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# Community Transportation Academy: Course Curriculum and Implementation Handbook

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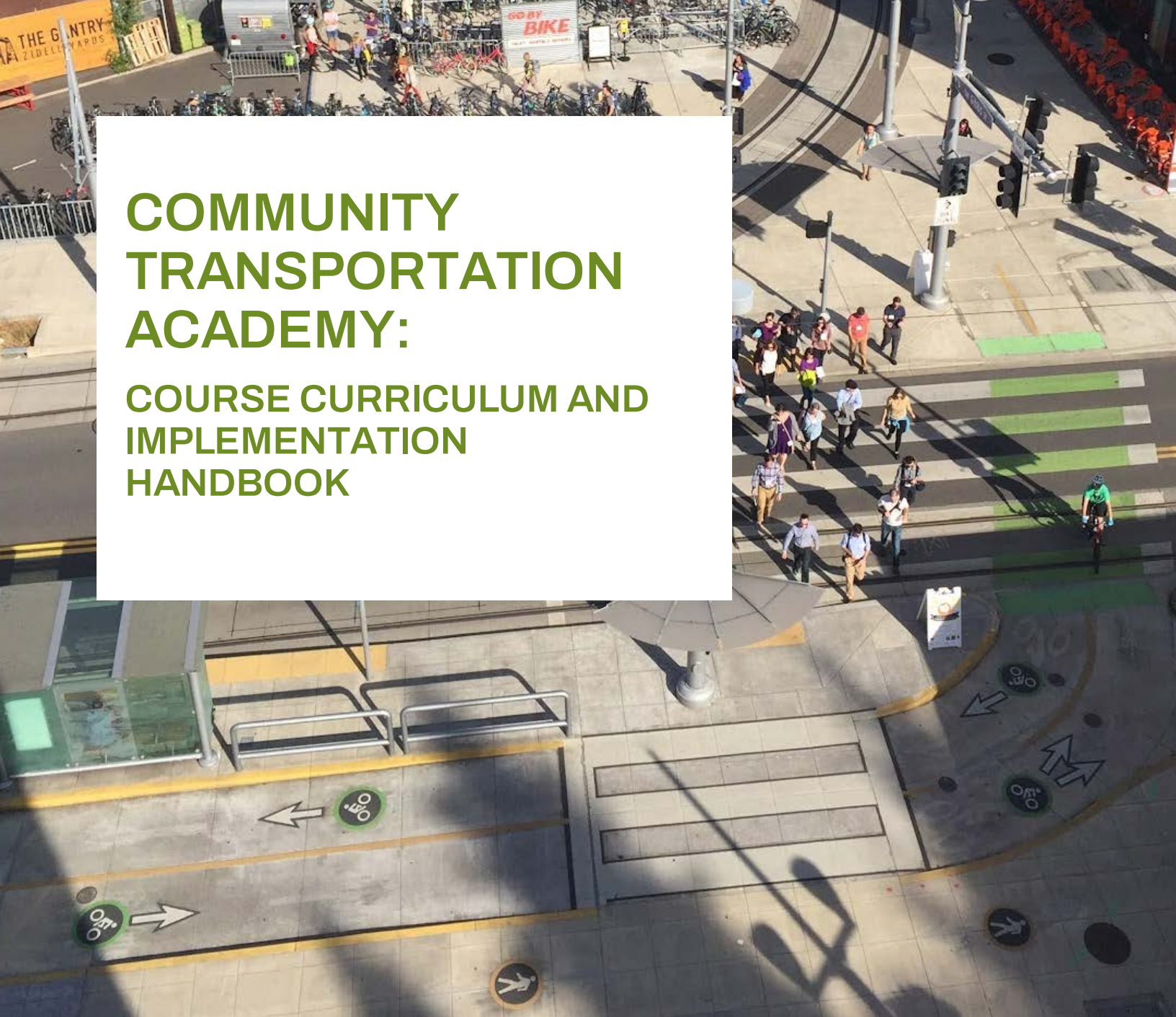
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# COMMUNITY TRANSPORTATION ACADEMY:

## COURSE CURRICULUM AND IMPLEMENTATION HANDBOOK

**September 2022**

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# Community Transportation Academy

A Community Transportation Academy (CTA) is a course that harnesses the knowledge, technical expertise and passions of practicing transportation professionals in a city to immerse a cohort of interested and dedicated community members in transportation issues over a two to three month curriculum. CTAs are designed to provide course participants with:

- ✚ A basic technical understanding of how the city's transportation system operates on a daily basis, along with what agencies and policies play a role in the system's development and operation.
- ✚ An understanding of how the transportation system affects communities and individuals, including tradeoffs involved, positive and negative impacts of transportation decisions, and who is impacted by those decisions.
- ✚ The opportunity to meet, learn from and ask questions of the individuals who lead and staff local transportation agencies.
- ✚ The opportunity to interact with other community members who have an interest in transportation issues.
- ✚ Course lectures and a class project that help the participant understand the role and impact they have as a resident, including how to interact with transportation agencies and how to engage fellow residents around community transportation needs.

The CTA curriculum was developed by drawing from the Portland Traffic and Transportation (PTT or Portland CTA) course, along with the Wasatch Transportation Academy (WTA or Wasatch CTA, which was inspired by the Portland course). Planning academy courses in cities around the country are also good models to look to for how to structure and operate such a course. However, the nature of the transportation course is that it goes into much greater depth on a specific topic, allowing the participant to go deeper into transportation history and technical discussions and develop a greater understanding of the agencies and policies involved.

## Key course elements include:

- ✚ A series of guest lectures from city transportation leaders, including city commissioners, transportation agency directors and managers, and other key transportation decision-makers;
- ✚ A tour of the city to gain a practical, visual impact of transportation decisions; and,
- ✚ A problem-solving assignment that asks students to identify a transportation problem and, through a series of exercises, propose a solution to the problem (as well as to explain why the solution may or may not work).

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# Class Assignments

Like any course, CTAs normally require students to engage in work outside the class. The assignments listed here are designed to help students ideate and develop an idea for some sort of transportation improvement in their community. The assignments should be structured to achieve a few goals. These include having the student observe how transportation works (or doesn't work) in their community, and identify a transportation problem or issue (no matter how big or small), collect information about the identified issue, and interact with city staff regarding the concern. Finally, students are expected to propose a solution and identify whether their proposed solution can or will work.

Note that allowing students to form groups for the course assignment should be considered, as it may allow for more in-depth projects.

- ✚ **Assignment for week 2:** Identify a transportation-related problem or issue that you've observed in your community or city. This could be a safety problem, inefficiency or missed opportunity.
- ✚ **Assignment for week 3:** Devise and implement an observation / data collection scheme to obtain more information and insight into the problem or issue you have identified. In-person observation is preferred, but interviews with people who have experienced the problem or research into how other communities have handled the problem may also be used.
- ✚ **Assignment for week 4:** Continue observation / data collection scheme if more time is needed. Alternatively explore case studies in course-suggested readings for communities that have dealt with similar problems / issues.
- ✚ **Assignment for week 5:** Propose a solution to your observed problem or issue. Be prepared to briefly discuss your proposed solution.
- ✚ **Assignment for week 6:** Talk to someone at a relevant transportation-related agency about your observed problem or issue. Try to get insight into why the problem exists and what challenges your solution might have.
- ✚ **Assignment for week 7:** In small groups of 2-3 students in class, discuss your observed issue/problem, proposed solution and experience with city agencies. Identify potential next steps.
- ✚ **Assignment for week 8:** Work on presentation of your transportation issue/problem and proposed solution.
- ✚ **Assignment for week 9:** Prepare a 3-5 minute presentation on your transportation issue/problem, proposed solution, and why your solution will or will not work.

Projects may be presented in a variety of manners, including as audio, video, a scope of work for a project, etc.



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# Potential Class Sessions

CTAs are designed to be about transportation in a local place. Because of this, class sessions need to be adapted to the local context. In the interest of including the most engaging and experienced city leaders and agency staff, the session topics suggested in the following pages should be considered a starting point. CTA organizers can use these sessions to start thinking about what their course should look like, and then react and adapt them. Multiple sessions can be combined, single sessions pulled apart into multiple sessions, or any other combination. The interest and expertise of presenters should take precedence over strict adherence to a recommended session topic.

Regardless of the subject matter, each class should be structured to provide students with a mix of:

- ✚ High-level transportation understanding and background (e.g. sessions on History, Major Issues and Decisions, and Planning for Transportation);
- ✚ An introduction to top-level city leadership and their decision-making processes (e.g. Major Issues and Decisions);
- ✚ On-the-ground experience with transportation issues (Site Visits and course assignment);
- ✚ A solid understanding of the challenges, tools and approaches taken by specific agencies and staff working in transportation (Sessions Transit, the Department of Transportation, and Active Transportation);
- ✚ Information about how to be involved in the transportation process (course assignment, each agency/department session, and how to be involved in transportation decision-making); and
- ✚ The understanding that, as a citizen of the city, they should be involved in order to improve transportation in their community (course assignment, session on how to be involved, and course presentations).

Throughout each class session, students should be encouraged to consider how transportation impacts people, including the equity of meeting the needs of transportation users, understanding who experiences the harms or costs associated with transportation, and how to include people in the transportation planning process.

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## ➤ Session: History of Transportation in your City / Area

*Recommended presenter: City planner or course instructor*

**Possible session topics:**

- Role of transportation and geography in city location
- Street layout
  - What type of layout (e.g., grid, etc.)?
  - What type of hierarchy was built into the system (e.g., main streets, arterials, alleys, etc.)?
  - What are the block lengths/sizes? Why were these sizes chosen?
- Land development and influence on transportation
  - Where are job-dense neighborhoods? Has that changed over time?
  - Where has residential development focused? Has that changed over time?
  - Demographics, communities and transportation – where have communities of different ethnic or racial backgrounds lived? Different income levels? How have those differences influenced transportation?
- Early public transportation
  - What did it connect and why?
  - What type of transit and why?
  - What route/streets did it travel and why?
- Highway/freeway influence on city development
  - Were the highways/freeways built before or after the city was originally laid out?
  - If after, how did their construction change the city?
- Current public transportation system
  - When was it planned?
  - How was it funded?
  - What challenges were encountered during construction?

**Suggested reading:**

📌 Local transportation system history document, or regional vision plan

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## ➤ Session: Transportation and Equity

*Recommended presenter: City or Agency equity officer, Transportation advocate*

Possible session topics:

- What is equity?
- How have different groups been affected by transportation? How have benefits and harms been distributed?
- How do transportation agencies approach assessing transportation needs of underserved residents and the equity impacts of transportation projects?
- How is equity incorporated into transportation decision-making?
- How are people working to improve transportation equity in your community?

Suggested reading:

- ✚ The Greenlining Institute – “Mobility Equity Framework” (<https://greenlining.org/wp-content/uploads/2018/03/Mobility-Equity-Framework-Final.pdf>)
- ✚ Smart Growth America – “Dangerous by Design” (<https://smartgrowthamerica.org/wp-content/uploads/2021/03/Dangerous-By-Design-2021-update.pdf>)



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## ➤ Session: How to be Involved in Transportation Decision-making:

*Recommended presenter:* Neighborhood association (NA) or community board (CB) transportation chair/liaison, on the Role of Neighborhood Associations, Community Boards or Other Local Community Governance Entity

Possible session topics:

- What type of transportation concerns do NAs or CBs deal with?
- What are the local mechanisms to handle concerns?
- Where should residents take concerns?
- How can residents get involved in influencing transportation decision-making through NAs or CBs?

*Recommended presenter:* Transportation advocacy group representative, on Transportation Advocacy and Campaigns

Possible session topics:

- Why campaign for a transportation issue?
- What type of evidence is needed to demonstrate a problem, and how do you collect evidence?

*Recommended presenter:* Course Instructor on effective communication for student projects

Possible session topics:

- How to concisely and effectively present your class project? What is the essence of the story you are telling, and how can you convey it in five minutes?
- How do you create meaning out of data?
- What are the elements of a story?

Suggested reading:

- ✚ Arnstein – “A Ladder of Citizen Participation” (<https://www.planning.org/pas/memo/2007/mar/pdf/JAPA35No4.pdf>)
- ✚ Project for Public Spaces – “A Citizen’s Guide to Better Streets: How to Engage Your Transportation Agency” (2008). (<https://www.pps.org/article/a-citizens-guide-to-better-streets-how-to-engage-your-transportation-agency>)

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## ➤ Session: Major Issues and Decisions

*Recommended presenter:* Transportation department director

**Possible session topics:**

- Upcoming challenges for transportation in the city, and how the department of transportation expects to address the challenges.
- Factors that the department must consider when making decisions, including policy and fiscal opportunities and constraints.
- The available tools the department can use to address transportation and traffic issues.

*Recommended presenter:* City commissioner or other leader involved in transportation policy

**Possible session topics:**

- Major decision points that shaped the current transportation system
- How those decisions were made, both in terms of process and content
  - Who were the key decision-makers? What information did they have? What resources were they working with?
  - How was the public involved in the decision?
- How the city would have been different if a different decision had been made

**Suggested reading:**

- ✚ Vision Zero Network – “Prioritizing Internal City Coordination to Advance, Track Vision Zero A New York City Case Study” (<https://visionzeronetwork.org/wp-content/uploads/2017/09/NYC-Case-Study-Final.pdf>)

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## ➤ Session: Planning for Transportation

*Recommended presenter:* Metropolitan Planning Organization (MPO) director or planner to discuss the Regional Transportation Plan

Possible session topics:

- Benefits and limitations of regional transportation planning
- Factors considered include:
  - Travel demand
  - Relationships of modes
- Coordination process between cities and entities in the region

*Recommended presenter:* Planning or transportation department planner to discuss a city transportation plan

Possible session topics:

- Plans that affect transportation
- Comprehensive Plan
- Transportation System Plan
- How do land use plans affect transportation?

Suggested reading:

- ✚ Todd Litman – “Introduction to Multi-Modal Transportation Planning Principles and Practices” ([https://www.vtpi.org/multimodal\\_planning.pdf](https://www.vtpi.org/multimodal_planning.pdf))

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## ➤ Session: Transit Agency: Analysis and Planning

*Recommended presenter:* Transit agency director or planner

Possible session topics:

- Transit types in the city – which and why?
- Who uses public transit? Who depends on public transit?
- Planning to identify primary transit networks
- Integration of transportation and land use
- How is transit paid for in the region? What are the long-term forecasts for the funding stream?
- What capital investments in transit are needed and what investments are planned? How do regional entities coordinate on transit planning?

Suggested reading:

- ✚ TransitCenter, Winning Transit (2019). (<https://transitcenter.org/publication/winning-transit-2/>)
- ✚ TransitCenter, Equity Dashboard, Review summary story and data for one city (<https://dashboard.transitcenter.org/>)

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## ➤ Session: Transportation Department: Planning and Services)

*Recommended presenter:* City transportation planner, on Planning and Services

Possible session topics:

- Travel demand management
- Right-of-way management
- Coordination with planning department and transit agency
- Role of freight in the transportation system
- Major projects identification and planning
- Streetscape redesigns

*Recommended presenter:* City transportation engineer, on Engineering Systems

Possible session topics:

- The systems used to manage city transportation
  - Signals
  - Detectors
  - Data management
- City's role in parking management

Suggested reading:

- ✚ Schlossberg et al, "Rethinking Streets," especially pages 5-10, and then an additional 3-4 case studies (each is a quick read with lots of visuals). (A PDF version of the book is available for free at <http://www.rethinkingstreets.com/>)

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## ➤ Session: Active Transportation: Bicycling

Recommended presenter: Bicycle coordinator

Possible session topics:

- Benefits and barriers to cycling
- Accomplishments achieved in improving the city for bicycling
- Challenges and needs for improving the city for bicycling
- New or planned bicycling facilities – what been done and what's needed?
- Policies and programs for encouraging cycling – what been done and what's needed?
  - Encouragement; Education; Enforcement; Evaluation
- Funding for bicycle projects
- Goals for bicycling in the city

Suggested reading:

- ✚ NACTO, Designing for All Ages and Abilities (2017) (<https://nacto.org/publication/urban-bikeway-design-guide/designing-ages-abilities-new/>)



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## ➤ Session: Active Transportation: Walking and Rolling

Recommended presenter: Pedestrian coordinator

Possible session topics:

- Everyone is a pedestrian
- Interaction with other modes
- Universal design – designing for children, adults, the elderly, etc.
- Role of walking on health and urban vitality
- Efforts to improve the safety at crossings, schools, etc.
  - Benefits of reduced crossing distances and to achieve this goal
  - Those that have been built (including any results)
  - Those that need to be built

Suggested reading:

- ✚ US DOT, USDOT Pedestrian Safety Action Plan (2020) ([https://highways.dot.gov/sites/fhwa.dot.gov/files/2020-11/FHWA\\_PedSafety\\_ActionPlan\\_Nov2020.pdf](https://highways.dot.gov/sites/fhwa.dot.gov/files/2020-11/FHWA_PedSafety_ActionPlan_Nov2020.pdf))

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## ➤ **Session: Student Presentations to Panel of Transportation Practitioners**

Recommended presenter: Students

Student presentations on projects:

- Classroom discussion on problems identified by students, their proposed plan to address the problem, and their experience navigating the transportation system to address the problem
- Effective methods employed to engage agency staff
- Class discussion/reflection on course project process

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# Curriculum implementation

## ➤ Operating Principles

The following are a set of operating principles to be successful in developing a Community Transportation Academy in your city:

- ✚ **Find a champion:** The CTA will need someone willing to fight to get funding to get the class off the ground, to rally city and agency leadership to support the class and to promote the class in the community. This may or may not be the course instructor, and could be a small coalition of champions as well.
- ✚ **Recruit top agency staff to participate:** It will be important to have students interact with the people who have the experience and are making the decisions on transportation topics in the city. These should be agency and department leaders, and should be willing to take the time to make their presentations interesting and engaging.
- ✚ **Build an advisory group / support network:** Having buy-in and support from key transportation partners and staff can help to launch and sustain the academy. Identify enthusiastic supports and recruit them to support the academy's development and goals, including engagement as academy promoters, guest presenters, and student presentation panel members.
- ✚ **Foster communication between community members and agency staff:** The CTA should help residents and city staff to develop a common language of understanding around transportation issues. This requires community members to learn some technical aspects about transportation and how decisions are made, but also for staff to be open, engaged and available to students.
- ✚ **Develop a sense of agency in course participants:** An important lesson for students is not only how to get involved in transportation decision-making, but also that they can have an impact. This lesson is sensitive because it requires that students be prepared for inevitable frustrations (they won't always, or even usually, get all the change they want, and they'll be told "no" often). It also requires that cities and agencies have systems that respect community participation, and in which there are ways for people and communities to shape transportation decisions and improvements. The course assignment should promote this principle.
- ✚ **Establish a neutral setting:** A university or community center can offer a setting that allows community members and city staff to meet and talk on neutral ground. It is important that city staff, decision-makers and community members are able to openly express their own opinions in the course setting. The open atmosphere of a university allows clear and open communication. It also allows participation from university students in transportation-related fields, in addition to community members.

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 **Foster networks among students:** The CTA offers students an opportunity to connect with other like-minded community members with an interest in improving transportation in local communities. Develop an alumni network with regular opportunities for alumni to share

information about what they are working on in their communities and meet new graduates. The network could take the form of an email listserv, happy hours, or other types of activities that connect course graduates.

## ➤ Who will Participate?

There are many people with a variety of interests who may be interested in learning more about their local transportation system. A CTA will function best when it is inclusive:

- Is it for advocates? Yes!
- Is it for concerned citizens? Yes!
- Is it for those curious about transportation? Yes!
- Is it for people working in transportation who want more information? Yes!
- Do you need to commit to being there and interested? Yes!

That last point is an important one because a 10-week course requires a level of commitment from the student that they want to be there.

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## ➤ Course Checklist

Once you decide to carry out a Community Transportation Academy in your city, you'll need to undertake several tasks:

- ✚ **Develop champions of the course:** CTA champions should be passionate about transportation and harnessing the knowledge, energy and interest of people in the community. They should be able to rally support around the course, help secure commitments from city transportation leaders to participate (and to have their agency leadership participate as well), and have a long-term commitment to promoting the goals of the course. An advisory group of transportation leaders and co-champions of the course can help serve as a sounding board for the course instructor, help corral guest presenters, promote the course, and more.
- ✚ **Find the course instructor:** The CTA instructor should also be a champion of the course. They should have a deep understanding of transportation issues and players in the city, and have the time to dedicate to teaching, organizing guest lectures and helping develop course materials.
- ✚ **Decide on a budget:** Budget your CTA costs and secure funding. You will also have to determine how/if you will charge for the course, and what will be included in the course (such as meals, child care, etc.).
- ✚ **Find presenters:** Secure commitment from local transportation leaders to present on the key topics identified in the session's list. Assign presentation topics in coordination with the presenters, provide them with the presentation template, and make sure they are able to put together presentations by the session date. In addition to a lecture format, consider incorporating panel presentations and discussions which may help to elucidate multiple angles of complicated agency operations.
- ✚ **Develop course materials:** CTA materials will need to be developed specific to the city. These include a local transportation resource list/guide (to identify local transportation resources, such as plans, reports, histories or other documents that can help students to understand the local transportation system), and the course syllabus.
- ✚ **Arrange a meeting time and location:** Generally, midweek evenings will work best for the greatest number of people. In securing a classroom, remember to try to find a neutral location, such as a university or community classroom.
- ✚ **Identify a mix of in-person and virtual learning opportunities:** Many classrooms moved to a virtual setting during the COVID-19 pandemic. For academies catering to an array of community members, who may be spread out in place, and have an array of work and family commitments, virtual settings offer some benefits. However, courses should offer at least some in-person opportunities, such as site-visits and social or networking opportunities.

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- ✚ **Provide mentoring and advising opportunities:** Identify how to offer individualized support and opportunities to students. This may come in the form of office hours, welcoming questions and input during class sessions, seeking opportunities for students to provide peer mentorship, etc. For office hours, seek to provide a mix of times for students to reach out (e.g. include some day time and some evening hours).
  - ✚ **Find a panel:** Identify a presentation panel for course participants and schedule a final presentation time.
  - ✚ **Recruit students:** Identify how you will advertise the course to get your intended enrollment.

## ➤ Cost to implement

The cost of citizen academies and CTAs can be relatively modest.

- ✚ A survey of 74 municipalities offering citizen leadership academies found that the average cost to hold the classes was around \$2,000, although most such academies are run by municipal staff and this estimate did not include staff time (Huggins, 2014).
- ✚ The Portland Traffic and Transportation course costs PBOT about \$6,500-8,000 per year factoring in instructor fees and administrative costs, while PSU provides teaching assistant and meeting room.
- ✚ For the WTA, costs for running the course include funds to pay a stipend for an instructor/coordinator and to provide stipend and tuition support for a graduate assistant. At 2022 rates, this is estimated at about \$25,000. The administrative demands of running the course are not insignificant, however. Adding in support for administrative work, plus a budget for food and childcare (if the class is delivered in-person), plus benefits and overhead increases the budget to \$55,000.
- ✚ **Cost to Participants:** The cost to students should be as affordable as possible. The cost structure also should offer the opportunity to incentivize students to attend the bulk of the classes. For example, Portland offers scholarships to students that commit to attending 80% of the classes.



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## ➤ Getting more value out of the course

- ✚ **Develop student and alumni networks:** Alumni and current students of the CTA course share similar interests in transportation. Additionally, many students may be participating in the course because they want to connect and network with other like-minded people. Consider inviting course alumni to attend student presentations or to celebrate at a reception or happy hour afterward. Create student and alumni listservs (or similar) to help them connect and keep each other informed about transportation-related news, events and opportunities.
- ✚ **Provide resources for the broader community:** Sharing information about the class, including lecture summaries, slides and recordings of class sessions could help people interested in the topic but not able to attend, and may serve to spark interest in future offerings, as well as giving students a realistic sense of what to expect from the class.
- ✚ **Promote student work while getting the word out about the class:** Work with local journalists, bloggers or city staff to document and share stories about the project students have been working on. This can be an exciting opportunity for students to show what they've achieved or to highlight an issue they want more people to hear about. At the same time, it can show the value of the course and advertise for future courses.
- ✚ **Maximize relationships with university or college partners:** A strong relationship with a college or university can offer many advantages for the CTA. As mentioned earlier, the neutral academic setting of the university can serve to moderate tensions between community members and agency staff (which may exist in agency public meetings). The relationship can offer the university the opportunity to share topical expertise with the community through professors or researchers presenting alongside agency staff. The university may gain future students if course participants decide they want to pursue further studies in the area. Some colleges or universities may also consider offering credit for the course, or otherwise incorporating elements of the course into a degree program or capstone.
- ✚ **Check in on alumni project status:** Offering course graduates the opportunity to check in with the course instructor or presenters may offer an opportunity to help students push their projects along, and also offers the instructor the opportunity to find out how the course lessons are being applied in the real world.
- ✚ **Coordinate with a Planning Academy:** A CTA could be a good synergistic fit with a Planning Academy for cities that have one. The two courses could be offered in alternative seasons (e.g., one in the spring and the other in the fall), and offer students the opportunity to go into greater depth on transportation topics if they so choose. Each course could promote the other and further develop students' civic and technical knowledge and skills.

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## ➤ Evaluating and Improving the Course

The course instructor should always look for ways to strengthen the course from one year to the next.

- ✚ **Individual session surveys:** One approach could be to share a short survey with students after each session, asking a few questions about that session's topic and guest presentation. How engaging and interesting was the topic? Was it presented clearly? What related topics or subtopics should have been covered or covered more? If kept to less than 5 questions and able to be completed within a minute or two, these individual session surveys could yield helpful improvement tips for the instructor and guest presenters. These evaluations may be shared with presenters to help them and motivate them to improve their presentations.
- ✚ **Course evaluation:** Course evaluation should be completed by students at the end of each year to understand what is working well and what needs improvement, including around student projects and additional support that could be provided. Evaluations should be simple to complete, but provide basic information on what was valuable to students and where improvements could be made.
- ✚ **Net Promoter Score (NPS):** The NPS concept originated with businesses to assess customer satisfaction in very simple terms: asking people how likely they would be, on a scale of 0 to 10 to recommend the business to a friend or colleague. Typically, ratings of 9 to 10 are deemed to be very enthusiastic, or "promoters," while ratings of 0 to 6 are deemed to be "detractors." Ratings in between, of 7 to 8, are "passive." The NPS subtracts the percentage of detractors from the promoters to yield a score. This approach can be adapted to assess student satisfaction with the course.

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## ➤ **Tips for Course Organizers, Instructors and presenters**

**Course Organizer:** As the course organizer, your role is to handle the logistics of the course, from handling any paperwork and payment needs, organizing and securing a meeting location, recruiting students, and making sure that the instructor has the information and material they need.

**Course Instructor:** As the instructor of the CTA, you have several important responsibilities, including:

- Stay focused on presentation quality. Make sure presentations are of a high level of professional quality.
  - In a sense, this is a “great lecture series,” and it’s your responsibility to make the presentations great.
  - Have all presenters start their presentation by succinctly stating what exactly their department, agency or group does. This helps students to wrap their heads around the different roles in government and what the specific responsibilities are.
  - Ask presenters to tie their presentations in to questions of equity, diversity and inclusion.
- Guide students through the project process.
- Be capable of running a tour / onsite experience for students.
- Be willing and able to advocate for the best interest of the class, and push partners (transportation agency, university, etc.) to fulfill their obligations.

**Guest Presenters:** At its core, the CTA should be a sort of “great lecture series” with top-quality and experienced transportation leaders. Presenters should:

- Start their presentation by very succinctly stating what exactly their department/agency/group does. This helps students wrap their heads around the different roles in government and what the specific responsibilities are.
- Prepare their presentation in advance, and share their presentation (or their plans) with the course instructor for feedback on how to best engage students.
- Promote engagement between presenters and students: Presenters should be invited to participate in class activities beyond their presentation, including a discussion session with the class, and possible participation in a project presentation panel later in the term. Other opportunities include engaging with students in breakout sessions (e.g. small group project work), attending class social gatherings / reunions, etc.
- Update and improve presentations annually. Allowing for a feedback mechanism (e.g., a course survey during the final class) can be a good vehicle for constructive feedback for both presenters and the course instructor.

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# CTA Wisdom and Expert Advice

## ➤ Feedback from the founding Portland Traffic and Transportation course instructor

Founding PTT instructor Ric Gustafson offered these insights.

- ✚ **Understand the past:** Knowing how the transportation system came about can put the current state of things into context and help avoid making the same mistakes again. The history also can convey that the system's development is not a fight between the city and the neighborhood, but rather a longstanding conversation about how the system works and develops.
- ✚ **Technical nature of transportation:** Transportation is a unique topic wherein technical understanding is very important and sometimes facts can be counterintuitive (as in the example of faster traffic speed limits sometimes resulting in lower vehicle throughput). Knowing the facts and having access to the information in a local context is very important because it's not always possible to communicate in abstract terms.
- ✚ **Diversity of student interests:** Different course participants will bring different interests, passions and approaches. For example, in the Portland course, the PSU students tend to bring more of an academic and research approach to the class (and subsequently to their questions in lectures and to their course project), while neighborhood advocates bring more community-based knowledge and interest in processes needed to get things done in their neighborhood.
- ✚ **Value of the university setting:** The university setting has been invaluable to the success of the Portland course because it brings a learning atmosphere to the process, wherein respect is accorded. It doesn't feel like a town hall meeting where people are there to push an agenda and agency staff are expected to tow the agency line. Rather, the university setting provides a neutral setting.
- ✚ **Participation of agency leaders:** It's important that the top talent in the city must participate by giving course lectures (for example, division managers, agency directors and commissioners, etc.). By having top leadership participate, this gives participants access to the people making the decisions, along with top expertise in engineering and the best information on the city's processes.
- ✚ **Top-level support from city leaders:** One key element to getting top talent to participate is having steady support from the city and transportation agencies.

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## ➤ Feedback from course graduates

Feedback received from graduates of the Portland and Wasatch CTAs, along with an analysis of survey responses, highlight a few key findings:

- ✚ **Guest lectures are the most popular course element:** Guest lectures (and access to people making local transportation decisions) are viewed as the most important and valuable course elements. This highlights the importance of getting excellent guest presenters as a foundational element of the course.
- ✚ **Understanding who does what in transportation:** Participants are very interested in understanding the roles of the different agencies working in the transportation landscape, what the agencies' fiscal and policy constraints are, and what tools are and are not available to them. People really want to understand how things get done and what is and is not possible.
- ✚ **Help students to tie the pieces together:** Understanding how transportation projects go from ideas to on-the-ground, including how policies, plans, and engineering interconnect, is very challenging. Provide case studies, use site visits to connect the dots, and seek out the connections between guest presenters from different agencies and disciplines.
- ✚ **Understanding how to get involved:** Many people are participating because they want to know how they can be involved (at various levels) in transportation decision-making in their community. There is an interest in learning how to advocate within the transportation system for their community.
- ✚ **Harnessing what participants bring to the class and community:** There is an incredible amount of passion, energy and experience in the community. The course is an excellent way to provide residents with knowledge they might not get anywhere else, and to empower them to be effective community members.
- ✚ **Focus on equity and justice:** Transportation affects everyone, and focusing on how to improve the system for those with the fewest transportation options can improve the system for everyone. Ensure the topics and presenters reflect diverse views and address the transportation needs of all community members.

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## ➤ Feedback from experts in public participation and community involvement

Conversations with a number of experts from around the country on issues of community involvement and public participation in civic activity and decision-making highlighted a number of important factors that need to be considered when implementing a Community Transportation Academy.

- ✚ **Mutual understanding:** There are many constraints on planners and agencies, but city staff are not always good at making those constraints known to community members. The constraints on the planner or agency may include fiscal constraints; engineering constraints; legislative or legal constraints; and bureaucratic constraints including internal agency dynamics, concerns about image and perception, or a fear that engaging citizens/advocates will be complicated. A result of this is that, in some cases, community members may think their concerns are not being heard or are simply being ignored, and that the citizen and planner are not able to have an open conversation about how to create a change. There is a need on both the part of the agency staff and the community member to better understand one another.
- ✚ **Accountability:** Getting community residents involved in the course and in local transportation issues is good because it makes people more invested and gives them the right (and impetus) to demand accountability.
- ✚ **Dialogue and active listening:** The course should promote dialogue and active listening. Many people assume they are right once they have an idea and do not truly listen after that. Other people will shut down if you just push your agenda and ideas all the time without listening to what other people around you (agency staff or other community members) want or believe. Success, even in negotiation, requires listening skills.
- ✚ **Overcoming barriers to participation:** Low-income communities present a special challenge because often basic needs, like long work hours and taking care of kids, come first and people don't have time to get involved. Further, in some communities they may have much further to travel to get to a central meeting location for a course. Organizers may consider locating courses close to the communities in which people live, and providing food and child care if the course is in the evening. Language challenges may also be a considerable barrier.
- ✚ **Building trust:** Not only do underrepresented groups have difficulty accessing government, but in many cases they are distrustful of government. The course offers an opportunity to rebuild trust, but must take the responsibility to do so seriously.
- ✚ **Community agency and trust:** Residents must have the confidence that if they engage in the transportation decision-making process, they will be heard and have some influence. For many residents, particularly in underserved communities, there is a sense that their individual action won't have any impact on community decision-making activities and won't have any effect on community outcomes. For this reason, it is important to imbue in community members a sense of agency and the knowledge that they can act, and if they do so, that they



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will be heard. This is a hard task to achieve, and requires that people know how to become involved and what tools are available to them. These things can be taught in the course. However, particularly in communities where their voices haven't been heard in the past, the process will take longer. A few things to keep in mind related to this:

- In building a sense of agency among community members, it's important not to ignore or downplay successes, even if they are small.
- However, as is taught in the Portland Traffic and Transportation course, participants will likely encounter their fair share of "no" responses from city staff, and must be prepared to deal with that.

✚ **Teaching skills for effective engagement:** Most community members haven't had exposure to many of the skills necessary to advocate for improvements to the transportation system. Among these skills and experiences are giving effective testimony about a problem/need or collecting data to demonstrate the problem, organizing with fellow community members and getting a message out to the community, and numerous other skills.

✚ **Technical knowledge:** Echoing some of the reasons cited for the founding of the course - transportation gets complicated fast because of varying levels of authority, different agencies, overlapping jurisdictions and blurred distinctions between roles. Learning how to navigate these different layers is very important.

✚ **Understanding systems:** Community members need to learn to think in terms of systems and the effect that one change may have on other interrelated components within the transportation system or outside of it. There are lots of consequences that planners have to consider and that a community advocate needs to understand in order to make the most effective and convincing argument for a proposed improvement.

✚ **Providing a boost, not a burden:** One internal challenge that a local jurisdiction may need to acknowledge and overcome when implementing a CTA is that some agencies and staff will view empowering residents as something that will add extra work to their load (e.g., if the course results in more people contacting city staff). However, the goal should be improving the city's transportation overall, and in most cases, community involvement is a cheap way to have a transportation system that serves the community best.

✚ **In touch with the community:** In order for a CTA course to be successful, it will be important to know the community. In working to set up a local course, work with community members to understand their past experience with government and transportation planning, along with the community's needs and wants.

- To be effective in pushing for positive improvement on community transportation issues, students will need both process knowledge (e.g., understanding how the transportation system works and where people can get involved) and community knowledge. They must know how a project affects them and their community AND must know how to do something about it.

Courses should use real examples from the community in order to demonstrate the value of what community members can achieve.

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# Additional Resources

Further information about existing CTAs, along with some resources for CTA students, is presented on the following pages.

## ➤ Portland Traffic and Transportation Course

The PTT course was held twice a year between 1991 and 2008, and then each fall in the years since. The course is jointly administered by the Portland Bureau of Transportation (PBOT) and Portland State University (PSU) in an effort to meld the knowledge and experience of professional transportation agency staff with the learning environment of the university. A PBOT employee serves as a course organizer, arranging logistics and promoting the course. A course instructor is contracted to manage the course and arrange guest speakers. PSU also provides a graduate student employee to manage student participation in the class.

Founding course instructor Ric Gustafson retired from leading the course prior to the 2019 class. PBOT hired a new instructor, Thuy Tu, who has been the instructor since 2019. As the class transitioned to a new instructor, the course also revamped the approach and syllabus to include a focus on equitable transportation.

✚ The City of Portland webpage for the PTT provides a schedule of classes (<https://www.portland.gov/transportation/walking-biking-transit-safety/traffic-transport-class>):

- Week 1, Sept. 30th: Transportation, Equity and Community in Portland
- Week 2, Oct. 7th: Planning and Policy at the Regional and Local Levels
- Week 3, Oct. 14th: Regional Transit Planning and Equitable Contracting
- Week 4, Oct. 21st: Sharing the Road with Freight
- Week 5, Oct. 28th: Effective Community Engagement and Advocacy
- Week 6, Nov. 4th: Human Connections through Storytelling and Design
- Week 7, Optional in-person field trip Saturday
- Week 8, Nov. 18th: Visions for the Future, Honoring the Past
- Week 9, Dec. 2nd Class presentations I
- Week 10, Dec. 9th Class presentations II

✚ Video recordings of the PTT class meetings from 2019, 2020, and 2021. The 2019 class was held in a classroom on the Portland State University campus, while the 2020 and 2021 classes met virtually due to the COVID-19 pandemic: <https://www.youtube.com/playlist?list=PL8npY70YmmhTIH6Ab-6P-i7dFcj-jdmCM>

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- ✚ Several websites have documented student projects and presentations over the years, including:
    - The “BikePortland” blog has documented student presentations from 2016 to 2019:  
<https://bikeportland.org/tag/portland-state-university-traffic-and-transportation-class>
    - The “Portland Transport” blog documented student presentations from 2005 to 2015:  
<https://portlandtransport.com/archives/category/psupdot-class>
  - ✚ Further information about the course, including a survey of PTT graduates, is documented in:
    - McNeil, N. (2015). *Transportation Leadership Education: Portland Traffic and Transportation Course. A Case Study and Curriculum*. NITC-ED-541. National Institute for Transportation and Communities. (Note – included in the report is the “Course Curriculum and Implementation Handbook”, which is also available as a standalone document). Both are available at  
[https://trec.pdx.edu/research/project/541/Transportation\\_Leadership\\_Education](https://trec.pdx.edu/research/project/541/Transportation_Leadership_Education)

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## ➤ Wasatch Transportation Academy

The Wasatch Transportation Academy launched in 2022 and was based on the PTT. The WTA aims to help community members to understand how the transportation system works, particularly around how and where they can get involved in the different steps of the transportation planning process. The course is based at the University of Utah, and has support from local agencies including Salt Lake City Transportation Division; Wasatch Front Regional Council; Utah Department of Transportation; Utah Transit Authority; University of Utah; Salt Lake County, Regional Planning and Transportation; and the Portland Bureau of Transportation.

✚ Information about the course, including the syllabus, is available at <http://cta.cap.utah.edu/>. The class list of the course includes:

- Class One: The Role, History, Context, and Regional Planning
- Class Two: State Transportation Planning
- Class Three: City Transportation Planning
- Class Four: Public Transit
- Class Five: Walking and Biking
- Class Six / Presentation Night 1
- Class Seven / Presentation Night 2
- Class Eight / Field Trip: Life on State

✚ The effort to launch the course is documented in:

- McNeil, Nathan; Bartholomew, Keith, and Ryan, Matthew. *Launching the Wasatch Transportation Academy*. NITC-TT-1518. Portland, OR: National Institute for Transportation and Communities, 2022. Further details are available at: <https://trec.pdx.edu/research/project/1518/>.

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## ➤ Tampa Bay Citizens Academy on Transportation

In the fall of 2021, [Tampa Bay Citizens Academy on Transportation](https://nicr.usf.edu/2021/09/02/tampa-bay-citizens-academy-on-transportation/) (TB-CAT) was launched as a virtual learning opportunity for Tampa Bay, FL residents free of charge. Partnerships with the University of Southern Florida and professionals from the City of Tampa participated as facilitators to help guide students to create a project and prepare them for community involvement.

✚ The sample course overview of this class is as follows ([courtesy of NICR: https://nicr.usf.edu/2021/09/02/tampa-bay-citizens-academy-on-transportation/](https://nicr.usf.edu/2021/09/02/tampa-bay-citizens-academy-on-transportation/)):

- Introduction and History of Transportation in the City
- Transportation Decision-Making, Planning, and Management
- Solving Congestion – Travel Time Reliability and Impacts
- Improving Public Transportation
- Increasing Bicycle and Pedestrian Safety
- Taking Action – How can you get involved?

✚ Further information about the launch of the TB-CAT is available at:

- Jackman, Jason; Boyd, Tia; and Williams, Kristine M., "Tampa Bay Citizens' Academy on Transportation" (2022). *Research Reports*. 7.  
[https://digitalcommons.usf.edu/cutr\\_nicr/7](https://digitalcommons.usf.edu/cutr_nicr/7)

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## ➤ Resources for Students

In addition to the suggested reading options including in the course sessions, a few other sources are listed here. The most relevant transportation plans, news and resources for each CTA will likely be from local agencies and news sources.

### Websites

- Streetsblog: <https://www.streetsblog.org/>
- CityLab: <https://www.bloomberg.com/citylab/transportation>
- Human Transport: <https://humantransit.org/>

### Podcasts:

- TransitUnplugged: <https://www.transitunplugged.com/>
- TalkingHeadways: <https://streetsblog.libsyn.com/>
- ArrestedMobility: <https://arrestedmobility.com/episodes/>
- Strong Towns: <https://www.strongtowns.org/podcast>
- High Frequency, from the TransitCenter: <https://high-frequency.simplecast.com/>