Parking Investment Strategy

Public Safety Committee Meeting
July 29, 2025

CITY OF GRAND RAPIDS | Mobile GR

OHM

Stantec

Agenda

- OPA surveillance policy overview
- Our purpose today
- Project overview
- Proposed operational management protocols
  - How we're proposing to collect parking utilization data
  - Limitations of collected data
  - Why we feel it's advantageous and important to project's success and public safety goals
  - What will be done with the data
- Parking utilization data examples
- Request to set a public hearing

OPA surveillance policy overview

- Administrative Policy 15-03 (revised January 2022)
  - Purpose: to ensure the safety of persons and property, the investigation of illegal behavior, and ensuring that the privacy interests of Grand Rapidians are considered in the decision to acquire, use, or deploy surveillance equipment or surveillance services
- Revisions were made in partnership with the NAACP and other community members

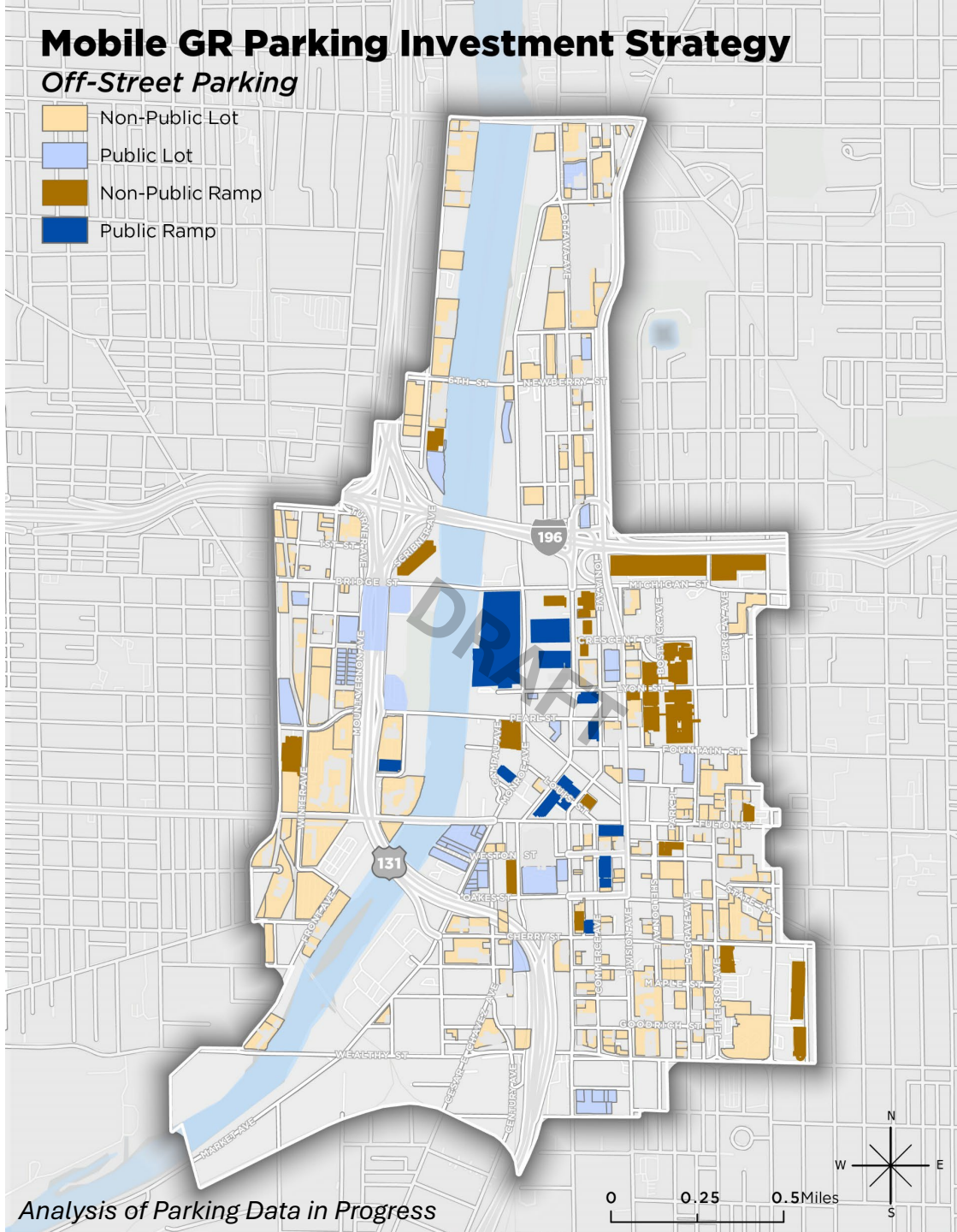
Our purpose today

- Present operational protocols and data management protocols related to proposed use of technology
- Elaborate and clarify how proposed activities will be in accordance with the OPA surveillance policy
- Request PSC set public hearing for following City Commission meeting

Project Overview

Project Overview

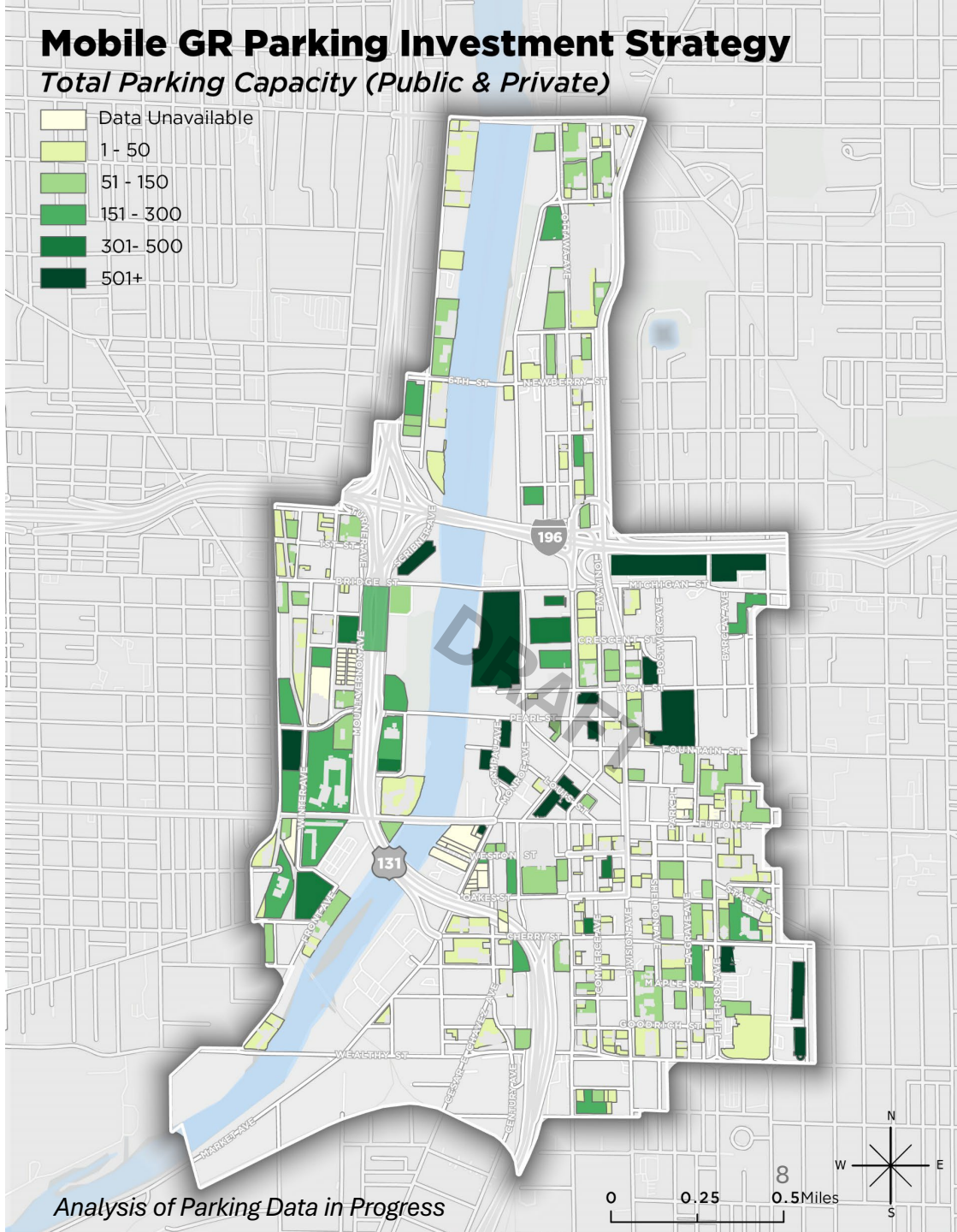
- Evaluate and compile parking data for downtown (i.e., DDA) area
  - Establish comprehensive inventory of all current parking facilities (public, private, restricted, event, etc.)
  - Capacity and utilization of parking facilities
- Understand current and future demand for parking
- Parking is a key component of downtown ecosystem
- Develop strategies for a sustainable and efficient parking system; demand reduction



Proposed Data Collection Methods

Proposed Operational Protocols

- Proposal
  - Contracted consultants (OHM and Quantifly) propose to collect and use overhead imagery to determine parking capacity, total utilization, turnover, and dwell time of parking facilities in DDA
  - Use of sUAS (Small Unmanned Aerial Systems) designed and optimized for mapping purposes
- Image capture
  - 300 – 400 feet above ground level (i.e., bird's eye view of large parking areas)
  - 20MP wide angle camera with 5280x3956 resolution
  - Aerial imagery collected and analyzed in morning peak hour, noon, afternoon peak hour, and early evenings
  - Data collection is proposed to occur over three (3) week period



Limitations of Collected Data

- Collected data is anonymized
    - Information not captured: identifiable features; including license plates, VINs, bumper stickers, etc.
    - Information captured: vehicle color and position and number of parking spaces
        - CMYK code of pixels to determine if same vehicle is utilization space when next image is captured or if space has turned over to new/no vehicle
- **Data collected will only be used for counting the number of available parking spaces and vehicles in a parking lot or on public streets and determining whether space is still occupied in subsequent images**
- Compliance with privacy laws
    - Project team will adhere to applicable federal, state, and local privacy laws to ensure personal data is not unintentionally captured
- sUAS operations will not interfere with:
    - Emergency responders
    - Individuals' right to safety and reasonable expectation to privacy
    - Restraining order violations
- Data sharing
    - **Neither Mobile GR nor any other City staff will receive raw imagery; only maps, images, and tables depicting parking utilization**

Importance to Project and Public Safety

- Greater anonymization
  - Aerial imagery avoids the need to capture specific details about individuals license plates as would be necessary for traditional (i.e., manual) counts
  - Ensuring focus is on the parking layout, utilization, and change of utilization over time rather than personal details
- Higher quality data
  - Greater reliability compared to manual counts
  - Enables single point in time capture of data across broader geographies; manual counts can not reasonably replicate
  - Enables capture of more data at more times of day and days of week yielding a greater understanding of how parking is utilized is downtown Grand Rapids
- Efficiency
  - Significantly fewer hours required to capture and analyze data over longer period compared to manual data collection methods
- Less disruptive/distracting to the public
  - Data collection occurring overhead as opposed to at street level

Data Management Protocols

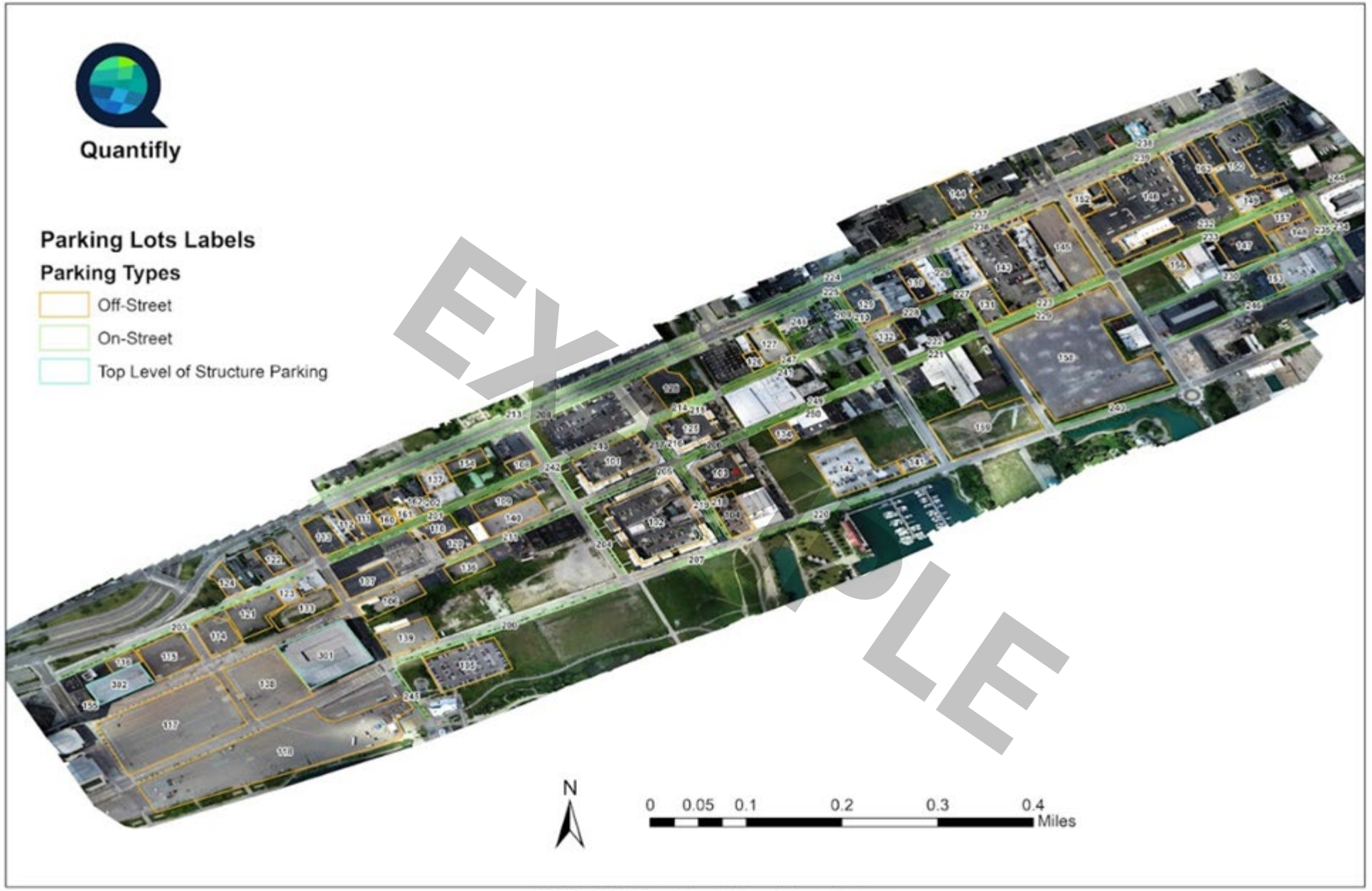
Occupancy & Utilization Data
(tabular data, generated maps, processed imagery)

- *Collection period:* 3 weeks
- *Retention period:* indefinitely; per City Records Retention policy
- *Upon project completion:* documented in final Parking Investment Strategy; archived

Parking Utilization Data Examples

Image of Sheldon Park (Livonia, MI). Captured at 400' AGL using a 20MP wide angle camera at a resolution of 5280x3956.

This is the level of detail that will be captured for the parking study.



City of Detroit Riverfront Parking Study (2019); orthomosaic overlaid with parking types

This is the level of detail that will be captured for the parking study.

Next Steps

Formal request for Public Safety Committee to set a public hearing for August 12, 2025 during City Commission meeting

Questions?

Thank you for your time!

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