



Origin:

Traffic Projects and Suitable Data Collection Procedures

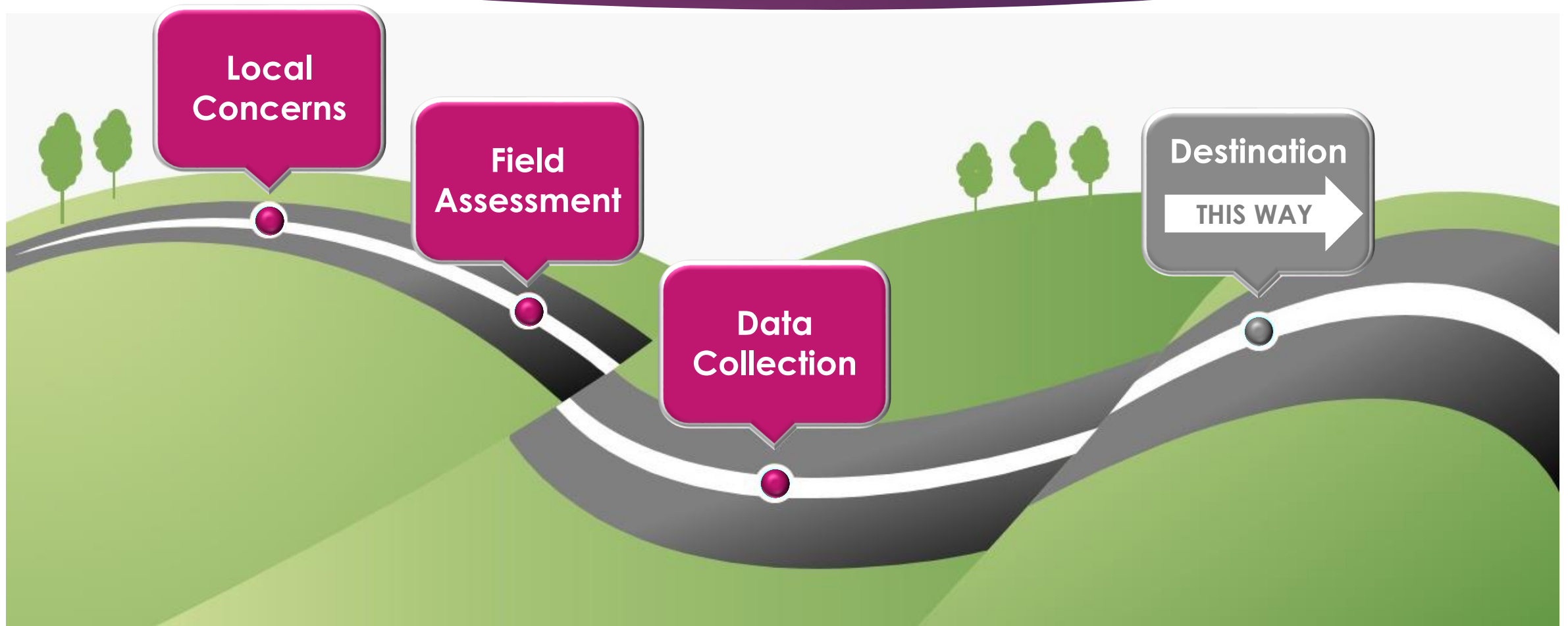
LINDSEY B. KLEIN

IMPERIAL TRAFFIC & DATA COLLECTION

Origin to Destination



Origin to Destination



Stakeholder Meeting

- ▶ Gather Local Input
 - ▶ County & township officials
 - ▶ Public works & maintenance
 - ▶ Police & emergency
 - ▶ Schools, hospitals, venues
- ▶ Intersection & Segment Con
- ▶ Complaints
- ▶ Budget Restrictions



June 12

Is the left turn signal on chapel and Haddon ave in cherry hill?
Is there ANY WAY to make the left turn onto Chapel longer? I counted- it's literally less than 15 seconds long and results in a back up...
If anyone has any information on how or who I can contact to have this looked into, please advise.
It's been bothering me for 4 years now and I'm ready to say something about it...
I've missed night time tuck-ins and getting to dinner on time because of this freakin light.



June 28

Does anyone have a rationale as to why the lights on Kresson right in front of Cherry Hill East are still turning red during non-school and summer hours? It's an additional 5-10 minutes of pointless traffic each way.



11 Comments

Field Visit

- ▶ Field check stakeholder comments
- ▶ Check exterior signal equipment
 - ▶ Signal heads & phasing
 - ▶ Field time
 - ▶ Pedestrian facilities
 - ▶ Regulatory signing
- ▶ Observe traffic





Your Partner in PUBLIC SAFETY

New Jersey Section of the
International Municipal Signal Association
Serving New Jersey and Pennsylvania
Since 1938

- ▶ Type of Controller
- ▶ Detection
- ▶ Communication
- ▶ Central System
- ▶ Time Clock
- ▶ Timing Inputs, Offsets
- ▶ Clearance Intervals
- ▶ What is hiding?

Certifications:

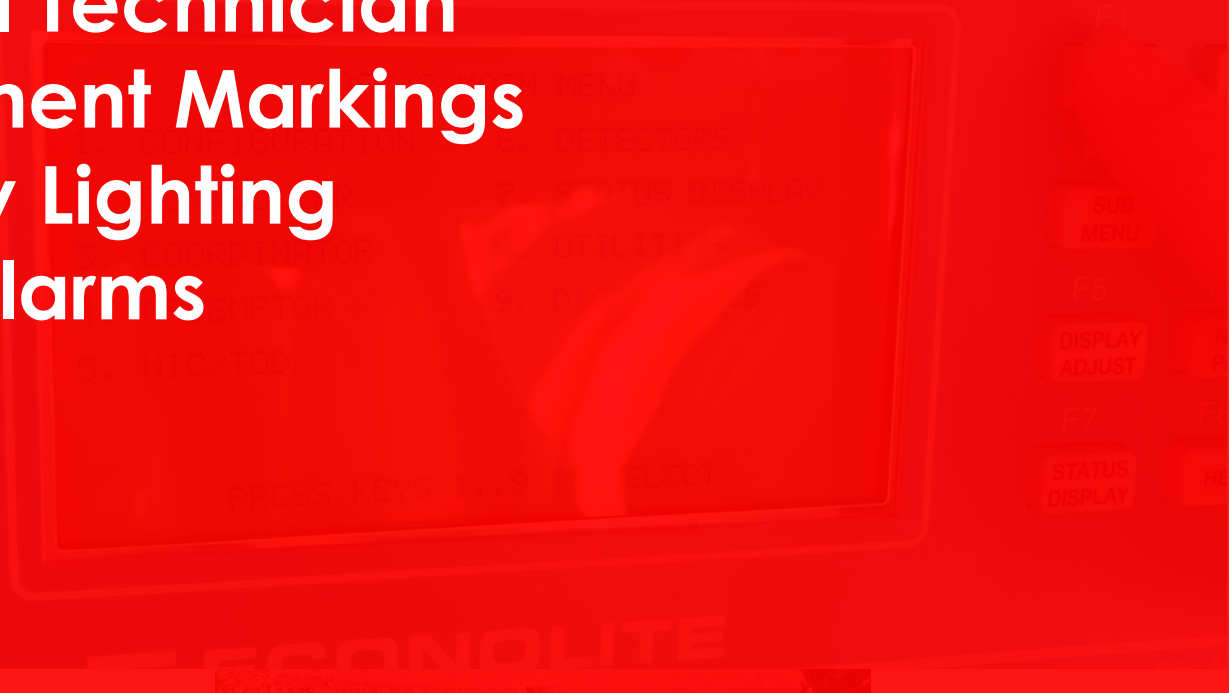
Workzone

Traffic Signal Technician

Signs & Pavement Markings

Roadway Lighting

Fire Alarms



Automatic Traffic Recorder Counts

- ▶ Average & Annual Daily Traffic
- ▶ Volume, Speed, Classification & Gap data
- ▶ Corridor Peak Periods
- ▶ Traffic Patterns Predictable?

▶ **Wavetronix HD Sensor**

▶ **BlackCat II**

▶ **Jamar Appolyon**

▶ **Metro**

▶ **Miovis**



**WAVETRONIX HD
RADAR BASED UNIT**

*OWNED & INSTALLED BY
SIGNAL CONTROL PRODUCTS*

**MIOVISION SCOUT
VIDEO BASED UNIT**

*OWNED & INSTALLED BY
IMPERIAL TDC*



**JAMAR TRAX CYCLES PLUS &
METROCOUNT ROADPOD VT
PNUMATIC TUBE UNITS**

*OWNED & INSTALLED BY
IMPERIAL TDC*

**JAMAR BLACK CAT II
RADAR BASED UNIT**

*OWNED BY JAMAR TECH
INSTALLED BY IMPERIAL TDC*

Imperial 
TRAFFIC & DATA COLLECTION

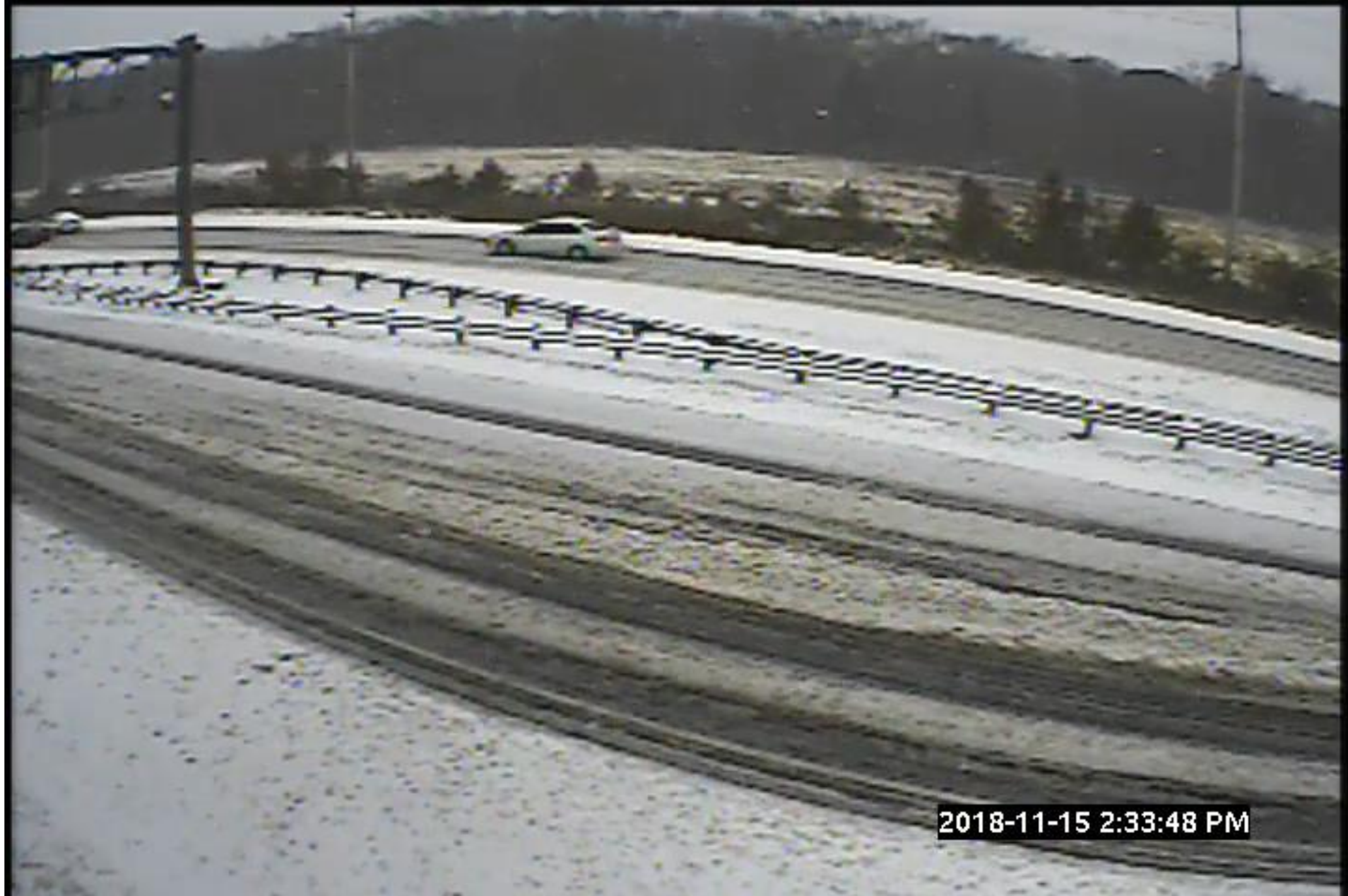
Thank you for your participation!





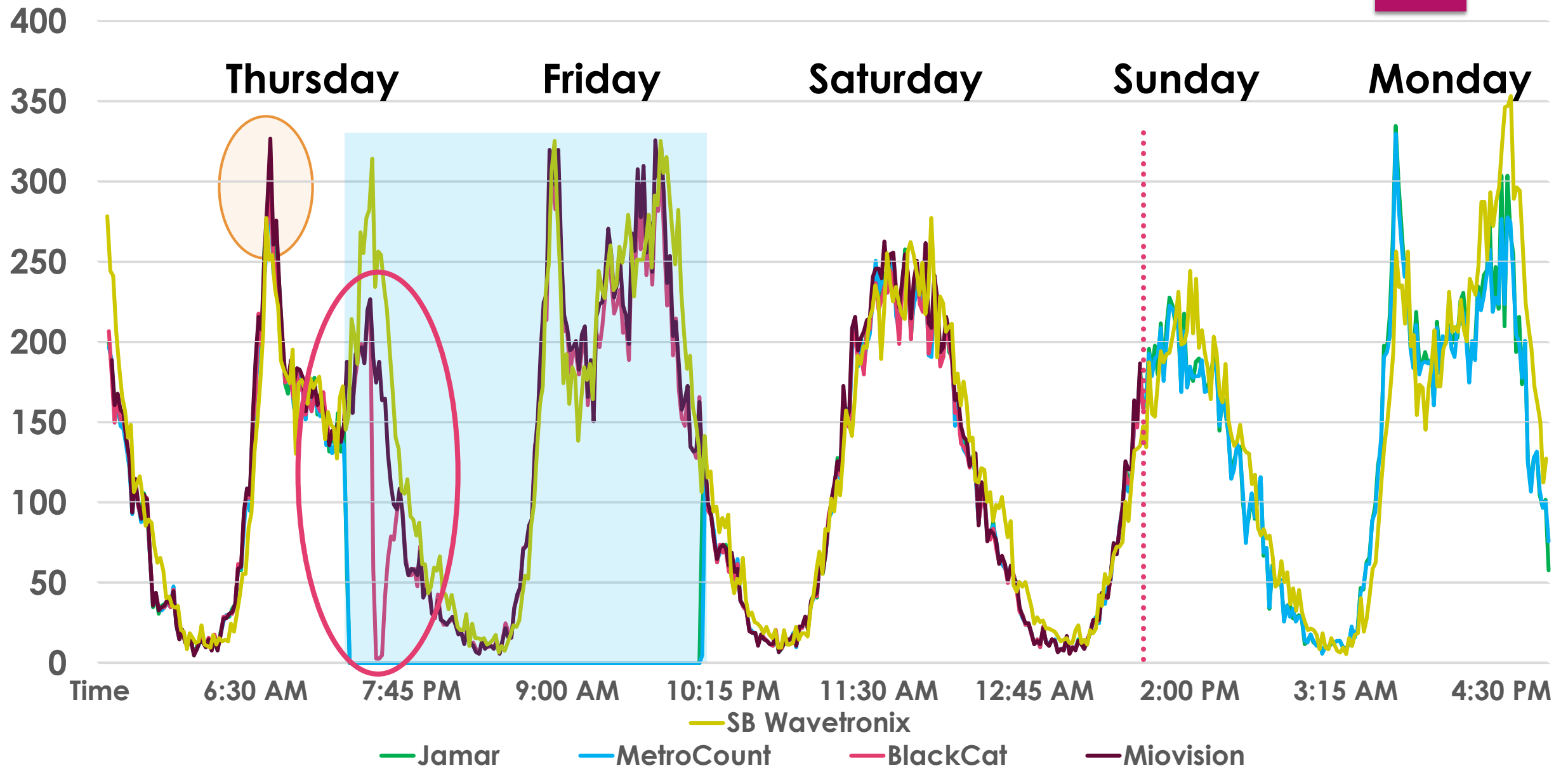
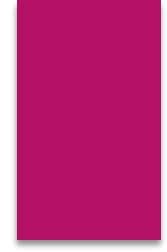




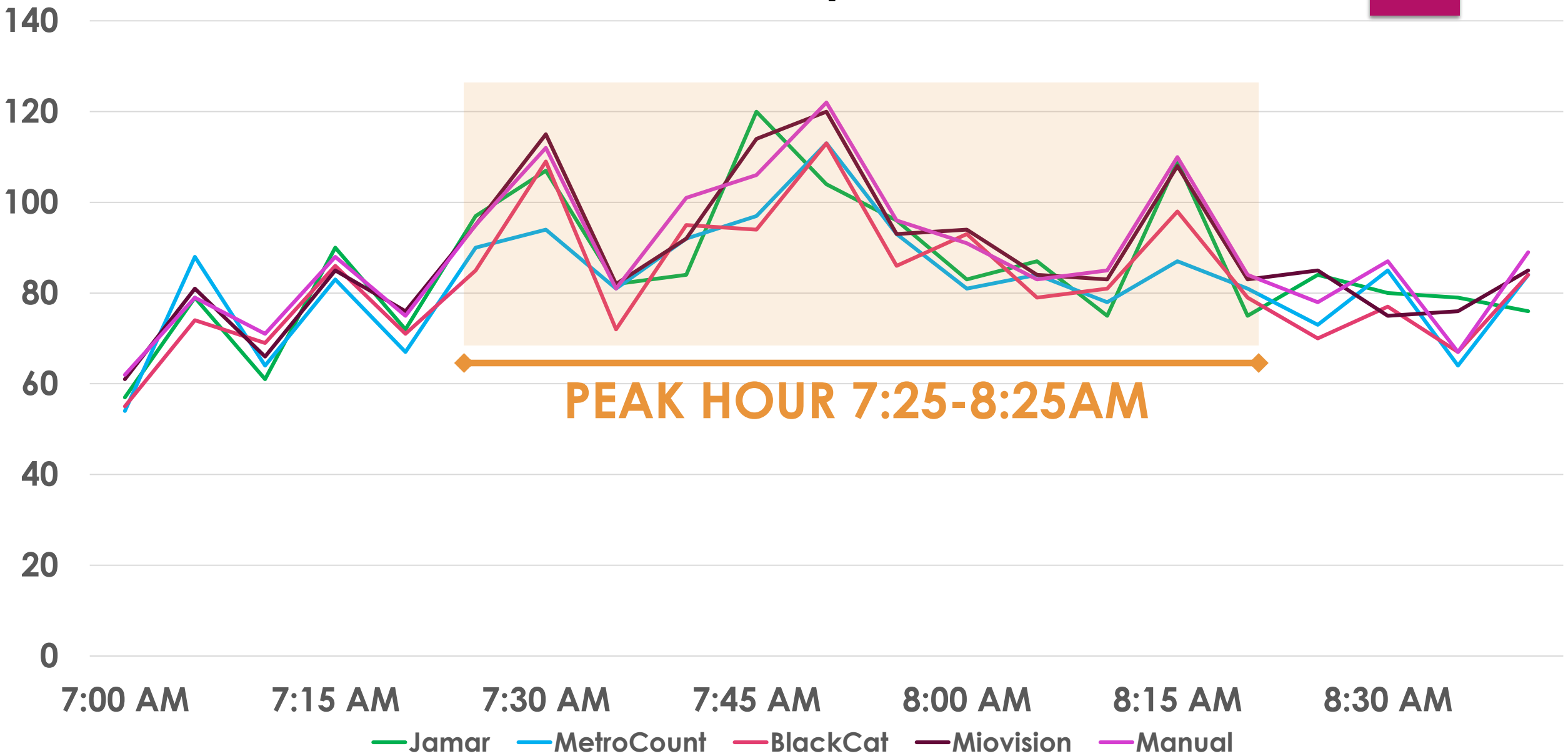


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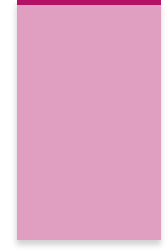
High Street, Burlington County ATR Comparison



High Street, Burlington County ATR Comparison



High Street, Burlington County ATR Comparison



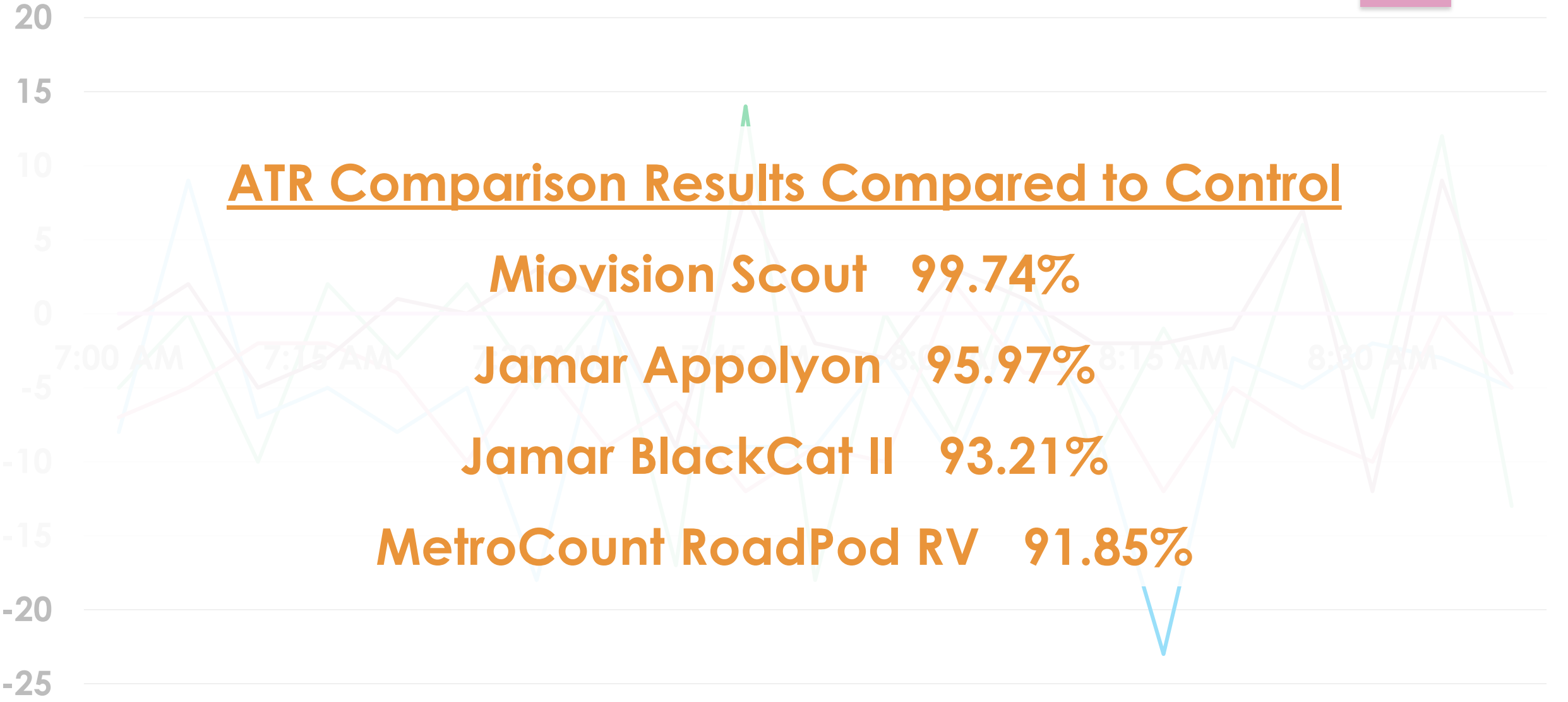
ATR Comparison Results Compared to Control

Miovision Scout 99.74%

Jamar Appolyon 95.97%

Jamar BlackCat II 93.21%

MetroCount RoadPod RV 91.85%



Jamar MetroCount BlackCat Miovision Manual

BRAND	JAMAR TRAX APPOLYON	METROCOUNT ROAD POD RV	JAMAR BLACKCAT II	WAVETRONIX HD RADAR	MIOVISION SCOUT
METHOD	PNUMATIC TUBE	PNUMATIC TUBE	RADAR	RADAR	VIDEO
SAFETY	INVASIVE	INVASIVE	NON-INVASIVE	NON-INVASIVE	NON-INVASIVE
SETUP TIME	45 MINUTES	45 MINUTES	20 MINUTES	60 MINUTES	15 MINUTES
COSTS	\$1,400	\$1,345	\$4,500	\$9,000	\$5,000
ADDITIONAL COSTS	\$	\$	\$	\$	\$\$\$
LANE CAPACITY	4 LANES BI-DIRECTIONAL	2 LANES BI-DIRECTIONAL	2 LANES BI-DIRECTIONAL	250' RANGE 22 LANES BI-DIRECTIONAL	175' RANGE 6 LANES BI-DIRECTIONAL
CLASSIFICATION	13	13	13	8	7
SPEED	YES	YES	YES	YES	NO
GAP	YES	YES	YES	YES	ENDING 3/31/2019
BATTERY	LITHIUM 2 YEARS	LITHIUM 2 YEARS	LITHIUM 10-14 DAYS	MARINE 10 DAYS	BATTERY PACK 7 DAYS

Turning Movement Counts

- ▶ Project needs
- ▶ Modeling & signal timing
- ▶ Warrant analyses
- ▶ Approach demand
- ▶ Classification or specialty data

- ▶ **Field Count**
 - ▶ **Miovision**
- ▶ **Counting Cars**
 - ▶ **Ulytic**
- ▶ **Data from Sky**

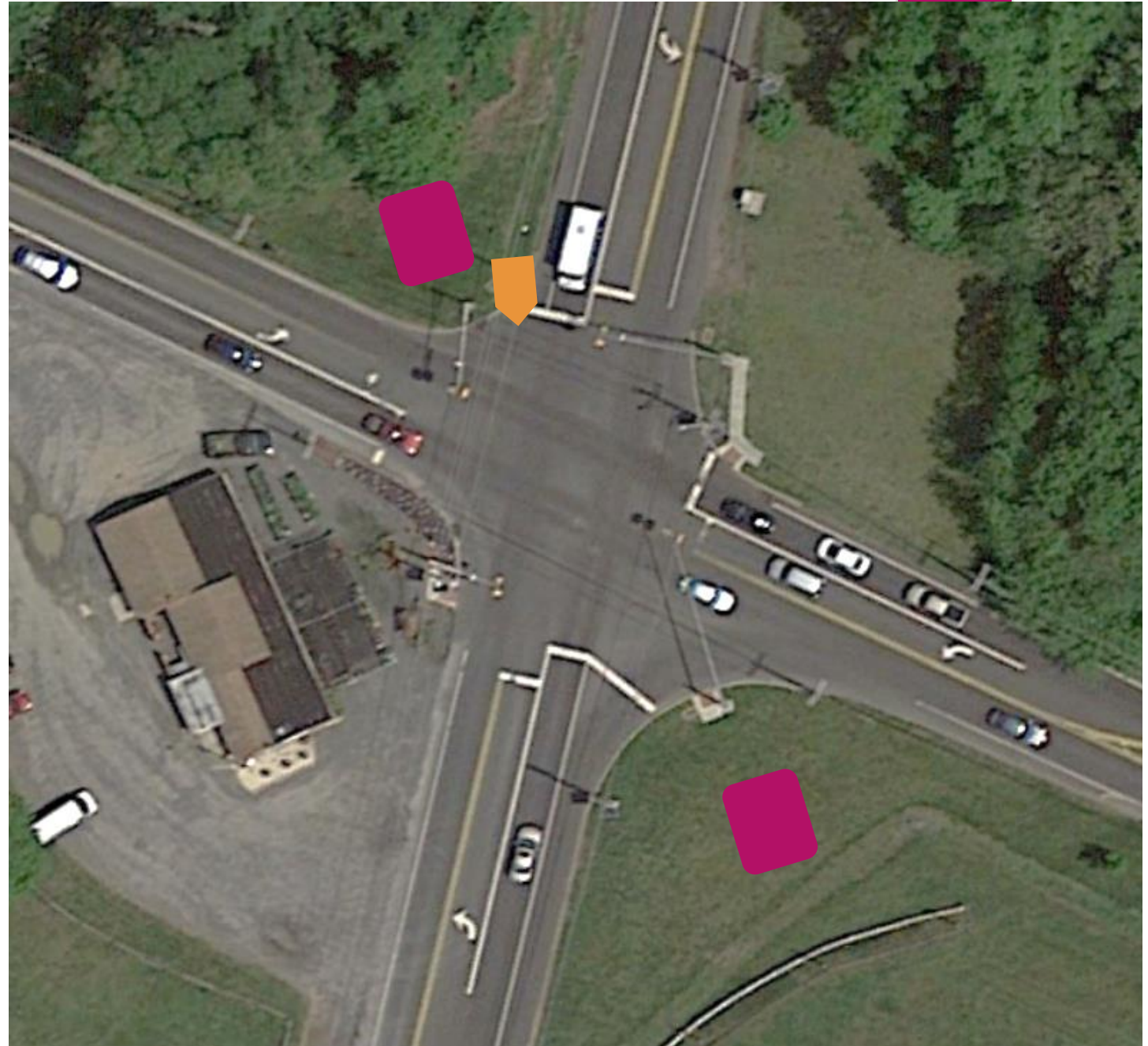
Comparison Count

Westfield Road &
Bridgeboro Road
Burlington County, NJ

2 Field Staff

miOVISION

COUNTING
CARS.COM



Westfield & Bridgeboro, Burlington County TMC Comparison

TMC Comparison Results Compared to Control

Field Count 99.6%

Miovision 98.3%

Counting Cars 98.0%

2500

2000

1500

1000

500

0

Eastbound

Westbound

Northbound

Southbound

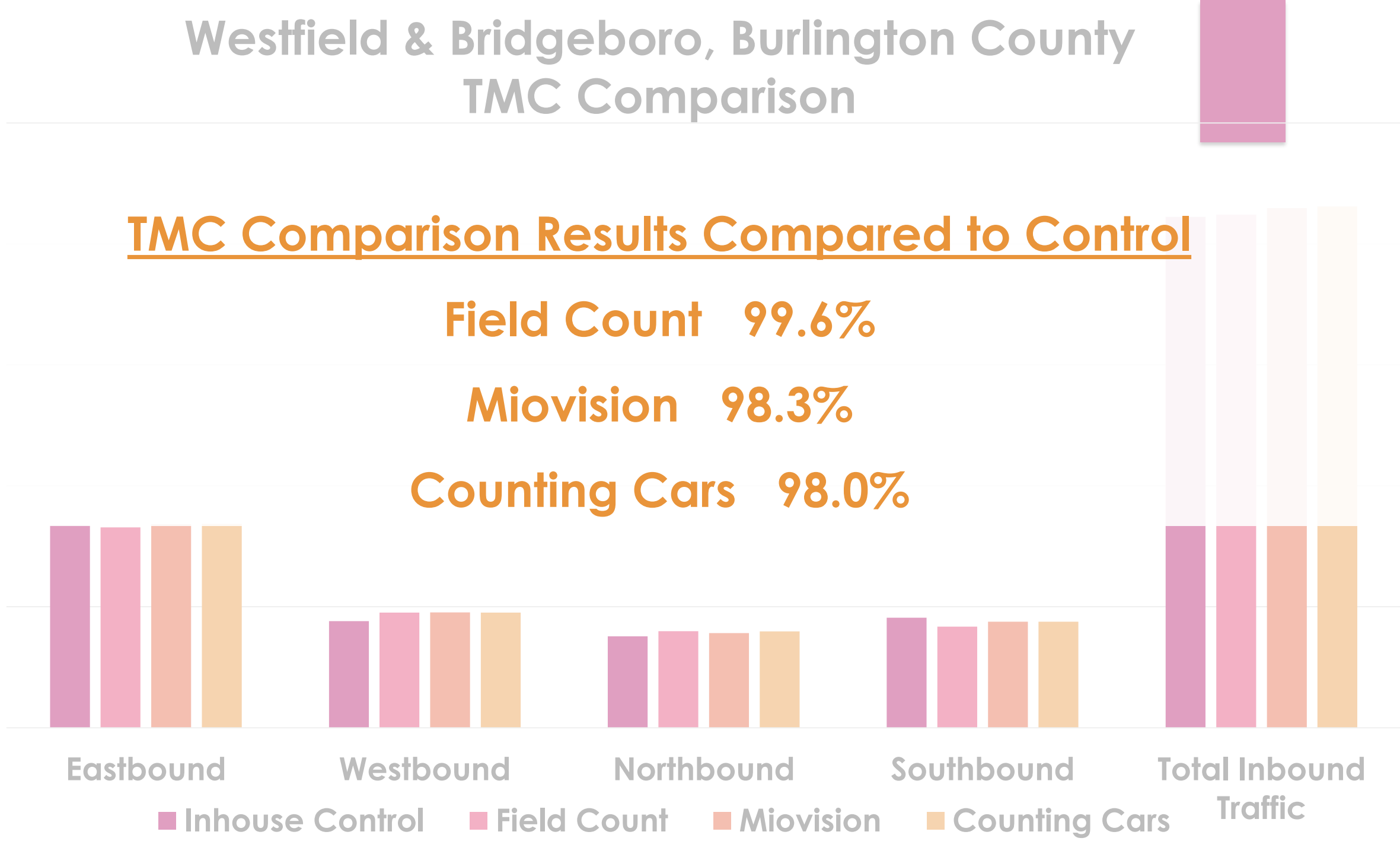
Total Inbound
Traffic

Inhouse Control

Field Count

Miovision

Counting Cars



Queue Data

- ▶ Latent demand
- ▶ Video based or manual
- ▶ Capture approach issues
- ▶ Are signals metered?



QC2



QC4



QC1



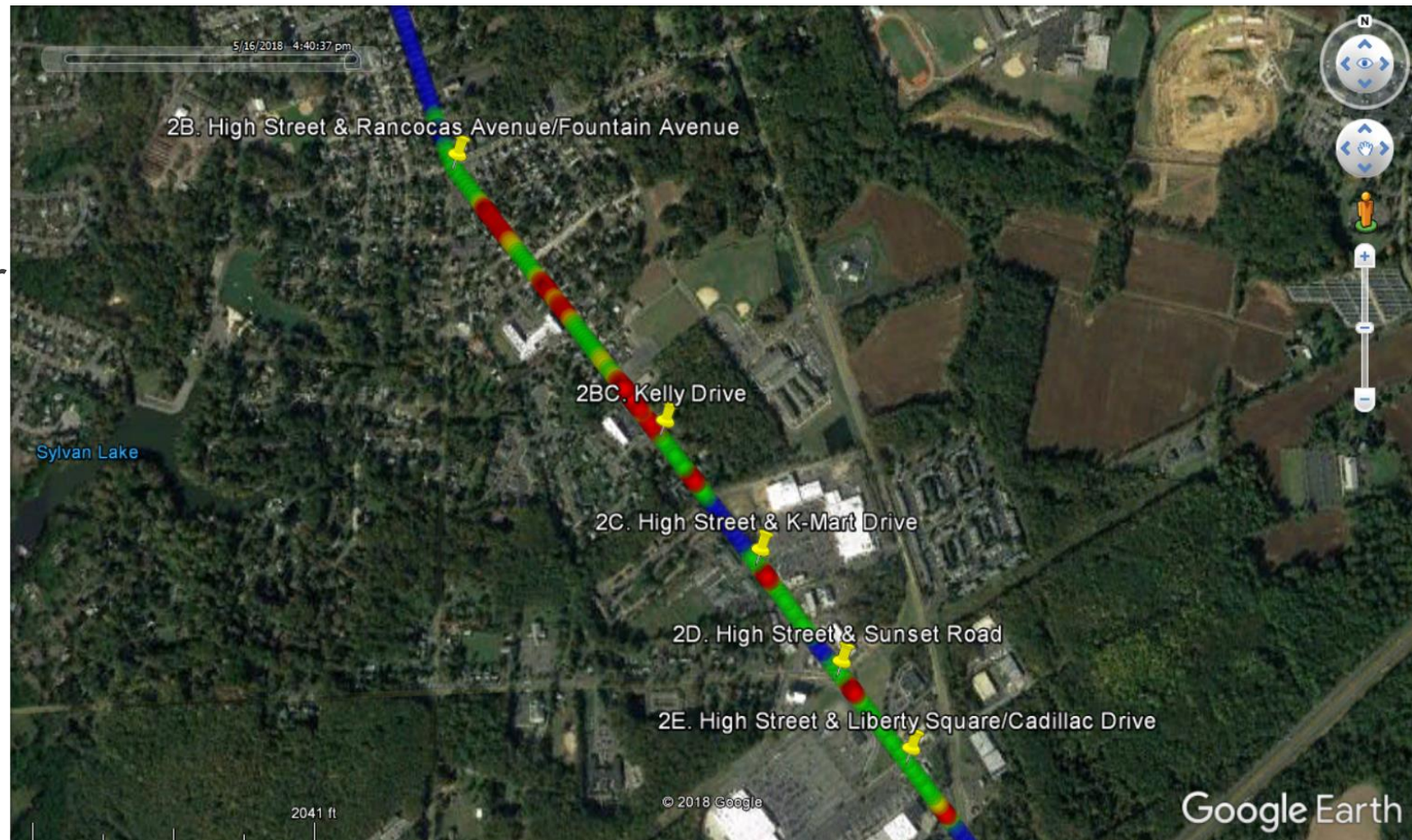
QC0



QC5

Delay & Travel Time

- ▶ Speed & Delay
 - ▶ Tru-Traffic
 - ▶ GPX data receiver
- ▶ BlueToad
- ▶ Miovision Connect



Bloopers

