

# TODs: Their Effects on the Community

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## Outline

- **Why TODs?**
- **Research Question**
- **Research Methodology**
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  - c. Time Frame
- **Conclusion**

## Why TODs?

- Personal Background on the Eastcoast and planning trends in California.
- I want to research if TODs in other locations such as Europe have proven to be effective in increasing ridership on public transit.

## Research Question

- Do transit-oriented developments increase the likelihood of it's residents and visitors riding public transit?

## Research

- To answer this question and to minimize bias, I plan to research two different sections:
  1. Land Use patterns of selected cities
  2. The quality of the transit system in selected cities. This will serve as a control variable to isolate the real impact of land use on people's transportation mode choice.

## Methodology

- Variables will include:
  1. **Independent**- Land Use type
  2. **Dependent** – Transportation choice

Statistical methods will be included in my research.

Null hypothesis: TODs increase public transit ridership.

Alternative Hypothesis: TODs do not increase public transit ridership.

## Methodology

- Qualitative research:
- Field Research – focus groups, site reconnaissance, windshield surveys and personal observations of me personally visiting the research sites and witnessing the life within these TOD communities.

## Methodology

- Quantitative research:
- Ridership figures from transportation department, funding amounts, route coordination such as headway frequencies, distance between stops and speed of transit vehicles.
- Number of TOD households in selected cities.

## Methodology

- Of all of the TOD households, I plan to conduct a simple random sample by utilizing a table of random numbers and randomly choosing addresses that match the numbers. I will visit and distribute a survey to the addresses that match the random numbers chosen.

## Survey Sample

- Ideally, my questionnaire will resemble the following:
- Please rank in percentages how often you utilize the following mode choices in your daily life.
  - a. Transit b. Auto c. Walk d. Bike e. Scooter f. other\_\_\_\_\_ (please list).
  - b. Does living near transit make you more inclined to ride public transportation?

## Time Frame

- **Week 1:** Explore Groningen and learn more about the community by observing it's land use patterns and transportation choices (such as there might be a lot of bike trails and less freeways).
- **Week 2-3:** Conduct a windshield survey from public transit vehicle to choose sites to study and conduct simple random sample.
- **Week 4-5:** Conduct a site reconnaissance of selected sites and distribute surveys to residents
- **Week 6:** Contact transit agencies for ridership numbers, etc.
- **Week 7-8:** Observe the quality of transit system and the marginal utility and satisfaction that riders have towards the public transit system.
- **Week 9:** Compute my calculations and draw a conclusion based on my research.
- **Week 10:** Present Findings at NEURUS Seminar

## Conclusion

- To try to minimize my own bias on the research, I am going into this with no pre-drawn conclusion of what my research could uncover. I will attempt to phrase my questions without any interviewer bias.