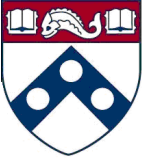


Stadium Traffic Emissions: Making Sports Greener

PARTH DOSHI
ZAIN MUKATY
FELIPE OCHOA

Advisor: Dr. Huemmler
10/1/12



GOALS FOR THIS PRESENTATION

PARTH

- Project Objectives
- Tasks Accomplished

FELIPE

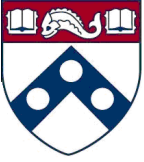
- System Block Diagram
- Subsystem Overview (SEPTA)

ZAIN

- Schedule
- Problems Encountered
- Tasks For Next Two Weeks

Advisor: Dr. Huemmler

10/1/12

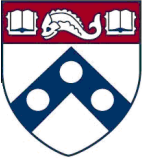


OVERALL PROJECT OBJECTIVE

Design a tool to quantify carbon emissions of fans travelling to and from sports games.

Advisor: Dr. Huemmler

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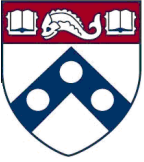


SPECIFIC OBJECTIVES

1. Develop a comprehensive model of transportation to and from the stadium.
2. Quantify the total emissions due to transportation to/from games.
3. Develop a tool to simulate the emissions impact of various initiatives to reduce private transportation usage (e.g. offering a discounted drink to someone who rides the SEPTA).
4. Create an algorithm to optimally route exiting vehicle traffic according to total emissions generated.
5. Develop a method for the Philadelphia traffic police to implement the traffic routing recommendations of our project.

Advisor: Dr. Huemmler

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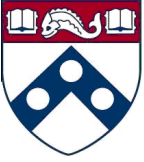


TASKS COMPLETED SINCE LAST PRESENTATION

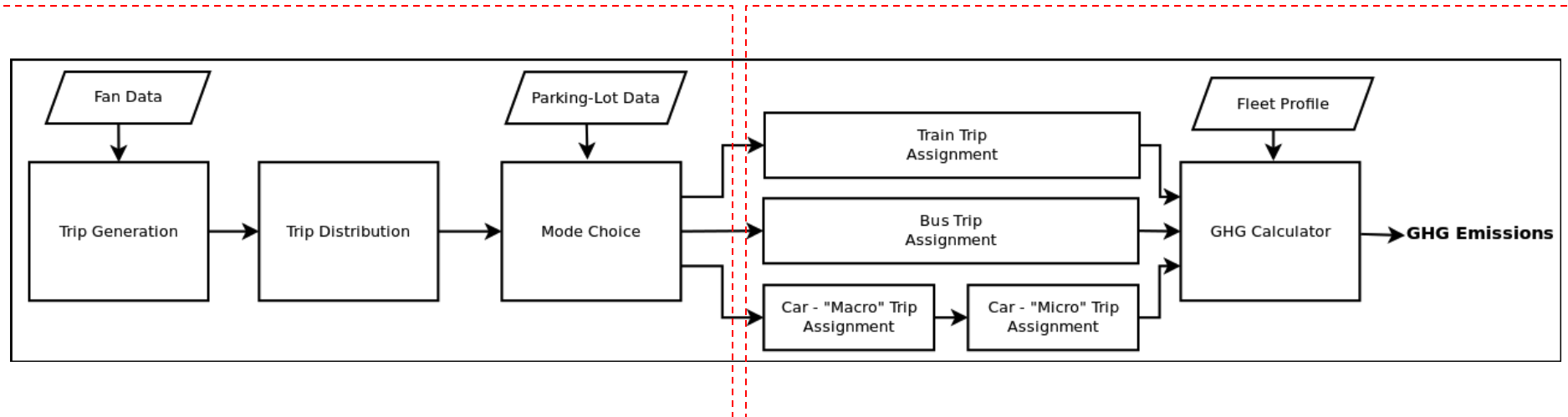
- Contacted professionals familiar with planning
 - Christopher Puchalsky and Robert Wright
- Completed project schedule
- Came up with comprehensive system model
- Developed list of incentives to smooth traffic
- Created database of SEPTA stations and routes

Advisor: Dr. Huemmler

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PROJECT OVERVIEW (SYSTEM BLOCK DIAGRAM)

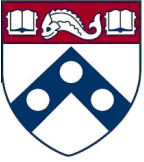


Part 1

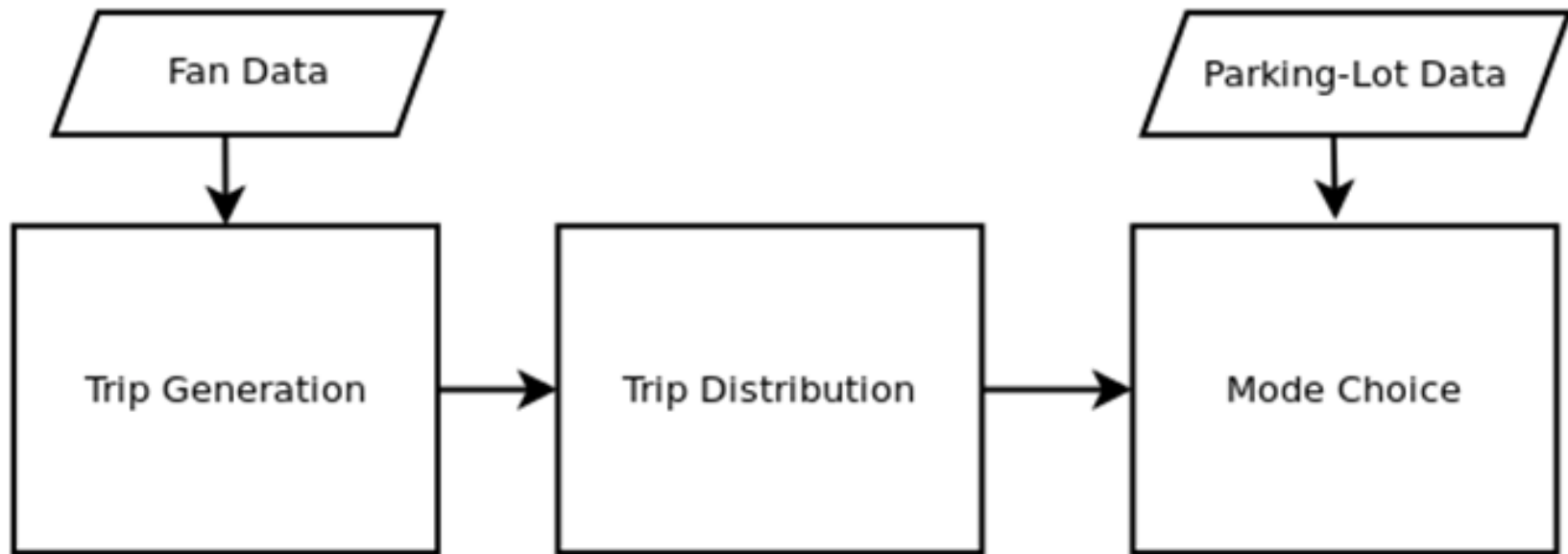
Part 2

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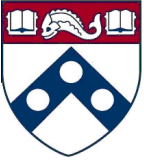


PROJECT OVERVIEW (PART 1)

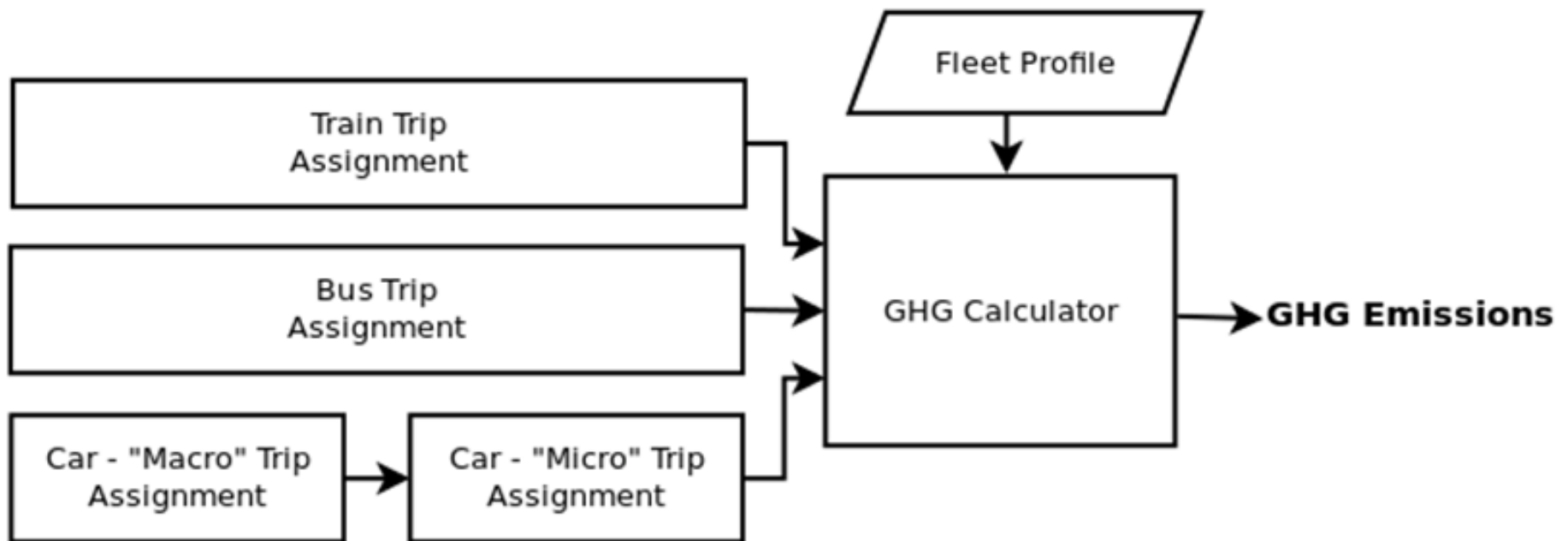


Advisor: Dr. Huemmler

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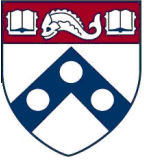


PROJECT OVERVIEW (PART 2)

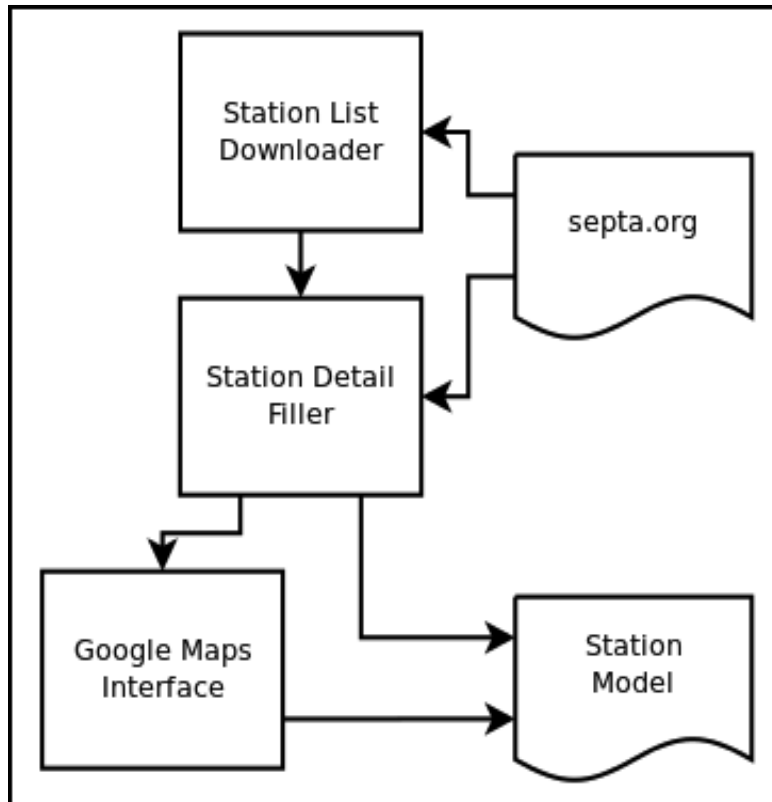


Advisor: Dr. Huemmler

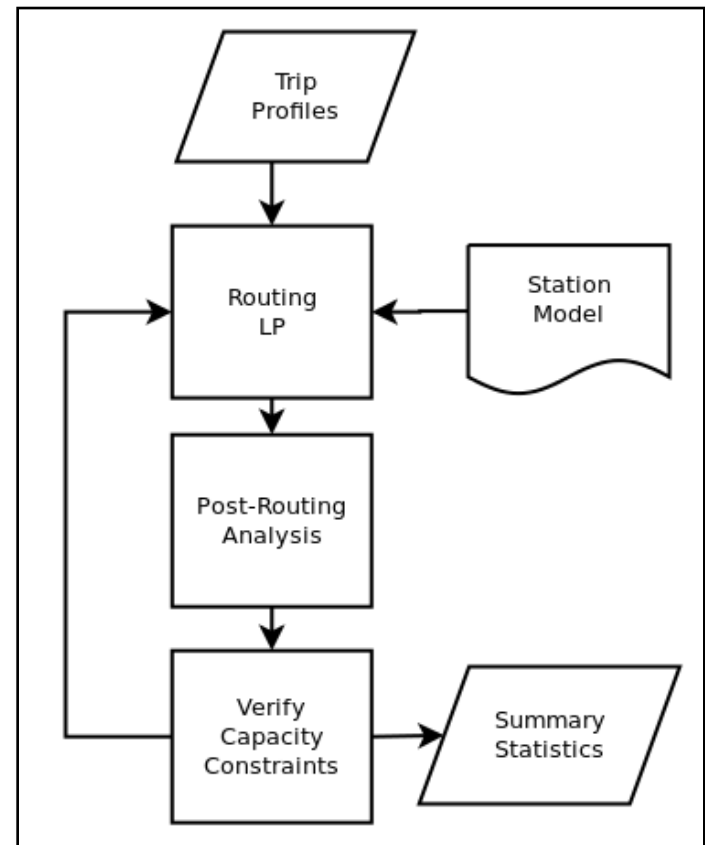
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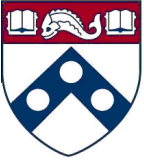
SUBSYSTEMS: SEPTA



STATION SYSTEM



ROUTING SYSTEM



Schedule

Nov

Dec

Jan

Feb

Mar

Apr

Train
Model

Car
Models

Bus Model

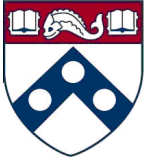
Subsystem Integration

Front End

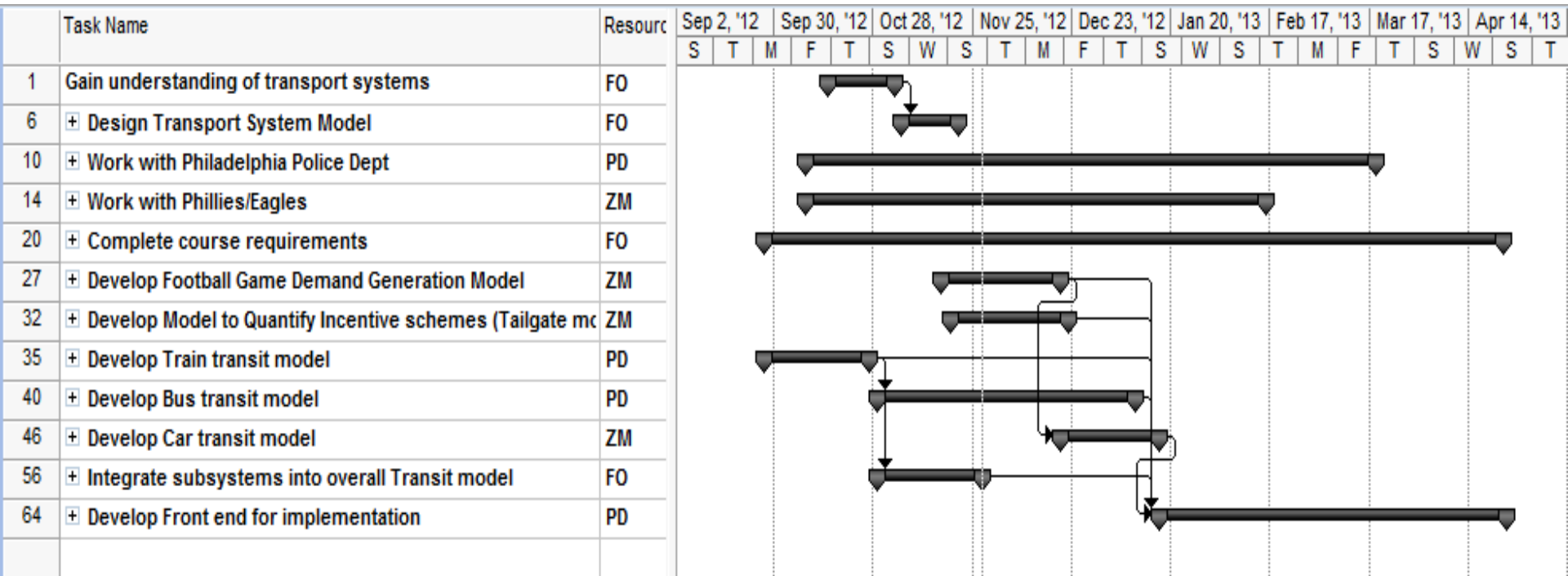
Advisor: Dr. Huemmler

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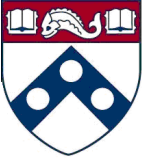
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SCHEDULE

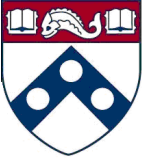


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PROBLEMS ENCOUNTERED

- Slow response from the Eagles
 - Mitigant: Pursue other contacts at the Eagles
- Difficulty collecting data
 - Mitigant: Find alternative data sources or collect primary data by visiting the venue during a game

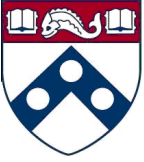


TASKS FOR NEXT TWO WEEKS

- Study GHG Emissions for idling and moving vehicles
- Begin working on Car Transit Model
 - Emissions Model
- Meet with Christopher Puchalsky
- Develop Bus Transit Model

Advisor: Dr. Huemmler

10/1/12



QUESTIONS?