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# ALCOHOL OUTLET DENSITY STUDY: PRESENTATION TO ALRC

FEBRUARY 20<sup>TH</sup>-2019





# PROJECT BACKGROUND



# STUDY BACKGROUND

- 2018 Budget
  - Language in the 2018 Adopted Budget called for an analysis determining to impact of licenses alcohol establishments in the Downtown to determine the cost implications of providing services in this area
  - Resulted in joint effort between Finance Department & Public Health examining the impacts of alcohol outlet density on the provision of City services (specifically Public Safety services)
- Legislative File 52680
  - Adopted-Dec 10<sup>th</sup>, 2018
  - Resolution recognized the formation of the joint effort between Finance and Public Health calling for the study to be complete by May 31<sup>st</sup> 2019
  - Requested briefings to the ALRC regarding the status of the project

## RESEARCH QUESTIONS

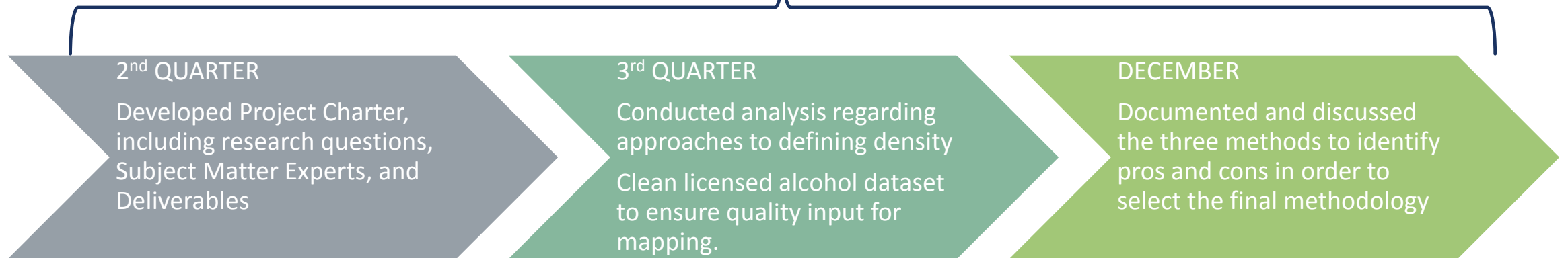
Are public safety services (police, fire/EMS, and building inspection code enforcement) being disproportionately utilized in areas with high alcohol outlet density throughout the City?

Is there a disproportionate net per capita cost of providing public safety services in areas of high alcohol outlet density?

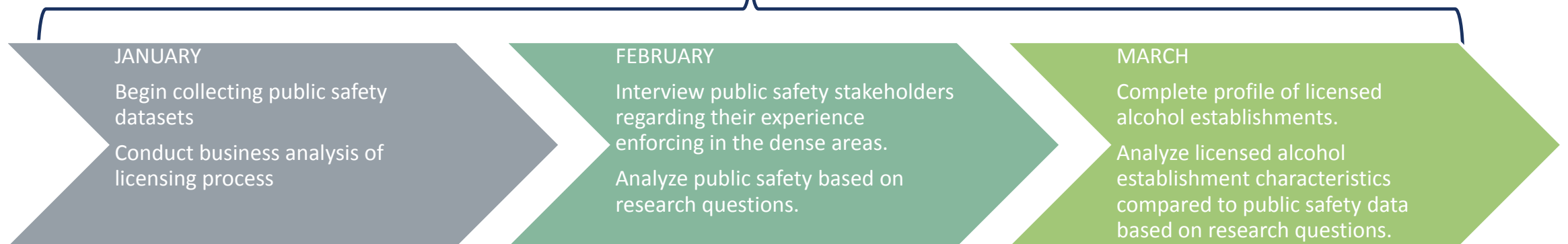
- Do costs vary based on license class?
- What are the characteristics of licensees who contribute to disproportionate services?

# PROJECT TIMELINE

## 2018: PROJECT CHARTER & LICENSE ANALYSIS



## 2019: CALLS FOR SERVICE ANALYSIS-DENSE VS NON-DENSE AREAS



# PROJECT TEAM & SUBJECT MATTER EXPERTS

Project Team	Subject Matter Experts
Brent Sloat (Finance)	Jim Verbick (Clerk)
David Singer (Finance)	Dan Haueter and Jason Freedman (Police)
Kara Kratowicz (Finance)	Ed Ruckriegel (Fire)
Laura Larsen (Finance)	Dan Seidensticker (MPO/Planning)
Brittany Grogan (Public Health)	Kyle Bunnow (Building Inspection)
Jeff Lafferty (Public Health)	Sarah Johnson (Public Health)
Julia Olsen (Public Health)	Riki Sjachrani, Jim Schmidt, Aaron Cohen (IT)
Justin Svingen (Public Health)	Barrett Erwin and Jessica Rodin (UWPD)
	Julia Sherman (UW Alcohol Policy Project)
	Carrie Meier (Dane County EMS)



# DEFINING DENSITY

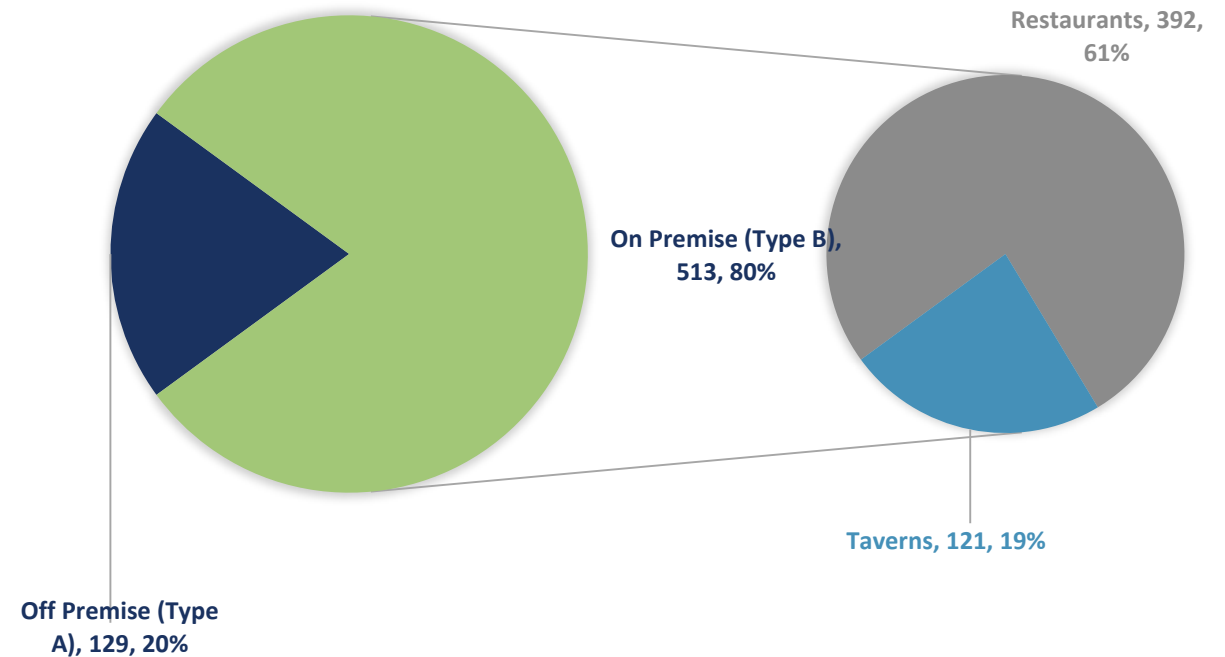


# CURRENT ACTIVE LICENSES

## NUMBER OF LICENSES BY TYPE

*Active Licenses as of Oct 1-2018*

- Research Period: Licenses as of Oct 1-2018
- TOTAL LICENSES: 642 Licenses
- TOTAL CLASS B: 513 Licenses
  - **Restaurants:** gross receipts from alcohol less than or equal to 50%
  - **Taverns:** gross receipts from alcohol greater than 50%





## COMPARING 3 CDC METHODS TO DEFINE ALCOHOL OUTLET DENSITY

	Container Based	Distance Based	Spatial Access Based
Description	<b>Counts</b> the number of outlets within the specified unit. Each unit is counted only once.	<b>Measures</b> the straight line distance between each alcohol outlet, then counts the number of alcohol outlets within the specified unit. Alcohol outlets falling within multiple specified units are counted multiple times.	<b>Measures</b> the distances between a reference point and a selected number of alcohol outlets. Alcohol outlets falling within multiple specified units are counted multiple times.
Units of Analysis	Census block group	Any given alcohol outlet that is within 0.1 mile of the reference point.  The reference point is any given alcohol outlet.	Census block group  The reference point is the center of each block group.  The selected number of alcohol outlets is the nine nearest outlets.

# PROS AND CONS OF EACH METHOD

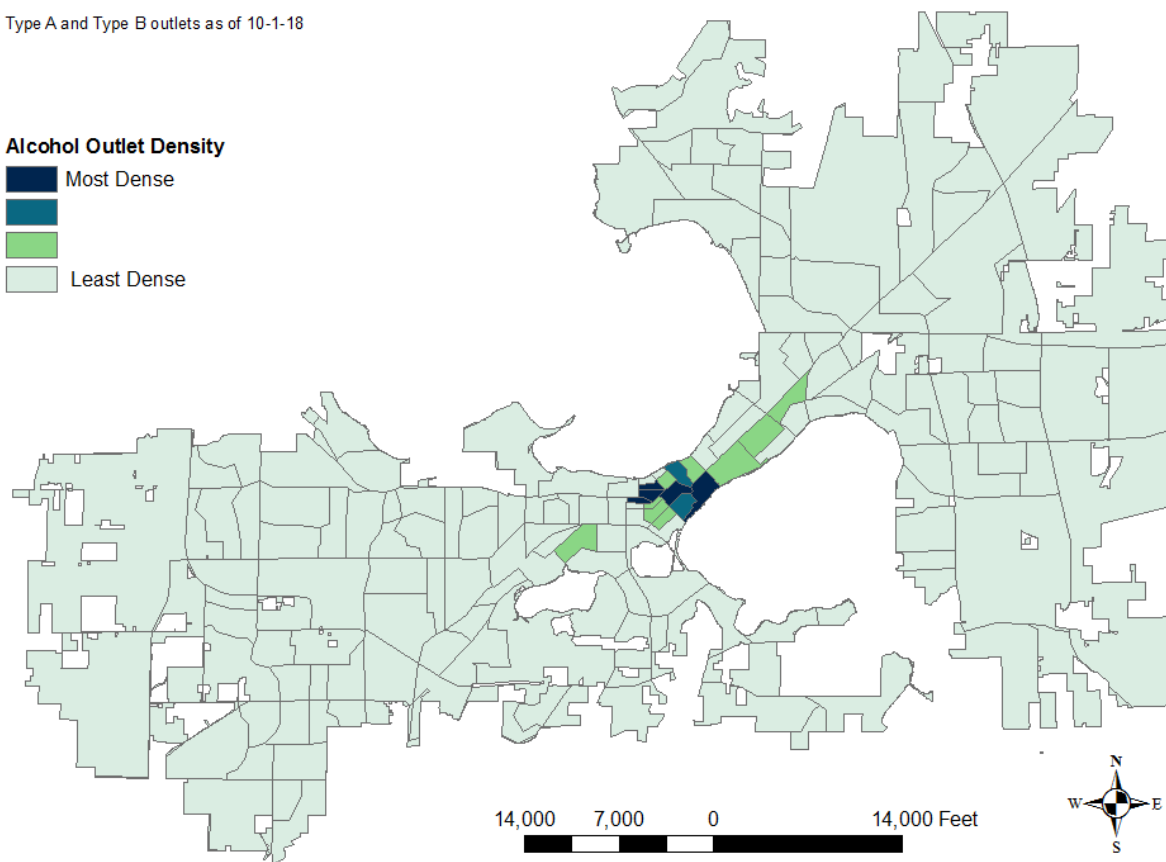
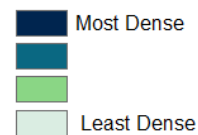
	Measurement Strategy		
Rating Criterion	Container Based	Distance Based	Spatial Access Based
Able to assess clustering	Red	Yellow	Green
Able to assess directly exposed population	Red	Yellow	Green
Suitable for evaluating harms	Red	Yellow	Green
Addresses access potential (reflects convenience cost)	Red	Yellow	Green
Low cost (personnel, equipment & data needs)	Green	Yellow	Red
Easy to calculate (simplicity)	Green	Yellow	Red
Easy to communicate (understandability)	Green	Yellow	Red

# MAP: CONTAINER BASED - CITYWIDE

## City of Madison Alcohol Outlet Density Container Based Method.

Type A and Type B outlets as of 10-1-18

### Alcohol Outlet Density

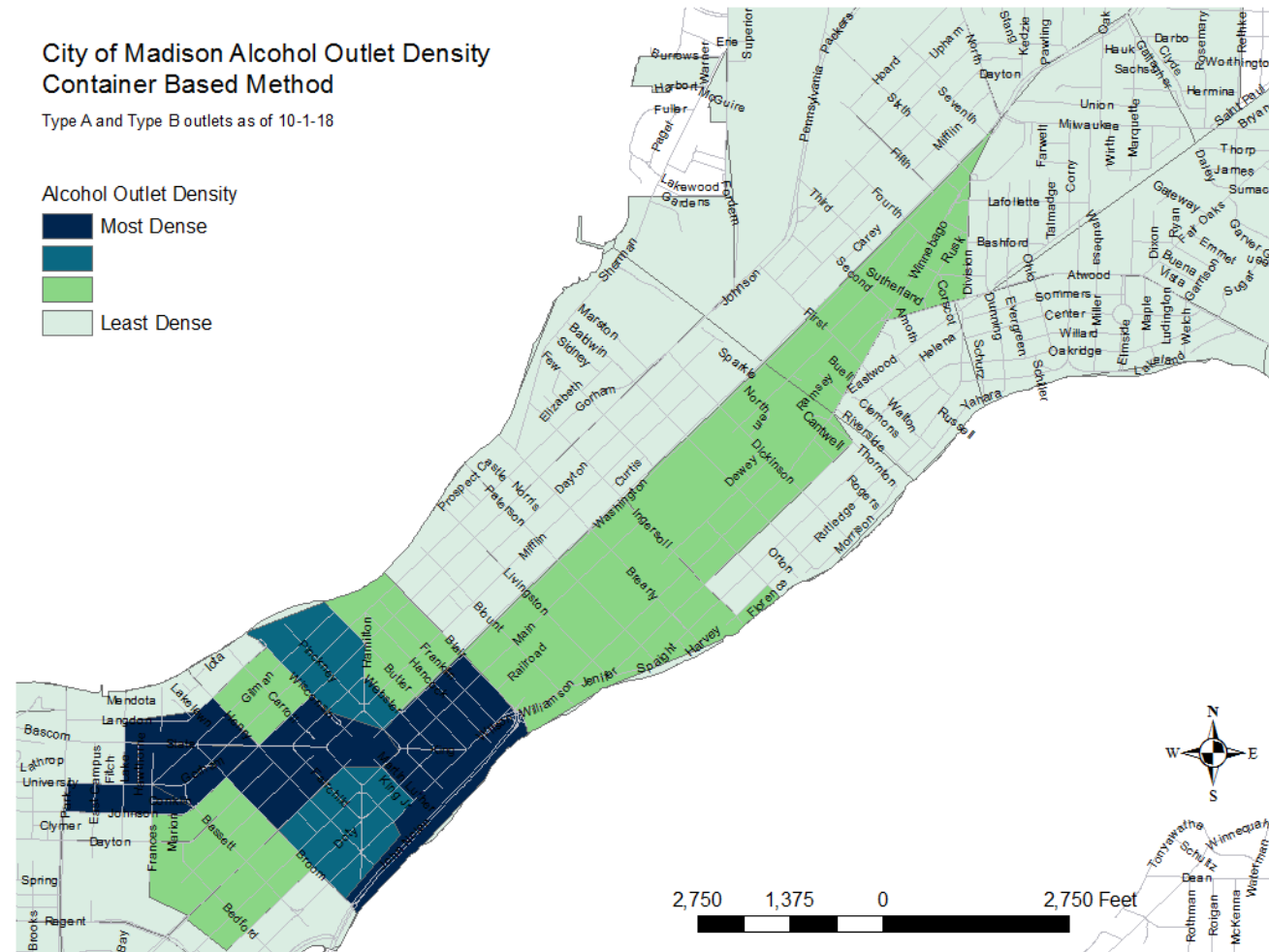
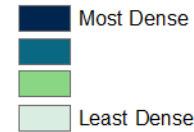


# MAP: CONTAINER BASED – DENSEST AREAS

## City of Madison Alcohol Outlet Density Container Based Method

Type A and Type B outlets as of 10-1-18

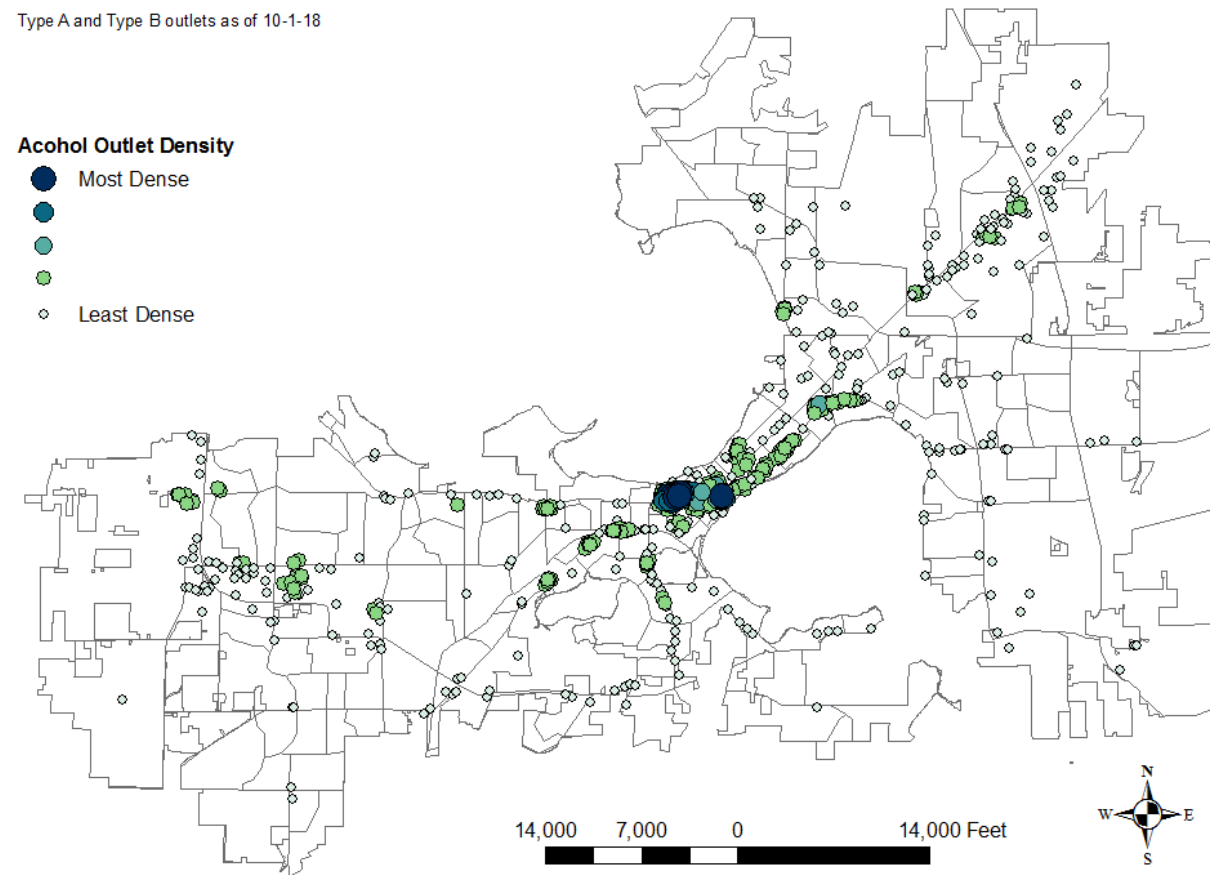
### Alcohol Outlet Density



# MAP: DISTANCE BASED – CITYWIDE

## City of Madison Alcohol Outlet Density Distance Based Method.

Type A and Type B outlets as of 10-1-18

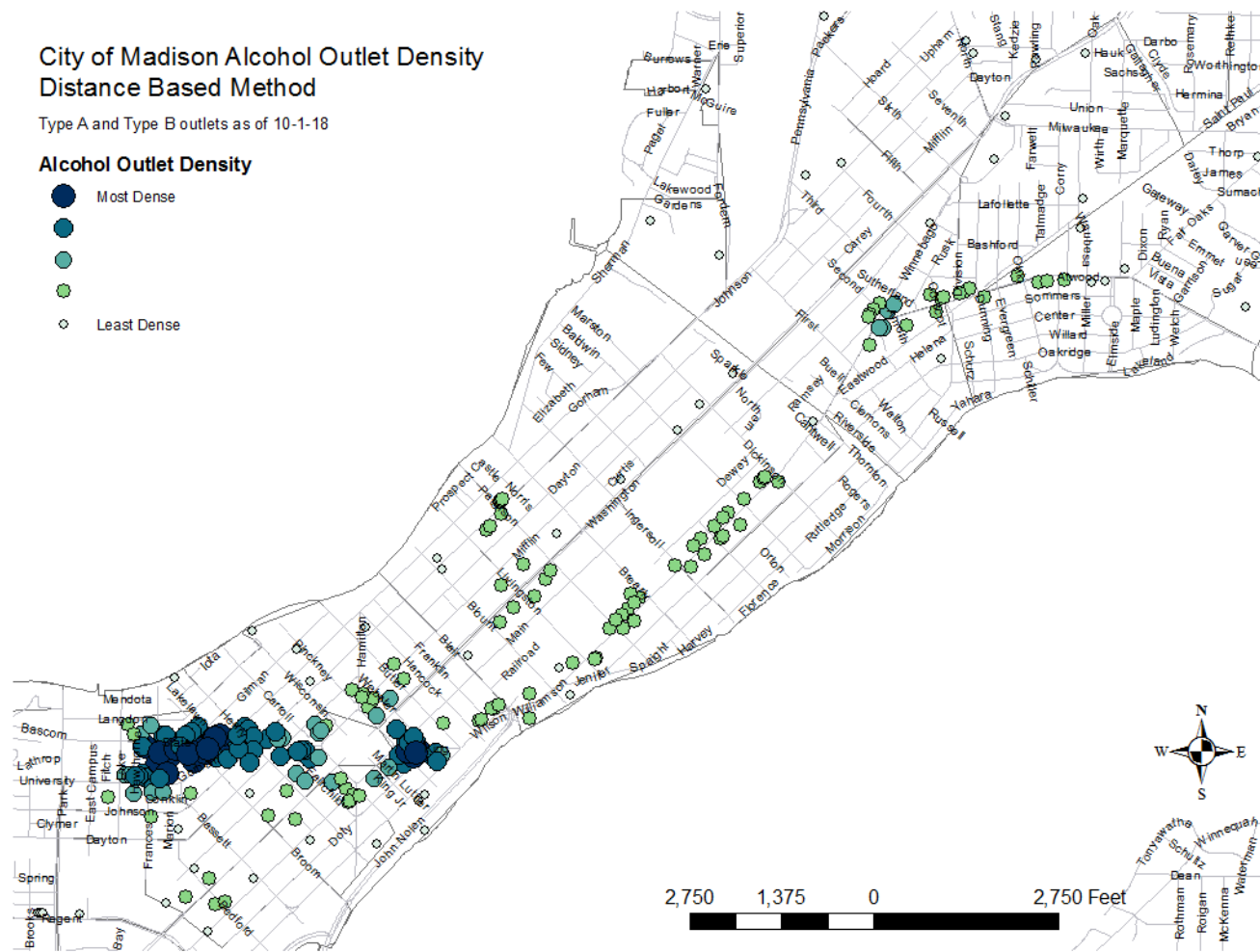
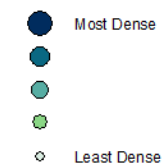


# MAP: DISTANCE BASED – DENSEST AREAS

## City of Madison Alcohol Outlet Density Distance Based Method

Type A and Type B outlets as of 10-1-18

### Alcohol Outlet Density

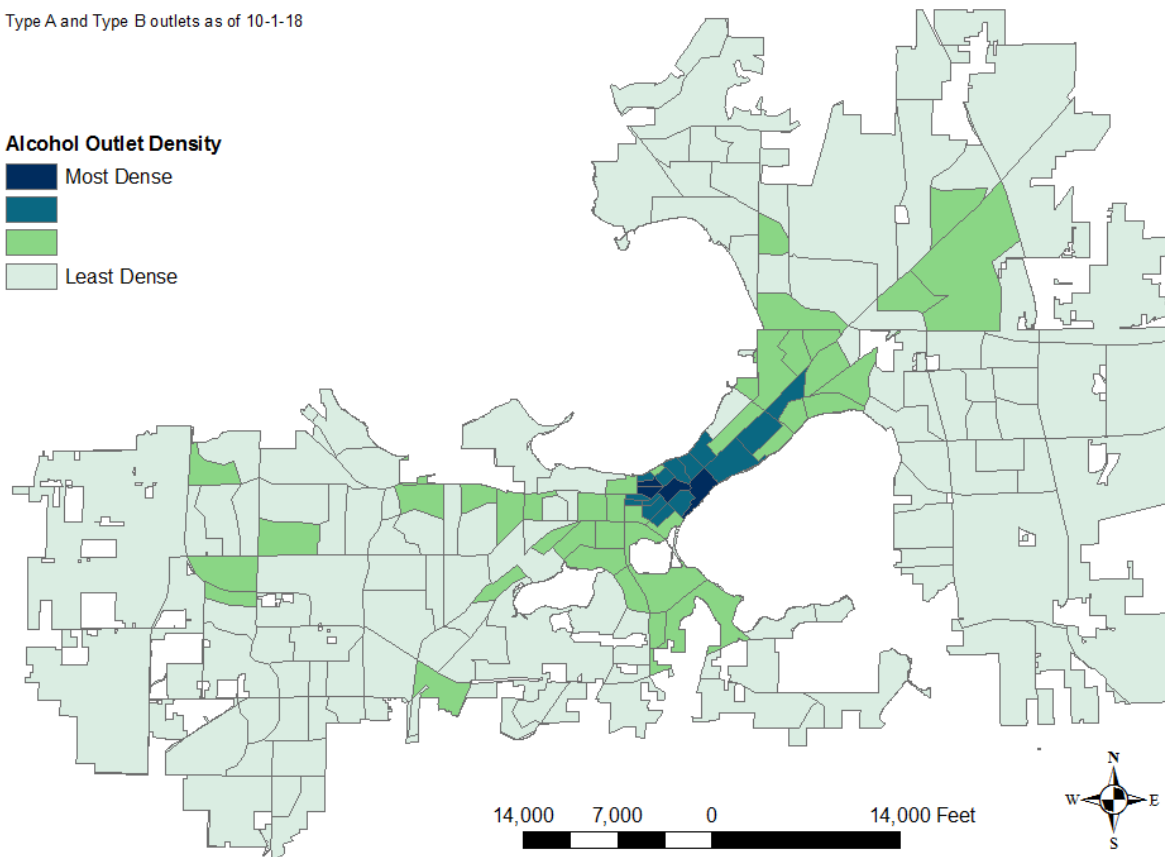
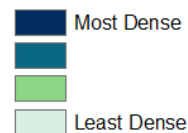


# MAP: SPATIAL ACCESS BASED – CITY WIDE

## City of Madison Alcohol Outlet Density Spatial Access Method

Type A and Type B outlets as of 10-1-18

### Alcohol Outlet Density

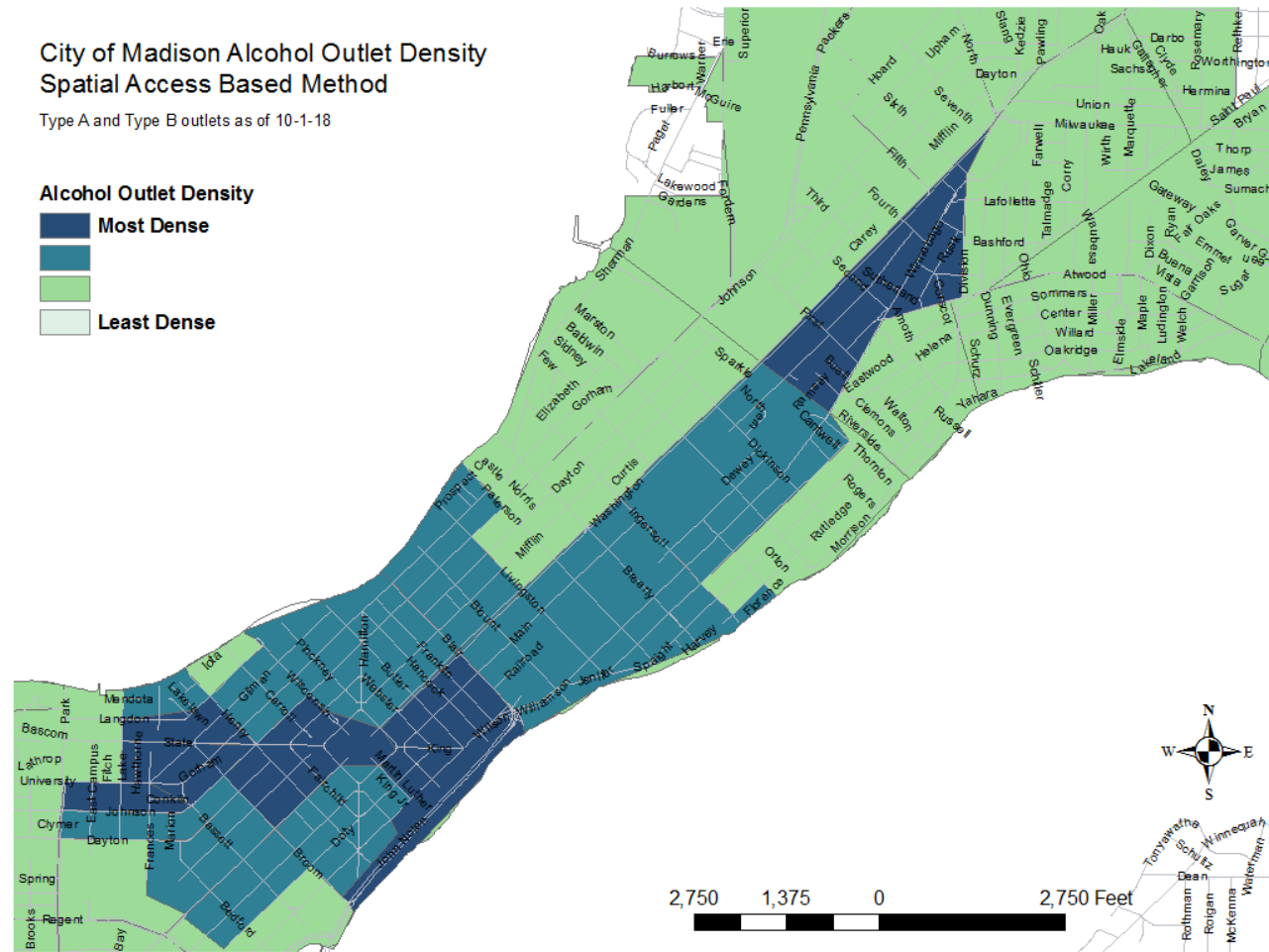
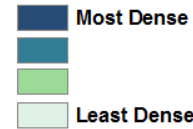


# MAP: SPATIAL ACCESS BASED – DENSEST AREAS

## City of Madison Alcohol Outlet Density Spatial Access Based Method

Type A and Type B outlets as of 10-1-18

### Alcohol Outlet Density






## Selecting a Methodology: Distance-Based

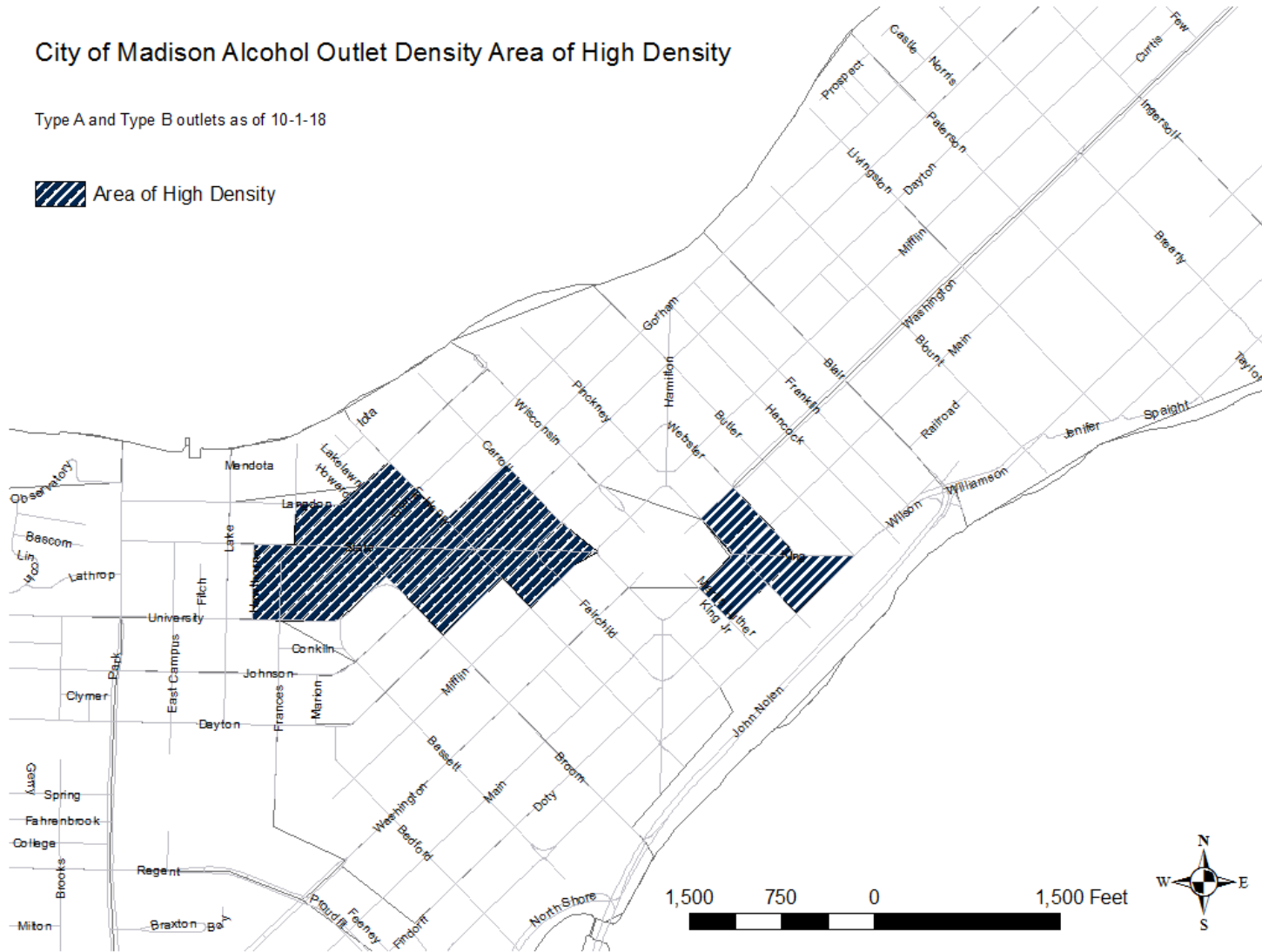
	Container Based	Distance Based	Spatial Based
Limitation(s)	Uses an arbitrary geopolitically defined boundary of a Census block group in order to calculate density	Using straight line distance ignores on the ground context (i.e. street/ped/bike network, possible physical barriers like a highway, etc.)	Uses the geometric center of an arbitrary geopolitically defined Census block group in order to calculate density
Strength(s)	Most straightforward methodology that relies on standard unit of measure	Ensures the density measure is independent of geopolitical boundaries (i.e. Census Block Group) AND it also allows for “cluster” analysis	Shows “clustering” around a certain point in Census Block Group (captures density that may be driven by outlets outside the individual block group)
Decision Point	How can we define density separate from constraints established by arbitrary boundaries?		
Selected Methodology	Distance Based: Approach uses statistically significant clustering to define where density exists without pre-determined borders.		

NOTE: the CDC uses the term “cluster” subjectively in their guidance to refer to areas with high concentrations of retail alcohol outlets within a small geographic area. This should not be confused with the statistical meaning of a cluster where a cluster is often defined as a statistically significant increase in cases or events in a defined area that is likely to occur solely by random chance or a random geographic distribution.

## City of Madison Alcohol Outlet Density Area of High Density

Type A and Type B outlets as of 10-1-18

 Area of High Density



- There are 85 active licenses within the area defined as Dense
  - Represents 13% of the total alcohol licenses
- Of the Class B licenses 73% are restaurants while 27% are taverns

MAP: HIGH DENSITY STUDY AREA - DISTANCE BASED METHODOLOGY



NEXT STEPS



## CALLS FOR SERVICE

- The Research Team is gathering datasets of 2016-2018 calls for service from the following agencies:
  - Police
  - Fire/EMS
  - University Police
  - Building Inspection
- All calls for service will be mapped and analyzed to draw comparisons between dense & non-dense areas
- Costs will be assigned to each call for service. A total cost for the study area and each Census block group will be determined. The analysis will provide a comparison of all public safety costs in the study area compared to each Census block groups in the city at large.

## SUBJECT MATTER EXPERT INTERVIEWS

- Five question interview requested of five MPD, UPWD and Fire/EMS employees requesting their professional perceptions on the following:
  - Culture associated with drinking in dense vs. non-dense areas.
  - Experiences and observations in the dense areas.
  - Enforcement and care provided related to alcohol issues.
  - Approximate time spent on issues related to alcohol.
  - How the situation changed in recent years (if at all).

# MANAGING LICENSES: BUSINESS PROCESS ANALYSIS

## Clerk

- Responsible for new liquor licensing, liquor license renewals, and managing liquor license data

## Building Inspection

- Responsible for collecting indoor capacity data for restaurants and bars

## Fire

- Responsible for collecting outdoor capacity data and enforcing capacity

- These independent business processes and data collected/maintained currently meet the needs of each agency. However, this presents challenges in answering research questions in this study because there is not a single, primary data source for all City business around liquor licensed establishments.
- An analysis around current business processes, data management, and their respective benefits, challenges, and limitations will be included in the final report.

## ALRC BRIEFING SCHEDULE

April: Present  
Calls for Service  
Data



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graph LR; A[April: Present Calls for Service Data] --> B[May 31st: Report with Findings Complete]; B --> C[June: Present Full Report to ALRC];
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May 31<sup>st</sup>: Report  
with Findings  
Complete

June: Present  
Full Report to  
ALRC