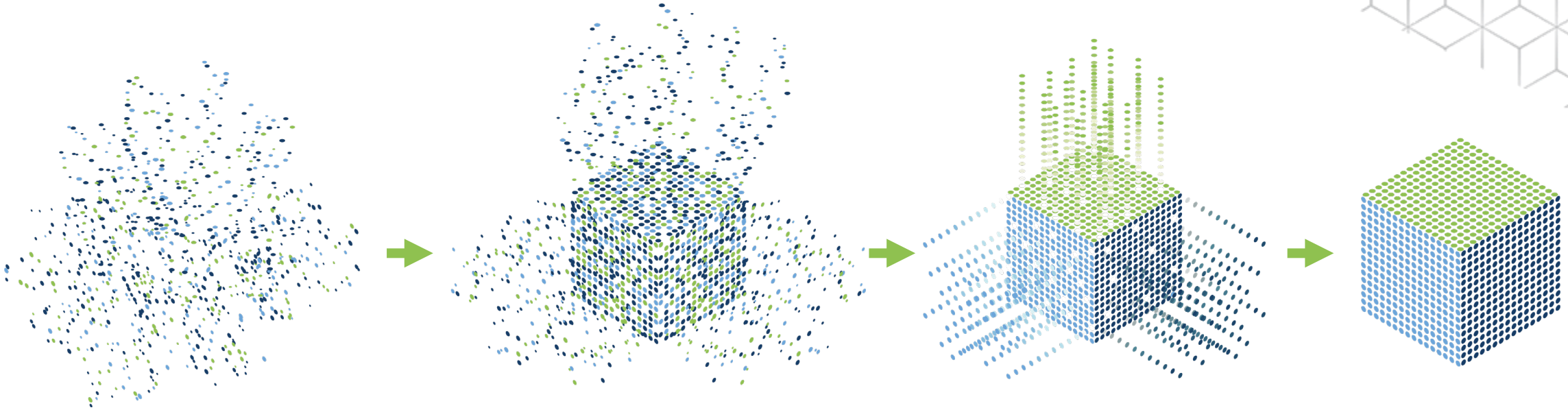
The Future of Big Data

J.J. Eden

Providing drivers more choices for their commute

NORTH CAROLINA
Turnpike Authority



Data

Sorted &
Analyzed

Arranged

Presented
Visually

Big Data Priorities

Purpose driven future of more efficient revenue collection

Commercially available as -a-service

Mobility value focused

Multiple roadside identification solutions

Mobile based payments

Fully automated customer service

Mobility pricing plans

Statewide transportation account

Big Data Projects

Connected Vehicle Data

wejo | GENERAL MOTORS

Data pulled every 3 seconds

From ignition on to ignition off

300,000 vehicles in North Carolina

Current market share

Instant Data

Non-intrusive data collection without expensive “tube” or “clicker” counts

Immediate Detection

Identify real time events without expensive roadside infrastructure

Data Share

Can be augmented by multiple vendors to validate data for traffic planning and operations

Integrated Data Platforms

snowflake® sas

How should we manage data?

- Capture unstructured and structure in real time
- Customer comments
- System health
- Vehicle data (including speed)
- Customer inquiries

How do you make sense of the data?

- Interoperability for data
- Tailor data to individual needs from non -compatible systems
- Many traffic and customers into one view to increase mobility options
- Run reports in minutes not hours/days, weeks or months

1
Only retrieve and keep the data needed
2
Reduces routine and repetitive work that is prone to error
3
Provide single source of data to all users
(Allows reports to dynamically change as business needs change)

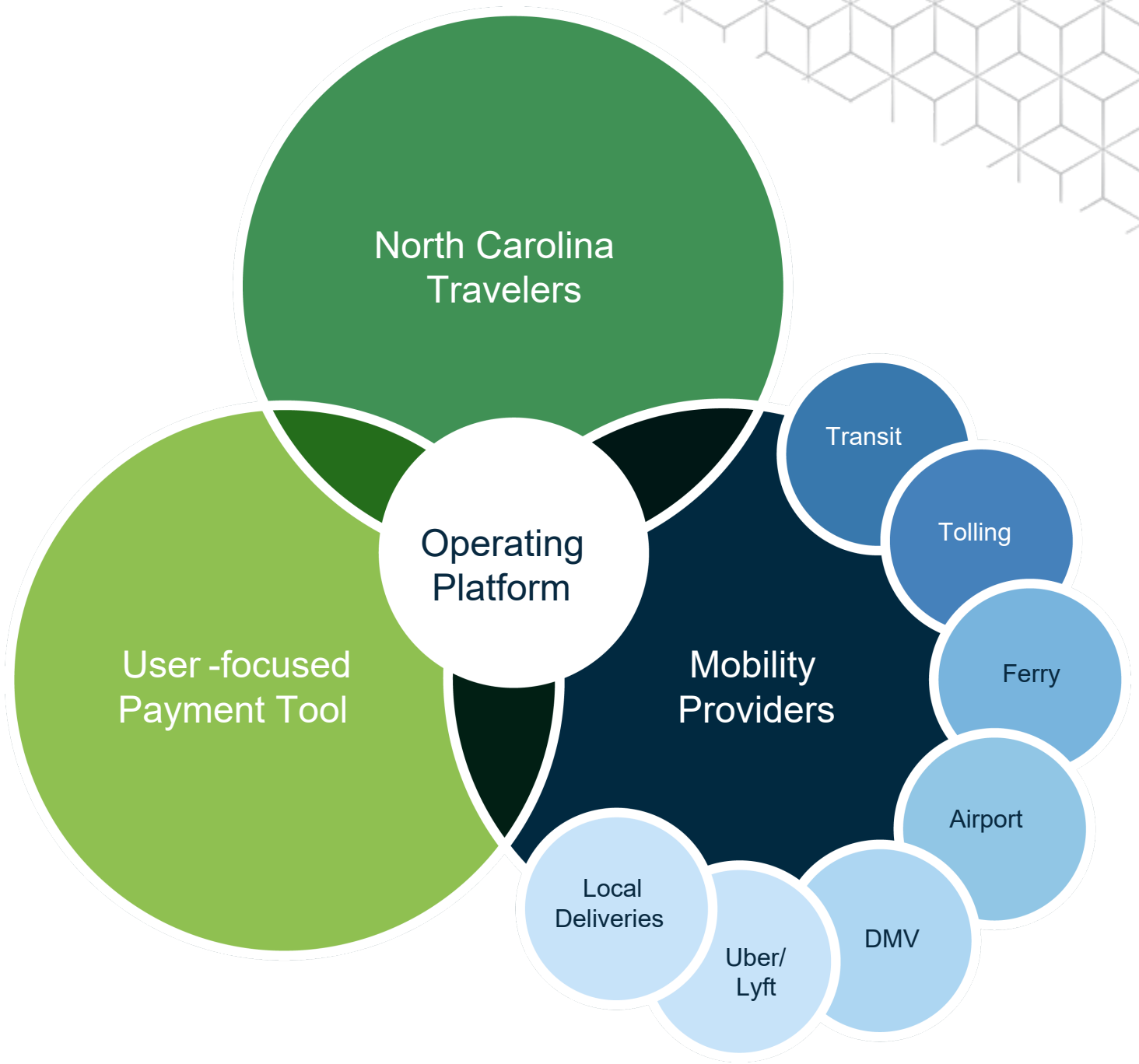
Vehicle Technology

1 Infrastructure to vehicle

2

3 Vehicle to infrastructure

Statewide Transportation Account


North Carolina Travelers
Operating Platform
User -focused Payment Tool
Mobility Providers
Transit
Tolling
Ferry
Airport
DMV
Uber/ Lyft
Local Deliveries

Thank you!

Contact Us

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