Transforming Traffic Congestion into Sustainability

CAMBODIA
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AGENDA

- Introduction
- Current Issues
- Proposed Recommendation
- Conclusion
INTRODUCTION

Phnom Penh, December 2010

Phnom Penh, January 2018
INTRODUCTION

Number of all registered transportation (in thousands) for Top 5 countries in 2017

Source: ASEANStatsDataPlot

The Number of registered motorcycles (in thousand) for Indonesia is the top contributor, 168% above the average. View more...
INTRODUCTION

Linear Regression on Increase of Total Transportation (in thousands) in Indonesia by 2019

The number will be increased by almost ¼ of total number in 2017
CO2 Emission From Liquid Fuel Consumption (kt) per Country in 2014

This has significantly showed that Indonesia become a top contributor to increase with 276% above the average

Source: World Bank
Correlation Between CO2 Emission and Total Number of Transportation per Country in 2014

Showed that “the more transportation the country have, the more CO2 will be emitted”

Source: World Bank & ASEANStatsDataPlot
### Number of Traffic Accident Casualties (injuries) by road per Country in 2017

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Casualties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>134,353.00</td>
</tr>
<tr>
<td>Myanmar</td>
<td>29,144.00</td>
</tr>
<tr>
<td>Philippines</td>
<td>20,410.00</td>
</tr>
<tr>
<td>Vietnam</td>
<td>16,970.00</td>
</tr>
<tr>
<td>Malaysia</td>
<td>9,849.00</td>
</tr>
<tr>
<td>Cambodia</td>
<td>5,539.00</td>
</tr>
<tr>
<td>Thailand</td>
<td>3,796.00</td>
</tr>
<tr>
<td>Brunei Darussalam</td>
<td>529.00</td>
</tr>
</tbody>
</table>

Indonesia become a top contributor with **387%** above the average.

Source: ASEANStatsDataPlot
ISSUE 3: Travel Time (Delay)

Travel Time Index per Road for Actual

OECD Development Centre 2018

- EDSA (Metro Manila) 2.97
- Sudirman-Thamrin (Jakarta) 1.80
- Jalan Sultan Ismail (Kuala Lumpur) 1.77
- Rama IV (Bangkok) 1.89
- Bukit Timah (Singapore) 1.66

Close, High and others per Timestamp for Actual in Manila, Philippines

OECD Development Centre 2018

- High
- Open
- Low
- Close

Travel Time Index

Graph showing travel time changes over different timestamps.
Recommendation 1: Travel Suggestion Application

This application can:

✓ Help drivers make better mobility decisions.
✓ Reduce vehicle congestions.
✓ Improve air quality (Reduce CO2 emission)

Two years in Austin (2015-2017)
Recommendation 2: From City to Outskirts

- Allocating companies/factories to outskirts
- Encourage people to use public transportation
- Reduce Congestion
Recommendation 3: Public Transportation

Linear Regression on Increase of Number of Passengers Using Public Transportation in Thailand

Source: asean.org
CONCLUSION

Current Issues:
- CO2 Emission
- Traffic Casualties
- Travel Time

Recommendation:
- Travel Suggestion Application
- From City to Outskirts
- Public Transportation
REFERENCES

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