find tether anchors
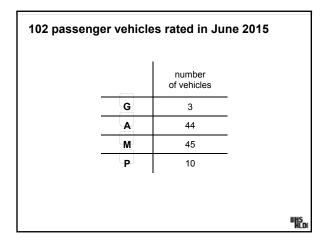2015 Toyota Sienna

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Top priorities for LATCH ratings

‣ Hardware required by law should be easy for parents to use

– 2 sets of lower anchors and 3 tether anchors for most vehicles

‣ LATCH hardware in additional seats and LATCH in the center rear position should be encouraged

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Overall vehicle rating
Based on LATCH hardware required by federal government

G GOOD	vehicle meets all ease-of-use criteria for 2 LATCH positions in 2nd row and 1 additional tether anchor
A ACCEPTABLE	2 LATCH positions meet most of the criteria
M MARGINAL	at least 1 LATCH position meets only a couple criteria
P POOR	at least 1 LATCH position meets only 1 or none of the criteria

102 passenger vehicles rated in June 2015

	number of vehicles
G	3
A	44
M	45
P	10

Percent of seat positions that do not meet ease-of-use criteria

lower anchor criteria			tether anchor criteria	
lower anchors too deep	too much force required	not enough room to maneuver	tether anchor hard to find	confusing hardware present

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2015 Honda Odyssey

2015 Volkswagen Passat

Overall **G**

2015 Toyota Sienna
Built before August 2015

Overall **P**

2015 Chevrolet Malibu

Overall **A**

This vehicle has 2 rear seating positions with complete LATCH hardware.

It has 1 additional seating position with a tether anchor, a single lower anchor and the ability to borrow the second anchor from another position.

Note: When an anchor is borrowed, it isn't available to use in its designated position.

Details by seating position

1 **Tether anchor**
   easy-to-find location
   no other hardware could be confused for anchor
   Lower anchors
   too deep in seat
   not too much force needed to attach
   easy to maneuver around anchors

2 **Tether anchor**
   easy-to-find location
   no other hardware could be confused for anchor
   Lower anchors
   1 dedicated anchor and 1 that can be borrowed from seat 3
   too deep in seat
   not too much force needed to attach
   easy to maneuver around anchors

3 **Tether anchor**
   easy-to-find location
   no other hardware could be confused for anchor
   Lower anchors
   too deep in seat
   not too much force needed to attach
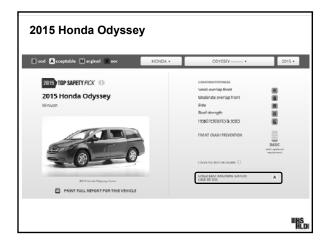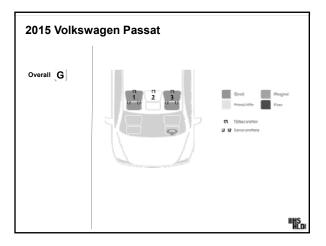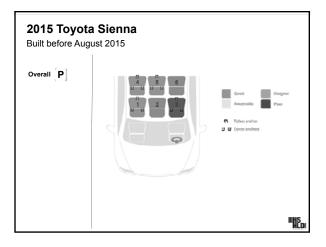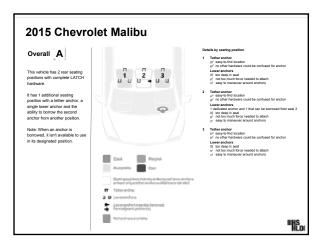   easy to maneuver around anchors

What parents and caregivers need to know about IIHS LATCH ratings

‣ Ratings indicate how easy it is for parents to get a good, tight installation using LATCH

‣ A good, tight child restraint installation is just as safe in a vehicle with a poor LATCH rating as one with a good rating

‣ Some LATCH seating positions might be easier to use than others

  – www.iihs.org provides information about which seats are equipped with LATCH and how easy the hardware is to use

‣ Good LATCH ratings mean a good, tight installation is more likely but don't guarantee it

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Top priorities for LATCH ratings

‣ Hardware required by law should be easy for parents to use

‣ LATCH hardware in additional seats and LATCH in the center rear position should be encouraged

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Good+ rating

‣ 2-row vehicles

  – Good rating plus acceptable LATCH available in second row center position, either by dedicated anchors or borrowing

‣ 3-row vehicles

  – Good rating plus 1 additional acceptable LATCH position plus acceptable tether anchors in all rear seating positions plus ability to use LATCH in the second row center, if available.

Vehicles that go beyond minimum requirements
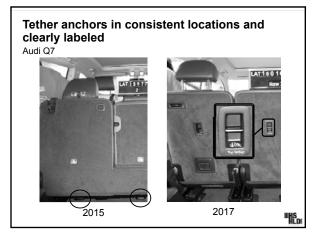102 vehicles evaluated in June 2015

‣ Of 74 two-row vehicles evaluated…
– 23 allow use of LATCH in the center seat position
– 5 with one dedicated anchor, 2 with two dedicated anchors

‣ Of 28 three-row vehicles evaluated…
– 9 have the minimum hardware required
– 13 offer at least one additional full LATCH position
– 7 have tether anchors in all rear seating positions

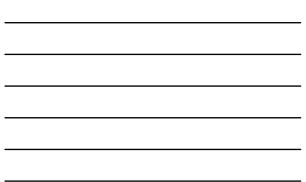**Rolling out LATCH ratings**

‣ Initial ratings of 102 vehicles released in June 2015
‣ Ratings after June 2015 are released to www.iihs.org with crashworthiness and crash avoidance ratings
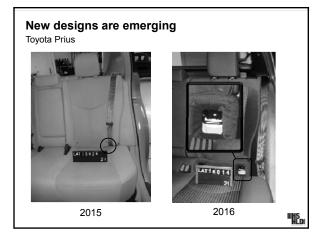‣ As automakers make changes, ratings are updated once vehicles are available at dealers

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Tether anchors in consistent locations and clearly labeled
Audi Q7

2015   2017

Better access to lower anchors
Lexus RX

2015   2016

New designs are emerging
Toyota Prius

2015   2016

More vehicles allowing LATCH use in the center rear
2016 Toyota Prius owner's manual

3 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P. 70)

■ **When installing in the rear center seat**
There are no LATCH anchors behind the rear center seat. However, the inboard LATCH anchors of the outboard seats, which are 16.1 in. (410 mm) apart, can be used if the child restraint system manufacturer's instructions permit use of those anchors with the anchor spacing stated.

Child restraint systems with rigid lower attachments cannot be installed in the center seat. This type of child restraint system can only be installed in the outboard seat.

■Laws and regulations pertaining to anchors
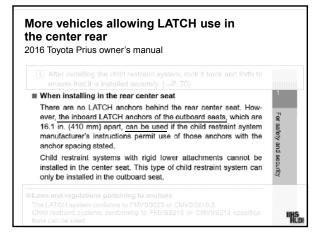The LATCH system conforms to FMVSS225 or CMVSS210.2. Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used.

Watch for our ratings roundup in June 2016

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Insurance Institute for Highway Safety
Highway Loss Data Institute

**More information and links
to our YouTube channel
and Twitter feed at iihs.org**

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