Kristi M. Sebastian, P.E., PTOE
Dakota County

“Pedestrian deaths increased by 9% in 2016 (the highest number since 1990).”

USDOT 2016 Fatal Traffic Crash Data release
source – National Highway Traffic Safety Administration
Pedestrian Crossing Safety

- Pedestrian signs and markings, without enhancements, have been found to be ineffective.

- Roadways with speeds $\geq 45$ mph – Do NOT install Marked Crosswalk (additional crossing enhancements should be considered).

- Lower speed roadway – consider enhanced signs, geometric improvements ...

Reference – Mn/DOT Pedestrian crossing facilitation tech memo (Jan. 7, 2015)

Pedestrian Crossing – Challenge
“Best” Approach

- Signal with NO Vehicle Traffic during Crossing
- Exclusive Pedestrian Phase – “Barn’s Dance”
- May also present issues – particularly near college campus during finals week.

Pedestrian Crossing Safety – Resources
**Key – Review Specifics of Location**

- Assess Issues
- Involve Stakeholders
- Develop Plan for the specific location
- Action may often involve several elements – Engineering Changes, Education & Enforcement
Heritage Middle School Project
*County Rd. 6, Butler Avenue in WSP*

- Issue – Problematic parent pick-up process, Parked cars creating safety issue, multiple access points.

- New Mid-Block Crossing with Pedestrian Bump Out
- Removal of access and lot reconfiguration to accommodate parent’s drop-off/pick-up of student’s in safer more effective manner
- Turn lane for the main school access
- School Crossing Guards
- Parent information sent to describe crossing and student pick-up process
Heritage Middle School Project

County Highway 33 and 145th
Apple Valley and Rosemount

- Issue: Unmarked intersection along high Speed Roadway near school with desired pedestrian crossing activity between residential area and school/park facilities.
County Hwy 33 and 145th

- Action: Modify Roadway configuration to creating a pedestrian refuge and fewer traffic conflict points.

County Highway 11 and Evergreen
By Echo Park Elementary School in Burnsville

- Ineffective existing school zone and flashing beacon system (speed studies / comments from law enforcement).
- Concern for crossing by general traffic and some school children although school district buses across intersection.
- Several meetings with school, city staff and policy to determine needs and best approach.
County Highway 11 and Evergreen

- **Action:** Installation of the “HAWK” and curb bump-out to lessen crossing distance. Plus, educational information and collaboration with school.

County Road 43 and Victoria Road in Mendota Heights

- **Issue:** Busy pedestrian area with request for crosswalk markings.
**County Road 43 and Victoria Road**

- Removed turn lane to create median area for separating movements and enhancing the crossing.

**Concord (Hwy 56) & 75th street in Inver Grove Heights**

- Action: Ped ramps and lighting – No Markings
Pedestrian Safety – Key Steps

- Understand specifics of the location.
- Develop solution based on the problem and proven strategies / tools.
- Engage local stakeholders
- Implement educational and enforcement solutions with engineering changes when applicable.
- Each location had different issues and characteristics which garners different solutions.