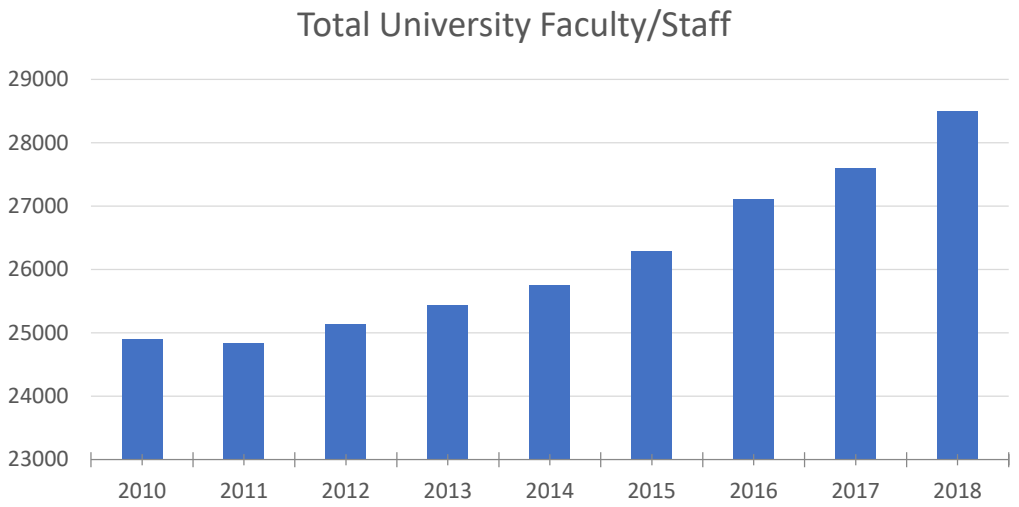
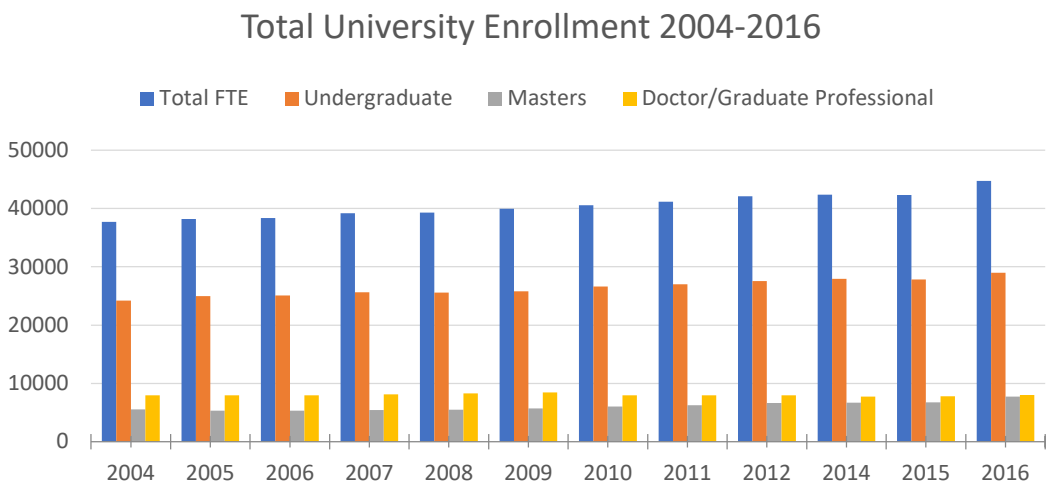
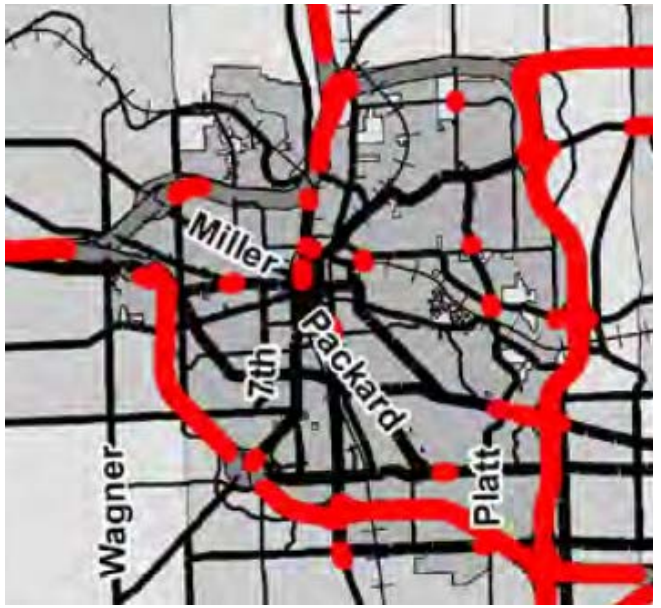
MOBILITY MATTERS

Sharing, Surveying, and Surviving


Total University Faculty/Staff
29000
28000
27000
26000
25000
24000
23000
2010
2011
2012
2013
2014
2015
2016
2017
2018


Total University Enrollment 2004-2016
Total FTE
Undergraduate
Masters
Doctor/Graduate Professional
50000
40000
30000
20000
10000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2014
2015
2016



2015
Congestion
Forecast Map

2045
Congestion
Forecast Map

MOBILITY BY THE NUMBERS

Daily Commuting

TRAVEL DELAY AND VMT

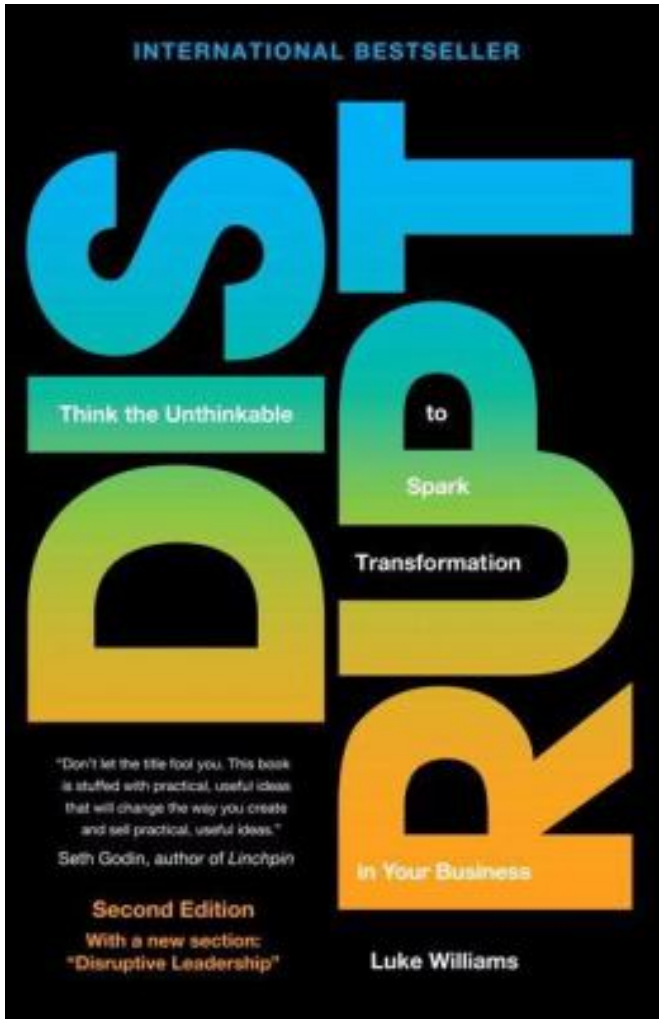
	2015	2045	Percent Change
AM Peak VMT	1,673,688	1,771,954	6%
AM Peak VHT	42,688	47,510	11%
AM Peak Total Delay (Hours)	7,034	10,122	44%
AM Peak Per Capita Delay (Minutes)	1.18	1.53	30%
PM Peak VMT	3,270,576	3,445,752	5%
PM Peak VHT	83,157	92,012	11%
PM Peak Total Delay (Hours)	14,336	19,737	38%
PM Peak Total Delay (Minutes)	2.40	2.99	25%

MOBILITY BY THE NUMBERS

Daily Commuting

PARAMETER	MICHIGAN	ANN ARBOR
Pavement Condition (% good or better)	21	36
Daily Population Expansion (several city range)	1.10- 1.34	1.74
Mean Commuting Time (minutes)	25.2	20.4
Drive Alone (%)	83	54
Use Transit (%)	2	11
Carpool (%)	8	8
Bike (%)	0	5
Walk (%)	2	20
Work at Home (%)	3	3 – 7

DISRUPTIVE INFLUENCES



ANN ARBOR CONNECTED VEHICLE TEST ENVIRONMENT

Spin scooters to roll in Ann Arbor as city ditches Bird

Updated Apr 19, 2019; Posted Apr 16, 2019

courtesy of Spin, Inc.

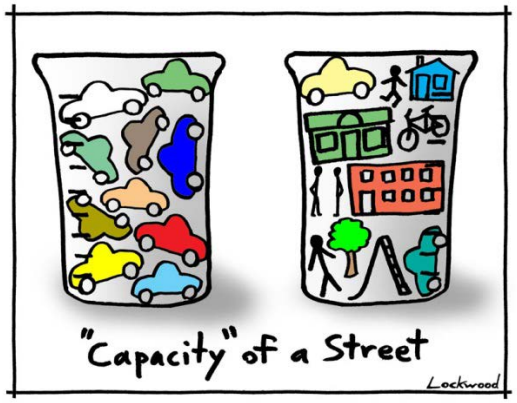
Ann Arbor approved an agreement with Spin to deploy scooters in the city. (courtesy of Spin, Inc.)

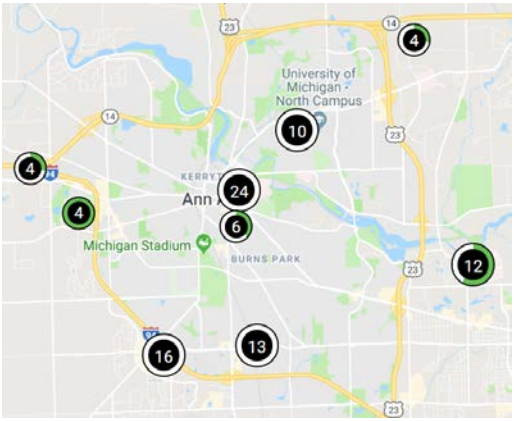
MOBILITY COMMITMENTS

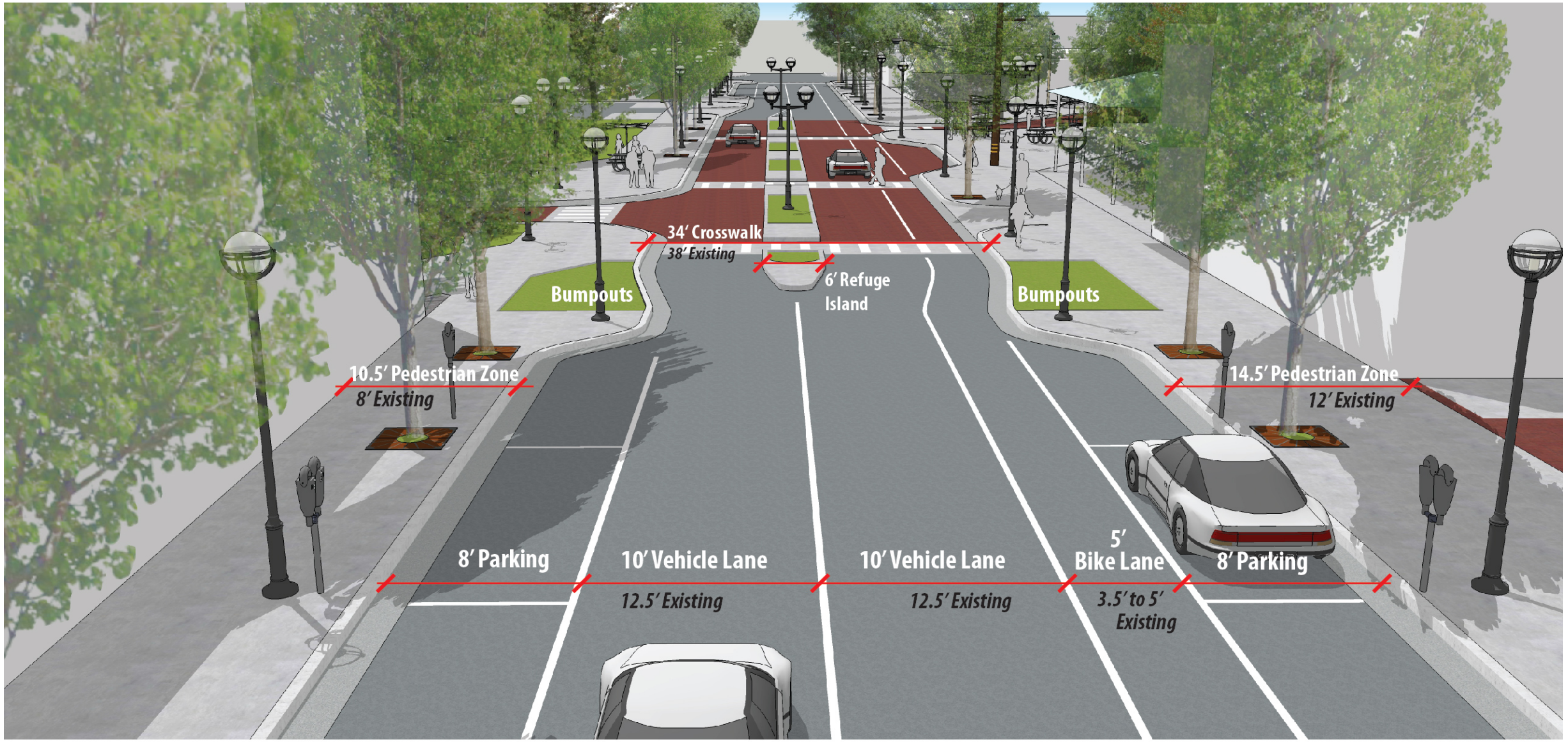
- **The Complete Streets/Vision Zero Commitment:**
  - Do we prioritize bike/pedestrian safety above speed of movement?
  - Do we have support to remove lanes of traffic and parking?
  - Are we building buffered and protected bike lanes?
  - Is our community prepared to pay for sidewalks?

- **The Carbon Neutrality Commitment:**
  - Are we supporting transit options?
  - Do we subsidize employee parking?
  - Does our community support increased density in its core?
  - Does our university have a neutrality pledge and if so how are they supporting it?
    - Do they subsidize parking?
    - Do their carbon calculations include transportation emissions?

- **The Safe Routes to School (SRTS) Commitment:**
  - What is the nature of our relationship with our school district?
  - Does the school district have a financial interest in SRTS?
  - How do students get to school?
  - How effectively do we coordinate mobility with AAPS plans?



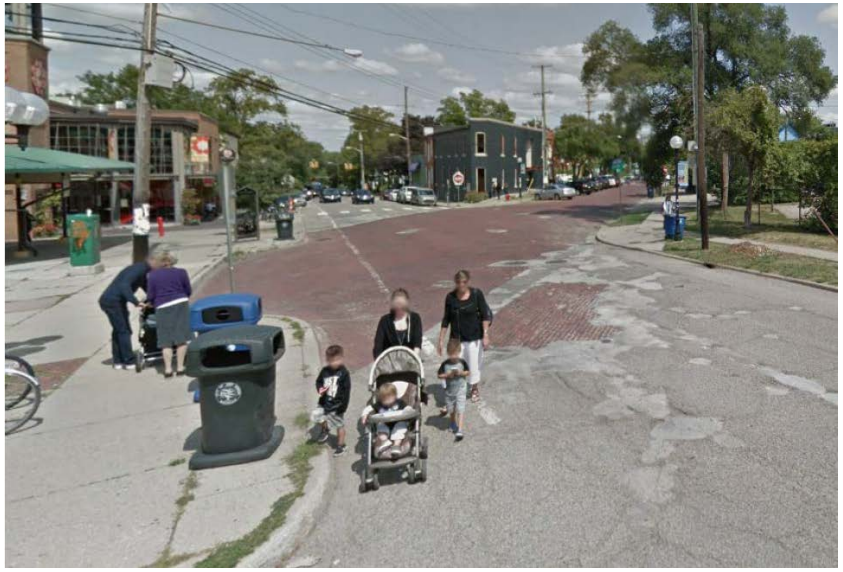




5TH & DETROIT STREET DESIGN

CONCEPTUAL LAYOUT

5th and Detroit Project - How did design & engineering affect behavior?



Before Study:

50% of people crossed with a vehicle present.

Of those:

- 52% of people were prevented from crossing because the car driver did not stop

In total 72% of people were able to cross because there was no car present or the driver stopped

After Study:

42% of people crossed with a vehicle present.

Of those:

- Only 3% of people were prevented from crossing because the car driver did not stop

In total nearly 99% of people were able to cross because there was no car present or the driver stopped

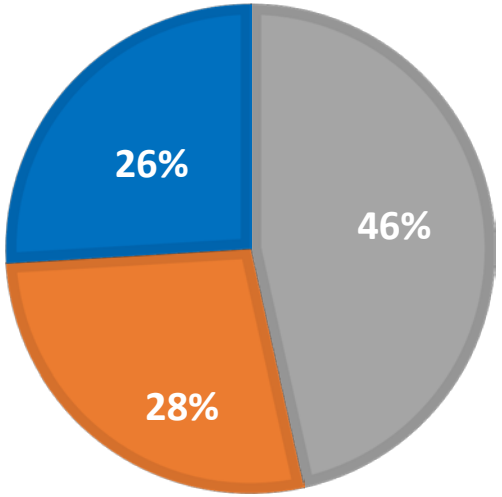
Before Improvements:

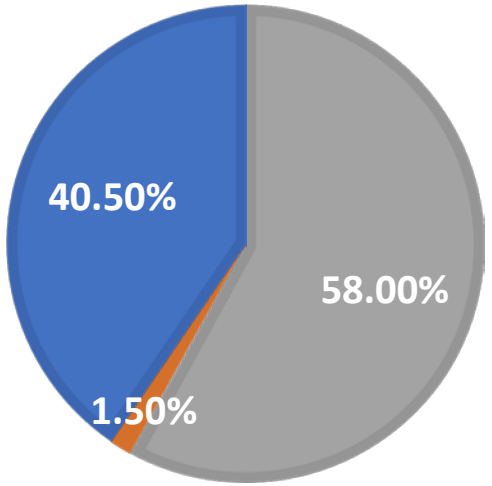
After Improvements:

Legend

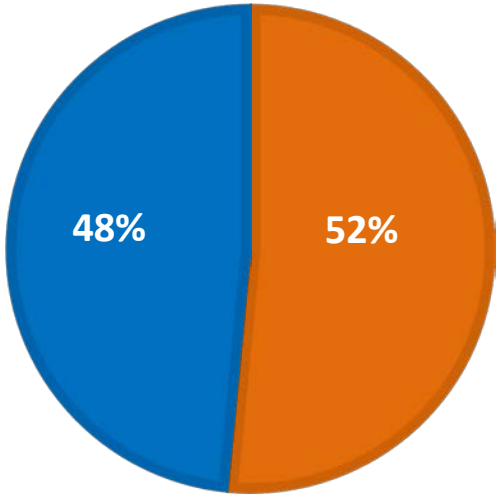
- Crossed Without a Vehicle Present
- Driver Did Not Stop
- Driver Stopped

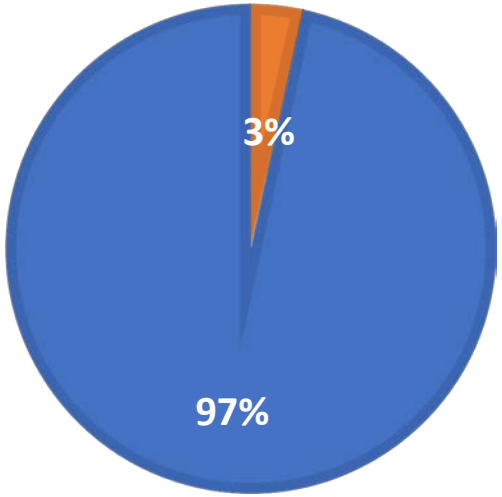
All Crossing Conditions



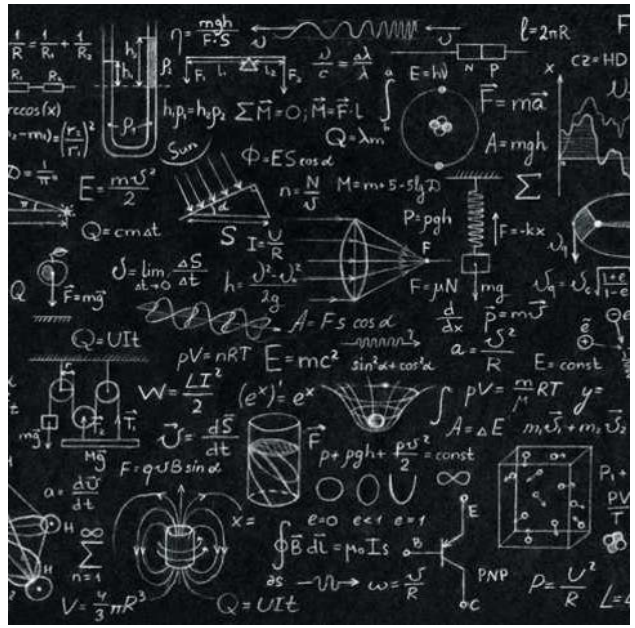


Crossing With a Vehicle Present





PERFORMANCE MEASURES



What are our standards?

Industry best practices

Peer city comparisons

Community surveys

Where does our data live?

City systems

Third party databases

What's the math?

Reliable (Is it accurate?)

Reproducible (Is it precise?)

Relevant (Who cares?)