

Jim Aloisi

MIT Dept. of Urban Studies and Planning

Lecturer | Transportation Policy + Planning

jaloisi@mit.edu | (617) 877-7583 | Office 9-324**Teaching Assistant:** Cameron Dougal | cdougal@mit.edu**Course Description**

The course examines urban transportation policymaking and planning, its relationship to social and environmental justice and the influences of politics, governance structures and human and institutional behavior. Through the lens of history and current events we will explore the pathways that led to today's legacy infrastructure, legacy policies (and legacy thinking), how attitudes are influenced, and how change happens. We will consider planning as a method and a process, and how it influences or is influenced by urban design, legacy systems and other (fiscal and political) constraints. We will discuss how to approach transportation planning in a way that responds to contemporary needs and values.

An overarching element of our work will be to grapple with this moment in time, when new technologies and business model innovations intersect with pandemic effects, and new federal policy and political priorities are unfolding, bringing an unprecedented level of uncertainty and complexity to the policy context. Topics to be explored include the roles of the federal, state, and local government, transport sector decarbonization, how change happens and how cognitive barriers to change can be understood and managed.

The class is structured to elicit interactive class discussion. The course will be taught through a Boston-oriented lens, as a convenient local example that illustrates many of the topics we will explore and discuss. This brings the benefit of immediacy and proximity, and in my experience is not limiting but enlightening.

Class Structure and Protocols

Each class will include a lecture and an interactive discussion of the readings. Class discussion will integrate lectures, readings, and assignments. **Active participation in class discussion is an essential component of this class.** We all learn from one another. I expect our interactions to be vibrant, respectful, engaging, and appropriately reflective of the weekly readings. Guest speakers are chosen for their expertise and relevance to the course.

Be present in class. Please do not use your laptop or other electronic devices during class unless it is necessary in connection with coursework.

Readings

[Assignment Readings](#) (meant to assist you in preparing the Assignments) are embedded or cited in this Syllabus.

[Weekly Readings](#) *are an essential part of the course.* Students are expected to come to class having read the required Weekly Readings and prepared to participate actively in class discussions. **The readings inform weekly discussion and interaction and, together with your Reading Responses, comprise 40% of your final grade.** You are expected to be familiar with the assigned readings before each class; use your judgment about where to read in detail and where to skim. I reserve the right to remove or add (typically recent news articles) readings currently listed on the syllabus. **Your best reference for all Readings will be those posted on the Canvas site.**

Reading Responses

These are a core element of the class. They are meant to help you engage with the Weekly Readings and the Big Dig Podcasts, and inform the class discussion. You are required to submit a brief (one-or-two-paragraph) response to the readings and the Big Dig podcast each week by **4:00 PM Wednesday. Please submit on the Canvas site in pdf format.** *This is not an arbitrary time requirement; I need the time to read your submissions before class.* Responses will count toward class participation. Your weekly responses are not meant to be formal, but they are expected to be thoughtful. ***Please do not summarize the readings; rather, react to or reflect upon them.*** What resonated with you? What did you really like or dislike about certain of the readings? Feel free to include a question that you would like to raise and discuss in class relevant to the readings.

Please note: Friday September 19 is a designated student holiday. There will be no class that day. However, I have assigned 4 readings for that week, which have broad applicability for the entire class. You are not required to (and please do not) write a Reading Response for these.

Big Dig Podcast series. In addition to the weekly readings, you must listen to the Peabody Award winning 9-episode Big Dig podcast produced by WGBH news. The podcast is available on multiple platforms. **Your weekly Reading Response should include a few sentences on that week's Big Dig podcast. What were your key takeaways or insights? What question or questions do you have? How do you think that week's podcast relates to themes in the course?** Your Big Dig podcast reflections will be compiled and curated by our TA Cameron, who will use them to lead a class discussion during each class.

Attendance and Participation

Students are expected to attend all classes and meaningfully contribute to class discussions. *See: Reading Responses, above, outlining specific requirements.* Your overall engagement with the class, specifically attending class, participating in discussion & submitting weekly Reading Responses will be 40% of the final grade.

Walking Tour: Friday September 19 is an MIT student holiday. We may schedule a voluntary walking tour, weather permitting, of places that are of relevance or interest to the course.

Office Hours

I will conduct office hours on Wednesday afternoons by appointment from 2:30pm-4:00pm beginning Wednesday September 10. Location: Room 9-324 or zoom. I am always available via e-mail if you have a question or need to talk through something. Our TA, Cameron, will also be available to you for any questions you may have.

Current Events

We will be discussing relevant current events as they may relate to our work together. You are encouraged to read the *New York Times*, and for more local content the *Boston Globe*, *StreetsBlog MA*, and *Commonwealth Magazine* <https://commonwealthmagazine.org>. You may also want to check out local transportation advocacy group websites, including TransitMatters, a local technical advocacy group <http://transitmatters.org>

Course Materials

All required course readings will be distributed via Canvas.

Academic Integrity

It goes without saying (even though I'm about to say it) that plagiarism and cheating are not tolerated. When preparing your individual submissions use your own words, give appropriate credit to the ideas of others, and always cite your sources. Of course, discussing, sharing and exchanging ideas and insights with your classmates is encouraged and is a key part to the learning experience of this course. I consider content generated by artificial aids like ChatGPT

or DeepSeek the equivalent of using words, ideas, or phrasing of another person. This doesn't mean you can't use AI appropriately or judiciously, but you must treat it as a cited source if you do (and good luck with that because in my experience it is often riddled with errors).

Mutual Respect | Safe Space | Accommodations

I hope to foster a sense of community in the classroom. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for everyone in the class. If this standard is not being upheld, please feel free to speak with me.

Students who need disability accommodations are encouraged to speak with Disability and Access Services (DAS), prior to or early in the semester so that accommodation requests can be evaluated and addressed in a timely fashion. If you have a disability and are not planning to use accommodations, you may still wish to meet with DAS staff to familiarize yourself with their services and resources. Please visit the [DAS website](#) for contact information.

Assignments and Grades

Class assignments collectively comprise 60% of your final grade. Your class participation and weekly Reading Responses comprise 40% of your final grade. Your assignment outputs should reflect an understanding and an integration of the relevant class readings, lectures, class discussions and your own independent research. **Each Assignment is due on a Monday at 4pm. Please consult the Assignment and Grading Table, below.**

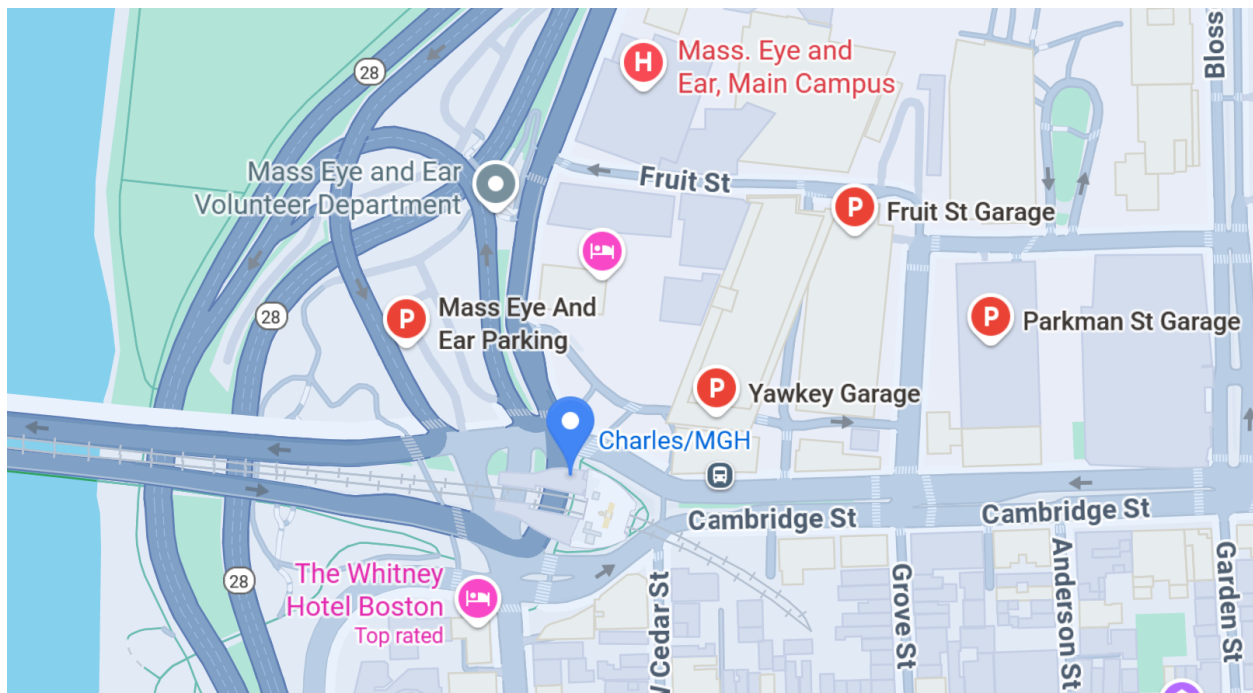
Assignments 1 & 2 | Improving the Cambridge Street Corridor

You are a consultant hired by the cities of Boston and Cambridge to propose a short and mid/long-term plan for the improvement of mobility and connectivity along the corridor connecting Kendall Square (Cambridge) and Government Center (Boston). The primary links are the Longfellow Bridge and Cambridge Street. This is a vibrant, if visually cacophonous urban corridor that includes one of the largest and most highly regarded medical facilities in the world, the Mass General/Mass Eye & Ear medical complex. The existing mobility infrastructure has modest, inadequate or no dedicated cycling lanes, two major transit subway lines that do not connect, and several high-capacity parking facilities supporting the Massachusetts General Hospital/Mass Eye and Ear Hospital joint campus. The epicenter of mobility is Charles Circle, which contains the Charles/MGH Red Line station. This transit hub serves the MGH/MEE campus as well as the Liberty Hotel and shopping destinations along Boston's historic Charles Street. Pedestrian, transit rider and auto traffic are heavy.

Context: Charles Circle and Charles/MGH Station.

Kendall Square and Boston's Government Center are connected via Cambridge Street and the Longfellow Bridge. The Charles/MGH Red Line Station stands at the center of Charles Circle, a gateway of sorts to the Longfellow Bridge and the MGH/MEE campus. This location is a high-mixed-traffic (pedestrian/transit rider/cyclist/auto driver) area, with significant use as a crossroads for inter-regional traffic and for access to the hospital complex. See, e.g., for transit-related data resources from TransitMatters: <https://recovery.transitmatters.org>; <https://dashboard.transitmatters.org> and <https://transitmatters.org/transitmatters-labs>

There are four major hospital-specific parking facilities supporting the MGH/MEE campus.



Context: Mass General Hospital/Mass Eye & Ear Medical Complex

MGH has plans for significant development along Cambridge Street.

<https://www.bostonplans.org/projects/development-projects/mgh-clinical-and-campus-services-building> A major new clinical building is well under construction along Cambridge Street. There has been an intent that the new facility include a portal to a connected Red and Blue Line system, but there has been little progress advancing the Red Blue Connector. In addition, MEE has had interest in replacing the current surface parking facility adjacent to the Charles River with an underground parking garage.

<https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:0655c176-efac-3bcb-a0fb-2027aaba6d5d> and <https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:952f79b6-d1aa-38c0-aa25-1966cba176bf> There will inevitably be a range of environmental, regional

mobility and safety implications of building an underground garage in close proximity to the Charles River, including impacts on (and of) the water table/potential limitation on number of parking spaces/improvements to & straightening of Storrow Drive/riverwalk.

You should consider access to the Charles River, and how Charles/ MGH station is also the transit link to the esplanade, via the relatively new pedestrian/ bike bridge that links the esplanade to Charles Street. In addition, the underground parking garage proposed by MEE in the past allows the bay under the Longfellow Bridge arch closest to the River to be restored as parkland, which was taken away in 1938 when Storrow Drive westbound took its place.

<https://commonwealthbeacon.org/economy/028-storrow-drive-garage-park-proposed/> This could be a rare opportunity to simultaneously add to and improve the Esplanade and straighten Storrow Drive. The construction of the underground garage could also provide the opportunity to revise the auto access and ambulance access to MGH, providing access directly from Charles Street Circle, and reducing the backup which now occurs on Cambridge street at the entrance to MGH, and revise the bicycle access along Cambridge street and Longfellow Bridge.

The MEE surface parking lot and associated Storrow ramps - aerial view



Context: Cambridge Street

Further up Cambridge Street, the Commonwealth has plans to redevelop the Charles Hurley Building. <https://www.mass.gov/news/healey-driscoll-administration-announces-new-redevelopment-vision-for-hurley-lindemann-buildings> This site is situated in close proximity to the current terminus of the Blue Line, Bowdoin Station. Several new residential and office buildings have been built or are in construction between Cambridge Street and Haymarket.

https://www.thesudburyapartments.com/?utm_source=GoogleLocalListing&utm_medium=organic&utm_campaign=TheSudburyGoogleLocalListing ; <https://www.mass.gov/service-details/charles-f-hurley-building-redevelopment> <https://www.mass.gov/info-details/charles-f-hurley-building-redevelopment> Cambridge Street is a high-pedestrian environment. <https://walkboston.org/2021/07/16/cambridge-street-signals-walk/> A city-led effort to add cycling lanes has taken place in the past 24 months. The design and safety of these lanes has been the topic of some debate. There are multiple resources on how to design best practice safe bike [lanes](#). See also: <https://nacto.org/publication/urban-bikeway-design-guide/bike-lanes/> The City of Boston has previously offered its thinking in this story map: <https://storymaps.arcgis.com/stories/439283dbff1d41989581ae32156881c6>

Context: Red/Blue Connector

Transit advocates have persuaded the MBTA to include the connection of the Red and Blue Lines as a project on its official construction plan. The Blue Line offers a direct transit ride to Logan International Airport. <https://www.mbta.com/projects/red-blue-connector> and <https://transitmatters.org/redblueconnector> The following link is dated but still of interest: <https://archives.lib.state.ma.us/bitstream/handle/2452/69131/ocn689058267-ExecutiveSummary.pdf?sequence=3&isAllowed=y> In East Boston, a developer is in the process of constructing 10,000 units of housing to the Suffolk Downs site, which is served by 2 Blue Line stops. Despite ongoing gentrification, East Boston is an EJ community with a significant underserved population. See, Northeastern University's Dukakis Center report, "The Toll of Transportation". <https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:a5881a56-67d5-3d18-a98d-dd040e2758e7> The MBTA appears to favor the elimination of Bowdoin station as part of the overall plan to connect the Red and Blue Lines. The construction of the Red/Blue Connector and the inherent disruptions to Cambridge Street that would accompany this creates potential phasing conflicts that have to be reconciled with regard to short-term conditions for pedestrians and bicycles and autos, and potential long range improvements like the reconstruction of the Red Line viaduct at Charles/MGH and a potential future underground garage replacing the current MEE surface parking lot (see below). What improvements in access are feasible to improve conditions TODAY, and are they consistent with the longer range desirable outcome?

Assignment 1: You cannot fulfill Assignment 2 without first having a firm grasp of the basic facts and context of the Cambridge Street Corridor. Hence, **this is an exercise in observing, counting, and visioning**. You can certainly undertake Assignment 1 with others in class if you wish to have company on your excursion, but these class assignments are all individual assignments.

Walk along Cambridge Street from Bowdoin Station to MGH at Charles Street Circle, and then to Longfellow Bridge. I suggest you consider spending at least 30 minutes, and maybe up to an

hour, sitting/standing in one place in addition to walking the area, taking notes. This will help you notice things you might not see right away. **Prepare a short memo (or outline, or slide deck) answering the questions below.** Please include specific examples, headcounts, etc. in your submission. Photos or diagrams supporting your memo/outline/slide deck are welcome. **Please undertake this exercise on a weekday, before 8pm. and note on your Assignment submission the day and time you are observing and counting.**

Observing/counting: You should be responsive to the following questions (but feel free to include more):

- Who are the beneficiaries of the Cambridge Street corridor? Do their interests conflict, and if so can the conflict(s) be resolved/mitigated?
- How many autos, taxis, ambulances, trucks, pedestrians, and bikes do you see at the entrance to MGH? Count them.
- Count how many motorized micromobility vehicles are using the bike lane or street (ebike, scooter, etc.).
- How many people do you see exiting Charles/MGH Station via the rear emergency exit door vs. front entrance?
- How many dwelling units are within 25 minutes of MGH by transit? By bike? By auto?
- Who are the primary constituencies whose interests you should care about?
- What is your assessment of the current safety of cycling and walking in this area? How would you improve it (if you think it needs improving)?
- What is your assessment of patient access to the MGH/MEE campus?
- What are the uses along Cambridge Street that require special consideration and where are they located?
- How many on-street parking spaces do you see? Are they time-restricted?
- What is your assessment of the overall legibility of this urban environment from an access/mobility perspective? Offer specific examples.

Visioning:

- How would you change the current design of Cambridge Street, and why? These are meant to be your initial thoughts, and my assumption is that you will refine or revise and develop them as you develop Assignment 2.

Additional Resources: <https://mbtaviz.github.io>;

[https://www.census.gov/data/academy/webinars/2021/using-ac-s-geodatabase-files-and-arcmap-with-ac-s-data.html](https://www.census.gov/data/academy/webinars/2021/using-acs-geodatabase-files-and-arcmap-with-ac-s-data.html)

[https://www.bostonplans.org/getattachment/c55502f3-3a70-4772-a894-](https://www.bostonplans.org/getattachment/c55502f3-3a70-4772-a894-0c51c325b216#:~:text=Boston%20had%20301%2C702%20total%20housing,the%20most%20new%20units%203%2C408)

[0c51c325b216#:~:text=Boston%20had%20301%2C702%20total%20housing,the%20most%20new%20units%203%2C408](https://www.bostonplans.org/getattachment/c55502f3-3a70-4772-a894-0c51c325b216#:~:text=Boston%20had%20301%2C702%20total%20housing,the%20most%20new%20units%203%2C408).

NACTO has issued a revised Urban Bikeway Design Guide. I have a copy and am happy to develop a way to share with the class. **See Canvas site for useful excerpts.**

Assignment 2: This is an individual assignment. Remember: You are a consultant hired by the cities of Boston and Cambridge to propose a short and mid/long-term plan for the improvement of mobility and connectivity along the corridor connecting Kendall Square (Cambridge) and Government Center (Boston). Please complete Assignment 2 as a written memo (max. 10 pages, including photos or charts or drawings/diagrams that illuminate your ideas).

Informed by the Assignment materials, Assignment 1, and your own independent research, **prepare a comprehensive plan that connects all of the moving pieces in a harmonious, coherent and synergistic way.** Your plan should contain both short term (immediate-1 year) and mid/long term elements and should be informed by, among other things, your assessment of weekday traffic, transit rider and pedestrian counts at Charles Circle, existing parking capacity at the Hospital complex, impacts of proposed developments, potential impacts of the proposed redevelopment of the Charles Hurley Building, and the potential to connect the Red and Blue subway lines. In specific connection with the proposed Red/Blue Connector, consider the implications for Cambridge Street (and your plan) during and after construction (sequencing of construction activities by all key stakeholders, potential for redesign to include protected cycling lanes, and management of existing curb cuts for parking facilities). Note any tradeoffs implicit in your proposal. How do you deal with safe passage of emergency vehicles needing access to the MGH/MEE complex? How could protected cycling lanes provide broader mobility and safety benefits? What are the governing standards for safe protected cycling lanes, and can these be fully achieved in this corridor? What funding sources would you consider to make your concept actionable? <https://www.sciencedirect.com/science/article/pii/S2667091724000013>

Assignment 3 (A) & (B) | A Policy Memo and Op-Ed Outlining How to Improve Transit Access from Kendall Square to Logan Airport

This is a two-part assignment, a short policy brief 3(A) and an op-ed 3 (B) explaining your recommendations.

Background: You are a consultant hired by the Kendall Square Association to develop a plan for improving transit access to and from Logan Airport from Kendall Square. There are two primary ways to get from Kendall to Logan by transit. One route is Red Line to Silver Line to Logan Airport via the SL1 or SL3. The alternative route is Blue Line to Airport Station then onto Logan Terminal Shuttles. Logan Express does not currently serve Kendall Square and, as you know, the

Red and Blue lines do not connect, leaving a gap between Charles/MGH and Bowdoin stations. For purposes of this Assignment, **I recommend that you find time to take a transit trip of your choosing (red/Silver, or Blue) to Logan and back again, so you have the full experience.**

Currently, many travelers working from academic, biotech or other businesses in the Kendall Square area feel compelled to use some form of vehicular mobility (personal vehicle or ride hailing) to access Logan Airport as they are unwilling to deal with the existing real or perceived deficiencies in transit access. This places a significant traffic congestion and emissions burden on East Boston and the Logan Airport landside complex. Your mission is to develop a comprehensive and actionable plan that the Kendall Square Association can adopt and promote to key stakeholders, Massport and other state agencies and leaders.

Assignment (A): Prepare a memo to identify and make the case for the policies and/or interventions you would propose as ways to improve transit access to and from Logan Airport and Kendall Square. In the context of this Assignment, you have some room to make certain specific policies and/or interventions the focal point(s) of your memo. Your memo should be a roadmap, with enough detail that it provides KSA with a strong, fact-and-data-based platform to advance their discussions with the key public stakeholders: Massport, Boston, MassDOT and the MBTA.

You should consider all relevant factors in connection with the specific, targeted policies and interventions you are proposing including efficacy, cost, potential funding sources, measures of success, mitigation of negative impacts, and potential or likely impacts on a broad spectrum of residents and stakeholders. You should identify the stakeholders who will be impacted by, and/or need to support your proposal. Your memo should include a discussion of how to generate political will and develop consensus or buy-in among the various stakeholders. Perhaps you will develop ideas for one or more pilots that can be implemented to gather data and assist key stakeholders as they decide on more permanent solutions.

Final Deliverable 3(A): A memo that makes a transportation policy recommendation to KSA. There is no suggested length for this third assignment but remember that you are writing a plan that is meant to be read and understood by the Executive Director of KSA and her senior staff and Board, who are smart but very busy people and not transportation experts. Hence your memo should be clear, concise, engaging, and mindful of the audience. There are no extra points for logorrhea.

Assignment 3(B): You are asked by KSA's Communications Director to draft an op-ed for your signature (~700-1,000 words max) that will run in *Commonwealth Beacon*, to make the case for the plan you are developing and, most important, float some of your ideas as a "trial balloon".

The Communications Director wants to use this as an opportunity to test public reaction and determine how difficult or easy it will be to explain your plan to the general public and media.

Assignment Readings & Resources:

- See, Johnson, J., “Why Can’t Logan Get Bus Pickup Right?”, Commonwealth Magazine, December 2021, <https://commonwealthmagazine.org/opinion/why-cant-logan-get-bus-pickup-right/>
- Transit advocates have persuaded the MBTA to include the connection of the Red and Blue Lines as a project on its official construction plan. The Blue Line offers a direct transit ride to Logan International Airport. <https://www.mbta.com/projects/red-blue-connector> and <https://transitmatters.org/redblueconnector> The following link is dated but still of interest: <https://archives.lib.state.ma.us/bitstream/handle/2452/69131/ocn689058267-ExecutiveSummary.pdf?sequence=3&isAllowed=y>

Assignment and Grading Table

| Assignments | Grading | Due Date | In-Class Discussion & Presentation |
|--|---------|------------------------------------|------------------------------------|
| Introductory Assignment | n/a | Monday September 8, 4pm | n/a |
| Assignment 1 | 10% | Monday Sept. 29, 4pm | October 10 |
| Assignment 2 | 25% | Monday Nov. 3, 4pm | November 14 |
| Assignment 3 (A) & (B) | 25% | Monday Dec. 8, 4pm | n/a |
| Participation (class discussion and Reading Responses) | 40% | Weekly every Wednesday before 4pm. | Weekly |

Week 1: September 5

Introduction

Mutual introductions; Overview of syllabus and course expectations; review the “run of class”

Lecture: US Transportation History

Introductory Assignment (not graded): **Upload pdf to Canvas by 4pm, Monday September 8.**

Write (1) a short (one-page max) introduction of yourself, your interests and background, and your interest in the topics to be covered in the course. Say something about your transit experience in your hometown, or anywhere you have been that made an impression (good or not-so-good) on you. Including a digital photo of yourself would be helpful but is not required.

Introductory Reading: Krizek, K., and King, D., “Data Models used in Transport Planning”, from *Advanced Introduction to Urban Transport Policy*, pp. 96-105 (2021).

Big Dig Podcast

In addition to the weekly readings, you must listen to the Peabody Award winning 9-episode Big Dig podcast produced by WGBH news. The podcast is available on multiple platforms, including YouTube. We will devote some time toward the end of each class to discussing each episode in sequence. **You can listen to the podcast however you like, but you are required to listen to and come prepared to discuss the episode assigned to each class, starting on Class 3 (Friday September 26).**

Please remember: **Your weekly Reading Response should include a few sentences on that week’s Big Dig podcast.** What were your key takeaways or insights? What question or questions do you have? How do you think that week’s podcast relates to themes in the course? Your Big Dig podcast reflections will be compiled and curated by our TA Cameron, who will use them to lead a class discussion during each class.

Week 2: September 12

Planning Methods | Access | Costs & Benefits

Special Guest Speakers: Randy Clarke, CEO WMATA; Prof. Kay Axhausen, ETH Zurich

Readings:

1. Dunkelman, M., *Why Nothing Works*, pp. 239-277 (2025).
2. Davidoff, P., "Advocacy and Pluralism in Planning", JAIP Journal, November 1965.
3. Wachs, Martin, "Forecasting versus envisioning: A new window on the future." (Part of the Symposium: Putting the Future in Planning) Journal of American Planning Association, Autumn 2001 (pp. 367-372).
4. Wachs, Martin, "When Planners Lie With Numbers".
5. Salvucci, F., "How Can Planners Learn From Mistakes?"
6. Gordon, A., "The Broken Algorithm That Poisoned American Transportation", Vice, August 2020.
7. Levy, A., "The Meaning of Construction Costs Per Rider", *Pedestrian Observations*, July 2024.
8. Salvucci, F., "Reflections on the Use of Accessibility as a Lens", excerpt from Chapter 8 in "Urban Access for the 21st Century", ed. Sclar, Lonnroth and Wolmar, (2014), pp. 212-217.
9. Chitti, M., "Down with BRT, Long Live the Bus", Italian Urban Letters blog, April 2025.

Friday September 19: No Class | Voluntary Walking Tour (Weather Permitting)

Please read these four items this week (no reading response required):

1. Chicago Value of Transit report, MIT 2024
2. The Transportation Dividend, 2018.
3. Aloisi, J., *et. al.*, "Replacing the Gas Tax: Leveraging the EV Transition", 2023.
4. Mumford, L., "The Highway and the City"

Week 3: September 26

Role of Public Transport | Agglomeration Effects | Social Costs of Automobility Pandemic Effects

Big Dig Podcast Episode 1

Guest Speaker: Matthew Petersen, Transportation Planner, City of Boston

* Please make sure you have read The Transportation Dividend and the Chicago Value of Transit report.

Readings

1. Sarriera, J., "Productivity and Costs in the Transit Sector: Impacts of Baumol's Cost Disease", brief excerpt from MIT Graduate Thesis, 2016.
2. Sclar, E. "Towards a Political-Economics of Finance for Urban Access", selection from Chapter 2 (pp.20-24) in *Urban Access for the 21st Century*, (2014).
3. Jenkins, J & F. Salvucci, "Agglomeration Benefits and Transportation: Theory, Measurement and Application to Crossrail" 2010.
4. Litman, T., "The Mobility-Productivity Paradox", Victoria Transport Policy institute, May 2025.
5. Zipper, D., "Transit is Great, But It's Not a Public Good", Bloomberg City Lab, March 2023.
6. Aloisi, J., "Transit is a Public Good", *Commonwealth Magazine*, April 2023.
7. Gossling, S., et. al, "The lifetime cost of driving a car", *Ecological Economics* 194 (2022).
8. Caros, N., "Preparing Urban Mobility for the Future of Work", pp. 75-108, June 2022.
9. Gordon, A. & Patino, M., "Where Public Transit Systems Are Bouncing Back Around the World", City Lab, June 2025.
10. Rogers, A., "San Francisco is a Car City Now. Sorry.", *San Francisco Standard*, July 2025.

Assignment 1: Due Monday September 29, before 4pm.

Week 4: October 3

Transportation Funding & Financing | Transit Fare Policy

Big Dig Podcast Episode 2

Guest Speaker: Joe Aiello, former Chairman MBTA Fiscal & Management Control Board and former Board & Exec Committee member, Meridiam Infrastructure Partners.

Readings:

1. Badger, E., et. al., “Everything That’s Changed Since Congestion Pricing in NYC”, New York Times, May 11, 2025.
2. Aloisi, J., “First Steps Toward a Coherent Transportation Revenue Plan”, “About \$115 billion to Fund the MBTA”, and “Let’s Get Our Terminology Right on Road Pricing”, in *Commonwealth Beacon Magazine*, March 2024.
3. Caro, R., *The Power Broker*, (1976), pp. 525-539.
4. Salvucci, F., “Accessibility and Transportation Funding”, selections from Chapter 9 in “Urban Access for the 21st Century”, ed. Sclar, Lonroth and Wolmar, (2014) (pp. 221-231).
5. Grabar, H., “The Problem With Free Transit”, Slate Magazine, June 2021.
6. Colon, D., “Zohran Mamdani Wants to Take a Free Bus to Gracie Mansion”, StreetsBlog NYC, May 2025.
7. Lee, S.Y., “One Simple Trick to Revive a System in Death Spiral”, Substack-Bahn 2025.
8. Shanahan, E., “One Hopped The Turnstile, 9 Police Bullets, 4 People Shot”, New York Times, March 2025.
9. Swan, R., “How Muni’s Crackdown on Fare Evasion is Going”, San Francisco Chronicle, April 2025.

Week 5: October 10

The Transport Sector Decarbonization Conundrum

Big Dig Podcast Episode 3

In Class review of Assignment 1

1. Aloisi, J., Response to MA Interim CECF
2. Marchese, D., “This eminent scientist says climate activists need to get real”, NY Times April 2022.
3. Tessum, C. et. al., “PM2.5 pollutants disproportionately and systematically affect people of color in the US”, Science Advances (2021).

4. Stevens, H., "Why So Many Americans Prefer Sprawl to Walkable Neighborhoods", Washington Post Climate Lab, December 2024.
5. Pan, H., "Could Trolley Buses Be The Solution?", The Guardian, 2022
6. Coale, K., "Muni's Dream of an Electric Fleet of SF Buses", The Frisc, November 2023.
7. Hsiang, S., and Burke, M., "Trump Wants you to Believe Climate Change Isn't Dangerous", New York Times, July 2025
8. Olubusoye, B, and Cizdziel, J., "One of the Biggest Microplastic Pollution Sources is your Tires", The Conversation, July 2025.
9. Mattioli, G., "Transport Needs in a Climate Constrained World", Energy Research and Social Science (2016).
10. Yglesias, M., "The Tyranny of Climate Targets", Slow Boring (December 2023).
11. Harvard Chan School of Public Health Study on Particulates (2020).

Week 6: October 17

How Change Happens Part 1 | Managing the Commons

Big Dig Podcast Episode 4

Readings:

1. Hardin, G. (1968). "The Tragedy of the Commons", Science, 162 (3859), 1243-1248.
2. Ostrom, E., Excerpts from *Governing the Commons*, Cambridge University Press, (1990).
3. Klein, E., and Thompson, D., *Abundance*, pp. 81-94 (2025).
4. DeRobertis, M., et. al., "The Tragedy of the Commons of the Urban and Suburban Arterial", ITE Journal (June 2017).
5. Freemark, Y., "How Cities Can Use Paris as a Model for Implementing Safe Street Infrastructure", Urban Wire, July 2024.
6. Florman, Samuel *The Existential Pleasures of Engineering*, pp.11-17; 191-192. (1976)
7. Faulkner, W. "The Bear" (1942), pp.288-291.
8. Aloisi, J., "Bus and Bike Lane Brouhaha Part of Bigger Transportation Battle", Commonwealth Beacon, February 2025.
9. Volcy, M., "Boston's Chief of Streets Reminds Business Leaders that Our Roads Aren't Getting Bigger", Streetsblog Mass April 2025.
10. Turner, R., "Birth of the Greenway", The Boston Globe (2007).

Week 7: October 24

Cognitive Barriers to Change

Big Dig Podcast Episode 5

Readings:

1. Lamb, W., Mattioli, G., *et.al.*, “Discourses of Climate Delay”, *Global Sustainability* 3, 17, pp. 1–5, (2020).
2. Walker, I and Brommelstroet, M, “Why do cars get a free ride? The socio-ecological roots of motonormativity.”, *Global Environmental Change* 91 (2025).
3. Mattioli, G., *et. al.*, “The Political Economy of Car Dependence”, (2020)
4. Eliot, G., excerpt from Chapter 56, *Middlemarch*, (1871)
5. Yglesias, M., “Crushing the NIMBYs of Middlemarch”, *Slow Boring*, April 2025.
6. Haarstad, H., *et. al.*, “Beyond Automobility? Lock-in of Past Failures in Low-Carbon Urban Mobility Innovations”, *Energy Policy* 665 (2022).
7. Shu, L. L., & Bazerman, M. H. (2010). *Cognitive Barriers to Environmental Action: Problems and Solutions*. 26.
8. Gossling and Cohen, *Why sustainable transport policies will fail: EU climate policy in the light of transport taboos*, *Journal of Transport Geography* (2014)
9. Van Wee, B.; “Controversial Policies: Growing Support After Implementation”, *Transport Policy* 139 (2023).
10. Reed, D. “Transportation Planners Shouldn’t Forget The Reasons That People Care About Cars.”, *Toole Design* (2019).
11. Gonzalez, J., *et. al.*, “Do Urban parking Restrictions and Low Emission Zones Encourage a Greener Mobility?”, *Science Direct* (2022).

Week 8: October 31

How Change Happens (or Doesn’t Happen) Part 2 | Case Studies

Big Dig Episode 6

Readings:

1. Accuradi, Z., “Derailed: How Nashville’s Ambitious Transit Plan Crashed at the Polls – And What Other Cities Can Learn From It.” *TransitCenter* (2019).
2. Manville, M., “Measure M and the Potential Transformation of Mobility in Los Angeles”, *University of California Institute of Transportation Studies* (2019).
3. Dutch Campaigners Explain Why The Netherlands is So Cycle-Friendly, *London Cyclists Magazine* 2021
4. Levine, B., “A Driven Woman: Fighting a Lonely Battle for Carpool Lanes in 1976”, *Los Angeles Times*, 1994.

5. Didion, Joan, "Bureaucrats", essay in *The White Album*, (1979).
6. Gordon, A., "Why Doesn't America Build Things?", Motherboard | Tech by Vice, August 2022.
7. Klein and Thompson, excerpt from *Abundance*, pp. 113-119 & pp. 125-128, 2025.
8. Zipper, D., "What Would 'Transportation Abundance' Look Like?", Bloomberg City Lab, April 2025.
9. The 28X Bus: A Case Study
 - * MilNeil, C., "The Transit Line That Got Away: Learning From the 28X", StreetsBlog Boston (2019);
 - * Seay, B., "Why Boston's First Designated Bus Lane Project Went Bust", WGHB (2019)
 - * **Audio:** <https://www.wgbh.org/news/local-news/2019/07/18/why-bostons-first-designated-bus-lane-project-failed>
 - * MilNeil, C., "Boston Wants to Redesign Blue Hill Ave. For Bus Riders, But Car Owners Dominate Public Meetings", StreetsBlog MA, August 2023.
 - * MilNeil, C., "City, MBTA Release Refined Designs for BHA Transit Project", Nov. 2024.
 - * Matthew, A., "Blue Hill Ave Redesign Draws Ire from Residents", Boston Globe, June 2025.

Assignment 2 Due Monday November 3, before 4pm

Week 9: November 7

Transport Justice Part 1 | The Role of Public Engagement

Big Dig Episode 7

Guest Speaker: Burhan Azeem, Cambridge City Councilor

Readings:

1. Sheller, Mimi, *Mobility Justice*, Ch.1 pp.20-38.
2. Segedy, J., "How The Legacy of Urban Renewal Continues to Haunt the Planning Profession", Notes from the Underground Blog (2019).
3. Zaleski, A., "All Aboard the 'Crime Train' Narrative", Bloomberg City Lab, August 2023.
4. Dickens, Charles, "Monseigneur in Town", *A Tale of Two Cities* (1859), Part 2, Chapter VII.
5. Demsas, J., "Community Input is Bad, Actually", The Atlantic April 2022
6. Kuntzman, G., "City Official Under Fire For Questioning Transit Benefits", Streetsblog NYC May 2022.
7. Holder, Sarah "A City Planner Makes a Case for Rethinking Public Consultation", CityLab August 2019.
8. Gordon, A., "Thank You for Your Feedback", Vice (2022).
9. Milkman, A., "Why Participatory Planning Fails (and how to fix it)", Next City, April 2021.
10. Gossling, S., "Urban Transport System Changes in the UK: In Danger of populism?", Cities 153 (2024).

Week 10: November 14

Transport Justice Part 2 | Impacts of “Transportation Progress” on People and Communities

Big Dig Episode 8

Guest Speaker: Caitlin Allen-Connelly, Executive Director, TransitMatters

Assignment 2 In-class Review & Discussion

Readings:

1. Aloisi, J. “Massport at 60” (2017) pp: 56-80.
2. Caro, Robert (1975), *The Power Broker*, pp. 946-958.
3. Walker, H., “Highways Have Sliced Through Cities, Can The US Undo the Damage?”, NY Times May 2021.
4. Schneider, B., “Why is it So Hard To Kill This Freeway?”, Bloomberg City Lab April 2023.
5. Zarroli, J., “Why Is It So Hard to Tear Down a Highway Nearly Everyone Hates?”, NY Times June 2023.
6. Nall, C., “The Road to Inequality”, Cambridge University Press (2018), pp. 23-41.
7. Archer, D., “White Men’s Roads Through Black Men’s Homes: Advancing Racial Equity Through Highway reconstruction”, *Vanderbilt Law Review* Vol. 73, Issue 5, pp. 1261-1294 (2020).
8. Transit Center, “Better Ways for FTA to Measure Transit Equity”, (2021)
9. Cadogan, G., “Walking While Black”, *Literary Hub* (2020)
10. Auden, WH, “Musée des Beaux Arts”, (1938)

Week 11: November 21

Transport Justice Part 3 | Gentrification, Gender, Generational Responsibility

Big Dig Episode 9

Guest Speaker: Stacy Thompson, former Executive Director Livable Streets, currently Associate Vice President, Jobs for the Future

Readings:

1. Aloisi, J. & Johnson, J, “The Transportation Equity Conundrum: Improving Mobility Without Displacement”, *Meeting of the Minds* Blog (2018).
2. Kimble, M., “Can Anacostia Build a Bridge Without Displacing its People?”, *New York Times*, August 2022.
3. Coughlin, J., “How Will You Get Your Ice Cream Cone?”, *MIT AgeLab* 2023.
4. Leung, S., “Four Hours Commuting. Four Hours on the Job.”, *Boston Globe*, July 2022.

5. Look, C. and Behrmann, E., "The Gender Divide in Transport is Starting to Crumble", Bloomberg City Lab, July 2021.
6. Badstuber, N., "Mind the Gender Gap: The Hidden Data Gap in Transport", London Reconnections 2019.
7. Barrett, G., "Boston Night Owl: A Framework for Introducing Overnight Bus Service That Can Close Significant Spatiotemporal Gaps in Greater Boston's Transit System", (2024)
8. Coughlin, J., "Who Will Power the Supply Chain of the Future?", MarketWatch, August 2022.

Friday, November 28: [Thanksgiving Break](#)

Week 12: December 5

The Future Starts Now | Class Dinner

Readings:

1. Murphy, C., "Before Zuckerberg, Gutenberg", The Atlantic (Jan/Feb/. 2020).
2. Thompson, D., "Where's My Flying Car?", The Atlantic (Jan/Feb/. 2020).
3. Douglas, Ross, Autonomy Newsletter, June 2024
4. Yglesias, M., "The Policy Implications of Self-Driving Cars", Slow Boring, September 2023.
5. Winston, C., "When Lawyers Come for Autonomous Vehicles", Barron's (2022)
6. Aloisi, J., "In Defense of Autonomous Vehicle Law", Commonwealth Magazine, August 2022.
7. Schneider, B., "Robotaxis Should be a Wakeup Call for Cities", Guest Blog, Slow Boring, July 2024.
8. Wilson, K., "How Same-Day Shipping is Clogging U.S. Roads", Streetsblog USA, 2020.
9. Jose Ortega Y Gasset, "Man the Technician" from *History as a System* (1935).

Assignments 3A and 3B: Due before Monday December 8, 4pm.