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Simple Open Data Measures of Public Transit Service Availability

Usecases for Closeness Centrality and Isochrones

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1 Introduction

In recent years, but for decades by now, the demand for a paradigm shift in transportation infrastructure and service has become louder and louder. While calls for a shift away from car centric mobility are nothing new and were a well established part of German Academic discourse in the 1990s already [1], it has become part of a widespread political discourse around the so called *Verkehrswende* [2]. With increased awareness and concrete experiences of climate change this discourse has reached states of heated debate. Benefits of

1.1 Transit Equity and Equality

1.1.1 Motivation

- Traditional transport planning centering on men?
  - German Transport Planning post world war 2?
- Transit planning and identifying demand in public transit networks is a complicated process, that takes into account a plethora of data that's hard to access or acquire [3].

1.1.2 Research Question

- How can an easy closenes centrality measure help asses transit service availability and equality

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2 Closeness or Reachability

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- limitations to car traffic estimations
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- Lorenz Curves and Gini Coefficients being silly sometimes [4]

4.4 Results

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5 Recap of Results

6 Discussion

6.1 General Limitations

- Lack of real world measures as Comparisons
- Lack of reliability Data
- Lack of delay data
- *inequality* being silly at times [4].

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