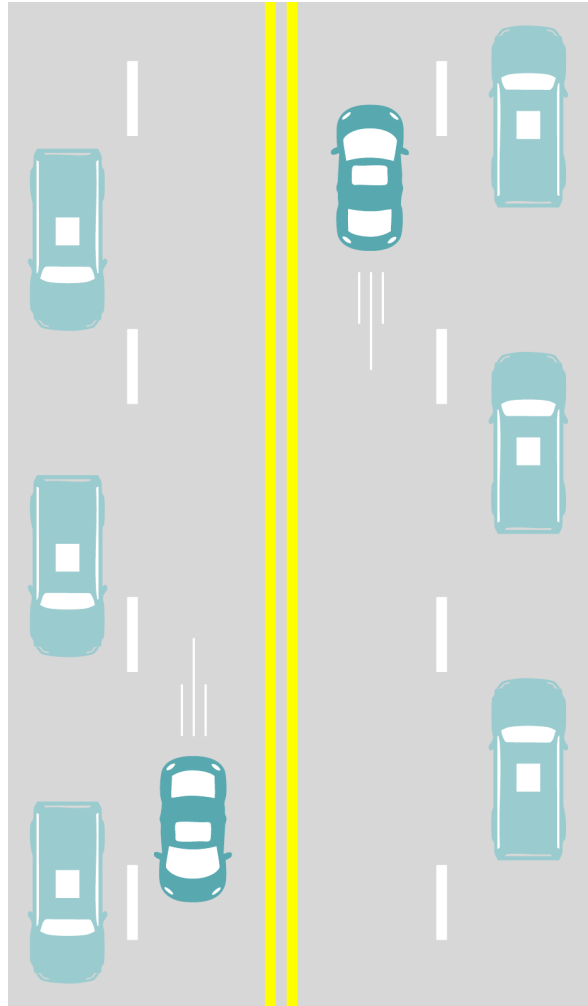


Traffic Operations

Traffic Capacity Considerations

Some aspects of traffic capacity can be counter-intuitive. This includes a “diminishing return” when additional travel lanes are added to a street.

When there are two travel lanes in the same direction, frequently one of the lanes becomes the “slow lane” and the other lane becomes the “fast lane” which can create safety concerns with drivers weaving and speeding through traffic.



Benefits of Roadway Rightsizing

There are many benefits of converting streets from 4 or 5 lanes to 3-lanes - a process typically referred to as a “roadway rightsizing.”

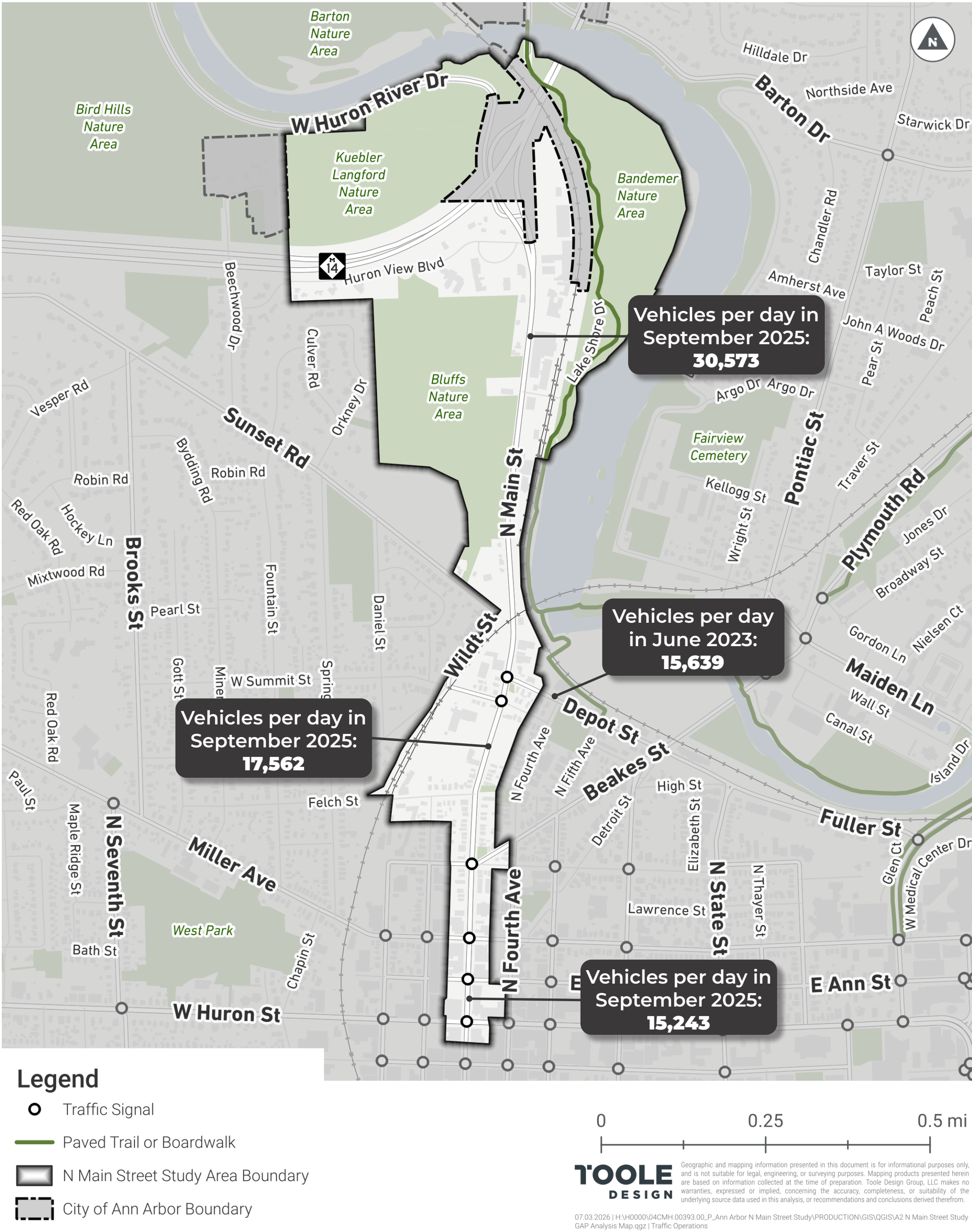
These include:

- Slowing motor vehicle travel speeds
- Reducing the number of lanes pedestrians have to cross
- Creating safer left-turn movements on and off of the street
- Creating space for pedestrian median refuge islands

Typical Thresholds for Roadway Rightsizing

There is no engineering standard that dictates when a roadway rightsizing is feasible or infeasible. Many agencies use a rule of thumb of 25,000 vehicles per day as a typical upper threshold where road diets function well.¹ A recent study of 5 road diet projects in Los Angeles with traffic volumes ranging from 24,000 to 28,000 vehicles per day found they had significant reductions in speeds and crashes with minimal increases in motor vehicle travel times.²

¹ Source: FHWA, “Road Diet Informational Guide.” (2014).
² Source: Venegas et al., “Analyzing the Safety and Speed Effects of High-Traffic-Volume Road Diets.” (2024).



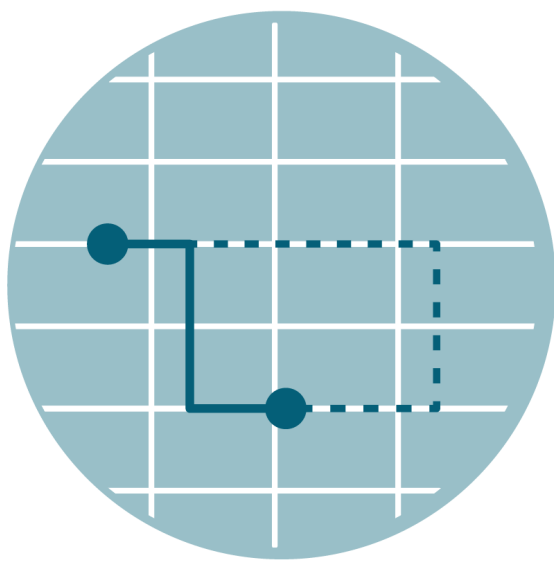
Potential Travel Time Changes

If North Main Street is redesigned as a 2 or 3-lane street instead of the 4 or 5 lane street it is today, we expect the travel time impacts for people driving to be minimal.

There could be 5 minutes or less of additional travel time between M-14 and Depot Street during the peak morning and evening commutes.

Traffic Adaptation Strategies

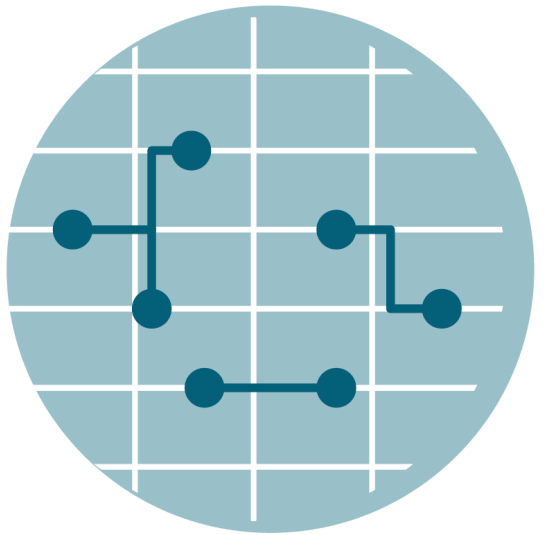
Traffic demand is malleable and responds to the infrastructure provided and the overall street network. When streets are redesigned with less motor vehicle capacity, people adapt using one or more of these strategies.



Route Change



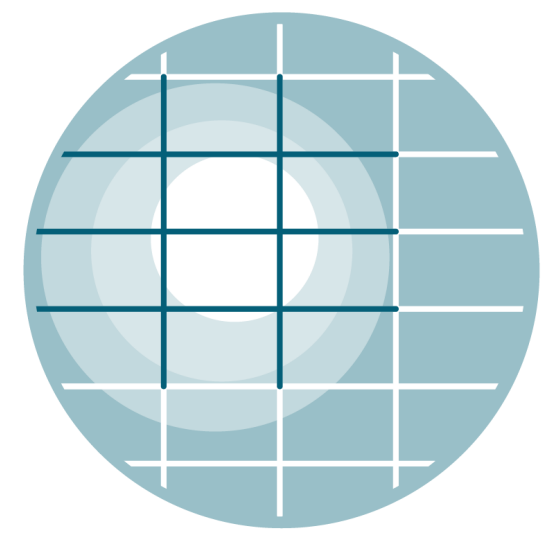
Time Shift



Trip Length Change



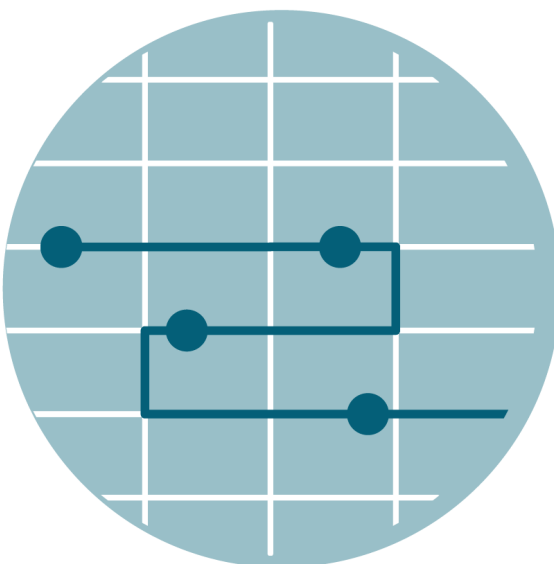
Trip Substitution



Proximity Shift



Mode Change



Trip Chaining