## FIRST AVENUE

Lane Reconfiguration


Increases Sight Distance


Reduces Conflict Points


Source: FHWA Road Diet Information Guide

## Proposed Improvements

o Lane reconfiguration proposed from Mall Drive to Lower Muscatine Road

- 11' wide Through Lanes
- 12' wide Continuous Two-Way-Left-Turn Lane
- Dedicated Bike Lanes
o Traffic Signal Improvements
- Coordinated signal timing
- Protected/permissive left-turn phasing

Crash History --- 2011-2015 Mall Drive to Lower Muscatine Road 58 Crashes Injuries

1 Major
5 Minor
14 Possible/Unknown $\$ 242,400$ in Property Damage Reported 10 FTYROW Left Turn 7 FTYROW Driveway


Following too close
Failing to yield the right of way

## Level of Service (LOS)

Definition: Quality measure describing operational traffic conditions, in terms of speed, travel time, freedom to maneuver, traffic interruptions, comfort, and convenience.

- LOS A to LOS F
- LOS A = Best Operating Conditions (free-flow)
- LOS F = Worst Operating Conditions (congested)
- LOS C and LOS D
- Considered acceptable operating service for design and planning

| Intersection | Current Traffic 4-Lane | Current Traffic 3-Lane | Future Traffic 4-Lane | Future Traffic 3-Lane |
| :---: | :---: | :---: | :---: | :---: |
| Mall Drive | A / 4.8 s | B / 10.5 s | A / 4.8 s | B / 10.7 s |
| Lower <br> Muscatine Rd | B / 13.2 s | C / 25.5 s | B / 14.2 s | C / 27.8 s |
| US Hwy 6 | B / 11.5 s | C / 31.5 s | B / 12.6 s | D / 31.6 s |

- Average LOS based on calculated delay at all legs of the intersection during the AM Peak Hour.
- Intersection delay reported in average seconds per vehicle.

| Intersection | Current Traffic <br> 4-Lane | Current Traffic <br> 3-Lane | Future Traffic <br> 4-Lane | Future Traffic <br> 3-Lane |
| :--- | :---: | :---: | :---: | :---: |
| Mall Dr | A / 7.5 s | B / 17.4 s | B / 10.6 s | B / 19 s |
| Lower <br> Muscatine Rd | B / 14.4 s | C $/ 25.8 \mathrm{~s}$ | C / 20 s | C / 26.8 s |
| US Hwy 6 | B / 10.3 s | C $/ 32.4 \mathrm{~s}$ | C $/ 28.6 \mathrm{~s}$ | C / 28.5 s |

- Average LOS based on calculated delay at all legs of the intersection during the PM Peak Hour.
- Intersection delay reported in average seconds per vehicle.


## Travel Time Increase

of approximately 15 seconds over the entire corridor

## Contact Information:

