



ODOT Speed Zones

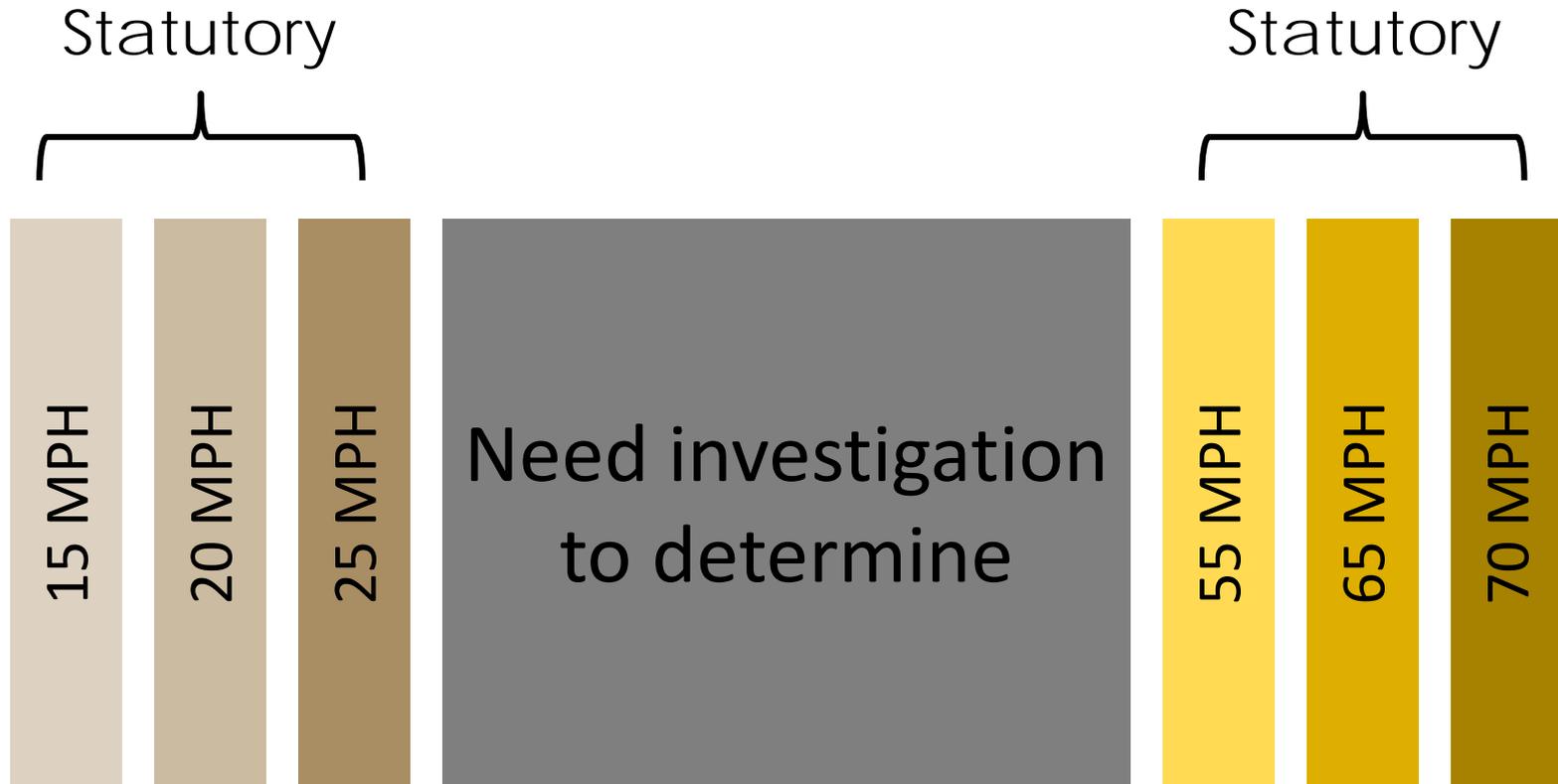
Keizer Transportation Safety Committee

August 2019



How are speeds set in Oregon?

Statutory versus designated speeds



*Designated may be any speed or if roadway does not meet statutory requirements



Designated Speeds

Requirements of the statutes



Requires engineering investigation



Investigation concludes current posted speed unsafe



Speed Zone Investigation



Collected, compiled, analyzed:

Roadside character

Traffic mix & volume

Crash data

Roadway widths

Travel speeds



Current speed setting practices

- Relies on 85th percentile speeds
- Number of crashes, geometry and context
- More flexibility in urban areas
- Post speeds typically below 85th percentile
- Operating speeds typically 5 to 7 mph over posted



National speed setting practices

Similar to Oregon Practices-

- 85th percentile
- Other factors considered
- Rural roads versus urban roads



Recent and current efforts



Research and Surveys

NCHRP 17-76/855

NTSB Report

TTI and AAA Survey

MUTCD Proposed
Changes

Options for setting speeds

Context NCHRP Report 855

Land use



NCHRP 855—Road user priority based on expanded FCS (Figure 2)

Context → Roadway ↓	Rural	Rural Town	Suburban	Urban	Urban Core
Principal Arterial					
Minor Arterial					
Collector					
Local					

User Priority:

High 

Medium 

Low 



Establishing target speeds based on NCHRP Report 855

Context → Roadway ↓	Rural	Rural Town	Suburban	Urban	Urban Core
Principal Arterial	High	Medium to Low	High to Medium	Medium to Low	Low
Minor Arterial	High	Medium to Low	Medium	Medium to Low	Low
Collector	Medium	Low	Medium	Low	Low
Local	Medium	Low	Low	Low	Low

Target Speed:

Low < 30 mph

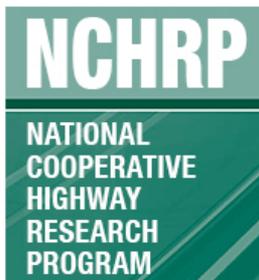
Medium 30—45 mph

High > 45 mph



Using NCHRP 855 to develop national guidance for setting speed limits

- NCHRP 17-76 will build upon NCHRP 855:
 - Factors that influence operating speed
 - Guidance for establishing speeds on all roadways
- Final report due in 2019



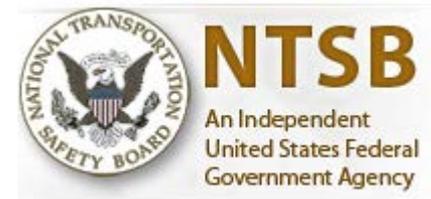
NCHRP 17-76 recognizes recent trends & research activity

NACTO

“State rules or laws that set speed limits at the 85th percentile speed should be repealed”

NTSB report

Remove guidance in the MUTCD that recommends speed limits should be within 5 mph of the 85th percentile speed



How NCHRP 17-76 is developing guidance

- Build guidance based upon the relationships between
 - Speed,
 - Crashes, and
 - Roadway characteristics
 - Context
 - Vulnerable users
- Build data from two major cities

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Target Speed:
Low < 30 mph
Medium 30–45 mph
High > 45 mph



Austin ,TX



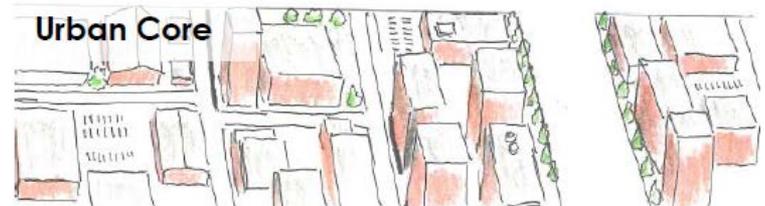
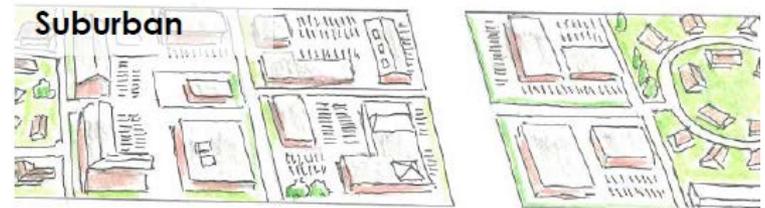
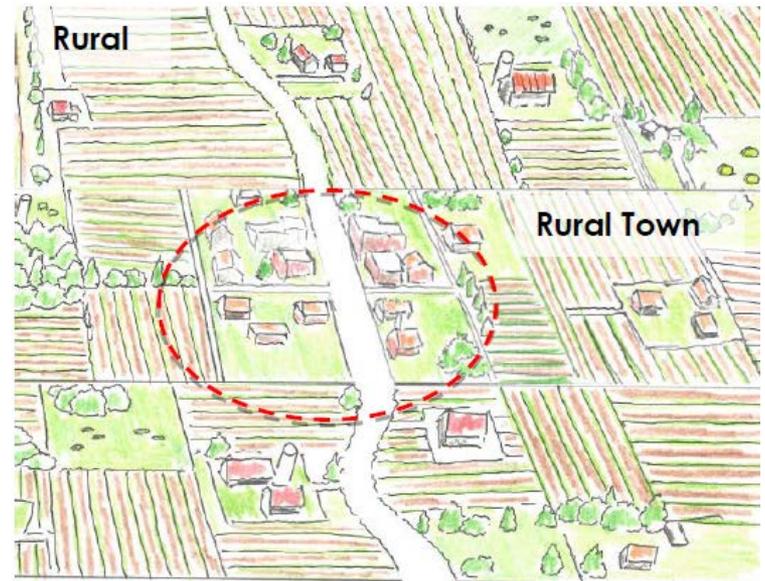
Ann Arbor, MI



Oregon options

Transition to context based approach for setting speeds

- NCHRP 855 – Context and Project 17-76 – Speed Setting Guidance
- Expand Portland Pilot to other jurisdictions
- Add flexibility, especially in urban areas



Other considerations



- Publish guidance on setting design speeds
- Clarify best practices for designs
- Clarify what elements influence operating speeds
- Clarify responsibility in designing roadways
- Provide assistance to small agencies
- Provide outreach on the process



How should we approach changing the way we set speeds?



- Sought OTC permission
- Form advisory group to recommend potential changes
 - Look at Portland Pilot
 - Look at NCHRP 17-76
- Bring in national experts for advice
- Rulemaking process

Timelines



✓ Feb 2019
Advisory Group

✓ Sept 2019
National Experts

✓ Sept 2019
Draft Rule

✓ Sept 2019
Rule Process

✓ Oct 2019
File w/ SOS

✓ Dec 2019
Public Meetings

✓ Early 2020
Approval



Proposed Target Posted Speeds

Context >	Urban Core/CBD	Urban Mix	Suburban Commercial and Residential	Suburban Fringe
Roadway Class				
Arterial	20-25 Low	25-30 Med Low	30-35 Med High	35-45 High
Collector	20-25 Low	25-30 Med Low	25-35 Med	30-40 Med High
Local	20-25 Low	20-25 Low	25-35 Med	25-35 Med

Speed must meet one of the following:

- Within 5 mph of 50th percentile speed
- Within the pace limits

Speed can vary 10 mph below 50th if:

- Bicycle crash risk score (high use?)
- More than one F&A in 3 yrs
- Less than 50% of P or B facilities
- With STRE approval:
 - Funded Plan for improvements



Proposed Target Posted Speeds

Context > Roadway	Rural Highways	Rural Communities
State Highways	50-65 Stat 55 or 65	25-45 mph
County Roads (and other)	45-55 Stat 55	25-45 mph

State Highways is within 5 mph of 85th or
County Road is within 5 mph of 50th

- 10 mph if crash rate exceeds statewide F&A by 50%
- 10 mph if local functional class
- 15 mph if passing through developed land uses area

Rural Communities (unincorporated communities) is:

- within 5 mph of 50th percentile speed or
- within pace limits and

*Typically less than ½ mile segment (if longer than 1 mile may treat as urban)

*Provide Transition speed zone if change is more than 20 mph





Questions?