



## Chicago Transit Authority (CTA)

*Service Planner, Bus*

*Jun 2019 - present*

- Evaluating bus ridership and performance, in order to make service changes that improve service quality and reduce overcrowding, according to CTA's service standards.
- Restructured school service at Taft High School, involving three bus routes with 12 daily trips, eliminated a legacy route variation, completely restructured one route, and saved 15 daily hours.
- Extended Saturday night service on route #152 Addison, whose span of service was cut more than 20 years ago, making it rank 6 places higher compared to the rest of the bus system's Saturday ridership between Fall 2019, Spring 2021, and Fall 2021 (not including Cubs games).
- Initiated recommendation plan for the restructuring of the DuSable Lake Shore Drive express routes, aimed at improving access, performance, and consistency.
- Creating tools to overview, analyze, and communicate bus performance metrics using technologies such as Microsoft Power BI, Python, and Jupyter Notebook.
- Managing development of ROVE Map, a web-based bus performance visualization tool.
- Supervising a team consisting of three doctoral students from Massachusetts Institute of Technology and one Information Technology professional from CTA.
- Ensuring successful deployment and contributing to software testing and maintenance.
- Initiating new projects to improve data analysis, performance, customer information, and consistency across the system:
  - Improving and modernizing the Service Standards using Python and Pandas.
  - Creating a bus shapes GIS dataset that will streamline and improve maps and visualizations.
  - Developing bus destination signs guidelines to improve legibility and consistency for customers.
  - Providing GTFS data for various bus shuttles during rail station construction closures.

## Chicago Metropolitan Agency for Planning (CMAP)

*Intern, Policy and Programming*

*Jun 2018 - May 2019*

Assisted in performance-driven decision making projects, such as:

- Evaluation of the transportation sections of the "ON TO 2050" regional plan.
- Transit Asset Management and Safety analysis, focusing on Vehicle Useful Life.
- Expressway traffic and incident analyses, including Big Data manipulation.

## Illinois Institute of Technology, Department of Civil, Architectural and Environmental Engineering

*Graduate Research Assistant*

*Aug 2017 - May 2018*

Utilized subject matter expertise to assist in a variety of research projects, including:

- "Chicago Streetcar Renaissance", emphasized on Transit Signal Priority and Simulation Models.

## Eratosthenes, S.A.

*Field Data Collector, Supervisor*

*Oct - Dec 2013*

- Collected passenger counts data on transit buses.
- Selected to lead a small team of 5 people collecting passenger counts data.

## ACADEMIC BACKGROUND

### Illinois Institute of Technology

*Master of Engineering, Transportation Engineering*

*Aug 2017 - May 2019*

Coursework in Transportation Engineering and Management, Public Transportation, Economics, GIS.

### National Technical University of Athens

*Master of Science (Integrated), Rural, Surveying, and Geoinformatics Engineering*

*Oct 2011 - Jul 2016*

Concentration in Transportation, Urban and Regional Planning and Development

Thesis: "Optimal Urban Transit Network Design Model Development Using Distinct Passenger Groups"

Coursework in Transportation and Traffic Engineering, Urban Planning, Geography, GIS.

## CONFERENCE PRESENTATIONS

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- Caros, N., Guo, X., Stewart, A., Attanucci, J., Nioras, D., Smith, N., Gartsman, A., Zimmer, A. (2022). *Ridership and Operations Visualization Engine: An Integrated Transit Performance and Passenger Journey Visualization Engine*. Poster presented at the TRB Annual Meeting, January 11, 2022, Washington, D.C.
- Nioras, D., Iliopoulou, C., Kepaptsoglou, K., Li, Z. (2019). *Urban Transit Network Design with Distinct Passenger Groups: Model and Application*. Poster presented at the TRB Annual Meeting, January 15, 2020, Washington, D.C.
- Nioras, D. (2019). *Effects of Bus Stop Spacing in Public Transportation Performance: An Analysis of Parallel Corridors in Chicago*. Presented at the Transport Chicago Conference, June 14, 2019, Chicago, IL.
- Nioras, D. (2019). *Feasibility of the Transition to a Battery Electric Fleet in Public Transit*. Presented at the Transport Chicago Conference, June 14, 2019, Chicago, IL.

## VOLUNTEER EXPERIENCE

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### Young Professionals in Transportation, Chicago Chapter

*Vice Chair of Student Relations*

*Nov 2019 - present*

- Administering relations between students and transportation professionals.
- Establishing new ways of communication and assisting student transition to the industry.

### Transport Chicago Annual Conference

*Steering Committee Member*

*Nov 2018 - present*

- Assisting the communications team with web design and preparations for the annual conference.

### Active Transportation Alliance

*May 2018 - present*

*Ambassador*

- Advocating for walking, biking, and public transit use.
- Informing about the benefits of active transportation to improve sustainability and quality of life.

## SKILLS - INTERESTS

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### Certifications

Rutgers University - National Transit Institute (NTI). *National Transit Database (NTD)*. Issued Sep 2021.

### Public Transportation Skills

Transit ridership and performance analysis using APC, AFC, AVL and GTFS data.

Use of data to make informed service decisions, in order to improve efficiency and optimize service.

Use of GIS (ArcGIS 10 - Pro, QGIS) and vector graphics software (Adobe Illustrator, Inkscape) in public engagement related to transit service.

Intermediate Scheduling knowledge using Giro HASTUS (up to vehicle blocking).

### Software Skills

Use of advanced programming tools (Python, Pandas, NetworkX, Altair, Jupyter, HTML/CSS/JS, Vue JS) to analyze and visualize transportation data.

Use of Microsoft Power BI to create dynamic dashboards and provide insights.

Working knowledge of database systems, including PostgreSQL, SQLite, Oracle, AWS Redshift.

Use of MS Office Applications, including Word, Excel, PowerPoint, Access.

### Professional Affiliations

Young Professionals in Transportation (YPT) Chicago

Transport Chicago Conference

Hellenic Institute of Transportation Engineers (SES)

### Music

Piano (Teaching Degree), Guitar, Brass Instruments. Former member of the Rock Band "Midnight Notes"

### Languages

English (fluent), Greek (native), German (basic)