

# Lab 8

## ArcGIS Basics

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CEGE-3201: Transportation Engineering

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# Administration

- ▶ Report 2 grade statistics:

Mean	Max	Min	Median
3.39 (85%)	4.0	1.46	3.57

- ▶ Did give feedback (why you lost points and general comments) to your submitted reports, please read them!
- ▶ Do not copy others' report!
- ▶ Take the evaluation survey.
- ▶ ITSO talk: Wednesday, March 27th, 12:30 - 1:30 pm, Room 202

# Objectives

- ▶ Become familiar with transportation analysis using ArcGIS
- ▶ Learn basic operations of ArcGIS: importing data, selecting objects using SQL, identifying objects, creating maps

# ArcGIS

ArcGIS is a geographic information system (GIS) for working with maps and geographic information. It is used for creating and using maps, compiling geographic data, analyzing mapped information,...<sup>1</sup>



Figure: ArcGIS

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<sup>1</sup><https://en.wikipedia.org/wiki/ArcGIS>

# Some ArcGIS Analysis Outcomes

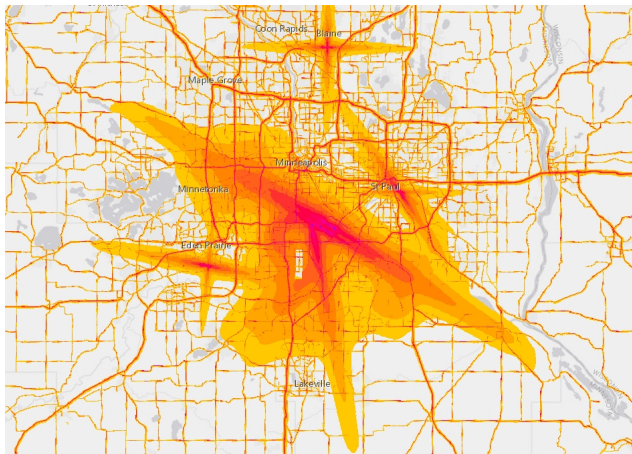


Figure: Transportation Noise <sup>2</sup>

<sup>2</sup><https://www.bts.gov/newsroom/national-transportation-noise-map>

# Some ArcGIS Analysis Outcomes (Cont.)

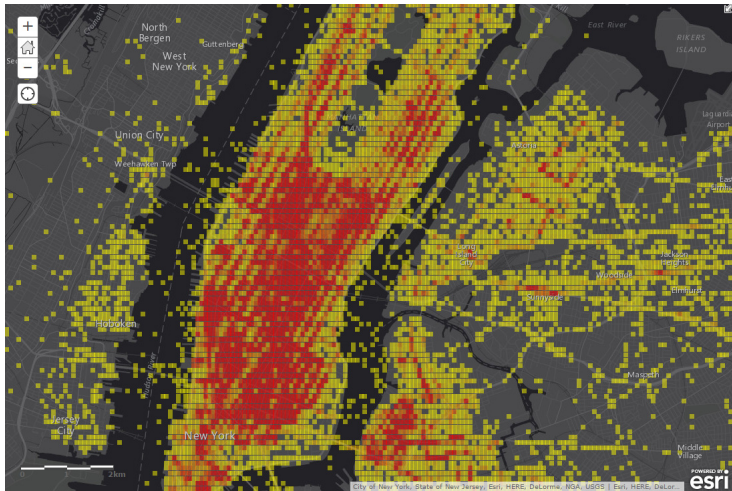


Figure: New York City taxi pick-up and drop-off heat map <sup>3</sup>

<sup>3</sup><https://www.memsql.com/blog/memsql-at-spark-summit-east/>

# Data sets

- ▶ Minnesota Road Network
- ▶ Transportation Analysis Zone Data
- ▶ Twin Cities' Transit GTFS data