# ANN ARBOR MOVING TOGETHER

## TOWARDS VISION ZERO

*Illustrations by: Pablo Stanley*

# Vision Zero Implementation Committee

Ann Arbor Moving Together Implementation

August 16, 2022

ANN ARBOR MOVING TOGETHER
TOWARDS VISION ZERO

Illustrations by Pablo Stanley

# Things to Know

- The video, speaking, and screen sharing functions are available to presenters, but disabled for participants to avoid unauthorized persons or offensive content.
- You can leave and rejoin the meeting at any time (unless the meeting is at capacity or you are removed for inappropriate behavior).
- You can communicate through the Q&A feature.
- Multiple opportunities for questions will be provided throughout the presentation.
- Presentation and additional materials are available https://www.a2gov.org/departments/engineering/Pages/Ann-Arbor-Moving-Together-Towards-Vision-Zero.aspx

# Vision Zero Implementation and Action Plan

**Vision Zero Implementation Subcommittee Meeting #3**

August 16, 2022

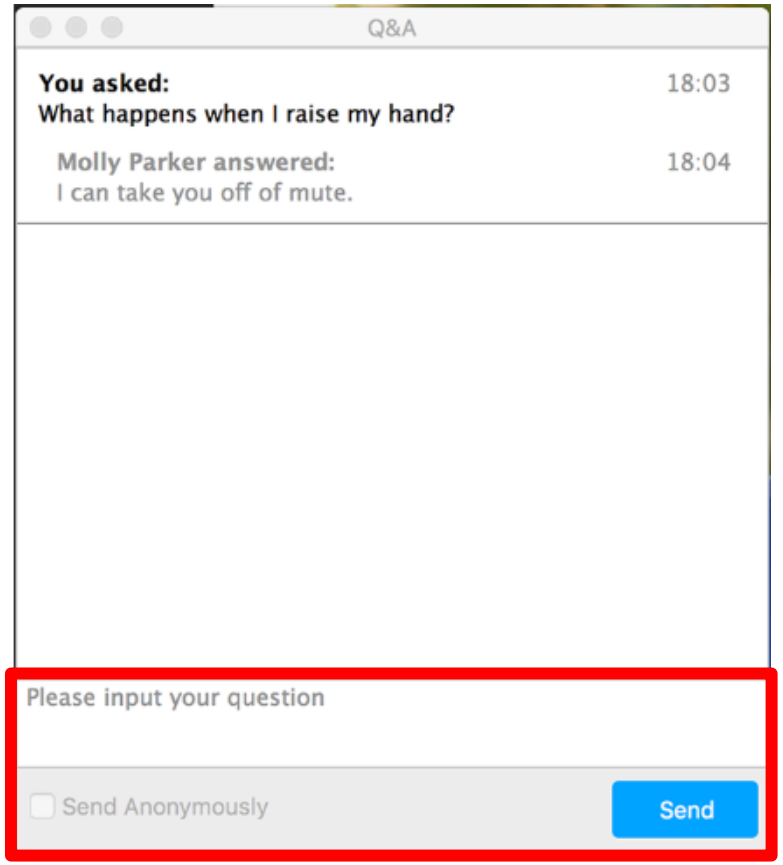
# Technology Overview

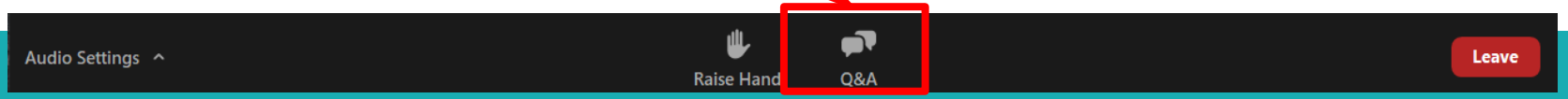
## Ask a Question or Share a Comment

We will be using the Q&A feature for those using a computer and the Raise Hand feature for those who are on the phone.

### Computer

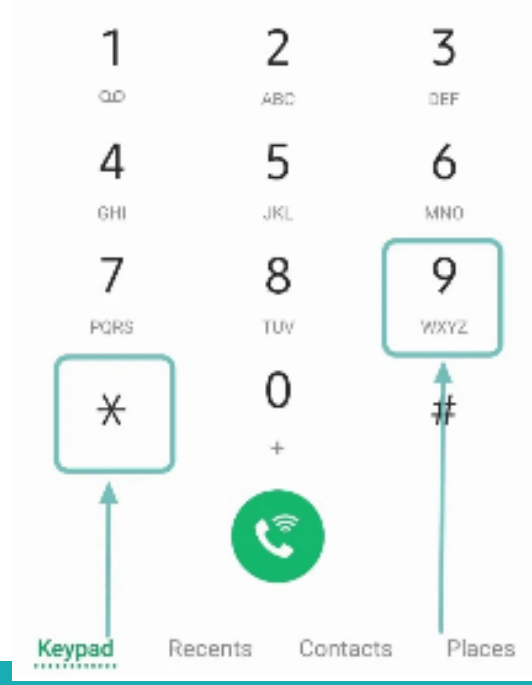
- Please use the Q&A feature located at the bottom of the screen to ask a question/comment.
- Type your question/comment.
- Click **Send.**


### Phone

- Select *9 to raise your hand
- You will be identified by the last 3 digits of your phone number



# Meeting Norms

- Commit to learning and avoid speculation – we encourage you to ask questions through the Q&A feature so we can explore the issue together.

- When speaking over the phone, please move to a quiet area and silence any background sounds. We want to be sure that we hear what you are saying.

- Please remember the importance of rights and the dignity of others. With that, we ask that you:
  - Critique ideas, not people.
  - Are thoughtful about your language so this can be a comfortable and respectful forum for all participants - inappropriate written and/or verbal comment or language, including personal attacks and accusations, will result in the attendee being removed from the meeting.

**Is there anything else anyone would like to add?**

# Follow-up Expectations

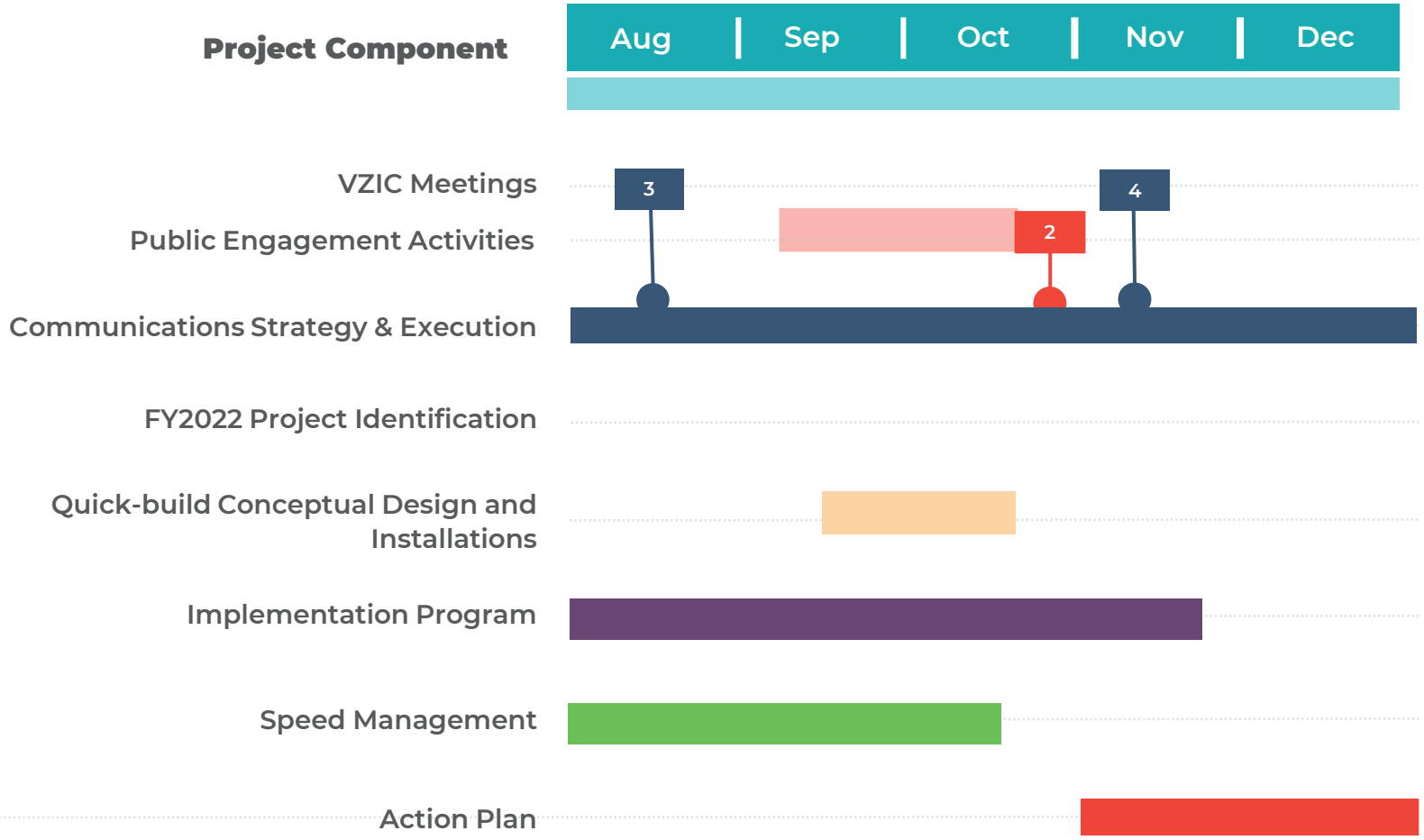
- Meeting summaries will be posted 7-10 days following the meeting
- Your feedback will be considered in addition to technical and cost considerations for the recommendations of this design effort
- The meeting is being recorded and content will also be posted to the City's webpage

# Agenda

1. Welcome & Introductions
2. Update on 5-year actions
3. Plan Tracking & Reporting
4. Speed Management Program
5. Public Comment Period

# Introductions

# Project timeline



# 5-Year Action Items

ANN ARBOR MOVING TOGETHER
TOWARDS VISION ZERO

Illustrations by Pablo Stanley

# Moving Together: 5-year Action Inventory

**51** out of **76** strategies are to be started in the near-term:

| | |
|---|---|
| 28 | Engineering |
| 21 | Encouragement |
| 14 | Equity |
| 7 | Education |
| 6 | Enforcement |
| 9 | Evaluation |

Types:

- Capital investments
- Process changes
- Evaluation
- Policy changes

## **Existing programs**:

- Annual sidewalk gap infill
- Curb ramps
- Streetlight maintenance

# Moving Together: 5-year Action Inventory

## Prioritization exercise

| Need | Opportunity |
| --- | --- |
| Focus corridor/intersection designation | Combination of strategies |
| Sidewalk gap infill – major street | Opportunity to incorporate into existing projects |
| Sidewalk gap infill – minor street | Feasibility / ease of implementation |
| Crosswalk upgrade or new crosswalk | Equity |
| Bike route – all ages and abilities | Other? |
| Bike route | |
| Bike intersection | |

# 5-year Prioritized Projects

## Top 5 Focus Corridors

1. Plymouth Road (Murfin to US-23)
2. Packard (Eisenhower to US-23)
3. Eisenhower (Ann Arbor Saline to Packard)
4. Miller (Newport to Main)
5. Packard (Main to Stadium)
5. Division (Hill to Beakes)*

## Top 5 Proposed Bike Routes

1. Plymouth Road (Murfin to US-23)
2. Packard (Eisenhower to US-23)
3. Eisenhower (Ann Arbor Saline to Packard)
4. Miller (Newport to Main)
5. Packard (Main to Stadium)
5. Division (Hill to Beakes)*

## For Discussion:

Do these seem appropriate as the top priority?

Are any surprising?

Are any important corridors missing?

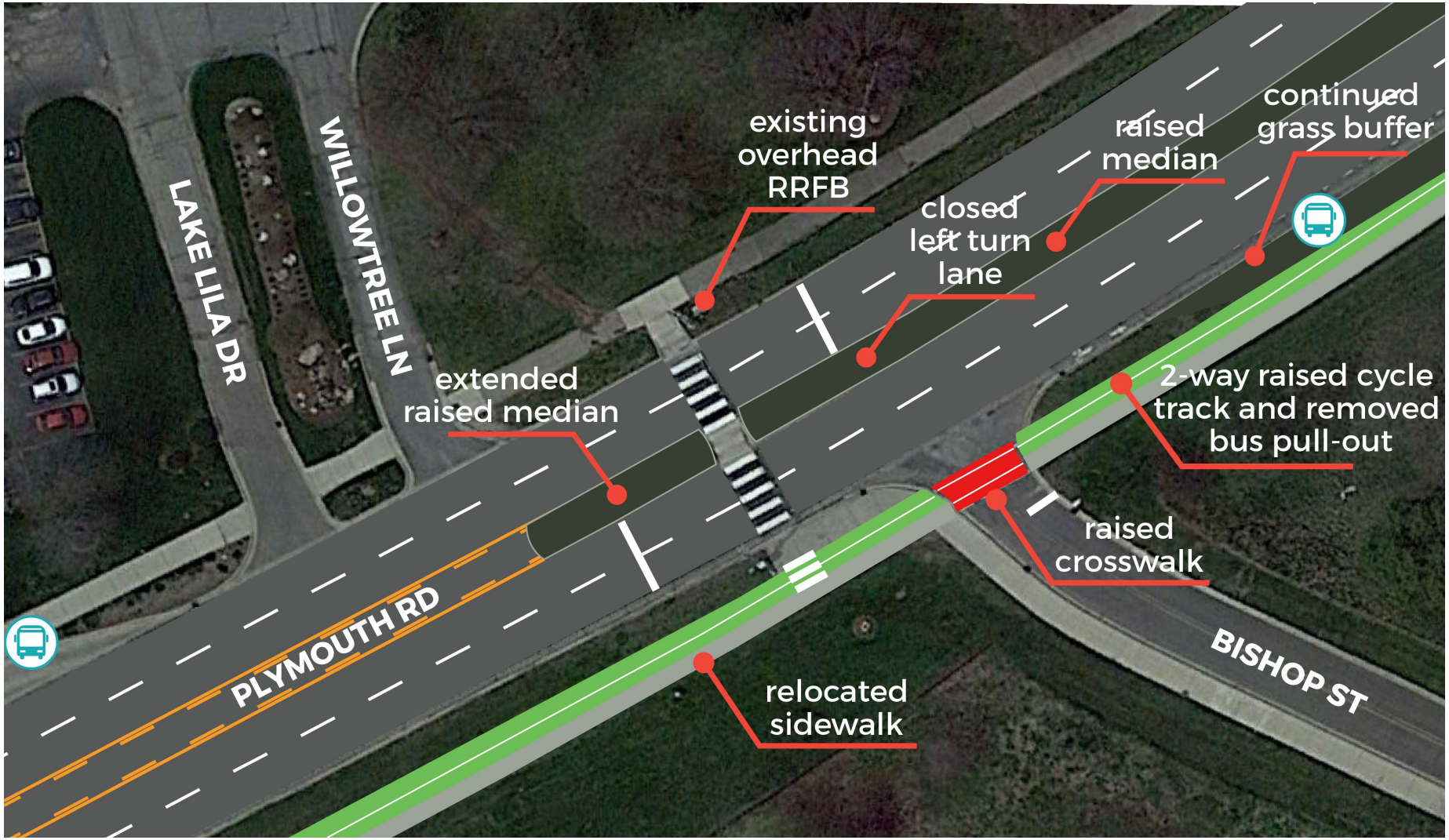
# 5-year Prioritized Project Achievements – where do we stand?

| 5-Year Plan | Moving Together Target |
|---|---|
| Tier 1 Corridor – 13.39 miles | N/A |
| Tier 2 Corridor - 10.47 miles | N/A |
| Focus Intersections - 14 | 15 |
| New Crossing - 6 | 3 |
| Bike Routes – 23 miles | 65 miles |
| Bike Intersection - 66 | 20 |

Total estimated cost:
$ 43,105,601

# Plymouth Concept

From Moving Together



# Miller Concept

## From Moving Together


# Plan Tracking & Reporting

ANN ARBOR MOVING TOGETHER
TOWARDS VISION ZERO

Illustrations by Pablo Stanley

## For Discussion:

What should be included in an Annual Report?

# Overall Metrics - Safety

| Metric | Baseline | Target | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|
| Annual number of people killed or seriously injured in traffic crashes | 30 | 0 by 2025 | 28 | 21 | | |
| Percent of serious injuries and fatalities to people walking and biking | 36% | 0 by 2025 | 29% | 52% | | |
| Percent of serious injury and fatality crashes related to dangerous behaviors | 38% | 0 by 2025 | | 33% | | |
| Number of safety improvements installed on focus corridors and intersections per year | N/A | 3 per year | | | | |

# Overall Metrics - Mobility

| Metric | Baseline | Target | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Percent of population with a 1/4-mile of the all ages and abilities network | 51% | 97% by 2030 | | | | |
| Percent of population within a 1/4-mile of high-frequency transit (every 15 minutes) | 26% | 40% by 2025 | | | | |
| Percent of trips in the city made by walking, biking, and transit | 36% | 50% by 2030 | | | | |
| Percent of all ages and abilities network completed | 25% | 50% by 2030 | | | | |
| Number of shared mobility vehicles available (car share, bikeshare, e-scooters) | 330 | 1,000 by 2025 | | | | |

# Overall Metrics – Accessibility for All

| Metric | Baseline | Target | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Transportation costs as a % of household income | 18% | 15% by 2025 | | | | |
| Average number of jobs within 20 minutes via different modes | Driving (109,149)<br>Transit (30,229)<br>AAA Bike Routes (15,231) | N/A<br>Transit (50,000) by 2030<br>AAA Bike Roues (30,000) by 2030 | | | | |
| Percent of bus stops that are ADA accessible | 89% | 100% by 2025 | | | | |
| Miles of gaps in the sidewalk network (on major streets and total) | 18 miles (major streets)<br>145 miles (total) | 0 miles (major streets) by 2027<br><8 miles total by 2040 | | | | |

# Overall Metrics – Healthy People/Sustainable Places

| Metric | Baseline | Target | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Average vehicle miles traveled (VMT) per day | 2.1 million | 1 million by 2030 | | | | |
| Percent of population living in a 20-minute neighborhood | 80% | 100% by 2025 | | | | |
| Percent of population meeting physical activity guidelines | 84% (2016) | 95% by 2030 | | | | |

# Overall Metrics – Regional Connectivity

| Metric | Baseline | Target | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Percent of commute trips into/out of Ann Arbor on transit | 2.1 million | 1 million by 2030 | | | | |
| Number of go!pass (or equivalent citywide program) holders | 5,000 per year | 10,000 per year by 2024 | | | | |

# Tracking Strategies

## Sample

| Targets | Strategy | Total/Identified Quantity | 5 year target | 2022 Efforts | Programmed |
|---|---|---|---|---|---|
| **Key Strategies** | | | | | |
| Make improvements on 3 safety focus corridors and/or intersections each year | Focus transportation investments on corridors and intersections with the most serious crashes. | 30 corridors; 17 intersections | 15 Projects | 6 Projects | |
| Install 10 curb extensions (temporary or permanent) per year | Address dangerous driving behaviors using design solutions, policy changes, and education efforts. | | 50 Curb Extensions | 24 Curb Extensions | |
| Install 5 LTTC per year | Address dangerous driving behaviors using design solutions, policy changes, and education efforts. | | 25 LTTCs | 4 LTTCs | |
| Install at least 3 quick-build safety projects per year, prioritizing focus corridors and intersections. | Establish a quick-build improvement program. | | 15 QBs | 7 QBs (33 intersections) | |

# Speed Management Program

ANN ARBOR
MOVING
TOGETHER
TOWARDS VISION ZERO

Illustrations by Pablo Stanley

# Speed Management Toolkit

## Goals

- Develop a toolkit of strategies that can be applied to streets to reduce speed
- Develop a process that educates and empowers residents to be part of the process in effective ways

## Approach

1. Categorize streets by character
2. Conduct best practice research to identify tools
3. Pair tools with appropriate street types
4. Outline a unified process for speed management
5. Engage public to educate & obtain feedback

| | Miller Ave | Liberty St | Dexter Ave |
|---|---|---|---|
| **Characteristics** | | | |
| **NFC** | Minor Arterial | Minor Arterial, Major Collector in Downtown | Minor Arterial |
| **Focus Corridor** | Tier 1 | Tier 2 | Tier 2 |
| **Applicable Tools** | | | |
| **Chicane** | No | Yes | Yes |
| **Realigned Intersection** | No | Yes | Yes |
| **Traffic Circle** | No | Yes | Yes |
| **Roundabout** | Yes | Yes | Yes |
| **Lane Reduction** | No | Yes | Yes |
| **On-Street Parking** | Yes | Yes | Yes |
| **Bike Lane** | Yes | Yes | Yes |
| **Lane Narrowing** | Yes | Yes | Yes |
| **Raised Median** | Yes | Yes | Yes |
| **Curb Extension** | Yes | Yes | Yes |
| **Pedestrian Island** | Yes | Yes | Yes |
| **Street Trees or Landscaping** | Yes | Yes | Yes |
| **Speed Hump** | No | No | No |
| **Speed Cushions** | No | No | No |
| **Speed Table** | No | No | No |
| **Raised Intersection** | No | Yes | Yes |
| **Hardened Centerline** | No | No | No |
| **Raised Crosswalk** | No | Yes | Yes |
| **Speed Feedback Sign** | Yes | Yes | Yes |
| **Posted Speed Pavement Marking** | Yes | Yes | Yes |
| **Street Art** | Yes | Yes | Yes |
| **Pavement Materials** | Yes | Yes | Yes |

# Speed Management Toolkit

## Tool Types:

1. Horizontal Deflection
2. Cross-section Modification
3. Vertical Deflection
4. Traffic Control Device

## Eligibility Criteria:

- Cross-section (2/3/4 lanes, 1-way vs. 2-way)
- Speed limit
- Traffic volumes
- Intersection control
- Emergency vehicles

# Chicane

**Description**

Chicanes are offset curb extensions on alternating sides of the street that encourage drivers to slow down and follow the curved path of the street.

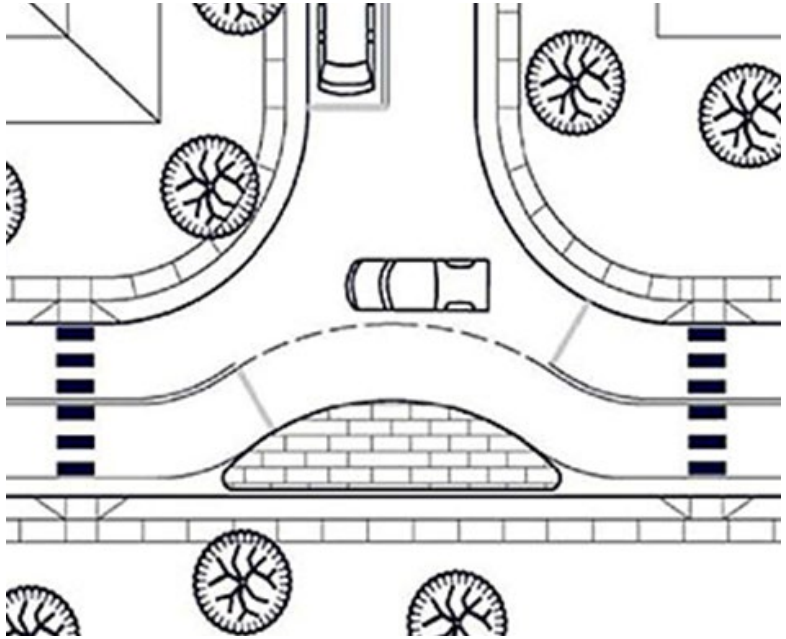
**Implementation**

Quick Build Retrofit Reconstruction

# Realigned Intersection

**Description**

Realigned intersections introduce a slight curve in the travel path, encouraging slower speeds through an intersection.



**Implementation**

Quick Build Retrofit Reconstruction

# Traffic Circle

**Description**

A traffic circle is a raised island in the center of an unsignalized intersection for traffic to circulate around.

They slow drivers by introducing a curve through the intersection.

**Implementation**

Quick Build Retrofit Reconstruction

# Roundabout

**Description**

A roundabout is a larger scale traffic circle for major intersections. Roundabouts are used in place of traffic signals.

They enforce slow speeds through the intersection.


**Implementation**

Quick Build Retrofit Reconstruction

# Lane Reduction

**Description**

Lane reductions reallocate street space from existing travel lanes to other uses.

They slow drivers down by narrowing the driveable space on the street.

**Implementation**

Quick Build | Retrofit | Reconstruction

# On-Street Parking

**Description**

Parking spaces provided along the side of a street (parallel or angled) are considered on-street parking.

It slows drivers down by narrowing the driveable space on the street and creating activity at the street edge.


**Implementation**

Quick Build Retrofit Reconstruction

# Bike Lane / Protected Bike Lane

**Description**

Bike lanes provide dedicated space for bicycles to use on the street.

They slow drivers down by narrowing the driveable space on the street.

**Implementation**

Quick Build Retrofit Reconstruction

# Lane Narrowing

**Description**

Lane narrowing decreases the striped width of a travel lane, encouraging drivers to slow down.

**Implementation**

Quick Build Retrofit Reconstruction

# Curb Extension

**Description**

Curb extensions narrow the roadway and expand pedestrian or green space. Curb extensions are often used at corners, improving visibility of pedestrians and enforcing safer turn movements.

**Implementation**

Quick Build | Retrofit | Reconstruction

# Choker

**Description**

Chokers pair curb extensions on opposite sides of the street to narrow the travel way and slow drivers.

**Implementation**

Quick Build Retrofit Reconstruction

# Raised Median

**Description**

Medians visually or physically narrow the travel space, encouraging slower speeds.

They introduce opportunities for landscaping and beautification.

**Implementation**

Quick Build | Retrofit | Reconstruction

# Pedestrian Island

**Description**

A pedestrian island is a short section of raised median at the center of a marked crosswalk that allows pedestrians to cross one direction of travel at a time, waiting for the other direction to clear.

These increase the visibility of pedestrians crossing the street.

**Implementation**

Quick Build Retrofit Reconstruction

# Street Trees

**Description**

Street trees slow drivers by visually narrowing the roadway.

**Implementation**

Quick Build | Retrofit | Reconstruction

# Speed Humps

**Description**

Speed humps introduce a vertical deflection to the roadway, slowing drivers down in spot locations by making it uncomfortable to travel at high speeds.


**Implementation**

Quick Build | Retrofit | Reconstruction

# Speed Cushions

**Description**

Speed cushions are less aggressive speed humps with gaps in them, making them more conducive on streets that carry larger vehicles.

**Implementation**

Quick Build Retrofit Reconstruction

# Speed Tables

**Description**

Speed tables are longer versions of speed humps, making them less severe and more conducive on streets that carry larger vehicles.


**Implementation**

Quick Build Retrofit Reconstruction

# Raised Intersection

**Description**

The entire intersection is raised, encouraging slower speeds through the intersection.

**Implementation**

Quick Build | Retrofit | Reconstruction

# Hardened Centerline

**Description**

A physical and vertical delineation of the centerline forces drivers to make safer turning movements.

**Implementation**

Quick Build Retrofit Reconstruction

# Raised Crosswalk

**Description**

Raised crosswalks are speed tables with a marked crosswalk on top. They force drivers to slow directly at a conflict point.

**Implementation**

Quick Build | Retrofit | Reconstruction

# Speed Feedback Sign

**Description**

Pairing a feedback sign with a speed limit sign encourages drivers to adhere to the speed limit. These are most effective in spot locations.


**Implementation**

Quick Build Retrofit Reconstruction

# Pavement Legends

**Description**

Pavement legends draw attention to a speed limit or school zone.

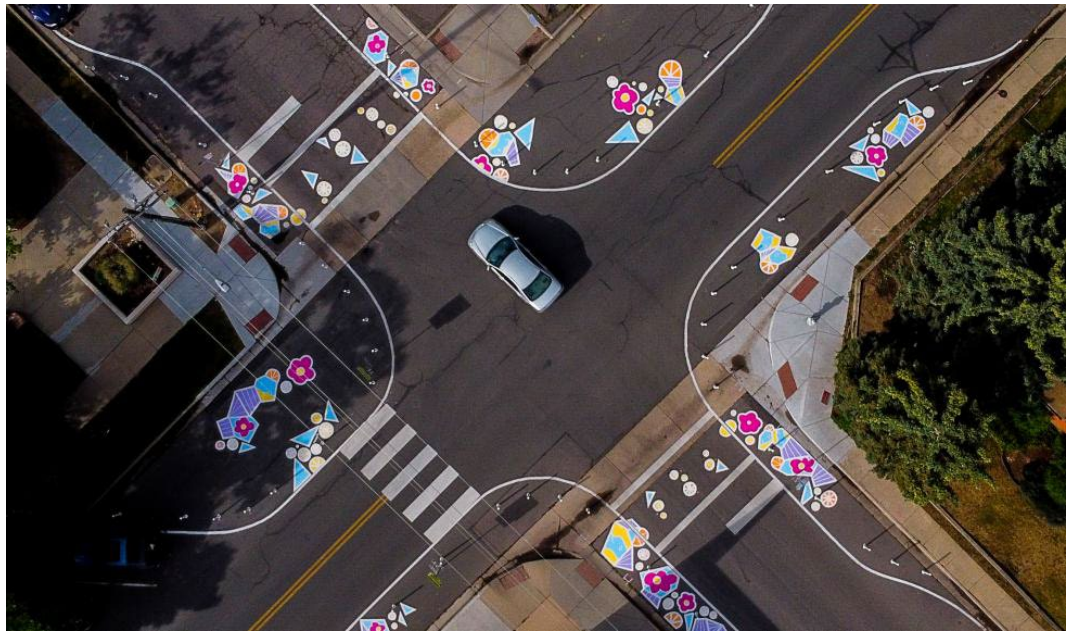

**Implementation**

Quick Build Retrofit Reconstruction

# Street Art

**Description**

Street art can be incorporated in areas like curb extensions to draw drivers' attention to street features that need to be driven around, a unique district or location, or the potential for pedestrian activity.



**Implementation**

Quick Build Retrofit Reconstruction

# Pavement Materials

**Description**

Colored or textured pavement markings draw attention to a unique district or location and alert drivers to the potential for pedestrian activity.

**Implementation**

Quick Build | Retrofit | Reconstruction

# Next Steps

1. Determine baseline eligibility
2. Build out process for resident participation
3. Virtual & in-person engagement

# Michigan Fitness Foundation

ANN ARBOR MOVING TOGETHER
TOWARDS VISION ZERO

Illustrations by Pablo Stanley

# Public Comment Period

- Please limit your comments to 3 minutes or less