

# Erie, Pennsylvania

LeAnn Parmenter, P.E.





# Background

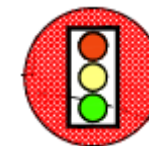
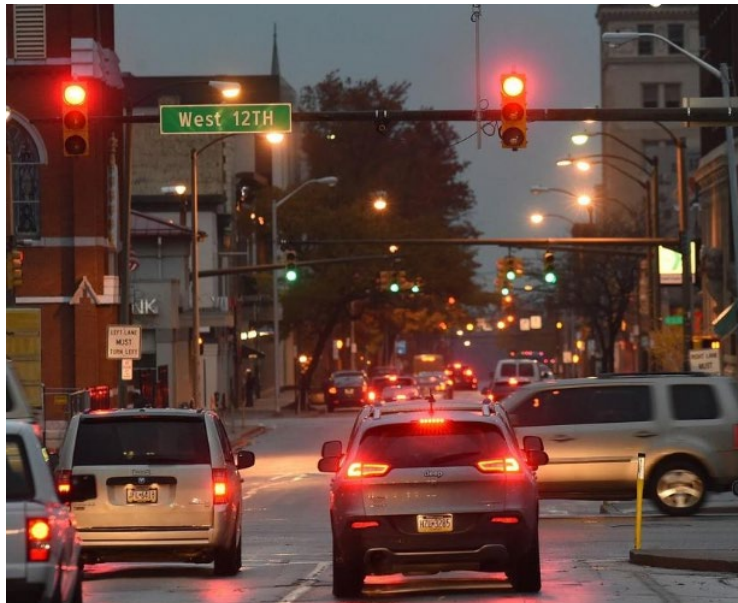
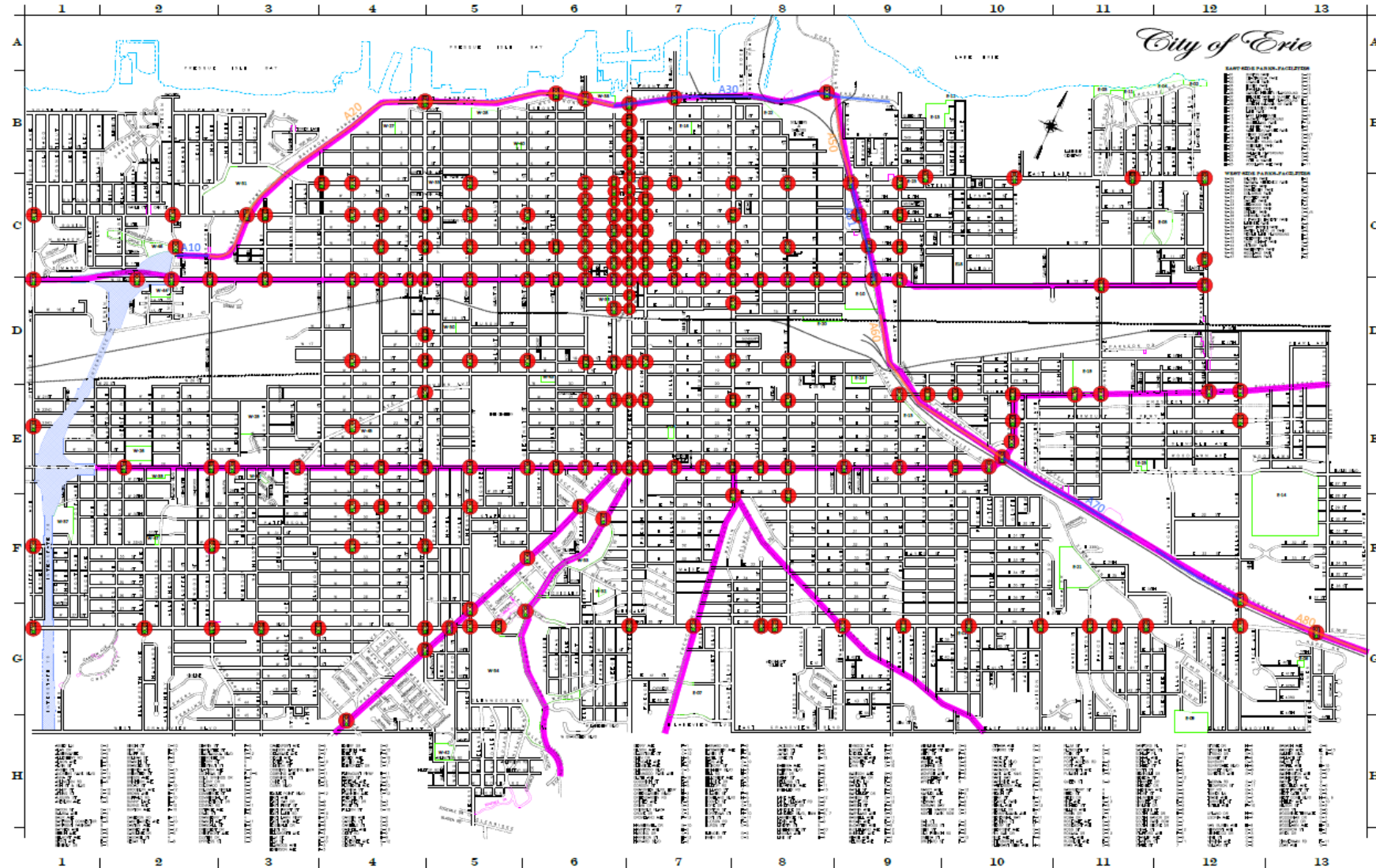
- Erie is a city located on the south shore of Lake Erie
- It is the fourth-largest city in Pennsylvania with a population of 97,369 (2017)
- Over four million people visit Erie during summer months for recreation at Presque Isle State Park, as well as attractions such as Waldameer Park
- Averages over 100" of snow annually





# Roadways

- The City of Erie maintains 320 miles of striped roadway which includes 200 signalized intersections
- PennDOT maintains state routes that are located within the city limits.



Signalized Intersections



## Bayfront Parkway Project

East-West Connector Traffic Volume/Development has made improvements necessary for connectivity between the Bayfront and Erie's Downtown.

The estimated cost is between \$70-100 million

The state has committed \$30 million for parkway improvements

The Bayfront Parkway Improvements will consider:

- Vehicular congestion, operations, and safety
- Connectivity and access to various transportation modes
- Multi-modal improvement opportunities
- Economic development and growth





### ICONIC GATEWAY

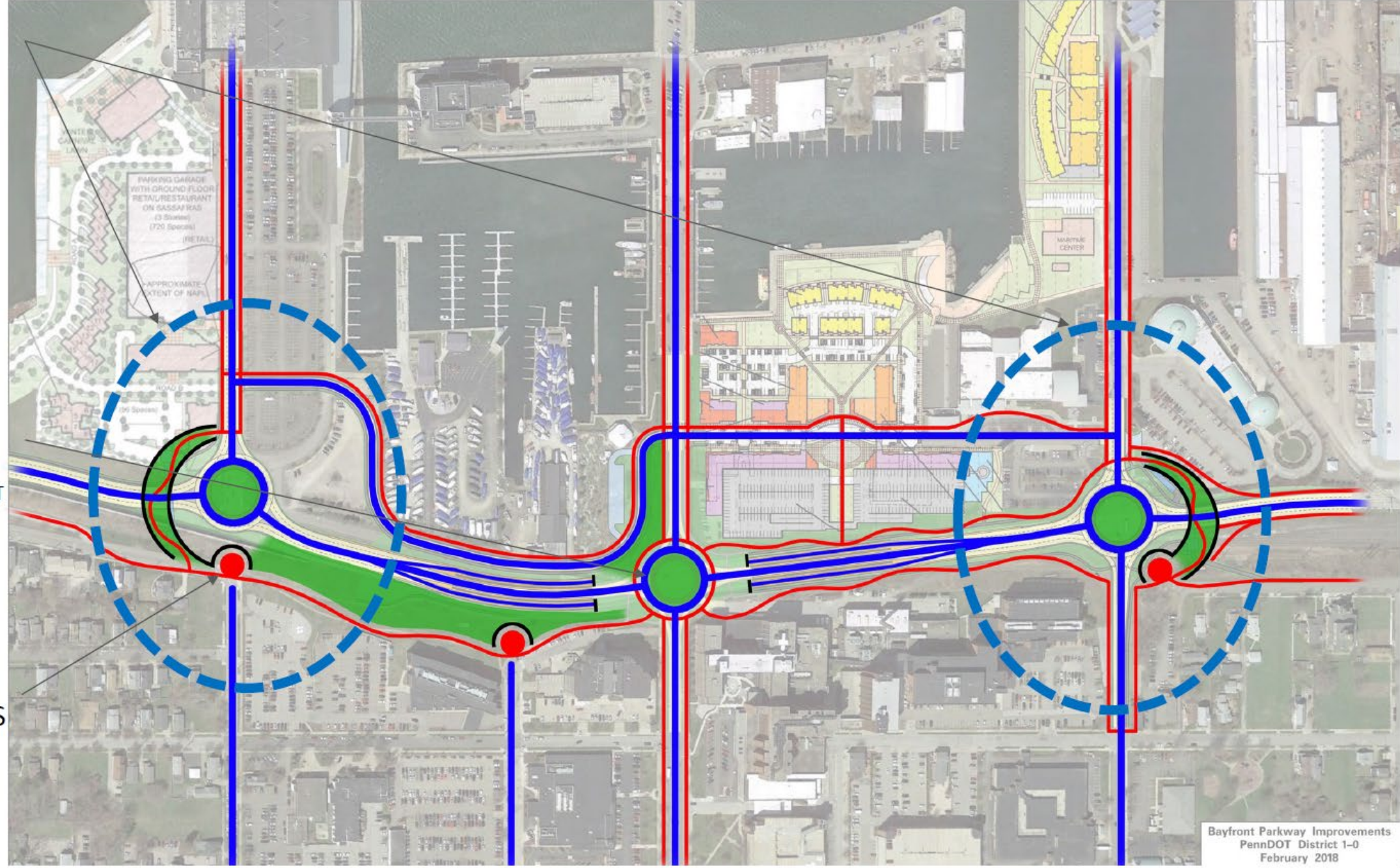
- SIGNAGE
- PEDESTRIAN BIKE CONNECTIONS TO:
- BUSINESSES
- ENTERTAINMENT
- RESTAURANTS
- HOTELS
- SHOPPING
- HOUSING
- WATERFRONT
- MARINAS
- CONVENTION CTR
- MARKET PLACE

### SIGNATURE ROUNDABOUT

- DISTRICT MONUMENT
- SIGNAGE
- ICONIC STREETSCAPE

### THE PROMENADE WITH OVERLOOKS

- PARK EXPERIENCE
- OVERLOOKS
- BENCHES
- PUBLIC ART



Bayfront Parkway Improvements  
PennDOT District 1-0  
February 2018

THE LANDINGS: Current Designs with heightened branding, placemaking + connectivity





Before

After



**LEGEND**

- PROPOSED ROADWAY PAVING
- PROPOSED ROADWAY SHOULDER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB GUTTER / ISLAND
- PROPOSED CONCRETE BARRIER / RETAINING WALL
- PROPOSED TRUCK APRON
- PROPOSED DRIVEWAY ADJUSTMENT
- PROPOSED LANDSCAPED AREA
- PROPOSED PEDESTRIAN BRIDGE
- EXISTING SIDEWALK & BICYCLE PATH



Bayfront Parkway Improvements  
 PennDOT District 1-8  
 June 2019  
 CONCEPTUAL INTERSECTION  
 ALTERNATIVES  
 SIDEWALK & BICYCLE PATH  
 NETWORK

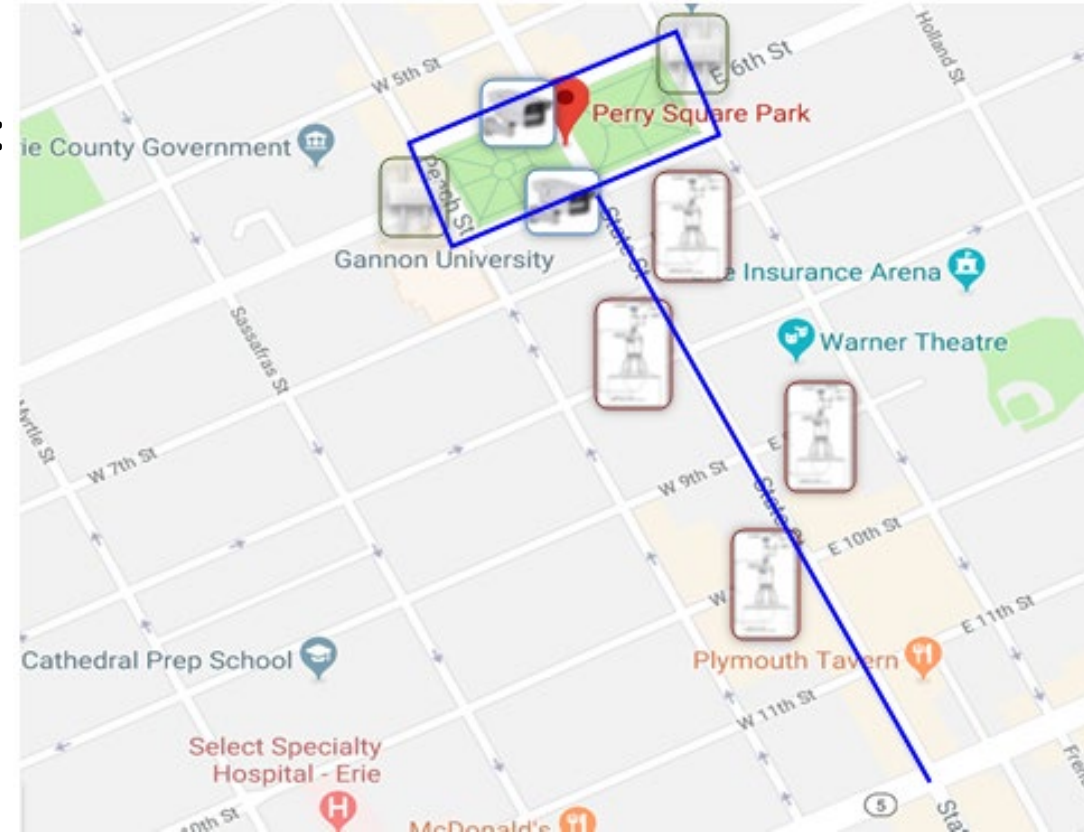


# Secure Smart City™ Pilot Public/Private Partnership

Erie Innovation Dist –  
Technology Incubator with  
Mercyhurst University

- Free Public Wi-Fi around Perry Square
  - Smart LED Lighting
    - Reduce up to 60% energy & maintenance costs
  - City Safety & Security
    - License plate recognition & object detection around Perry Square
- ??? Future Maintenance

## Pilot Area- State Street: 6<sup>th</sup> to 12<sup>th</sup> Street



# Smart Lighting

## CIMON iSLC-3100-7P-C Lighting RF Controller

- Devices are mounted on each of the tall light poles located on State Street between 6<sup>th</sup> Street and 12<sup>th</sup> Street.
- Is an intelligent wireless lighting controller that can be easily mounted outside of any LED fixture
- Each controller provides intelligent ON/OFF switching, dimming control, scheduling, power metering and health monitoring of each light fixture.



4.53 in. W x 2.68 in. H  
115 mm W x 67.98 mm H





## Recognition Camera- LF-002

Using this technology to enhance connectivity, promote economic development, fight crime and make local governments more efficient and responsive

- License plate recognition at low and high speeds
- Face recognition in a crowd
- Behavior Analytics in a crowd
- Crowd management
- Smoke and fire detection in a crowd
- Perimeter protection (up to 70m; additional illumination required for longer distances)

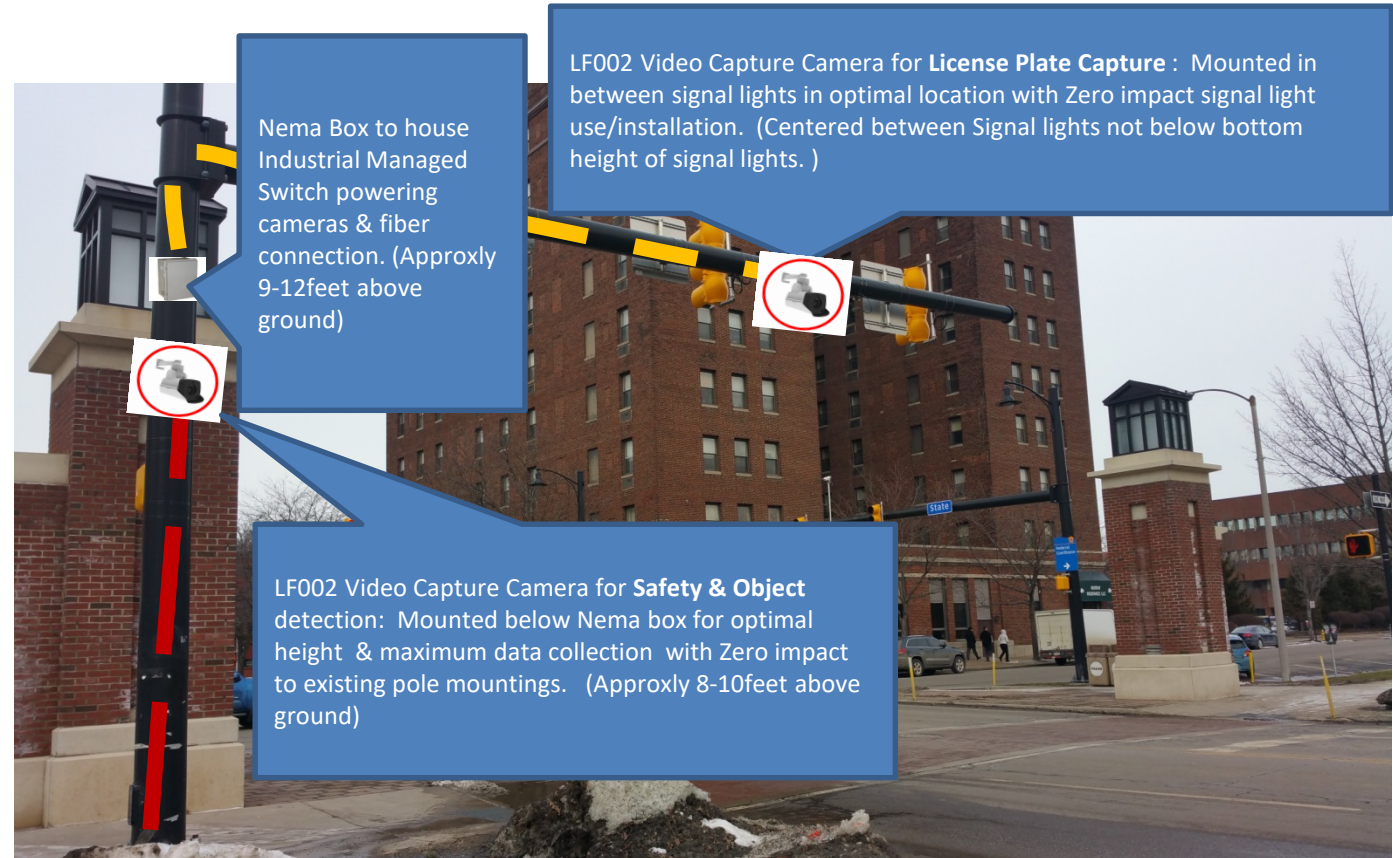
## Location Installation

*North Park Row and South Park Row intersections*

**Line Power from Controller**

**Fiber Connectivity to Switch mounted inside NEMA Box**

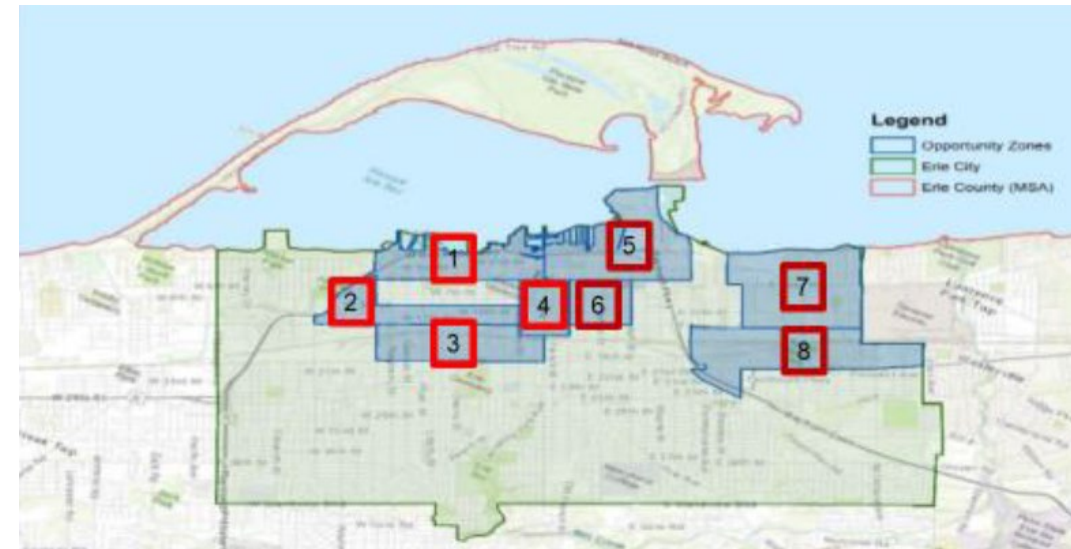
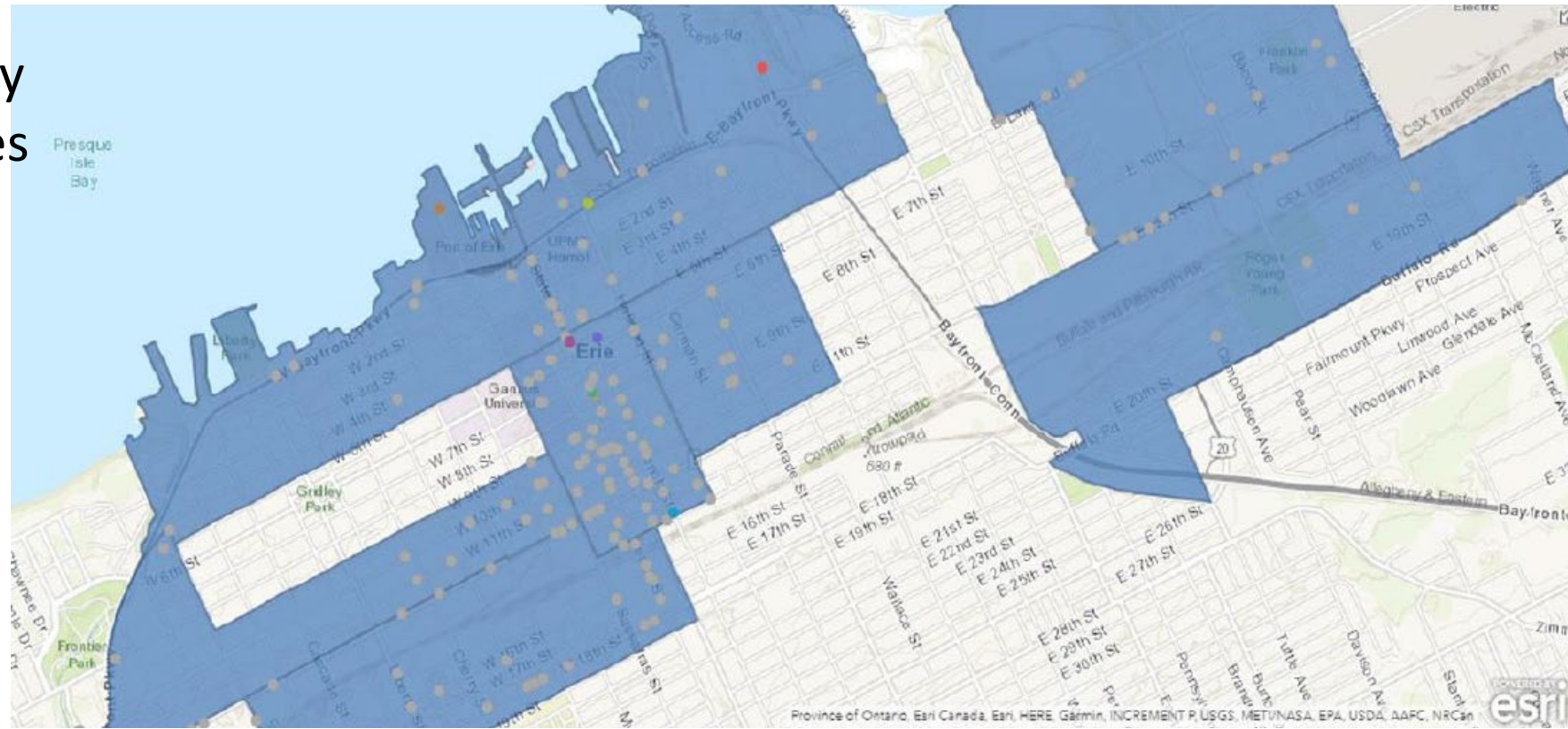
**Ethernet Connectivity to Camera**





# Wi-Fi Coverage Opportunity Zones -Penelec owned poles

- LED fixtures
- City Wi-Fi network to provide internet access for residents and visitors in a 1000 light pole coverage area of the 8 Opportunity Zones of the City
- Urban Security solution with License Plate Recognition (LPR) use case and traffic monitoring will be implemented at three (3) traffic junctions to be selected within the Opportunity Zones.





# Wireless Communication Facilities

- To date, the City of Erie has permitted approximately 23 small cell nodes in municipal ROW
- Recent requests for 150 additional small cell towers



**FIBER CABINET**  
FIBER TRANSITION HOUSING  
FTH-NG1



**AC PANEL**  
RAYCAP  
RSCAC-7239-P-240



Aug-04-2015 03:06 PM



Winter Fun!





***Thank you!***

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