



# Atlas of Urban Transport

Request for Proposals: UX, Design, and Development

*Issued as of March 4 2022. Proposals requested by March 23 2022.*

The [Institute for Transportation and Development Policy](#) (ITDP) is seeking proposals from web design+development teams to plan, design, and implement a web platform for the visualization of geospatial data describing urban transportation systems in hundreds of cities around the world: the Atlas of Urban Transport.

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## 1: Goals of the Atlas

ITDP launched the [Cycling Cities Campaign](#) in 2021. This campaign calls on cities, especially 29 signatory 'cohort' cities, to increase the portion of their population living within 300 meters of a physically-protected bicycle lane network by 25 percentage points by 2025.

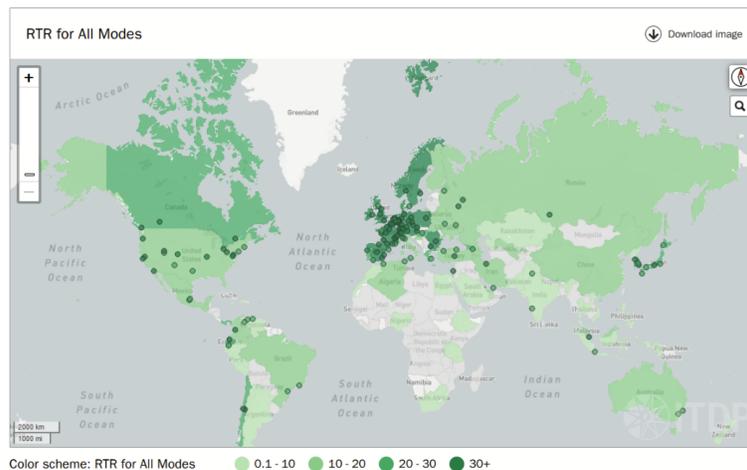
The **primary goal of the Atlas** is to enable local advocates and planners to monitor their city's progress in the Cycling Cities campaign. The **secondary goal of the Atlas** is to provide access to similar geospatial data for other aspects of urban mobility, in a way that will be extensible in the future. The Atlas will function as an educational resource.

By promoting cycling and other forms of inclusive and sustainable transport, the Atlas will help reduce carbon emissions, increase road safety, create economic opportunity, and promote public health.

## 2: Functional Requirements

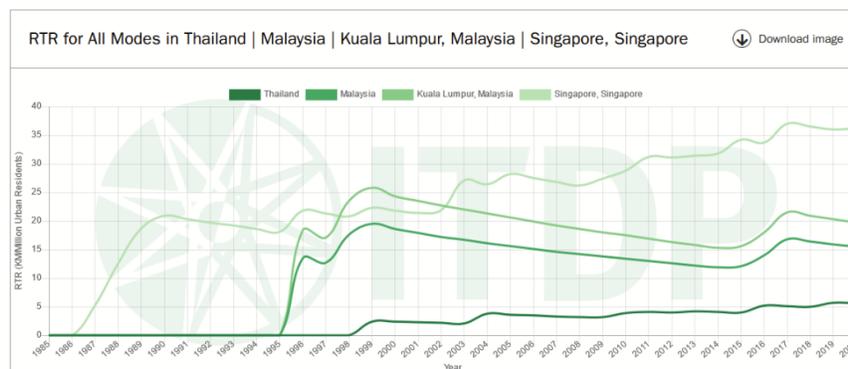
The Atlas will include the following functionality:

1. A choropleth map of indicators (e.g. ratio of metro network length to urban population, percentage of people within walking distance of social services) displayed at the level of countries, metropolitan areas, and jurisdictions.
  - In many cases we will display data for several jurisdictions as well as the metro area they belong to – for example, we may display data for San Francisco and Oakland separately, as well as data for the greater S.F. Bay Area.



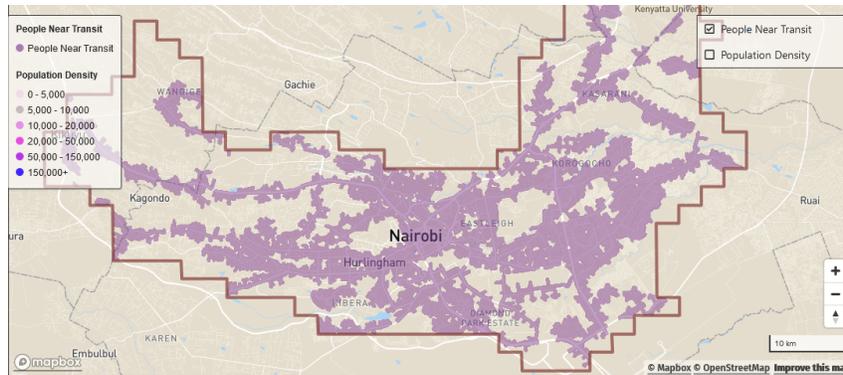
Example: This [map](#) of Rapid Transit to Resident Ratio in countries and cities

2. Graphics comparing indicator values in different countries, metro areas, and jurisdictions.
  - For some indicators, we will have values over time; for others, we will only have values as of 2022.

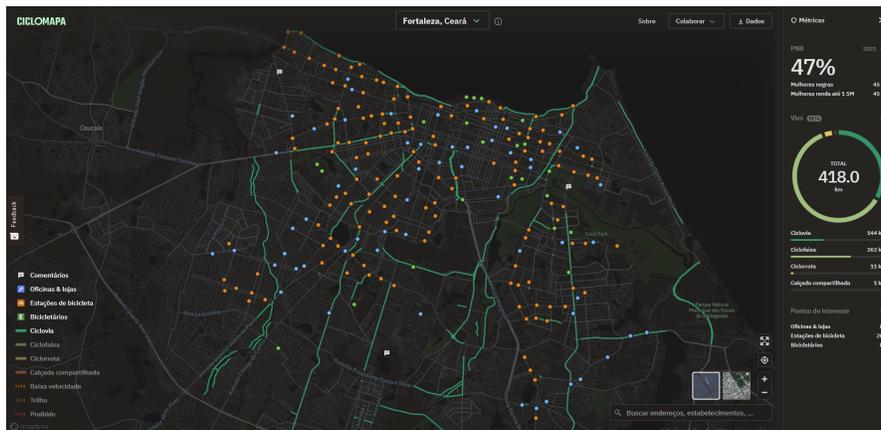


Example: This [graph](#) of Rapid Transit to Resident Ratio in countries/cities in Southeast Asia.

3. Maps of geospatial data (e.g. population density data, bicycle network maps, etc) within both city jurisdictions and metro areas.



Example: This [map](#) of People Near Frequent Transit in Nairobi



Example: This [map](#) of bikelanes in Fortaleza

4. Data downloadable in .csv and geospatial formats.
5. Text explaining the indicators and their interpretation and linking to other materials.
  - This will include the possibility to display different text on the basis of city size, country/region, and the values not only of the indicator in question but also of other indicators in that city. ITDP will provide all text.



The Atlas will be open-source, modular, and extensible over time, to be maintained for years to come. It will be user-friendly for non-expert visitors while providing high-quality data to experts. It will not only be a dashboard, but also a practical call to action.

1. The Atlas will be modular and extensible: We will provide the data that is currently available, but the platform should be designed so that additional indicators can be added onto it in the future at the existing scales (country, metro area, jurisdiction). This may require some developer assistance, but the design should make this as minimal as possible.
  - a. In the coming years, we may want to implement interactive functionality for certain indicators – for example, for a user to draw a new subway line on a map of their city and have the Atlas predict the impact of that new line. We are not seeking to build this functionality now, but to leave the option open to implement it in the future.
2. The code powering the website will be released open-source under the MIT license.
3. User-friendly - Users should be able to obtain useful information with no training or special instructions.
4. Maintainable - ITDP staff should be able to update the data in the platform on a regular basis without the need for the assistance of developers.

This request for proposals **does not include the calculation of the geospatial data** to be displayed in the Atlas, which ITDP will be doing simultaneously with the development of the website. There will be some aspects of this calculation for which the consultant's guidance will be sought: for example, the most appropriate file format for conveying the data to be displayed, or the most user-friendly indicator for communicating the rate of population growth in different neighborhoods. Many of the indicators and geospatial data to be displayed already exist, and the others will be calculated by ITDP during the timeline of the project. The data will be shared in its finished form in a format that we determine together.

For more detail, see this [working document](#) for a draft of possible functionality for the Atlas.



### 3: What we are seeking

ITDP welcomes proposals from teams capable of completing all three phases of the project (UX, design, and development).

**TIMELINE:** We intend to release the Atlas by September 30 2022.

**BUDGET:** Our budget range is \$15,000 - \$30,000, including hosting costs. This will be a lump sum contract.

If interested, please respond with a proposal by **March 23, 2022**. The proposal should include:

1. Approach to the work/comments (max 1 page). How you understand the work and how you plan to approach creating the final deliverable. This should also include any comments or suggested modifications to the work scope described above.
2. Team structure (max 1 paragraph) describing the team members and how they intend to work together. Please indicate who will lead the team and be the point of contact with ITDP. Also indicate how the team will coordinate and manage the work to stay on schedule and resolve any issues.
3. Timeline/work plan relative to a start date of April 18, 2022. Please include the following (or, if you propose an alternative approach, explain why):
  - UX strategy:
    - Stakeholder interviews
    - Identification of key tasks / user journeys
    - Functional specification and sitemapping
    - Wireframing and usability testing
  - UI design:
    - Graphical mockups
    - Interactive prototypes
  - Development:
    - Collaboration on data architecture / database design (to set up functionality of the Atlas based on a dynamic data pipeline, with indicators at different spatial levels and in various categories.). This should begin as soon as possible.
    - Interactive frontend development
    - Documentation and open-sourcing of code
    - Beta testing to begin by end of August, 2022
    - Setup of hosting and analytics collection, ready for release by end of September, 2022
4. Budget, itemized by work area.
5. 2-3 examples of comparable past projects, especially projects that included the interactive display of geospatial data, and the names of past clients who could serve as references.



ITDP will evaluate proposals on the combined basis of cost, quality of past work, and strength of proposed approach and work plan.

**Please share your proposal by March 23, 2022.**

For any questions, or to schedule a call to discuss your proposal, please reach out to Taylor Reich (they/them pronouns, [taylor.reich@itdp](mailto:taylor.reich@itdp)). ITDP intends to select a team by April 8, to carry out the project beginning April 18, 2022.

Thank you for your interest, and take care,

*D. Taylor Reich, Senior Research Associate, ITDP Global*