TRANSPORTATION PLANNING (762:472)
Edward J. Bloustein School of Planning and Public Policy
Rutgers University

Wednesdays 10:00 am – 12:50 pm
212 Murray Hall

Instructor: Professor Michael Smart (mike.smart@rutgers.edu)
Office: Civic Square Building 556
Office hours: Tuesday and Wednesday 1:00pm to 3:00pm or by appointment

COURSE DESCRIPTION
Transportation plays a huge role in our lives. We spend, on average, an hour and twenty minutes each
day doing it. How and in which contexts we do it has impacts on our quality of life, our health, and the
health of our natural environment. But the way we get around today is no accident: planning,
technology, and public policy have all shaped our transportation system and our individual travel
decisions.

In this course, we will learn about how transportation systems function, how they are planned, and what
impacts they have on the environment, the economy, and our everyday lives. We will explore the
various modes of transportation, the connections between the built environment and transportation, and
transportation’s role in the economy. We will explore hot topics such as urban sprawl and transportation,
how we pay for transportation, and how the transportation system of the United States compares with
those of other countries.

After completing this course, you will have a good grounding in urban transportation policy in the
United States. You will develop arguments about your vision for the future of transportation. While this
is a “big picture” class, you will also delve deeply into one very specific topic of your choosing; you will
become an expert on it!

COURSE REQUIREMENTS
ATTENDANCE
I expect you to attend all classes; if you must miss class, use the University absence reporting website
https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence. An email is automatically
sent to me. Students can take 1 unexcused absence; after this, your grade will be lowered.

READINGS
There is no required textbook for this class. All readings will be available digitally, either via Sakai or
on external websites. I expect you to do the readings before class. I try not to repeat what we have read
in my lectures (that would be boring for both of us), but I often refer to the readings and expect that you
will be able to contribute.

QUIZZES
Each class will begin with a short quiz based on the week’s readings. The quizzes account for 20 percent
of your grade. However, if you have done the readings, this will be easy. (I promise.) The purpose is to
ensure that you have completed the readings so that our classroom time can be spent discussing and analyzing the week’s themes instead of reiterating the content. Quizzes will be given promptly at the start of class. I will drop the two lowest two scores on reading quizzes (including absences which count as a zero) when calculating the grade.

PEER TEACHING
During our first class, you will sign up for a week that you think sounds interesting, and about which you would be willing to do a small bit of peer teaching. Peer teaching can be nerve-wracking, I know, but we’ll keep it fun. You will pick a very specific topic or case study that relates to the week’s theme, and during your chosen week you will present ten to twenty PowerPoint slides on your topic or case study for fifteen to twenty minutes. You will also facilitate a brief discussion afterwards if anyone has any questions. You will turn in your slides as well as your speaking notes (these can just be bullet points if you like). I will grade you primarily on content (i.e. was the presentation related to our week’s theme, did you provide some detail, did you teach us new things). See me if you are nervous about speaking in “public,” and I can share some pointers with you!

(VERY) SHORT ESSAYS
You will write two short essays in this class. The first will be a one-to-two page* essay describing how you think the State of New Jersey’s transportation system should change in your lifetime. I’m leaving this intentionally vague—you can write about pretty much whatever you want, as long as it’s about your vision for New Jersey’s transportation networks. You can write about cars, public transportation, parking costs, airports, truck traffic, ferry service, or really anything else you like. Pick just a couple of topics. But keep it realistic, and keep it planning oriented: i.e. tell me what we should do, not just vague statements about how you’d like the world to be. (IE “New Jersey should double expenditures on fixing potholes” rather than “I wish there were no potholes!”) This essay is due by midnight on the 14th of September. You will be graded based on (a) the specificity of your arguments and (b) your crystal-clear, laser-sharp writing.

You will write your second essay at the very end of the course; it will be your “final exam.” It will be a 6-to-8 page* essay responding to the essay you wrote at the beginning of the course. You will use readings from the class (at least 3 readings) and any other external materials you like to help you make crystal-clear, laser-sharp arguments for or against your original ideas (roughly 3-4 pages of this). You will also propose new ideas, based on the readings from class (roughly 3-4 pages of this). This assignment will be due by midnight on December 14th. You will be graded on (a) your use of class readings to support your arguments (b) the specificity of your arguments and (c) your crystal-clear, laser-sharp writing.

TRAVEL BEHAVIOR MEMO
This assignment will have two parts. Both should be relatively straightforward. In the first part, you will recruit four people to take part in a travel diary survey that I will provide online. This survey will be short and pretty easy; respondents will provide some basic demographics as well as a diary of all the places they went on the day before they fill out the survey. They will also input which mode of transportation (drive alone, carpool, bus, train) they used for that purpose. Aim for diversity in your subject pool: men and women, older and younger, working and in school, and so forth. You will also fill

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* Whenever I say “pages” I mean double-spaced, 12-point Times New Roman font, with 0.75” or 1.00” margins.
out this survey, meaning that you will supply me with five surveys. They will be anonymous. They are due by midnight on September 21. You can receive extra credit for supplying extra travel diaries, 1% toward your final grade for each additional diary you provide (maximum: 5%).

In the second part of the assignment, I will ask you to do one of two things: for the mathematically-inclined, you can analyze the full dataset of responses (5 × the number of students in class) and write a 5-8 page* memo about 1-3 trends that you observe in the data (i.e. do men drive more than women?). If you are less inclined to this kind of analysis, don’t worry; you can interview one of your participants and get them to provide you a narrative not only of how they get around, but why they don’t get around in other ways. You can come up with other questions as well, such as “what would it take for you to switch to the train?” You will provide me with a memo of 5-8 pages*, as well as a list of 8-12 open-ended questions that you asked them.

I am also open to other ideas for this travel behavior memo. Speak to me if you would like to do something else.

FINAL EXAM
There will be no final exam in this course.

CLASSROOM BEHAVIOR
I expect you to respect the views, opinions, and experiences of your classmates. Everyone is allowed equal opportunity to share his/her views in a non-threatening, non-insulting manner. I expect you to be non-disruptive during class. Side conversations, verbal insults, reading non-related course material, or wasting time on Facebook are all distracting to other students and the instructor – and thus it is not allowed in class. Students who actively disrupt the class will be dismissed and granted an unexcused absence for the class session.

When we have guest lecturers in class, be alert, polite, and ask good questions—otherwise they’ll never come back again!
## SCHEDULE OF CLASSES AND ASSIGNMENTS

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Sep 3</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>Sep 10</td>
<td>Transportation and the evolution of cities</td>
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<tr>
<td>3</td>
<td>Sep 17</td>
<td>Who gets around how? And what it means for the environment</td>
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<td>4</td>
<td>Sep 24</td>
<td>Transportation and land use</td>
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<td>5</td>
<td>Oct 1</td>
<td>Cars: the good, the bad, and the ugly</td>
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<td>6</td>
<td>Oct 8</td>
<td>Public transportation</td>
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<td>7</td>
<td>Oct 15</td>
<td>The transportation planning process and guest (James Rojas)</td>
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<tr>
<td>8</td>
<td>Oct 22</td>
<td>Transportation and fairness</td>
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<tr>
<td>9</td>
<td>Oct 29</td>
<td>Transportation finance and economics</td>
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<td>10</td>
<td>Nov 5</td>
<td>Emerging trends: the next generation of travelers</td>
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<td>11</td>
<td>Nov 12</td>
<td>Walking</td>
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<td>12</td>
<td>Nov 19</td>
<td>Bicycling and guest (Nicholas Klein)</td>
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<tr>
<td>13</td>
<td>Dec 3</td>
<td>Freight</td>
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<tr>
<td>14</td>
<td>Dec 10</td>
<td>The future of transportation</td>
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### FIRST SHORT ESSAY DUE SEPTEMBER 14

### TRAVEL DIARIES DUE SEPT 21

### TRAVEL BEHAVIOR MEMO DUE OCT 21

### THANKSGIVING BREAK

### SECOND SHORT ESSAY DUE DECEMBER 14

## FINAL GRADES

Rather than one mega-paper or a final exam, this course has a number of smaller required assignments and quizzes; I intend these to be relatively straightforward and fun. How I will grade each assignment is spelled out in each of the assignment prompts, but I will also grade each written assignment based on how clear, concise, and laser-sharp your writing is. I will assign your final grade based on the charts below:

<table>
<thead>
<tr>
<th>Assignment weights</th>
<th>Grade scale</th>
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<tbody>
<tr>
<td>Peer teaching</td>
<td>A 93% or higher</td>
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<tr>
<td>Short essay 1</td>
<td>B+ 88-92%</td>
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<tr>
<td>Short essay 2</td>
<td>B 83-87%</td>
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<tr>
<td>Weekly quizzes</td>
<td>C+ 78-82%</td>
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<tr>
<td>Travel behavior memo</td>
<td>C 73-77%</td>
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<tr>
<td>Participation</td>
<td>D 68-72%</td>
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<tr>
<td>Total</td>
<td>F 67% or lower</td>
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<tr>
<td>WEEK 1</td>
<td>SEPT 3: INTRODUCTIONS</td>
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<tr>
<td>Class time will include introductions to the course as well as to course participants. You will also sign up for peer teaching assignments to be presented in the following weeks.</td>
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<tr>
<td>No readings this week, but start in on next week’s ample readings.</td>
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<tr>
<th>WEEK 2</th>
<th>SEPT 10: TRANSPORTATION AND THE EVOLUTION OF CITIES</th>
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<tbody>
<tr>
<td>Class time will include a quiz on readings, and a lecture on urban transportation geography and the tandem evolution of transportation systems and urban form in the U.S.</td>
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<tr>
<td>Readings:</td>
<td></td>
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| FIRST SHORT ESSAY DUE SEPTEMBER 14 |

<table>
<thead>
<tr>
<th>WEEK 3</th>
<th>SEPT 17: WHO GETS AROUND HOW? AND WHAT IT MEANS FOR THE ENVIRONMENT</th>
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</thead>
<tbody>
<tr>
<td>Class time will include a quiz on readings, and a lecture on travel demographics in the U.S.</td>
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<tr>
<td>Readings:</td>
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</tbody>
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Also, please skim/familiarize yourself with:


TRAVEL DIARIES DUE SEPT 21

WEEK 4

SEPT 24: TRANSPORTATION AND LAND USE

Class time will include a quiz on readings, and a lecture on how land use and transportation are related.

Readings:


(Don’t worry if the math is not clear to you; it’s important that you understand the main ‘take-aways’ of the readings.)

Also, please skim/familiarize yourself with:

Smart Growth America. Read items in the “Issues” section, located at http://www.smartgrowthamerica.org/what-is-smart-growth
WEEK 5


Class time will include a quiz on readings, and a lecture on the role of the automobile in the U.S. and abroad.

Readings:


WEEK 6

OCT 8: PUBLIC TRANSPORTATION

Class time will include a quiz on readings, and a lecture on the role of mass transportation in the U.S. and abroad.


Readings:


(Don’t worry if the math is not clear to you; it’s important that you understand the main ‘take-aways’ of the readings.)
WEEK 7

OCT 15: THE TRANSPORTATION PLANNING PROCESS

Class time will include a quiz on readings, and a lecture on how transportation systems are planned in the U.S., and an event hosted by guest James Rojas.

Readings:


TRAVEL BEHAVIOR MEMO DUE OCT 21

WEEK 8

OCT 22: TRANSPORTATION AND FAIRNESS

Class time will include a quiz on readings, and a lecture on concepts of “fairness” in transportation.

Readings:


WEEK 9

OCT 29: TRANSPORTATION FINANCE AND ECONOMICS

Class time will include a quiz on readings, and a lecture on how we pay for transportation, as well as the interrelationship between transportation and economics.

Readings:


WEEK 10

NOV 5: EMERGING TRENDS: THE NEXT GENERATION OF TRAVELERS

Class time will include a quiz on readings, and a lecture on current travel trends.

Readings:


## WEEK 11

**NOV 12: WALKING**

*Class time will include a quiz on readings, and a lecture on walking as a mode of transportation.*

**Readings:**


*(Don’t worry if the math is not clear to you; it’s important that you understand the main ‘take-aways’ of the readings.)*

## WEEK 12

**NOV 19: BICYCLING**

*Class time will include a quiz on readings, and a lecture on bicycling as a mode of transportation. Dr. Nicholas Klein will teach this week.*

**Readings:**


WEEK 13

DEC 3: FREIGHT

Class time will include a quiz on readings, and a lecture on freight and logistics.

Readings:


WEEK 11

DEC 10: THE FUTURE OF TRANSPORTATION

Class time will include a quiz on readings, and a lecture on “where we go from here.”

Readings:


Note that the California fuel economy standards Sperling (2008) wrote about are now in force nationwide.


SECOND SHORT ESSAY DUE DECEMBER 14