



Route 30 in St. Louis - Impact of Road Diets with Signal Optimization

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Presenters



Matthew Volz, PE
HDR Project Manager
matthew.volz@hdrinc.com



Eddie Watkins Jr.
Senior Traffic Studies Specialist
MoDOT St. Louis District
Eddie.Watkins@modot.mo.gov



01 Route 30 Basics

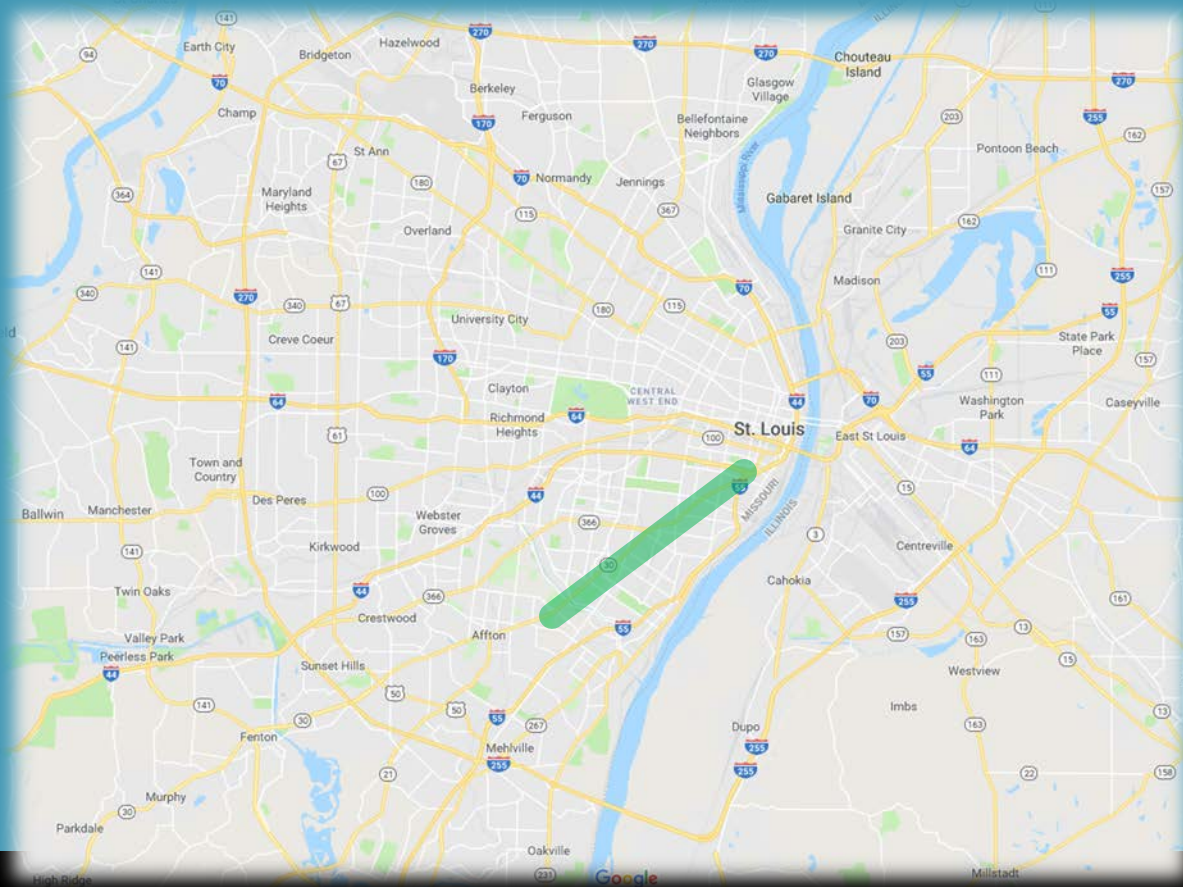
02 What was Done?

03 Results



01

Route 30 Basics



- 6 MILES
- 29 SIGNALIZED INTERSECTIONS
- ODD CONFIGURATIONS
- “ROAD DIET?”
- WHAT ROAD DIET?”

Route 30 Corridor in St. Louis, MO

MO Route 30 (Gravois Road)

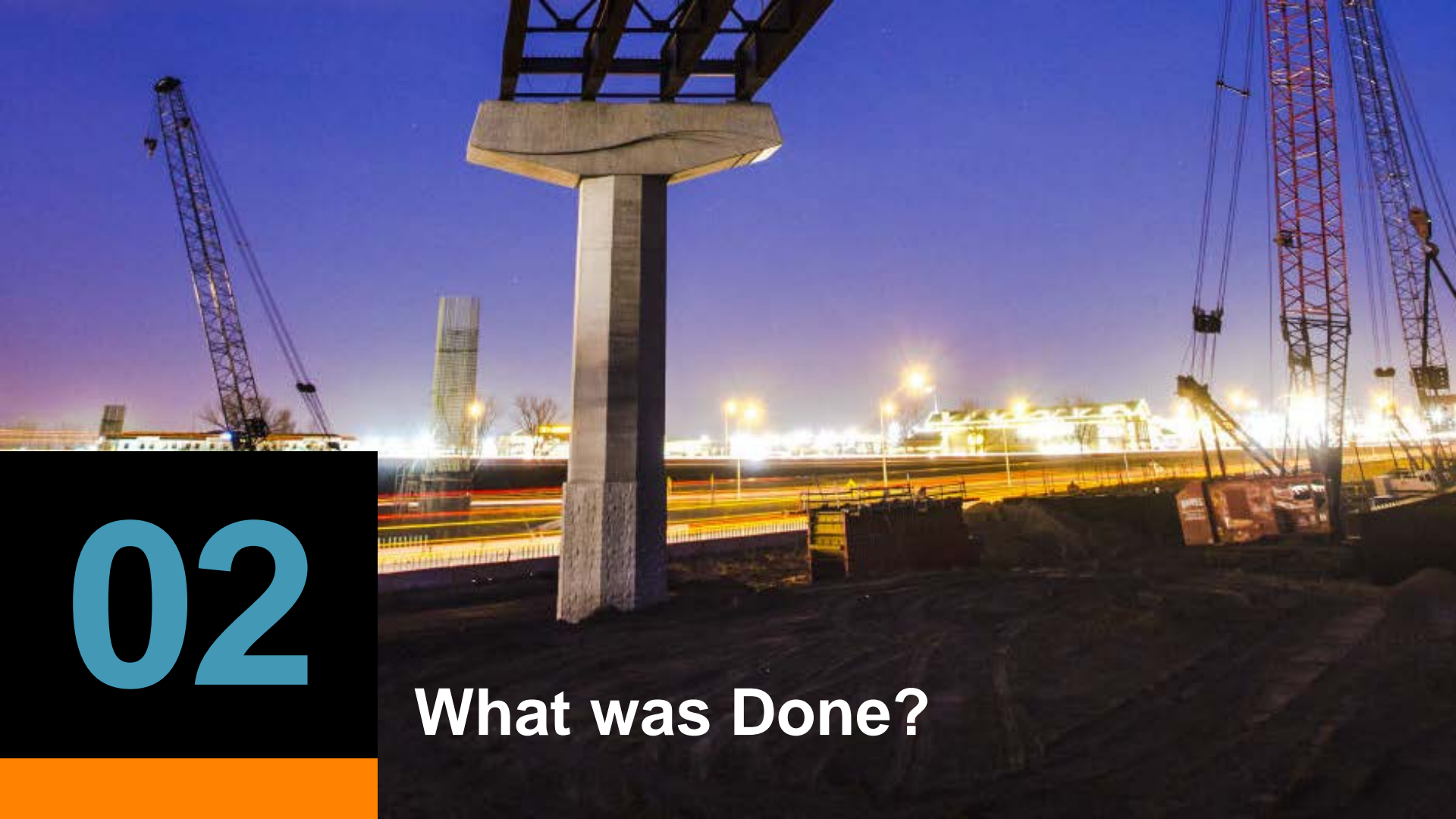
- 29 intersections with signals
- 37 separate signalized intersections



GRAVOIS & MORGANFORD



Route 30 Corridor in St. Louis, MO



02

What was Done?

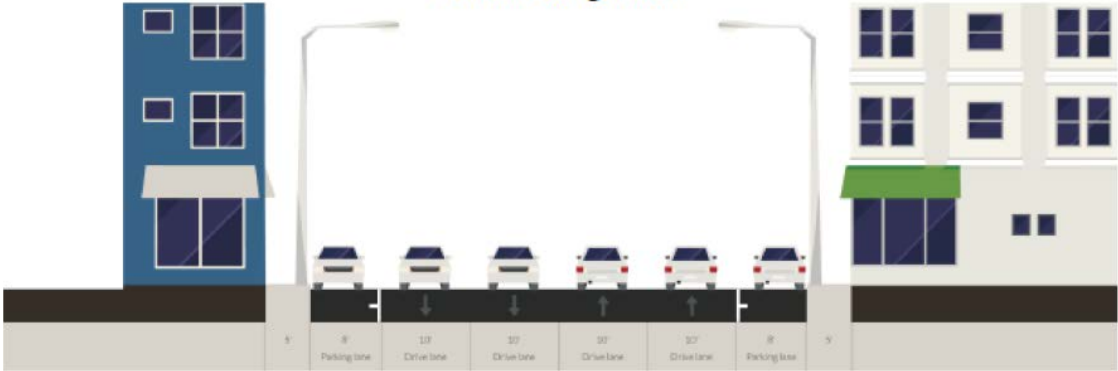
WHAT WAS DONE? ROAD DIET (WAIT, WHAT?)

- 2016-2017
- NEW OVERLAY
- CURBS, ISLANDS
- FLASHING PED
- BIKE LANES
- TURN LANES
- AND LOTS OF STRIPING...

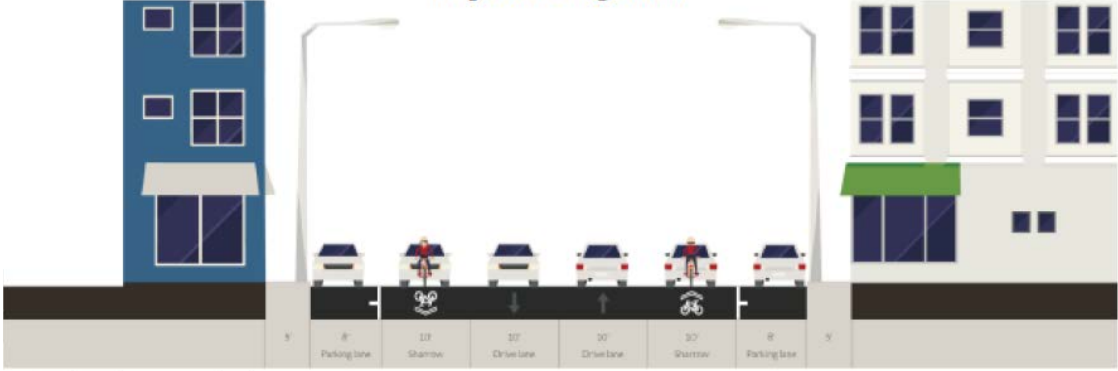


CHIPPEWA TO GRAND

Current Configuration

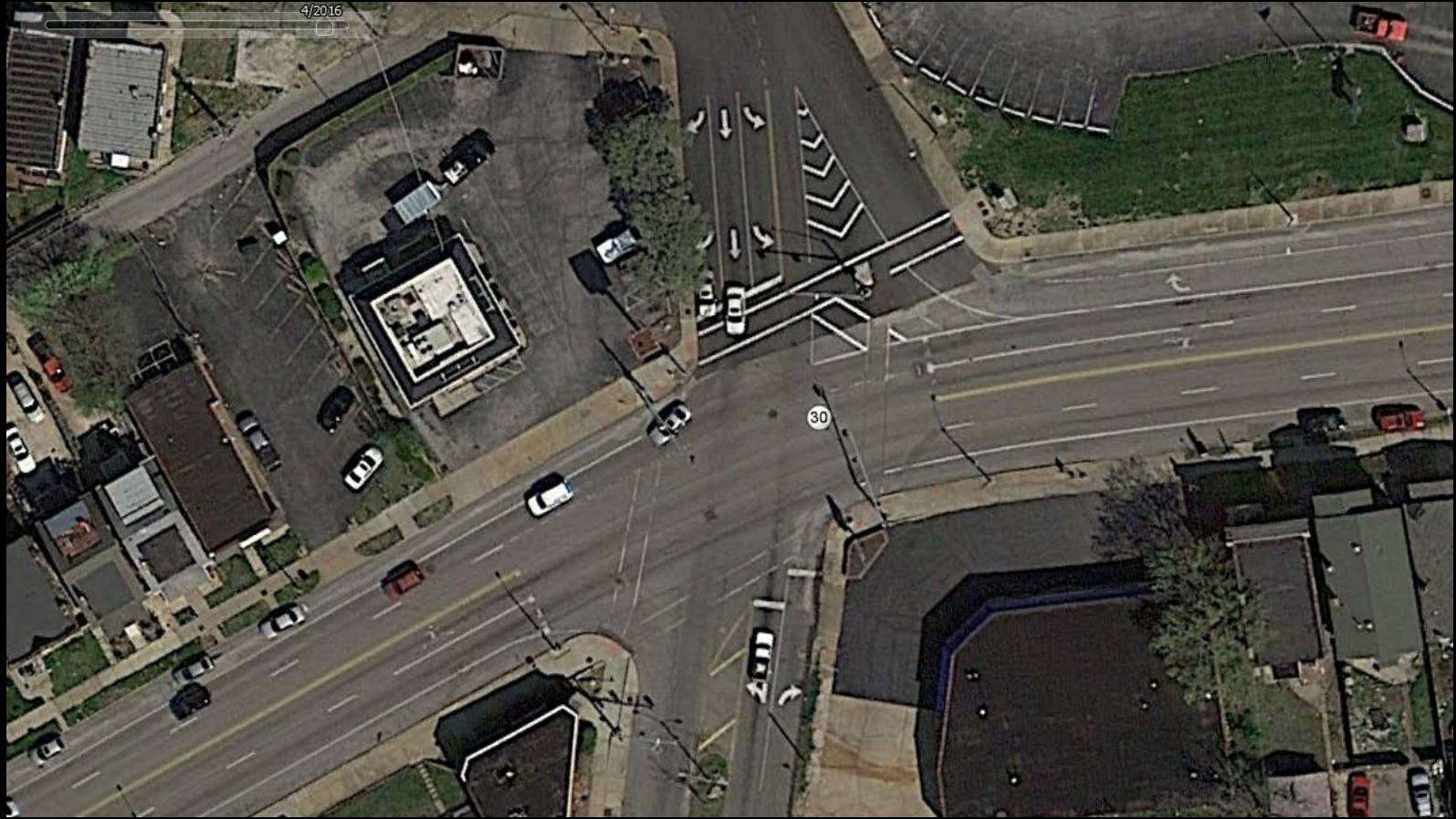


Proposed Configuration



WHAT WAS DONE?
ROAD DIET

4/2016



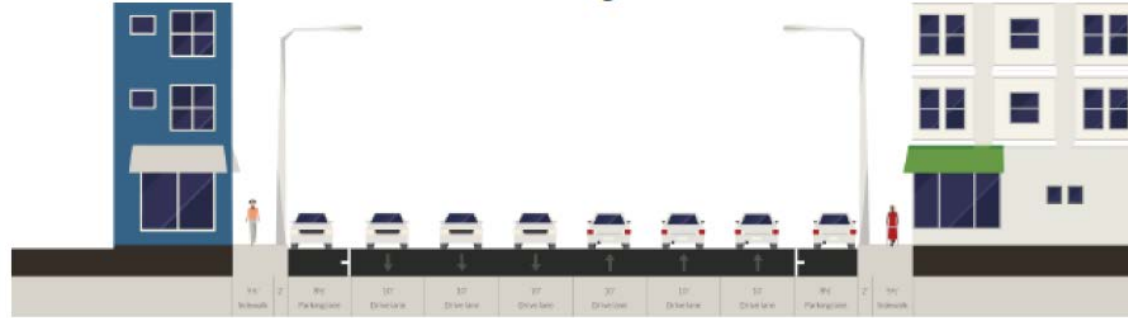
Route 30 Corridor in St. Louis, MO - BEFORE



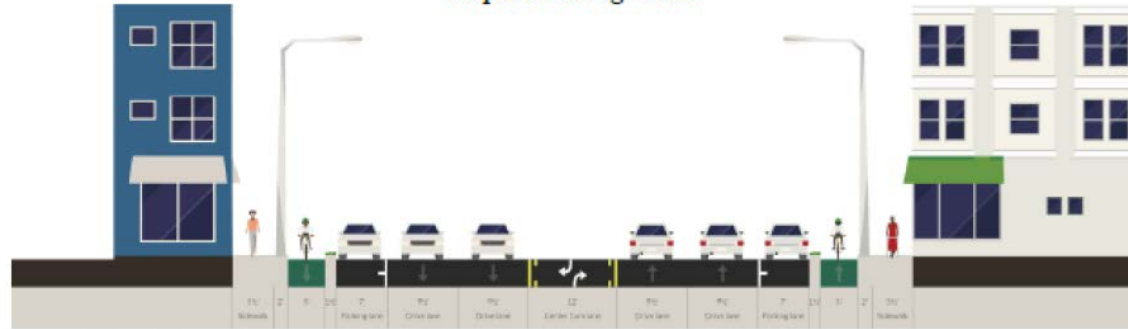
Route 30 Corridor in St. Louis, MO - AFTER

JEFFERSON TO RUSSELL

Current Configuration



Proposed Configuration



WHAT WAS DONE?
ROAD DIET



Route 30 Corridor in St. Louis, MO - BEFORE



Route 30 Corridor in St. Louis, MO - AFTER



Google

Image capture: Apr 2012 © 2018 Google United States Terms Report a problem

Route 30 Corridor in St. Louis, MO - BEFORE



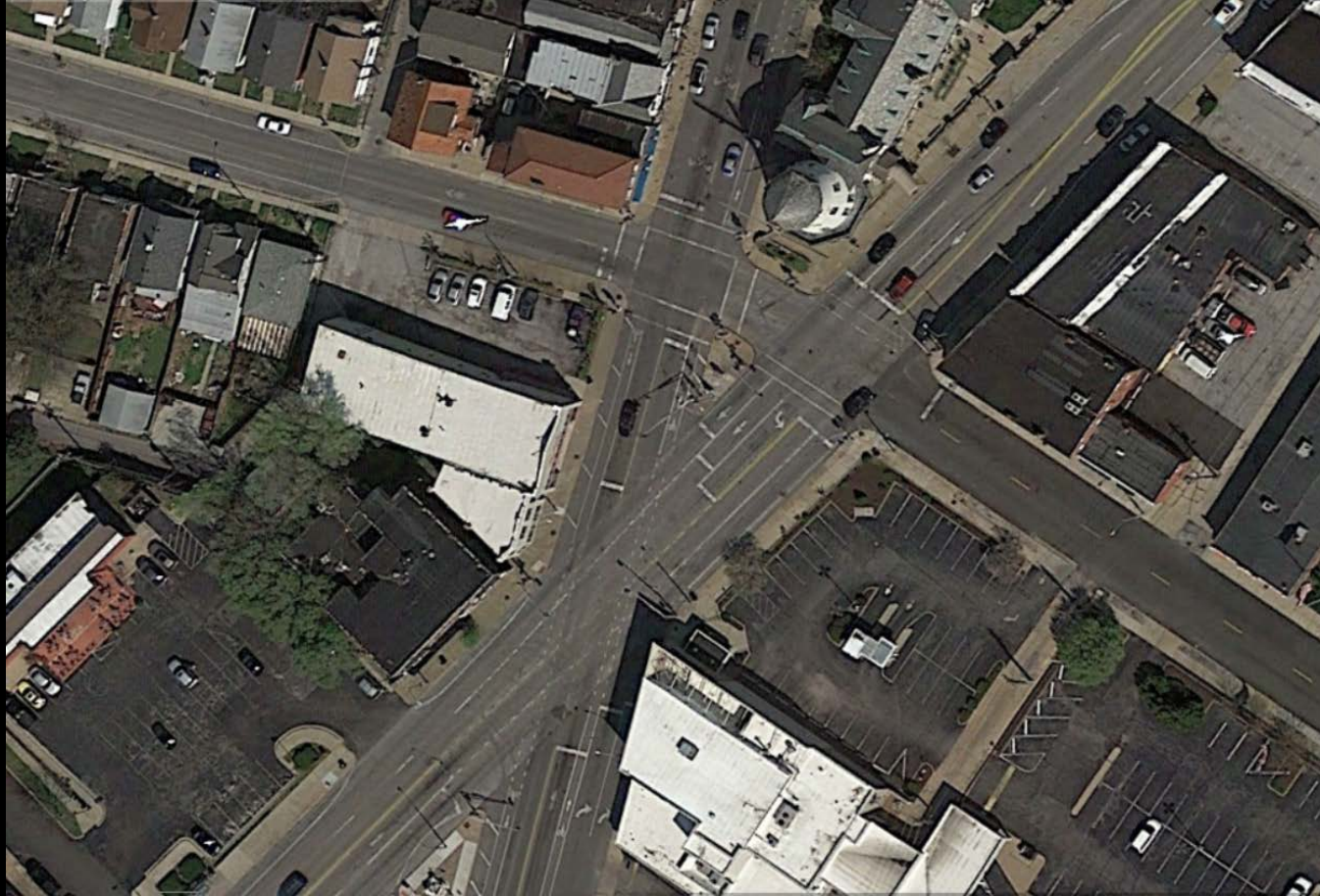
Route 30 Corridor in St. Louis, MO - AFTER



Route 30 Corridor in St. Louis, MO - BEFORE



Route 30 Corridor in St. Louis, MO - AFTER



Route 30 Corridor in St. Louis, MO - BEFORE



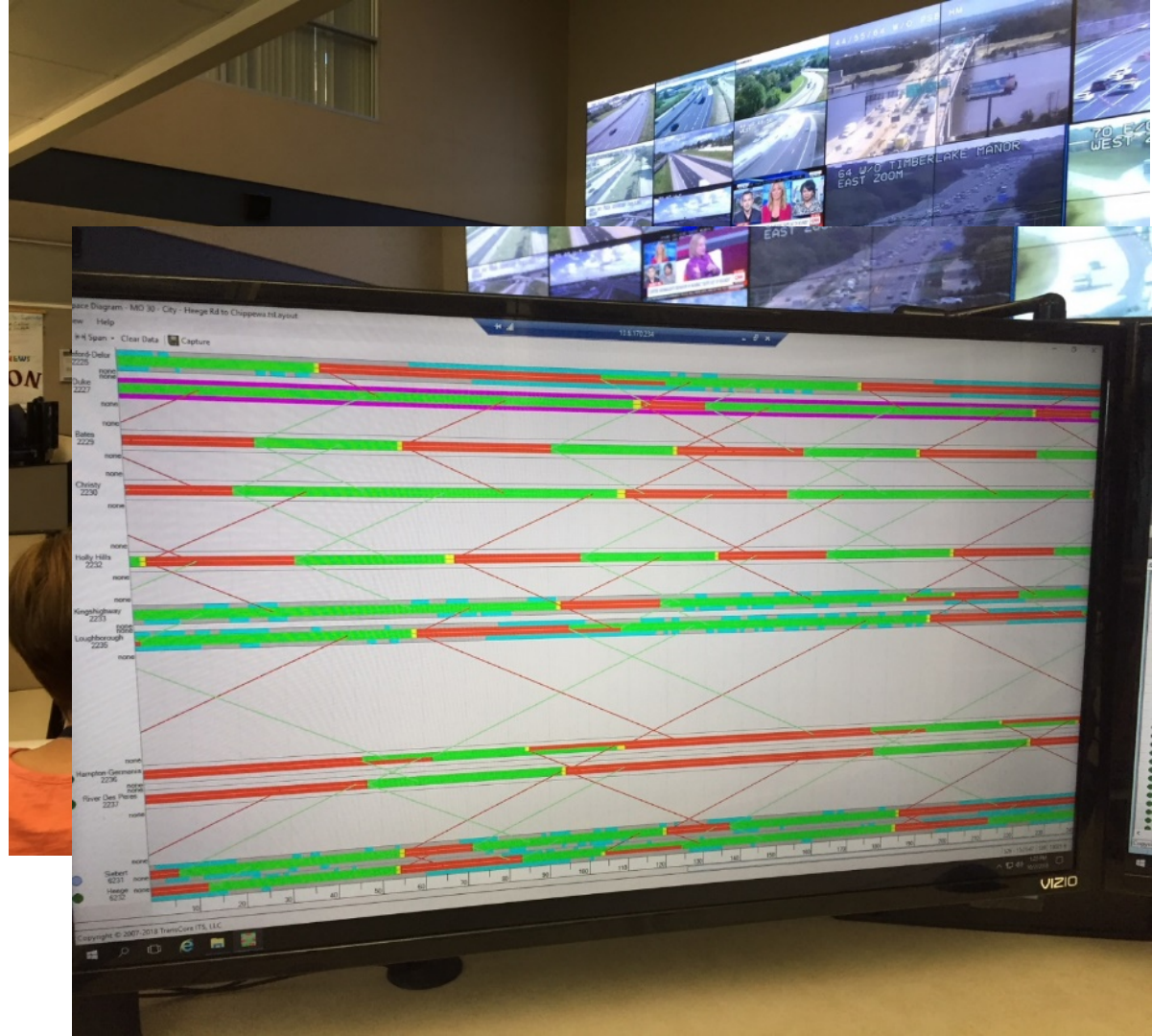
Route 30 Corridor in St. Louis, MO - AFTER



WHAT WAS DONE? SIGNAL OPTIMIZATION

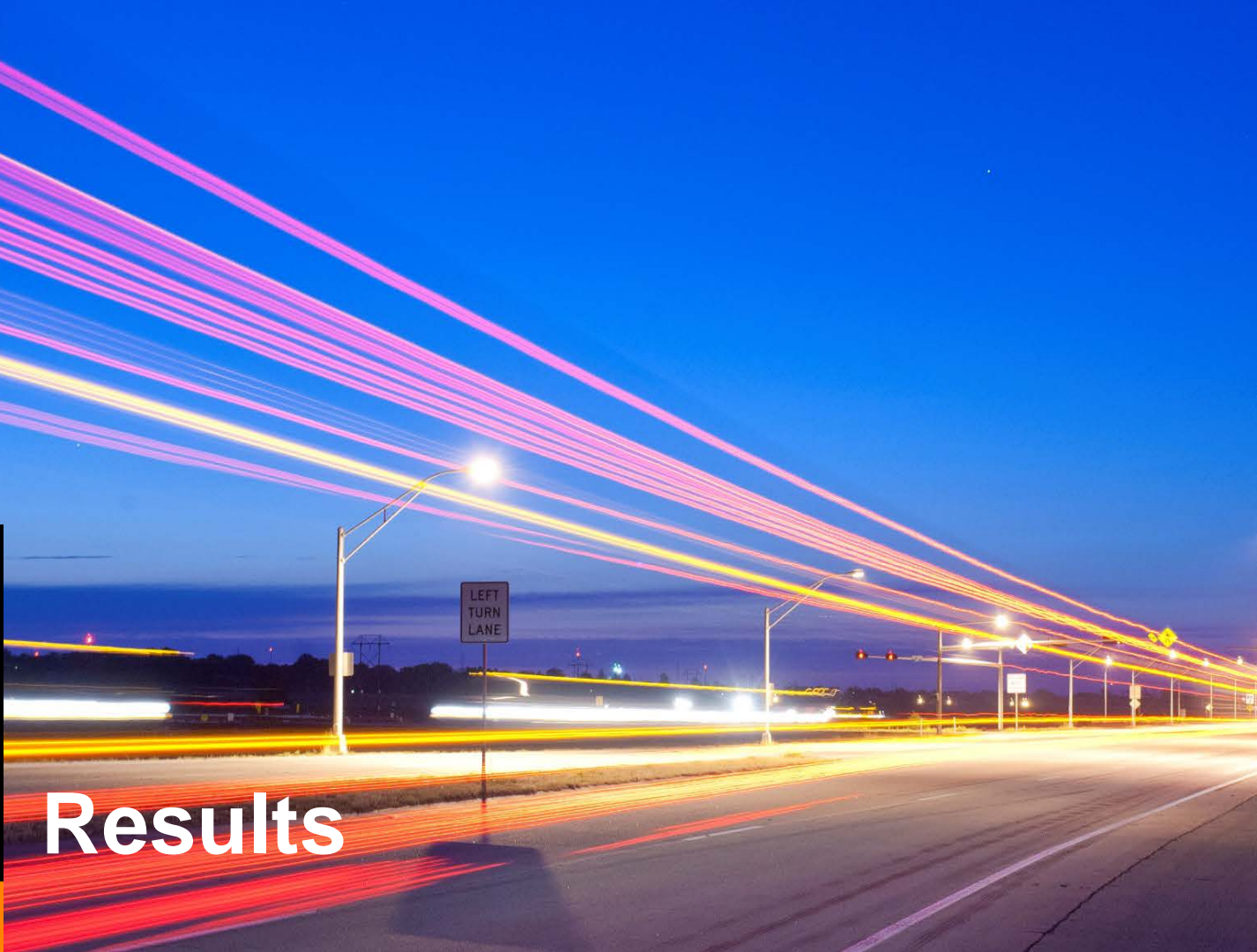
- Optimize efficiency
- MoDOT's goal:
 - Maximize mainline green bands
 - Minimize intersection delays
- Data Collection post Road Diet
- Optimization using Synchro
- Implemented May 2018

WHAT WAS DONE? SIGNAL OPTIMIZATION



03

Results





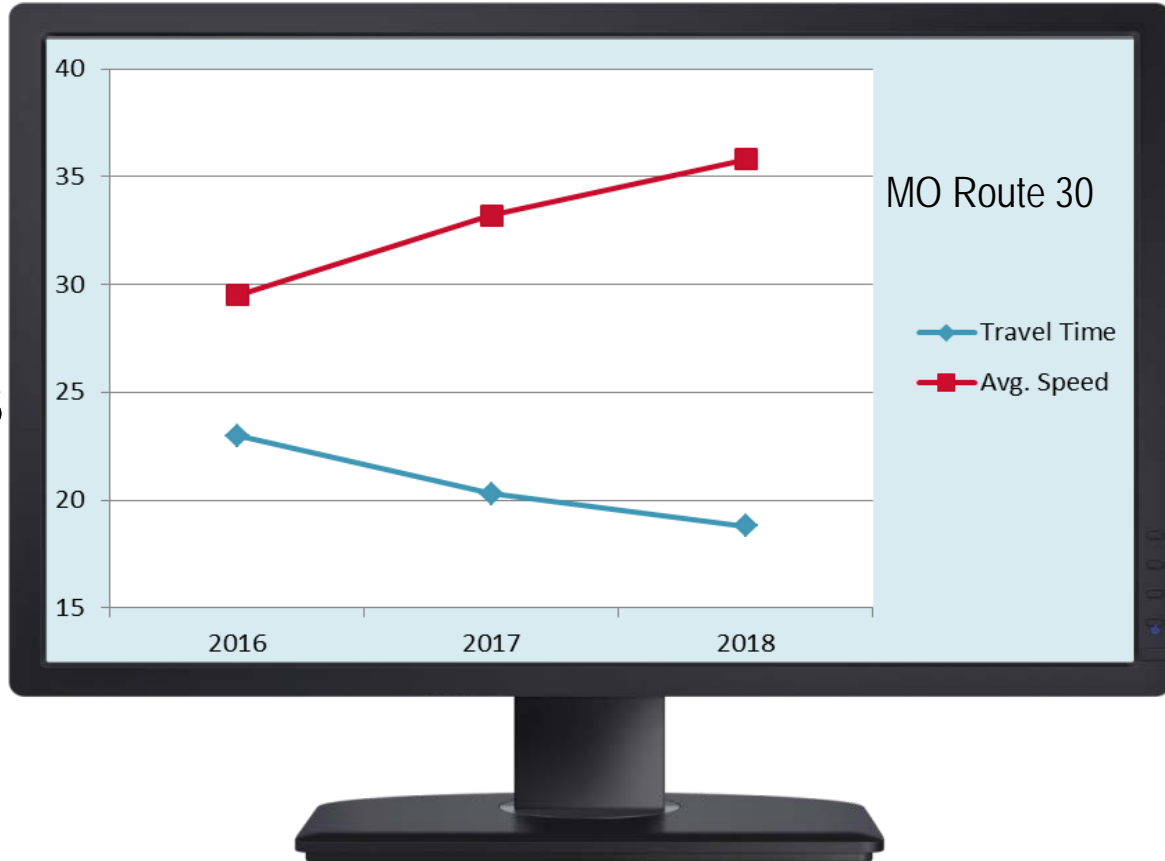
PROJECT METRICS

Public Reaction – MoDOT

- After optimization complaints decreased regarding signal coordination
- Drive thru commuters still like more vehicle lanes/locals prefer more multi-modal 'road for all'
- Elected officials want road diet for MO 115 citing traffic calming, improved efficiency

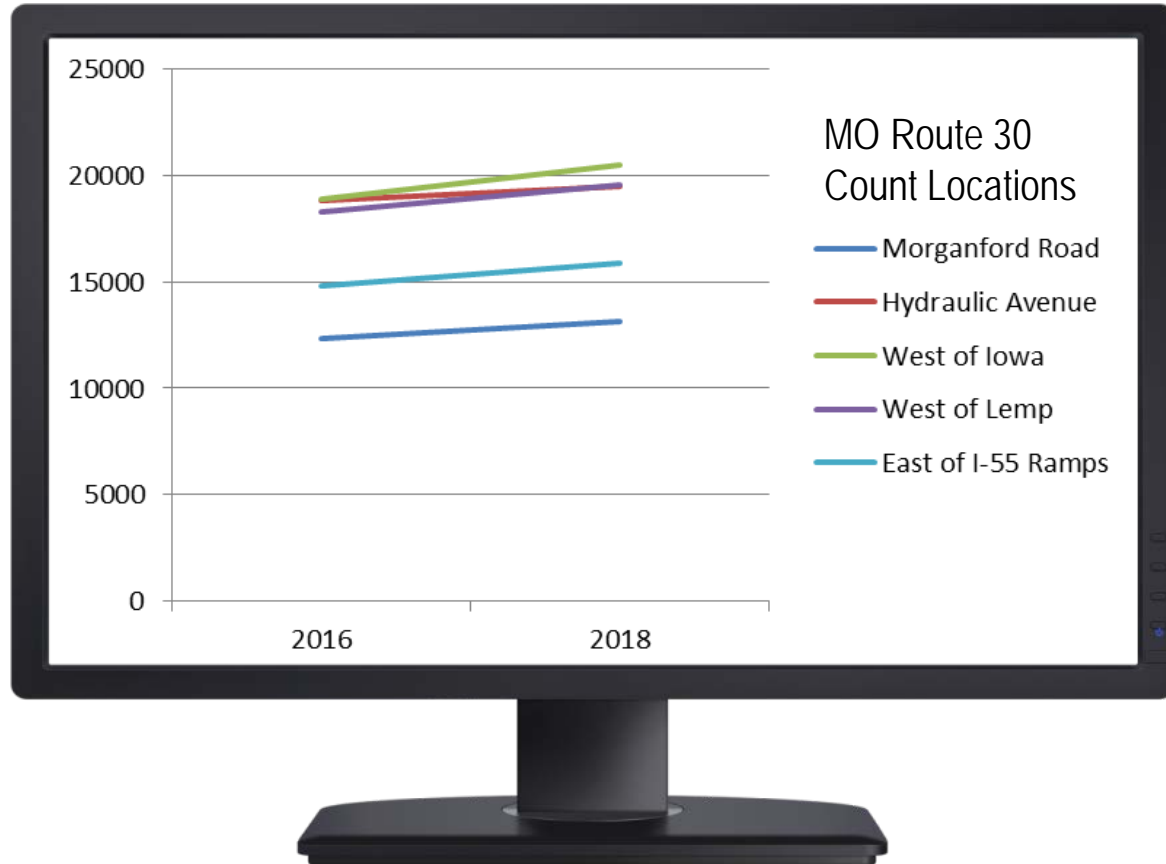
PROJECT METRICS

- Average Speed
 - Road Diet: +13%
 - Optimization: +8%
- Travel Time
 - Road Diet: -12%
 - Optimization: -7%



2016 ADWT vs. 2018 ADWT

PROJECT METRICS





PROJECT METRICS



Anecdotal Results:

- Bikers like it
- Commuters? Mixed
- Businesses - Deliveries easier with turn lanes
- Speed differentials decreased
- Annoyance factor decreased with center turn lanes

Conclusions

- Road Diets not as bad as people assume
- Signal Optimization is good... even better with a Road Diet
- Throughput: +5%
- Average speed: +21%
- Travel Time: -18%
- Applying to other routes

