

# Supply Analysis of an Access Mode for Local Travel: The Case of Tricycles in the Philippines

Dr. Alexis Fillone (Dept. of Civil Eng. )

Dr. Maria Cecilia Paringit (Dept. of Civil Eng.)

Dr. Marlon Era (Dept. of Sociology and Behavioral Science)

Dr. Krista Danielle Yu (Dept. of Economics)

#### Contents of the Presentation

- I. BACKGROUND
- II. OBJECTIVES
- III. CONCEPTUAL FRAMEWORK
- IV. METHODOLOGY
- V. PRELIMINARY ANALYSIS

#### I. Background



A transformational large-scale initiative and flagship project of President <u>Duterte</u> supported by the proposed Comprehensive Tax Reform Program of the Department of Finance.

It envisions a restructured, modern, well-managed, and environmentally sustainable transport sector where drivers and operators have stable, sufficient, and dignified livelihoods while commuters get to their destinations quickly, safely, and comfortably.

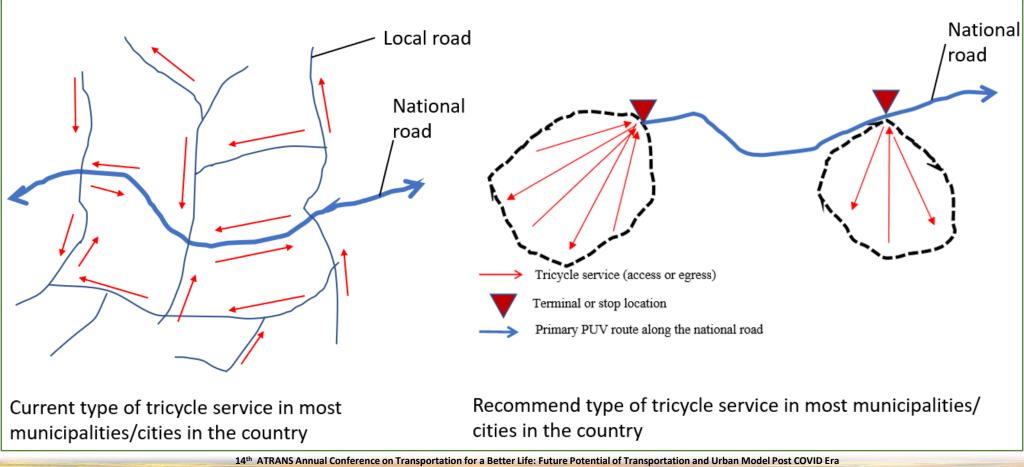
#### **MAJOR COMPONENTS**

**PUV MODERNIZATION PROGRAM** 



14th ATRANS Annual Conference on Transportation for a Better Life: Future Potential of Transportation and Urban Model Post COVID Era

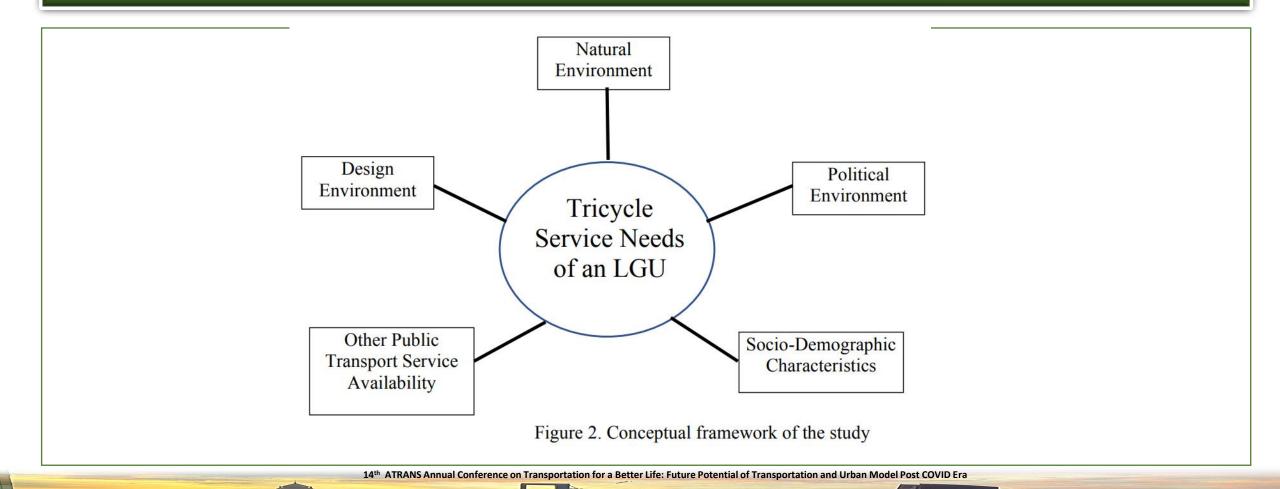
# I. Background



#### II. Objective

• The primary objective of this study is to determine the most appropriate number or range of tricycle units that should serve a given locality (municipality or city) given the estimated passenger demand and their travel characteristics taking into consideration the existing national and local policies and social acceptability of the community residents.

## III. Conceptual Framework



#### METHODOLOGY

Category or Classification Analysis

Regression Modeling

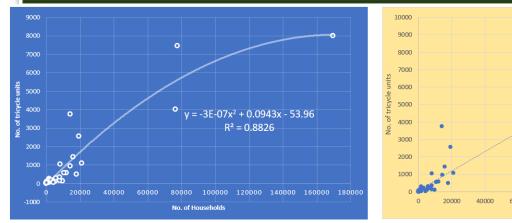
Artificial Neural Network Models

# V. Preliminary Analysis

#### Correlation Analysis

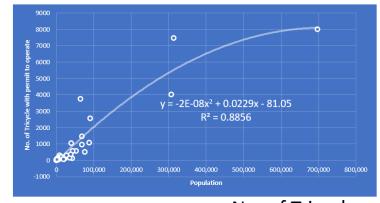
	Number of		Total		No. of
	Households	Land Area	Populatio	Population	Tricycles
	(Estimated)	(Hectares)	n (2020)	Density	(y)
Number of Households					
(Estimated)	1				
Land Area (Hectares)	0.575345754	1			
Total Population (2020)	0.999712651	0.587316657	1		
Population Density	-0.021706539	-0.299489926	-0.03038	1	
No. of Tricycles (y)	0.912608632	0.464344466	0.913995	-0.02483	1

## V. Preliminary Analysis

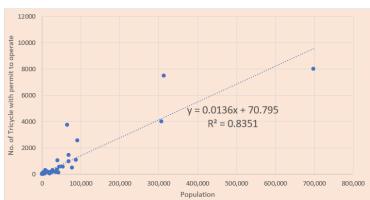


No. of Tricycles vs. No. of Households in the LGU

#### **THANK** you for your kind attention!



y = 0.0556x + 87.246 $R^2 = 0.8329$ 



No. of Tricycles vs. LGU Population

14th ATRANS Annual Conference on Transportation for a Better Life: Future Potential of Transportation and Urban Model Post COVID Era