

# Special Supplement from the EIDR Research Program

## The Mass Transit System in Metro Manila: From Tranvia to MRT, 1879 - 2014

By drawing on the disciplines of history, geography, transportation studies, and political economy, this study aims to examine (un)executed mass transit plans and determine varied contexts (social, economic, cultural, political, and even technological) that configured the present-day mass transit system in Metro Manila.

**Project 1:** A history of the railway systems from the colonial Manila (1879) up to the present Metropolitan Manila (2014) as gleaned from plans and the built infrastructures

*Project Leaders*  
Prof. Marco Lagman  
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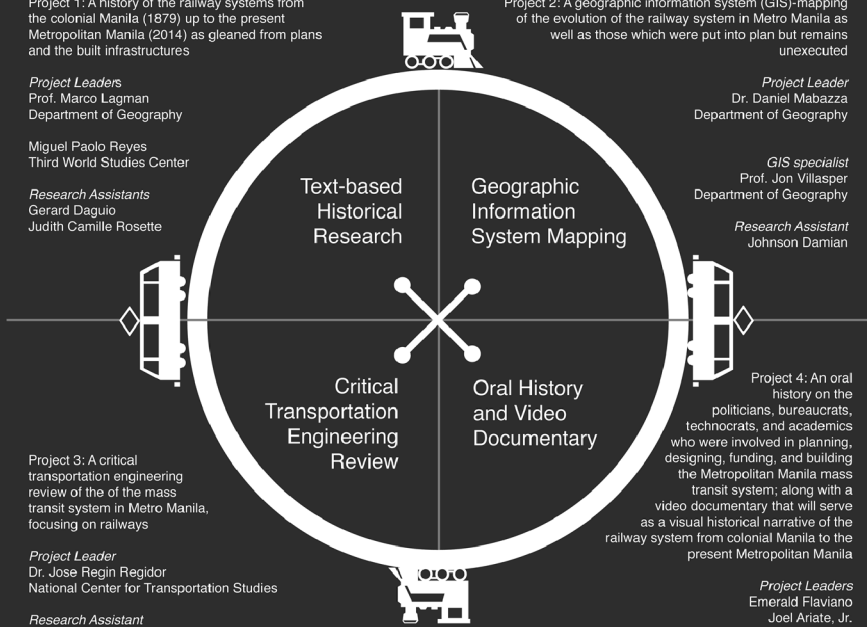
*Research Assistants*  
Gerard Daguio  
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**Project 2:** A geographic information system (GIS)-mapping of the evolution of the railway system in Metro Manila as well as those which were put into plan but remains unexecuted

*Project Leader*  
Dr. Daniel Mabazza  
Department of Geography

*GIS specialist*  
Prof. Jon Villasper  
Department of Geography

*Research Assistant*  
Johnson Damian



**Project 3:** A critical transportation engineering review of the of the mass transit system in Metro Manila, focusing on railways

*Project Leader*  
Dr. Jose Regin Regidor  
National Center for Transportation Studies

*Research Assistant*  
Dominic Aloc

**Project 4:** An oral history on the politicians, bureaucrats, technocrats, and academics who were involved in planning, designing, funding, and building the Metropolitan Manila mass transit system; along with a video documentary that will serve as a visual historical narrative of the railway system from colonial Manila to the present Metropolitan Manila

*Project Leaders*  
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## The Mass Transit System in Metro Manila: From Tranvia to MRT, 1879–2014

I am pleased to present as a supplemental section in this issue of *Kasarinlan: Philippine Journal of Third World Studies* research notes from the emerging interdisciplinary research program (EIDR), “The Mass Transit System in Metro Manila: From Tranvia to the MRT, 1879–2014.” The EIDR program of the University of the Philippines Office of the Vice President for Academic Affairs, following the Board of Regents-approved implementation guidelines “Reinventing Research in UP” in 2011, caters to “innovative, interdisciplinary, inter-CU research programs and projects that aim to generate fundamentally new knowledge contributing to the understanding of natural phenomena, and with beneficial applications” (OVPAA, n.d.). EIDR grants are highly competitive and are assessed by external reviewers using the following criteria: “(1) innovation and intellectual merit, (2) significance and broad impacts, (3) investigator competence, (4) feasibility of completion in four years” (OVPAA, n.d.).

The set of research notes in this issue is the product of the concerted effort of the program members—all from the University of the Philippines Diliman—since the project began in 2015, with the invaluable guidance of Philippine Institute for Development Studies president Gilbert Llanto, who served as one of the resource persons of the project.

The program is a two-year multidisciplinary initiative (October 2015 to September 2017). It draws on the disciplines of history, political economy, geography, and transport engineering with the following general aims: a) to put together a comprehensive and critical survey of mass transit plans for (Metro) Manila and how these plans relate to each other and to the built infrastructures that simultaneously, in varying degrees, altered, facilitated, and constrained the metropolitanization of Metro Manila; b) to gather and make public sources (maps, photographs, monographs, and others) on the mass

transit system in Metro Manila through accessible online platforms; and c) to impact with informed content the current discussions on the mass transit system in Metro Manila through accessible knowledge forms (feature articles, blog posts, video documentaries, and the like).

I am program leader. Elinor May Cruz (university research associate, Third World Studies Center [TWSC]) is program manager, and Hannah Joy Germinal (MS Statistics student) is part-time administrative assistant. The multidisciplinary nature of the project is reflected by the composition of its members, assigned to four complementary components:

Project 1 focuses on the history (text) of the railway systems from the colonial Manila (1879) up to the present Metropolitan Manila (2014) as gleaned from plans and built infrastructures. Marco Stefan Lagman (assistant professor, Geography Department) served as co-project 1 leader until March 2017. He was succeeded by Karl Friedrik Poblador (assistant professor, History Department and PhD History student). Keith Gerard Daguio (MA Philippine Studies student) and Hannah Angelica Makilan (BS Geography student) are the research assistant and student assistant to the project, respectively. Their focus is on the colonial period up to the end of World War II (1879-1945). Miguel Paolo Reyes (university research associate, TWSC) is co-project 1 leader, Judith Camille Rosette (MA Art Studies student) is research assistant, and Laurenz Patrick Lee (BFA Painting graduate) is part-time research assistant. Their focus is on the post-World War II period up to the present (1946-2014).

Project 2 focuses on a geographic information systems (GIS) rendering of the evolution of the railway system in Metro Manila as well as those which were planned but remain unexecuted. Daniel Mabazza (associate professor and chair, Geography Department) is project 2 leader with Jonathan Villasper (instructor, Geography) as senior GIS specialist. Johnson Damian (lecturer, Geography Department) is research assistant, with Jianne Mae Pamintuan and Rouen Gail Pineda (BS Geography students) as student assistants.

Project 3 focuses on a critical transportation engineering review of the mass transit system in Metro Manila, focusing on railways. Jose Regin Regidor (professor, Institute of Civil Engineering and research fellow, National Center for Transportation Studies) is project 3 leader, and Dominic Aloc (MS Civil Engineering student) is research assistant, with Angela Kariza Ines and Kenneth Joseph Peña (BS Civil Engineering graduates) as part-time research assistants.

Finally, project 4 is the production of an oral history of the politicians, bureaucrats, technocrats, and academics who were involved in planning, designing, funding, and building the metropolitan Manila mass transit system and an audiovisual history of the railway systems of Manila. Emerald Flaviano (university research associate, TWSC) is co-project 4 leader for the oral history component, with Ivy Dianne Oliván (MA Philippine Studies student) as research assistant. Joel Ariate Jr. (university researcher, TWSC) is co-project 4 leader for the video documentary component, with Giselle Joyce Nadine de la Peña (MA Anthropology student) as research assistant. The core members of the video documentary team include Boyette Rimban as director, Jeremy Aagsawa as cameraman, Rolando Que as assistant cameraman, Cara Cristina Red as sound man, Luz Rimban as post-production manager, Miguel Paolo Reyes and Joel Ariate Jr. as scriptwriters, Karla Luz Rimban as master editor, and Dawn Po Quimque as assistant editor. Christian Victor Masangkay (research associate, TWSC) and Maria Jeriesa Osorio (BA Communication Research graduate) served as transcribers.

This supplemental section consists of four research notes written and developed by the research assistants as products of a series of workshops with the *Kasarinlan* editorial staff that lasted for seven months (July 2016–January 2017). The set of research notes in this issue is one of several accomplishments of the project. To be specific, the project leaders and the research assistants have presented their works in progress to international and local conferences, with some already completed into full-length journal articles and submitted for publication in ISI or Scopus-listed journals—at least three are undergoing peer review. Using archival sources, maps, photographs, reports, and plans, as well as demographic and socioeconomic data on Metro Manila through time, GIS maps of the evolution and truncated growth of the rail system in Metro Manila are gradually being developed, with some of the finished maps already utilized in research dissemination activities.

Not limited to the academic community, a thirty-minute video documentary entitled “Tranvia: Ang Mga Riles ng Kamaynilaan” (Tranvia: The Railways of Metropolitan Manila) was successfully premiered last 9 February 2017 at an international conference organized by the TWSC to celebrate its fortieth anniversary at the GT Toyota Auditorium, Asian Center, University of the Philippines Diliman. The video documentary contains 164 photographs from various archival

sources, three minutes and fifty-six seconds of archival footage, one minute and nine seconds of animation, and five minutes and twenty-two seconds of footage shot by the video documentary team. It tells the story of the early attempts from the late nineteenth century to build and operate a rail-based mass transit in metropolitan Manila, the heyday of the electric tranvia (tramways), and its eventual demise when Manila was reduced to rubbles during World War II.

In looking at the still unwritten side of the mass transit history through an oral history of the politicians, bureaucrats, technocrats, and academics who were involved in planning, designing, funding, and building the Metropolitan Manila mass transit system, in particular its current rail network, the project has successfully interviewed key actors from the government, the private sector, and the academe, recorded them audiovisually, transcribed them, and edited their video recordings, with the general intent of making these research outputs available to the public via an educational website that will serve as a digital and public repository of all the materials that the research has gathered.

There are four research notes in this supplemental section. Daguio and Lagman's "Beyond UTSMMA and MMETROPLAN: Other Transport-Related Plans, Reports, and Position Papers, 1968-1982" focused on materials housed in the University of the Philippine Diliman libraries. It wove salient themes in transport planning history using select works of academics and practitioners, the World Bank, and transport-related government agencies during the said period. Based on the works of these select stakeholders, Daguio and Lagman's research note provide a brief survey of primary documents on transport planning history in Metro Manila to give a glimpse of how the government, the academe, and the private sector dealt with the burgeoning traffic conditions in Manila from 1968 to 1982. In raising key questions on transport planning history, Daguio and Lagman hope to prompt discussions that "would lead to significant contributions in the area of planning history, which is one of the acknowledged 'gray areas' in Philippine urban and regional planning literature."

Damian's "Preparing a Historical GIS of the Mass Transit Systems of Metro Manila from the Nineteenth Century to the Present" describes the methodology and inherent challenges in utilizing historical sources in a GIS. The research note is a detailed discussion on "the application of GIS methods to historical transport studies as it seeks to visualize the transport history of Manila, as well as contribute to the growing literature and set of techniques employed in historical GIS."

Damian's work includes the visualization of his application of GIS methods using archival and primary materials, which should be of great value to historical GIS practitioners and students.

Regidor and Aloc's "Travel Demand Analysis: Requirements for Transit Modeling for Metropolitan Manila" lays the groundwork in answering what-if questions on transport planning for railways using transport modelling softwares. It applies the unimplemented railway plans on the existing traffic and land use conditions of Metro Manila. Through accessible language, it gives a thorough discussion of the development and conduct of a travel demand analysis to imagine what-if scenarios and understand "what could have been the state of traffic in Metro Manila if past rail transport plans had been implemented."

Finally, Flaviano's "Toward an Oral History of Metro Manila's Railways" outlines the contribution of an oral history of key players in the development of Metro Manila's mass transit system. Like Damian, and Regidor and Aloc, Flaviano follows a methodological approach to her research note. She engages international and local scholarship on oral history in crafting the theoretical and methodological approach of the oral history component of the project from "the conduct of the interviews, the method of recording, the analysis of the gathered data" to giving "public access to the video recordings and transcripts" via the planned program website.

These research notes are markers of what the program has accomplished thus far. The program envisions the fruition of more of its plans: a) the continuation of the gathering of research materials from different archives and libraries; b) continuation of the research on Light Rail Transit Lines 1 and 2 and the Metro Rail Transit 3; c) the production of maps of various scales and time periods in order to create a high-resolution printed chronology and evolution of Metro Manila's railway systems; d) impact assessment of the transport systems using a co-benefits approach among transport experts and specialists and crowdsource respondents; e) the continuous conduct of oral history interviews and preparation of their video recordings for the program website; f) a video documentary on the rest of the rail systems in Metro Manila; and g) the creation of the program website for educational and noncommercial use to effectively disseminate the research output as well as provide access to the archival materials it has gathered to students and the general public. Finally, the published journal articles, utilizing other unpublished materials, will be broadened and put together into an edited book, which will be submitted for publication

to the University of the Philippines Press by the end of the two-year project duration.

I hope you will find informative this “preview” as the research notes give a glimpse, from the different and complementary perspectives of history, geography, transport engineering, and political economy, of how the mass transit system in Metro Manila, particularly the rail system, “arrived” at the condition it is in now—and perhaps how it can be imagined to move forward in other, more optimistic directions. We would like to thank the resource persons who have shared their knowledge and experience to equip us in undertaking the challenges that a multidisciplinary research project entailed. We give special thanks to Dr. Gilbert Llanto for his comments on these research notes. We also would like to thank the Office of the Vice President for Academic Affairs, from Dr. Gisela P. Concepcion to Dr. Cynthia Rose Banzon Bautista, and their staff for their continuous support. Please send inquiries about the program at [eidr.masstransit@up.edu.ph](mailto:eidr.masstransit@up.edu.ph). ❀

## REFERENCE

OVPAA (Office of the Vice President for Academic Affairs). n.d. “Emerging Interdisciplinary Research Program.” <http://ovpaa.up.edu.ph/emerging-interdisciplinary-research-program-2>.