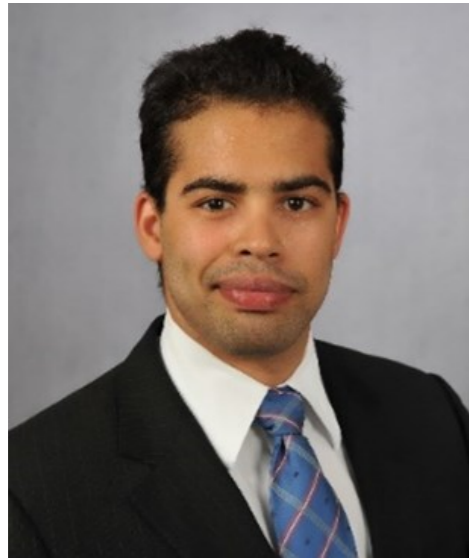


Identification and Categorization of Viable Abandoned or Underutilized Railway Corridors for the Implementation of Urban Rail Systems in Mexican Cities.



Miguel Alexander Abreu Camilo

Abstract

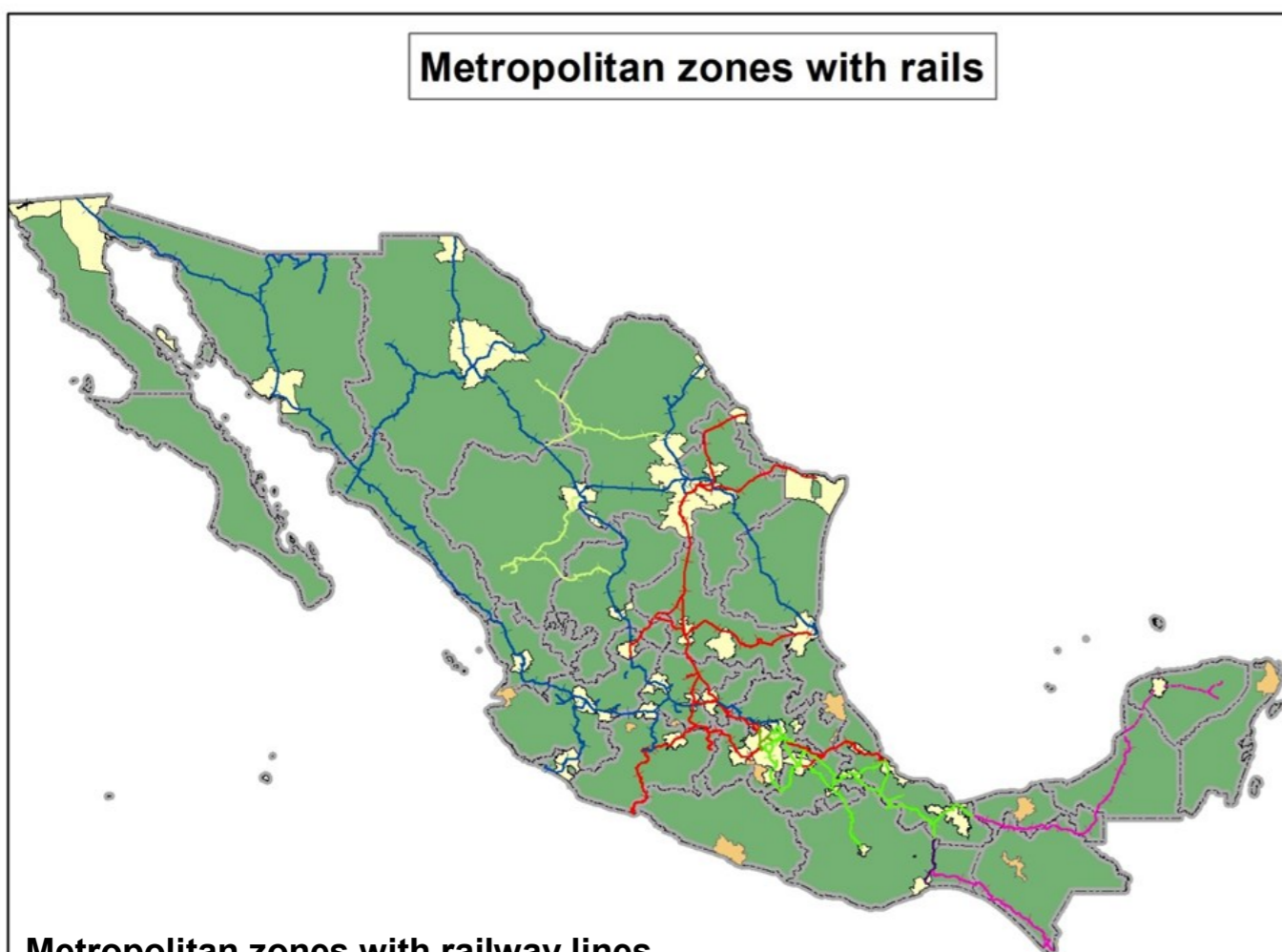
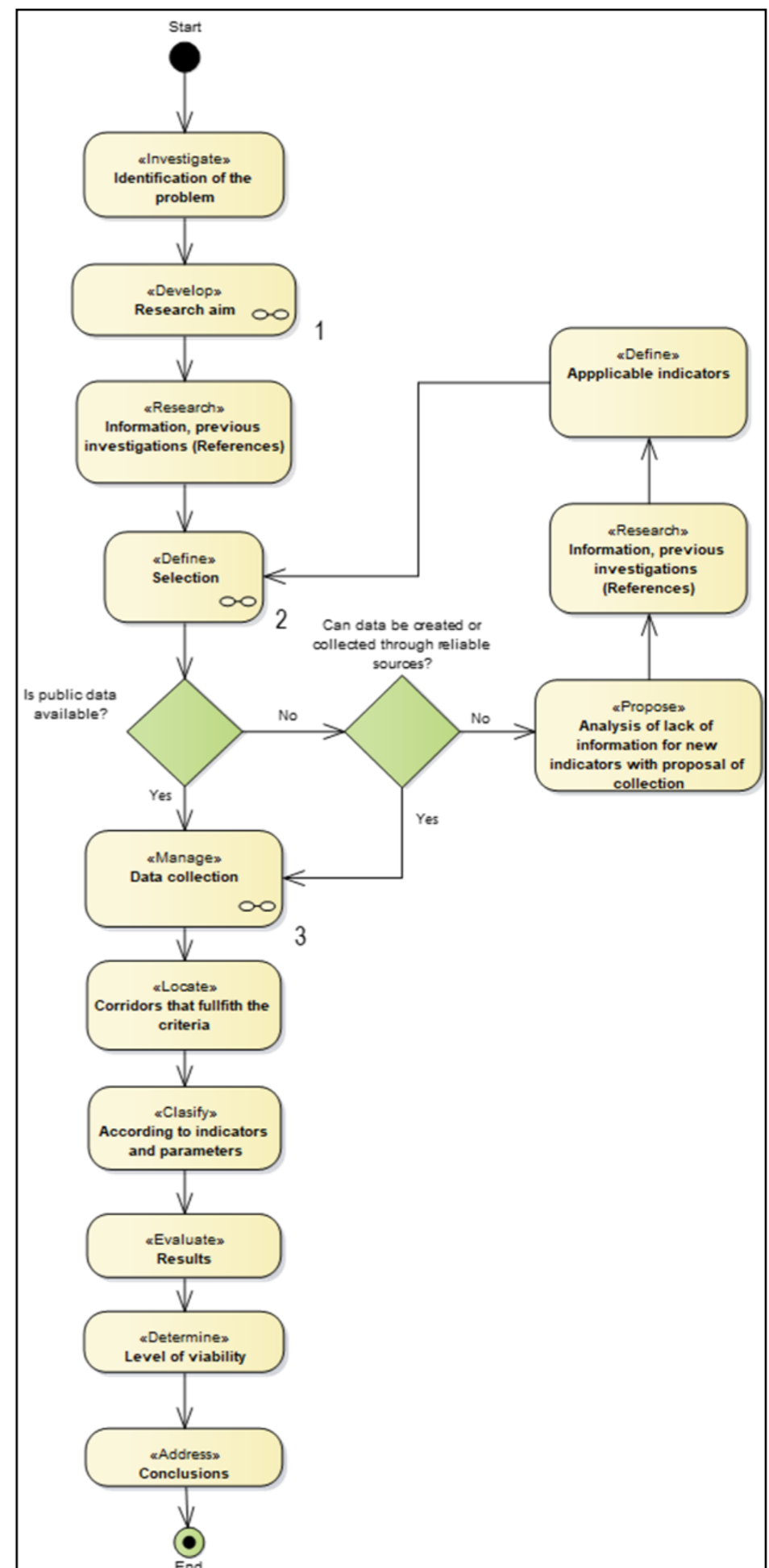
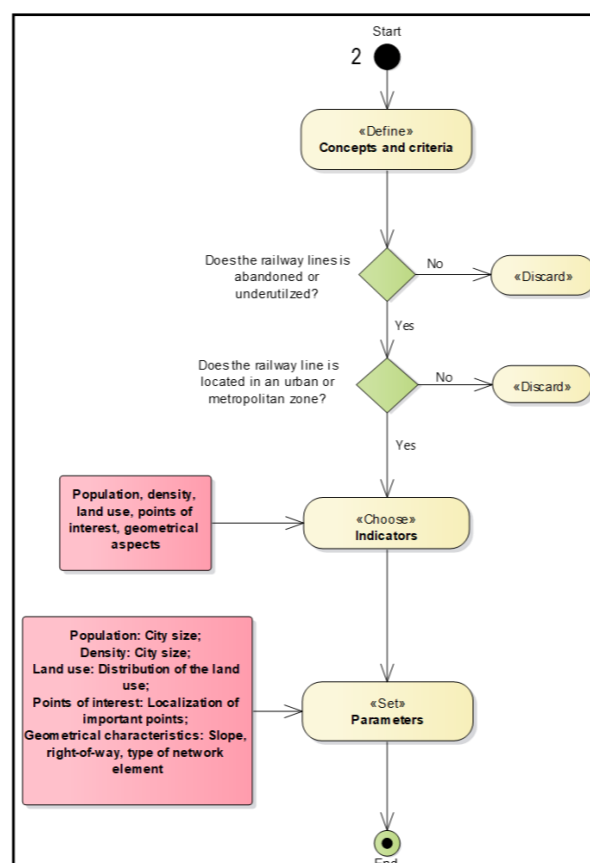
This thesis is part of a series of research towards the development of Light Rail Systems and railway operations focus on passenger in Latin America. The study's research focus on the current situation of the railway network in Mexico by analysing the possibilities of rail corridors to be used for public transportation and urban development.

The objective is to locate, analyse and categorize the abandoned and underutilize railway corridors within urban cores. To achieve this objective key information needs to be collected to evaluate the success of these projects, for that, a database is created with information used to evaluate transport systems, in this case, for Light Rail Transit (LRT) Systems.

By creating a database and sharing the situation of these corridors and their characteristics, projects will be easier to develop through accessible information.

Objectives

1. Locate railway lines.
2. Set parameters with indicators available that determine the success of a rail transport systems.
3. Create a database and collect data.
4. Categorize the railway lines according to their use.
5. Analyse and determine their viability according to indicators previously set.



Conclusions and Future work

A rail corridor has distinct capabilities and characteristics to provide new insights to the betterment of public transportation. It possesses an immense potential, such as higher accessibility, greater capacity transport system, reduced gas emission and commute time. Furthermore, the system also has the potential to enhance urban regeneration within the nearby areas of the corridors.

The objective of creating a database is to precisely filter, categorize and set parameters for the design of LRT transport planning.

These cities can be use as case studies for further analysis along with the addition of new indicators that were not analysed in this study. By following and achieving the objective of the database through the collection of new data, necessary information can be at hand for further projects. Therefore, the proposal for new indicators, such as car accidents, gas emissions, energy consumption (for studies like cost-benefit analysis), are an essential work that demands serious consideration.

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