

**PROPOSED SOLUTION TO ADDRESS TRAFFIC
CONGESTION AT EL 98 - BENIGNO AQUINO AVENUE
INTERSECTION**



**A Special Problem
Presented to
The Faculty of the College of Engineering
Graduate Programs
Central Philippine University
Jaro, Iloilo City**

**In Partial Fulfillment
of the Requirements for the Degree of
Master of Engineering**

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ABSTRACT

Today, there are more than one billion cars on the road worldwide and that number will double by 2020, and when the number of vehicles reaches the capacity of the road, particularly at intersections, traffic congestion sets in. This is a major problem happening in most highly-urbanized cities, including Iloilo City.

This study determined and recommended a viable solution to the traffic congestion at El 98 – Benigno Aquino Avenue Intersection by comparing and ranking the advantages and disadvantages of four alternative solutions: traffic signal lights, roundabout, flyover and by-pass road. An engineering problem-solving methodology was employed using the Dartmouth/Thayer approach. The best solution was determined by utilizing problem-solving matrices where alternatives were rated and ranked based on specifications. The results of the study showed that the roundabout was the most viable solution in addressing traffic congestion at the intersection and its construction was recommended. It cost less than other alternatives, the most doable project at the moment and can be completed in a relatively short period of time.