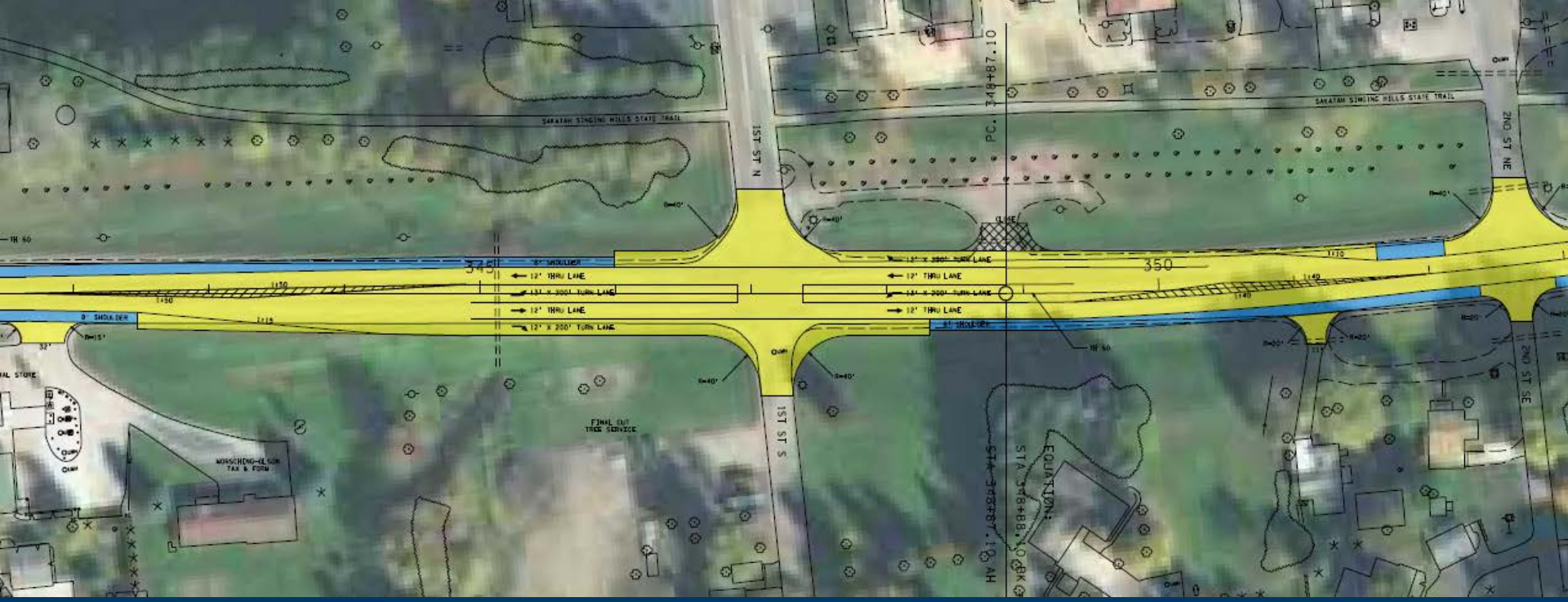


Elysian Public Meeting
2020 Highway 60 Pavement Reclamation

Forrest Hasty, PE | Project Manager

Brett Paasch, PE | Traffic Engineer

16Jan2018

DEPARTMENT OF TRANSPORTATION

State Project 4006-35(60)
www.mndot.gov/d7/projects/hwy60madisonlake/

Agenda

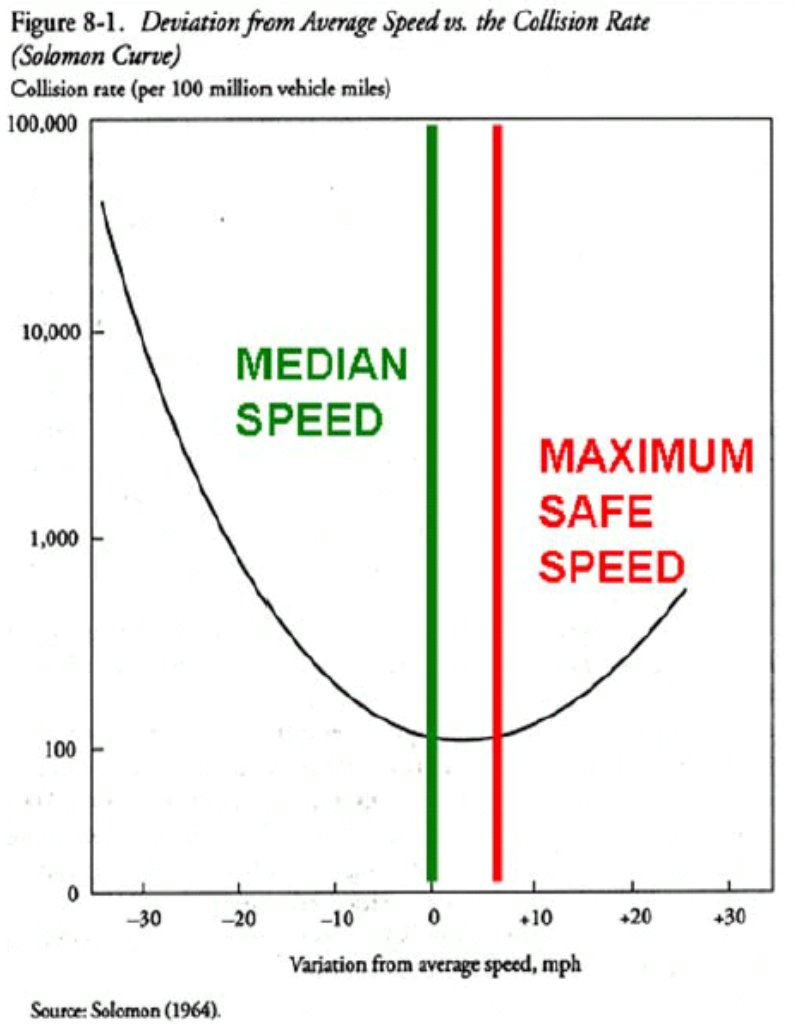
- Project Overview
  - Pavement Fix Type - Reclamation
  - Detour
  - Time of year / Project Duration
  - Local Impacts
  - Past Public Engagement
- Speed Limits / Pedestrian Crossings
- Current Highway performance
- Feasible Design Options
- Closing – General questions followed by open house

Why have speed limits?

- Uniform speed results in safest operation
  - Provided posted speed limit is reasonable
- Used by law enforcement to identify and curb unreasonable behavior
- MnDOT establishes non-statutory speed limits on all roads
  - Minnesota Statute 169.14

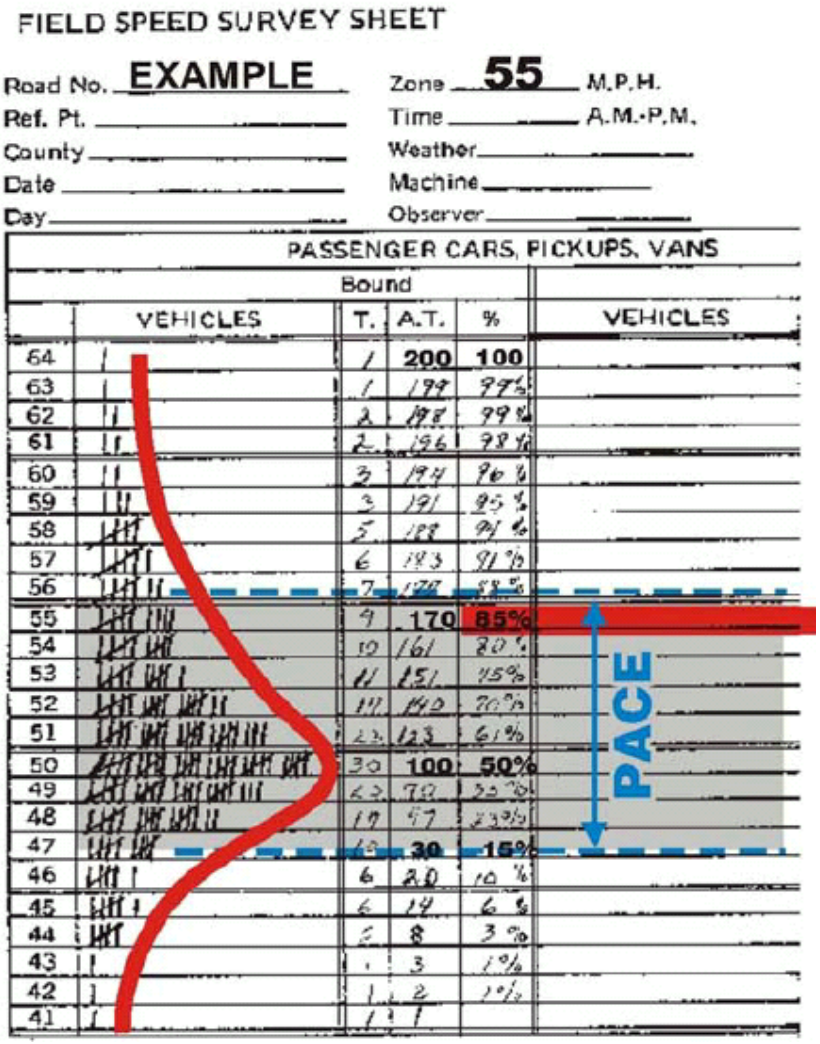
Speed Limits on Public Roadways

- Unreasonable speed limits can increase crashes
  - Some will drive posted speed limit
  - Most will drive reasonable speed
  - This leads to conflict (crashes)
- Speed limits should match motorists speeds



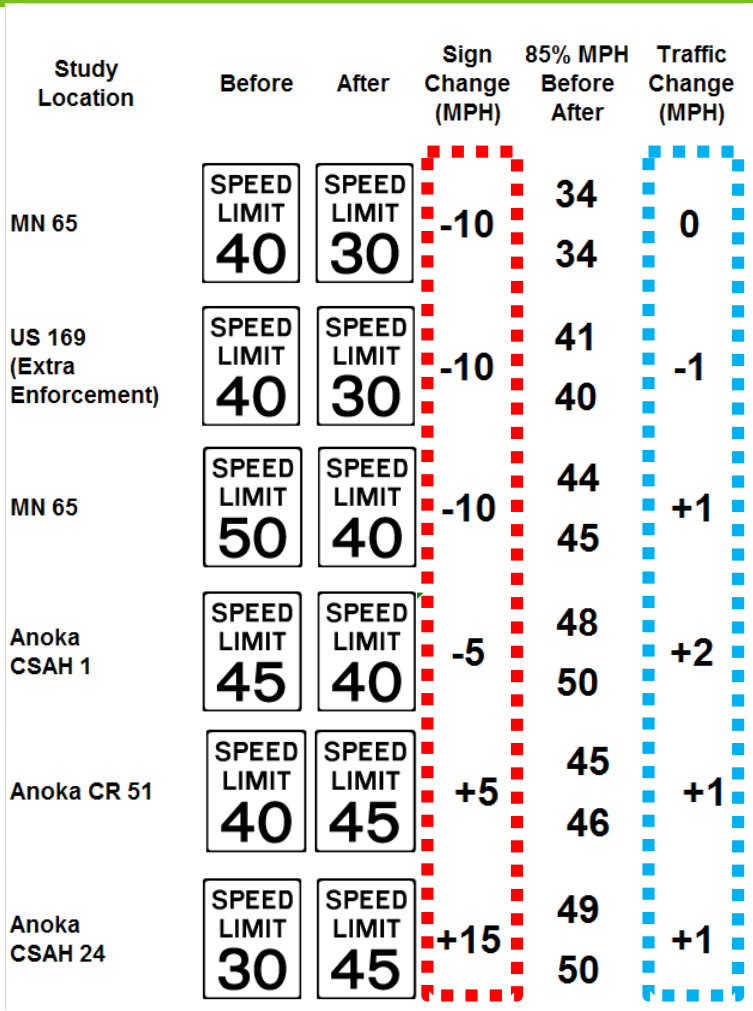
How Speed Limits Are Set

- Completed during ideal driving conditions
  - Minimum sample of 100 vehicles (typically)
- Determine the 85th Percentile speed
  - Recognized Internationally
- Public "votes" with their gas pedal



Outcomes of Speed Studies

- Lowering a speed limit will not significantly reduce speeds
  - Converse is also true
- Drivers perform an individual risk assessment
- Verified by separate national, state, and local studies
- Speed Signs do not drastically change driver behavior



Study Location	Before	After	Sign Change (MPH)	85% MPH Before	85% MPH After	Traffic Change (MPH)
MN 65	SPEED LIMIT 40	SPEED LIMIT 30	-10	34	34	0
US 169 (Extra Enforcement)	SPEED LIMIT 40	SPEED LIMIT 30	-10	41	40	-1
MN 65	SPEED LIMIT 50	SPEED LIMIT 40	-10	44	45	+1
Anoka CSAH 1	SPEED LIMIT 45	SPEED LIMIT 40	-5	48	50	+2
Anoka CR 51	SPEED LIMIT 40	SPEED LIMIT 45	+5	45	46	+1
Anoka CSAH 24	SPEED LIMIT 30	SPEED LIMIT 45	+15	49	50	+1

Current Highway 60 Performance

- Crash History (within Elysian Corporate Limits)
  - No Fatal or Serious Injury Crashes
  - No Pedestrian Crashes
  - Most Common Crash Type:
    - Rear End Collision
- Treatment to address most common crash type:
  - Right Turn Lanes
  - Left Turn Lanes

Background on Pedestrian Crossings

- 2013 Minnesota State Statutes:
  - "where traffic control signals are not in place or operation, the driver of a vehicle shall stop to yield the right-of-way to a pedestrian crossing the roadway within a marked crosswalk or at an intersection with no marked crosswalk"

- While state statues support the rights of pedestrians at all intersections and marked crosswalks, it is a small comfort when a crash between a vehicle and pedestrian occurs

Factors in placed marked pedestrian crossings

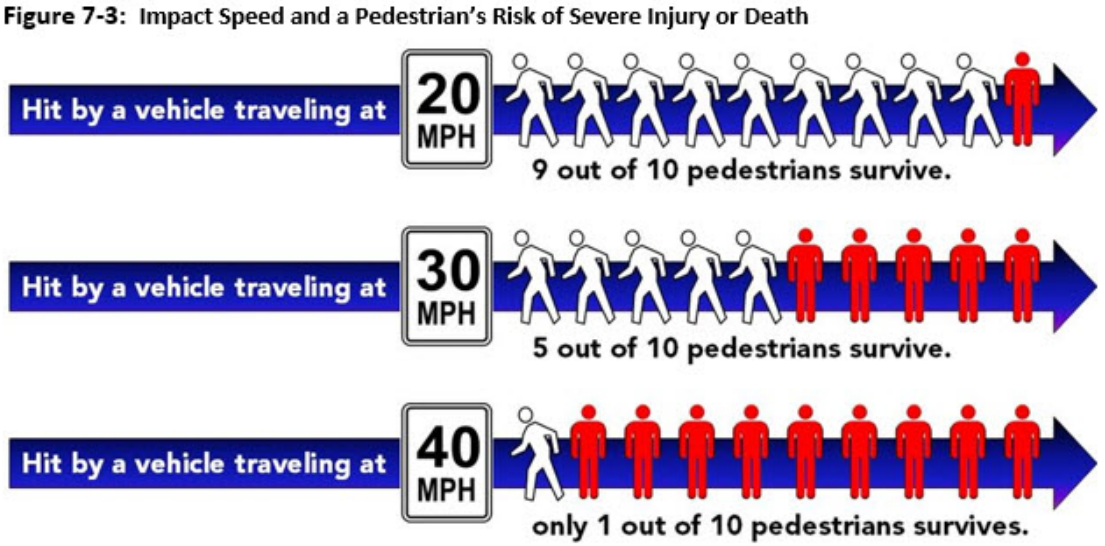
- Pedestrian Volume
  - Occasional vs Frequent
- Vehicular Volume
  - Too Low vs Too High
- Vehicular Speed
  - Lower Speeds: 20-35 MPH
- Sight Obstructions
  - Adequate sight distance to perceive, react, and stop

Federal Highway Administration Guidance

- Marked crosswalks alone without traffic calming treatments (or other substantial crossing improvements) are insufficient and should not be used. . . where the speed limit exceeds 40 miles per hour

- Why?

  Certainty of injury and high likelihood of severe or fatal injury



Feasible Design Options

- At-Grade, Unmarked Pedestrian Crossing
  - Sidewalk and ADA-compliant ramps and landings, but no signs or pavement markings
- Pedestrian Underpass
  - Requires trail connection to existing sidewalk network
  - As per Cost Participation Policy, MnDOT would contribute up to $100k, remainder of costs to city

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Thank you again!

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