Traffic congestion is one of the longest-standing dilemmas in urban and regional planning. Almost alone among social problems, congestion’s direct costs—in lost time and productivity—fall primarily on affluent people, and continue to grow worse. At the same time, the pollution congestion creates disproportionately affects the poor and future generations.

Researchers often approach congestion as an economic or engineering problem, but it is also a political problem, and many of the reasons congestion persists can be explained by examining the incentives that elected leaders face. In developed countries, congestion is a problem that most people suffer from, but also one that most people cause. Because most people are drivers, and most drivers are voters, it is difficult to devise effective solutions for congestion that do not impose short-term harm on a majority of voters.

II. AIMS AND OBJECTIVES

This class examines traffic congestion from both a policy perspective and a political perspective. We will use concepts from economics to evaluate the problem of congestion, and concepts from political science to ask why some policies to fight congestion are adopted and others are not. We will cover congestion pricing, public transportation investments, and the use of development restrictions to fight traffic, among others. The class should be of any interest to any student interested in surface transportation policy. However, the class should have broader appeal as well. Traffic congestion is a classic "externality"—a problem that arises when the costs or benefits of people’s actions spill over onto bystanders. Externalities are common in all areas of
city and regional planning. Because the course will be an exercise in thoroughly examining an externality and its implications, it should be useful to all students of urban planning, as it can provide an analytical framework for thinking about other urban problems.

By the end of the class, students should understand a) why congestion occurs, b) why the United States has a "car culture" c) the merits and problems (both economically and politically) of different approaches to solving traffic congestion. Students should also have the tools to think critically about how large a problem congestion really is, and to evaluate different approaches to dealing with externalities.

III. CLASS FORMAT

I have structured the class as a lecture, but the topic lends itself well to discussion. Thus as the semester progresses I expect more participation from students, and participation will be a part of grading (see below).

IV. REQUIREMENTS AND GRADING

Students enrolled in this course will write three clearly-written, tightly-argued, 5-page policy memorandums. I will grade these memos both on their substance and their clarity. I have attached writing guidelines to the syllabus, and evaluation of writing will be based on these guidelines. Students who do not adhere to these guidelines should expect a low grade. The papers should be submitted in hard copy on the dates they are due. Late papers will have a grade point deducted for each day they are late (i.e., an A becomes an A-, then a B+).

In addition, each student must complete twelve "reading notes" throughout the quarter. A reading note is simply your reaction to one or more of the week's readings. The note can be a comment, an opinion, a rant, an analysis, or some amalgamation of all of these. But it must not exceed one page (in 12 point or larger type). The purpose of the reading note is to prepare the class for discussion, to help you reflect on the readings, and to guide me in preparing lectures. Reading notes should be posted on the class Blackboard the evening before class. Because we may fall behind schedule at some point during the semester, the rule of thumb to keep in mind is that you may write a reading note on any reading we have not already discussed.

The grading breakdown for the class is as follows:

1. Writing Assignment One: 20%
2. Writing Assignment Two: 30%
3. Writing Assignment Three: 30%
4. Reading Notes: 5%
5. Attendance and Participation: 15%

Note that if circumstances require it, I will change this format. For instance, I might find it useful to give a quiz at some point. If that happens, I will update the grading breakdown accordingly.

V. COURSE TOPICS AND READINGS
The main text for the course is Still Stuck in Traffic, by Anthony Downs. The book can be purchased on Amazon in both paper and digital formats, and it is less expensive on Amazon than via the Cornell store. The other readings for the class will be available either as hyperlinks from the syllabus or on the course blackboard site. All students should enroll on Blackboard in order to access the readings.

The readings are substantial but tend not to be technical. I try to use articles that accurately and accessibly distill technical research. I do this for a reason. Although this class is open to many students, including upper-division undergraduates and doctoral students, it is designed for Master’s students in City and Regional Planning. I therefore teach the class in the manner I think will be most useful to people who go in careers in transportation planning. These careers do not, for the most part, require or reward an understanding of technical research methodology. They require a strong understanding of the concepts and logic involved in transportation planning. I realize some students may wish to delve into the technical articles. In many instances the citations for these articles are prominently displayed in the articles I assign, and students should be able to find them easily. In other cases I am happy to provide citations for students who ask.

VI. ACADEMIC INTEGRITY

Each student is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit must be the student’s own. Work written with another student must include that student’s name. Violation of the Code of Academic Integrity can result in punishments up to and including failure and expulsion.

VII. ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

I am available to discuss any appropriate accommodations for students with disabilities. If possible, requests for these accommodations should be made during the first three weeks of the semester, so that arrangements can be made.
VIII. SCHEDULE OF CLASSES AND READINGS

Note: The schedule is subject to change depending on how quickly or slowly we move, as well as on guest speakers, etc. Students should complete the reading for each class before the class meets.

I: THE RISE OF THE PRIVATE AUTOMOBILE. DO WE HAVE A CAR CULTURE? IF WE DO, WHERE DID IT COME FROM?

Readings


The Forgotten History of How Jaywalking Became Illegal. Vox.com


II: THE CONTINUED IMPORTANCE OF PRIVATE CARS: WHY DO WE DRIVE AS MUCH AS WE DO? ARE WE DRIVING LESS?

Readings


III: THE SOURCES OF TRAFFIC CONGESTION, AND SOME BIG IDEAS ABOUT IT

Downs, 1-5, 38-60, 76-90.


IV: MEASURING CONGESTION, COUNTING ITS COSTS

Readings

Downs, 14-37.


Joe Cortright, Another Tall Tale from the TTI. Streetsblog.


Downs, 61-75.


Wall Street Journal: Another Upside to EZ Pass: Healthier Babies (Longer optional article: Traffic Congestion and Infant Health)


V: SHOULD WE BUILD MORE ROADS? CAN WE BUILD MORE ROADS?

Readings

Downs, 101-116


VI: SHOULD WE INVEST MORE IN PUBLIC TRANSPORTATION?

Readings

Downs, 117-151.


Marlon Boarnet and Douglas Houston. 2013. The Exposition Light Rail Study - Executive Summary. pages v-1.


VII: TRANSPORTATION DEMAND-MANAGEMENT

*Readings*

Downs, 180-200.


*On-Street Parking Spaces for Shared Cars*. *Access*, 36:8-13

VIII: PRICING THE ROADS: A GOOD IDEA – WILL ITS TIME EVER COME?

*Readings*

Downs, 152-179.


IX: THE POLITICS OF ROAD PRICING: IS IT FEASIBLE? IS IT FAIR?

*Readings*


X: THE RIGHT AND WRONG PRICES FOR PARKING

Readings


Michael Manville, Alex Beata and Donald Shoup. 2013. Turning Housing into Driving, Housing Policy Debate.


XI: LAND USE STRATEGIES

Readings

Downs, chapters 12-14, 15 and 17


XII: CONGESTION IN OTHER COUNTRIES

Readings

Downs, 272-297


Lucas W. Davis, Driving Restrictions and Air Quality in Mexico City, Stuck: Moscow's Traffic Nightmare, The New Yorker.
XIII: REVIEW AND SUMMATION

Downs, Ch 18.


Writing Guidelines for Policy Memos

Be Specific
Do not attribute actions or circumstances to “powerful interest groups” or “economic forces” or “government agencies.” Identify the interest groups, economic forces or government agencies. So instead of “Government agencies have failed to reduce transportation obstacles,” give us that “The county transit agency has failed to reduce traffic congestion.” And then tell us specifically how that failure took place. Likewise do not say that “a lot of the vehicles on the road during peak hours are not travelling to work or school.” Give readers the share and the source of the information: “The National Household Travel Survey tells us that fewer than half (47 percent) of peak hour drivers are on their way to work.”

Avoid False Precision
False precision is a problem that shows up most often in tables, but sometimes it creeps into prose as well. We don’t need to know that people in Happyville own 0.623 cars per capita; we can be happy with 0.6. The Census might say that there are 3.27 people per household in a county, but the people at the Census don’t really know that (read all the data collection footnotes if you don’t believe me), and in any event it sounds ridiculous. You can get away with saying 3.3, or “just over 3” or even “3.” In other words, round numbers off. You gain a lot in clarity, and you don’t really lose much in accuracy, because often the digits you eliminate aren’t significant.

Avoid the Passive Voice
You probably hear this all the time, but since (in my experience at least) few people ever bother to explain the passive voice, the error persists. The passive voice describes a sentence where the verb tense is a form of “to be”: ‘a law WAS passed,’ ‘a parking plan IS required.’ In these sentences the main verb tends to end in “-ed” or “-en”—as in “passed,” or “required.” Another way to recognize the passive voice is that its sentences often have “by” or “in” towards the end of them—as in “Existing pollution programs are summarized in” or “A law was passed by…” There are two reasons not to like the passive voice. The first is that it tends to produce dull sentences. “A law was passed by the City Council,” is longer, less direct and less lively than “the City Council passed a law.” The second and more important problem with the passive voice is that it obscures the actor or cause of the action in the sentence. That’s where the passive voice gets its name—it renders everything passive. If everything were written in the passive voice, we would have a world where no one ever does anything.* In the passive voice things just happen: “A law was passed.” ”Mistakes were made.” This makes for bad writing and bad thinking. We shouldn’t be content to know simply that something happened. We want to know how and why
and by whom. Who passed the law? Who made the mistakes? Writing in the active voice forces us to answer those questions. Also, it tends to make sentences shorter: so with the active voice we get not just clarity and precision, but also brevity.

*Should you always avoid the passive voice? No. Astute readers will notice that I used it in this sentence. Sometimes it works. But in general, write in the active voice.

**Avoid Nominalization (Noun Clusters)**

Almost all of us are familiar with comments in the margins of our paper that tell us to be less "wordy", or less "awkward," or to not be "unclear." These comments are often correct but not helpful. In order to write well you need to understand what *causes* you to use excess words or awkward and vague constructions. Frequently the culprit is *nominalization*, or turning verbs into nouns. If I write "the absence of a vehicle is a frequent inhibitor of labor market activity," then I have written a bad sentence. It is wordy, unclear and awkward. It also contains no verbs, and instead uses clusters of nouns ("labor market activity"). I can make the sentence shorter, clearer and more specific simply by saying "People who don't own cars have a harder time finding and keeping jobs."

**Minimize Jargon**

For our purposes jargon includes not just technical terms—"marginalism," "elasticity", etc—but also words that are needlessly long. The word “utilize” for instance, should never appear in a paper. It is just a fancy and cumbersome way of saying “use.” Don’t say “dwelling unit” if you can say “house” or “apartment.”

If you do need to use some jargon, and often you will, make sure to carefully define the term the first time you use it. In many instances, however, you will find you can avoid using jargon altogether. Avoiding jargon takes a bit of thought, but expressing your ideas in non-jargon prose has two big advantages. First, it sharpens your analysis. Jargon is often not just a shortcut but a crutch, and putting your thoughts in plain language forces you to think through exactly what you are trying to say. This will make both your thinking and your writing better. Second, it will make your document much easier to read, and accessible to a broader audience.

**Avoid Florid Language**

If you have a choice between a word with three syllables and one with two syllables, use the shorter word. Is this an absolute rule? No. Is it a rule that will steer you in the right direction over 90 percent of the time? Yes. Similarly, if you can say something in two words rather than four, use two. See the discussion of nominalization, above. Lastly, a short sentence is generally better than a long one, especially if you are introducing complex ideas. You don’t want to write entirely in short sentences, of course—it’s good to vary their length—but whenever you are in doubt make a sentence shorter rather than longer.
Use mood-changers and other signaling devices

Often times when we write we need to shift gears; we lay out one scenario or interpretation and then, to be balanced or thorough, we lay out another. This is an important tactic, but it can confuse the reader terribly if the writer doesn’t signal his or her intentions first. Mood-changers are words and phrases that let the reader know a new direction is coming. They can be as simple as the words “but” or “however,” or be phrases like “on the other hand” or “nevertheless.”

Consider the following examples:

a. Building a light rail line provides a visible alternative to driving, and many proponents of rail believe it can not only reduce traffic but also clean the air and spur urban revitalization. Most research suggests that none of these claims are true. Cities build rail systems enthusiastically.

b. Building a light rail line provides a visible alternative to driving, and many proponents of rail believe it can not only reduce traffic but also clean the air and spur urban revitalization. Most research, however, suggests that none of these claims are true. Nevertheless, cities build rail systems enthusiastically.

In example “a” I change the mood twice, but I never use a signal. The example is, as a result, pretty clumsy. Example “b”, by contrast, reads much more smoothly, even though all I have done is insert the words “however” and “nevertheless.” In academic writing we often have to give both sides of an issue and then deliver some concluding thought. Mood changers are simple but necessary in these instances—without them an argument becomes incoherent. Also, despite what some grammar-school teachers may have told you, it is perfectly appropriate to start a sentence with the word “but.” But don’t do it too often.

Re-write

The assignments in this class are short for a reason. Nothing is done the first time. Some people claim that they can just sit down and produce good writing. But there is no such thing as good writing. There is only good re-writing. Re-writing makes not just your writing better but also your thinking. Oftentimes a phrase that isn’t clear to the reader is a sign of a thought that isn’t clear to the writer. Getting a sentence worded correctly requires that you think hard about the point you are trying to make, and if the sentence refuses to make sense it may be that your point doesn’t make sense. Not making sense is an inherent part of writing—it happens to everyone—but it is far better to catch yourself not making sense than to turn in a sloppy assignment and receive a low grade. Working hard now saves you from looking silly later. So go over your papers carefully, and more than once.

A Note on Tables

In addition to false precision, keep a few things in mind when you create tables. First, the less that is in a table, the better. That doesn’t mean that every table has to be tiny. Some tables are unavoidably large. But it does mean that no table should be bigger than it has to be. So look
closely at your tables. Are some of the categories very small, and better represented by collapsing them into other categories? Then do so. Are there some rows or columns in your table that you don’t discuss in your prose? Omit them. Could your table actually be two or three smaller tables (i.e., one on income, one on education, and one on age)? If so, break them up. Finally, make the table’s layout simple and pleasing to the eye. Don’t have gridlines running through it. Be consistent in the way you align headings. And always be sure to include the table’s sources.

Useful References for Student Writing:


