College Avenue Lane Reconfiguration Project
[Memorial Dr/Richmond St to Drew St]

City of Appleton
Dept of Public Works
2023

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Concerns Raised by the Community

1. Left turn safety (poor sight lines & lack of arrows)
2. Drag racing
3. Speed
4. Traffic noise
5. Bikes & scooters on the sidewalks/no bike lanes
6. Getting stuck behind left-turning vehicles
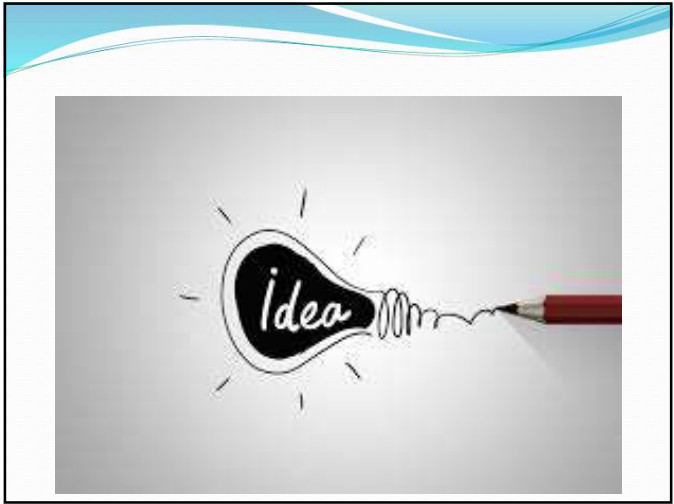7. Which lane should you be in if going straight?

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So, what's the answer?
Lots of Constraints…

- Keep all existing on-street parking
- Can't widen street *(to add turn lanes or bike lanes)*
- Can't enforce our way to lower speeds (long term)
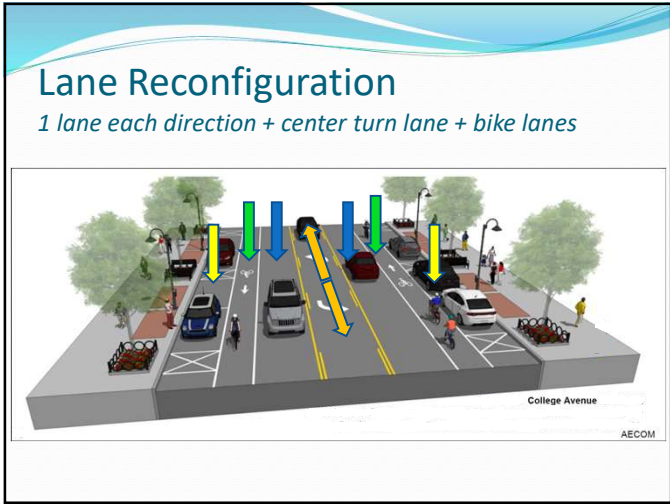- Can't add left turn arrows in both directions at any given intersection
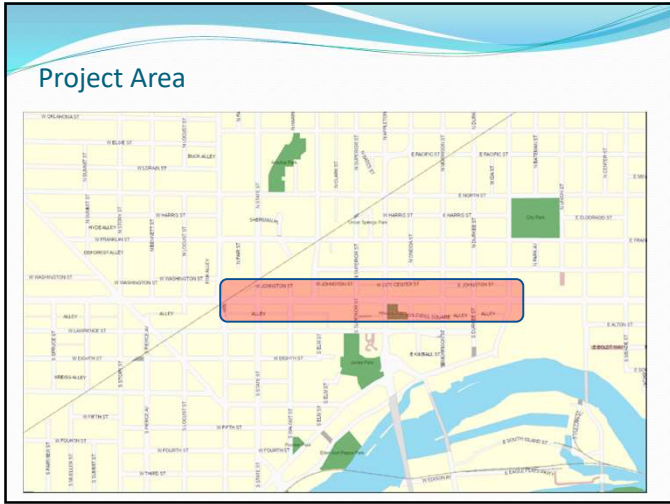
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4-to-3-Lane Conversion Video
Credit: IowaDOT

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Lane Reconfiguration
1 lane each direction + center turn lane + bike lanes

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Project Area

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Addressing College Avenue Concerns

- Improved safety
  - Fewer overall crashes (19 – 47% reduction)
  - Safer left turns (and ability to add arrows in both directions)
  - Slower speeds
  - Smoother traffic flow
  - Eliminate drag racing
- Improved pedestrian environment
  - Ped crash reduction of as much as 80%
  - Reduced traffic noise
  - No bicyclists/scooters on the sidewalks
  - Easier/safer to get in and out of parked cars
- Improved environment for bicyclists, scooters, etc.
  - Dedicated lanes / system connections

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Lane Reconfiguration
1 lane each direction + center turn lane + bike lanes

- Successfully used throughout the country with traffic volumes below 20,000 with little to no additional congestion
- Pre-COVID College Av traffic volumes range from 12,800 to 13,700 vehicles per day *(post-COVID volumes are about 20% lower)*.

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Historical Traffic Volumes

| 1955: 14,700 1969: 11,000 2022: 13,700 |
| 1955: 11,900 1969: 12,700 2007: 16,000 2019: 13,500 |
| 1955: 10,700 1969: 10,000 2004: 13,200 2016: 14,300 2020: 12,800 |
| 1955: 9,300 1969: 9,300 2007: 13,900 2020: 12,800 |
| 1955: 8,400 1969: 11,500 2004: 14,000 2007: 14,900 2016: 13,100 |

Corridor ADT

COVID

??

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Traffic Analysis
Context & Scope

- Pre-COVID Counts
- AM & PM Peak Hour
- No change in driver behavior and patterns
- Used simulation software to predict & quantify
- Iterative process - Traffic Signal adjustments
- Sensitivity checks

What will traffic be like?

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Traffic Analysis
What will traffic be like?

←AM

AM Peak

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Traffic Analysis
What will traffic be like?

PM Peak

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Traffic Analysis
What will traffic be like?

PM Peak

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Traffic Analysis
Sensitively Check

- Franklin Street can accommodate an additional traffic with relative ease.
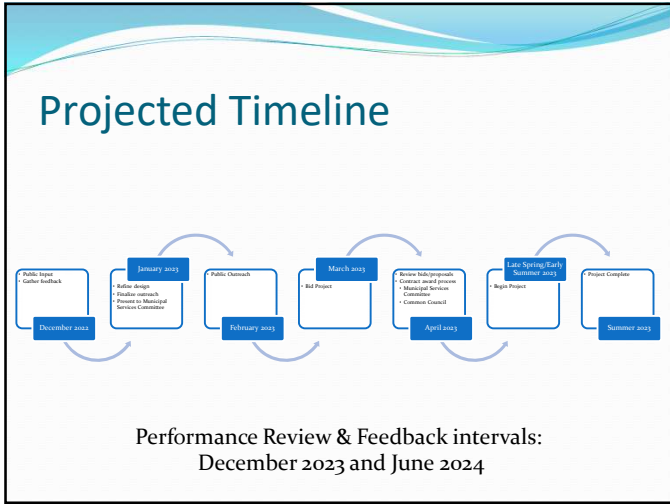- If 100 VEH turned left at Richmond instead, operation improves.

PM Peak

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Additional Considerations

- Special Events
- Railroad
- Parking Maneuvers
- Deliveries
- Growth and Development

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1/23/2023

Projected Timeline

Public Input · Gather feedback

December 2022

January 2023 · Refine design · Finalize outreach · Present to Municipal Services Committee

February 2023

Public Outreach · Bid Project

March 2023

April 2023 · Review bids/proposals · Contract award process · Municipal Services Committee · Common Council

Late Spring/Early Summer 2023 · Begin Project

Summer 2023 · Project Complete

Performance Review & Feedback intervals:
December 2023 and June 2024

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What would this cost?

College Avenue Restriping Project

- Construction:
  - $70,000 Pavement Marking Project
  - $55,000 Signal Improvements
- Contingency:
  - $5,000

Total Cost = $130,000

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Overall Goals and Benefits

- Improve Safety, Access and Mobility for all road users at a low cost.
  - Reduce the number of vehicle conflicts;
  - Reduce the number of conflicts between motor vehicles and other road users;
  - Decrease the number of vehicle travel lanes for pedestrians to cross. [1]
- Reduce aggressive speeding and vehicle speed differentials that lead to crashes.
- Provide the opportunity to install bicycle lanes, while maintaining the current on-street parking. [2]
- Increase and enhance business activity by reducing traffic speeds. [2]
- Create a more livable and pleasant neighborhood, boost property value and the local economy. [3]
- Overall traffic growth and further development may prompt the use of the entire Downtown Network, fitting with the City's Mobility Study.

1 : Wisconsin Department of Transportation
2: FHWA Proven Safety Countermeasures
3: AARP Livability Fact Sheet

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Questions?

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