VISION ZERO

Context Driven

Access & Mobility For All Users 1.0

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

September 8, 2020

Overview

- Northbound Strategic Plan
- Vision Zero & Context Driven
- Context Driven Initiatives
  - Context Guide
  - Context Driven Web Portal
  - Context Driven Toolkit
- Next Steps

Northbound
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What is Northbound?

Northbound | Strategic Plan 2020

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north·bound

\ nôrth-, baûnd \ **adj.**

traveling or headed north.

- Northbound Strategic Plan
  - The Northbound Ten – 5-year plan with 10 Goals
  - Goals we can work on collectively
  - Short and concise format
- Modernization of MDOT SHA that moves us in an upward direction

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The NORTHBOUND TEN
2020-2025

The Northbound Ten are MDOT SHA's goals and initiatives that will guide us during the next five years. We will challenge ourselves to think differently and embark on this journey together to move the organization Northbound.

establish OFFICE OF **ALTERNATIVE PROJECT DELIVERY**

IMPLEMENT a Dynamic **HUMAN RESOURCES** process

Implement **VISION ZERO PLAN**

DELIVER **I-495 & I-270 P3 PROGRAM**

ADVANCE **HIGHWAY MAINTENANCE 2.0**

DEVELOP PLAN *for* optimizing **FUNDING STABILITY** *and* **FLEXIBILITY**

ENHANCE internal *and* external **COMMUNICATIONS**

create a CULTURE of **INCLUSIVENESS**

fill **CAPITAL SHELF** with SYSTEM PACKAGES

formalize OPERATIONAL INFRASTRUCTURE **ASSET MANAGEMENT**

Context Driven Overview

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VISION ZERO

Context Driven

Overview

The Process

The Contexts

The Guidebook

Sample Scenarios

- Urban Core
- Urban Center
- Traditional Town Center
- Suburban Activity Center
- Suburban
- Rural

Pedestrian Safety Action Plan (PSAP)

Context Driven Toolkit

Context Driven Education & Outreach

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An MDOT SHA Vision Zero Initiative *stemming from SHSP strategies*

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PLANNED · IN PROGRESS · ITEMS LAUNCHED

components

1 Pedestrian Safety Action Plan

IN PROGRESS

WHY, HOW, and WHERE we need to implement Context Driven Tools

the driving force, the guide for benchmarking and data

2 Context Guide

ITEMS LAUNCHED

MDOT SHA's POSITION and VISION

diving into the context zones and setting the stage for the tool kit

3 Context Driven Toolkit

IN PROGRESS

HOW to build a Context Driven Environment *the kit of parts and resources for each context zone*

4 Case Studies

IN PROGRESS

TRACKING and LESSONS LEARNED *showing audiences we have projects completed and in the works - a place to learn from past projects*

5 Education and Outreach

IN PROGRESS

Building AWARENESS and FAMILIARITY *exposure and education for multiple audiences*

6 Web Portal

IN PROGRESS

A CLEARINGHOUSE for all five components

the one stop shop for learning and loading case studies

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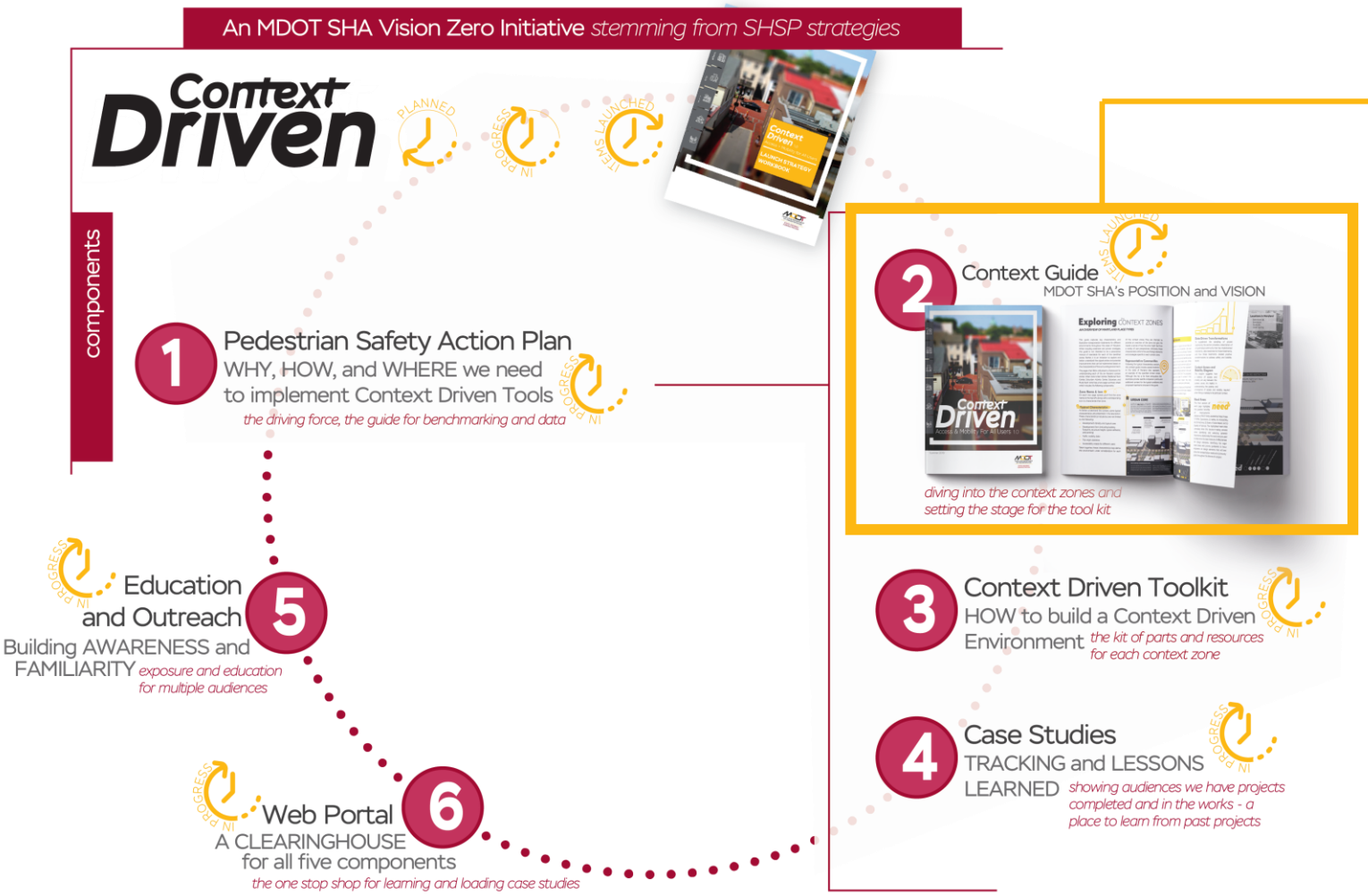
Completed Initiatives



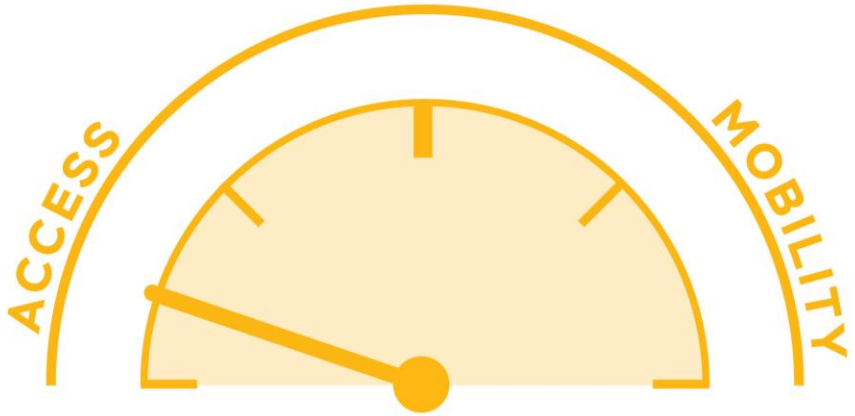
Context Guide

- Released Summer 2019 by MDOT SHA
- Establishes 6 contexts and role of access vs. mobility
- Online ArcGIS Context Map Tool
- Proactive and innovative treatments

Balancing Access & Mobility

MDOT SHA Contexts

How much can you get to?



How far can you go?

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TRADITIONAL TOWN CENTER

While smaller and less dense than either of the urban contexts, the ***Traditional Town Center*** is characterized by a high diversity of uses, including residential, office, retail, civic, and cultural facilities. Structures are typically late 19th to early 20th century, mid- to low-rise and oriented toward the street with no setbacks. Parking is often provided on-street along the main thoroughfare, with additional parking at the rear of the building accessible by alleys or other minor streets. Typically laid out before the advent of the automobile, these areas often serve the dual purpose of accommodating both short trips in the areas surrounding the commercial corridor as well as longer pass-through trips. While the need for mobility through these areas exists, it is somewhat exceeded by the need for internal circulation within the context. This area constitutes roughly 1% of the land area in the State.

Traditional Town Center

The many points of interest in Traditional Town Centers are mostly clustered along historic Main Streets. These should be easily accessed while recognizing the role these corridors play in regional mobility.

Example Locations in Maryland

- Easton
- Taneytown
- Chestertown
- Catonsville

SAMPLE SCENARIO
COUNTERMEASURES

CURB EXTENSION

Narrows the roadway (both visually and physically) to shorten the crossing distance, improve visibility for pedestrians, and slow turning speeds

CONTINENTAL CROSSWALK STRIPING

(For all crosswalks in this context) Promotes the highest driver compliance and is the most visible of all crosswalk markings[9]

RECTANGULAR RAPID-FLASHING BEACON (RRFB)

Increases vehicle yielding compliance from 18% to 81%[14] and can reduce pedestrian crashes by 47%[15]

MID-BLOCK CROSSING

Facilitates safer crossings to places people want to go but that are not well served by the existing traffic network[16]

PEDESTRIAN-SCALE LIGHTING

Lower than street lamps, pedestrian-scale fixtures cast light on the sidewalks

SAMPLE SCENARIO
SAFETY AND OPERATIONAL CHALLENGES

Complimentary land uses should have pedestrian connectivity in the Traditional Town Center while the roadway should be in a state of good repair to support multimodal travel.

SAMPLE SCENARIO
COUNTERMEASURES AND DATA DRIVEN BENEFITS

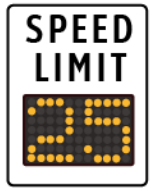
The original two-lane typical section with a two-way left-turn lane was in a state of disrepair, largely due to underground drainage issues. Sidewalks were not ADA compliant and a new shopping center lacked pedestrian connectivity, causing both operational and safety issues. Improvements were designed to provide a vehicular LOS of E, return fixed assets to a state of good repair, reduce crashes by 15%, and provide full pedestrian connectivity between major generators.

Context Driven Improvements

2019 – 2020

Recent Pedestrian Incident Response

- **Evaluating all appropriate pedestrian safety measures**
- **Re-visiting improvements previously implemented**



Speed Limit Reductions

Roadway Narrowing

Improved Lighting

Pedestrian Signals

Pedestrian Crosswalks

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May St/Rippling Brook Dr

- **Prioritizes pedestrian movements at a central corridor location**
- **New signal improves safety for pedestrians and motorists**
- **Establishes marked, signalized, and controlled intersection for improved safety**

MD 97 Corridor (Wheaton-Glenmont)

Arlington Rd

- Provides safer crossings for students attending Bethesda Elementary School
- Continental markings have highest visibility and promote the highest driver compliance

MD 187 Corridor (Bethesda)

I-495 to Cedar Ln

- Removed tripping hazards and signs obstructing sidewalks
- Repaired curbs and widened sidewalks to improve safety and mobility
- Review pedestrian and bicycle safety concerns with agency member, elected officials, and citizens

MD 187 Corridor (Bethesda)

White Flint

- **Improves safety around access point to White Flint Metro Station**
- **New crosswalks improve pedestrian safety along central corridor locations**
- **Continental markings have highest visibility and promote the highest driver compliance**

MD 355 Corridor (North Bethesda)

Rockville

- **Accessible Pedestrian Signals (APS) and Countdown Pedestrian Signals (CPS) improve pedestrian safety during crossings**
- **New ADA ramps improve accessibility along major corridor**

MD 355 Corridor (Rockville)

Woodmont

- **Worked collaboratively with community members to establish Pedestrian Safety Plan**
- **Potential projects include pedestrian signals, pedestrian beacons, and traffic calming measures**

MD 355 Corridor (Bethesda)

Our Commitment

Creating a…

✓ SAFE

✓ HIGH QUALITY

✓ EFFICIENT

…system for all Marylanders.

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THANK YOU!

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Questions?