

INTERNATIONAL SYMPOSIUM PAPER

**POLICY EVALUATION ABOUT THE SETTING  
PATTERN OF TRAFFIC FLOWS AT JUNCTION  
OF TRUNOJOYO ROAD - DIPONEGORO ROAD,  
JEMBER DISTRICT**

PRESENTED AT:

**The 15<sup>th</sup> International Symposium of  
Indonesian Inter University Transportation Studies Forum**

**THEME: "ENHANCING TRANSPORTATION RESEARCH  
AND TECHNOLOGY TO IMPROVE THE PERFORMANCE OF  
FREIGHT TRANSPORTATION AND LOGISTICS"**

The School of Land Transportation - Bekasi, November 24<sup>th</sup>, 2012

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ORGANIZER BY :



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**Re: Paper Acceptance for the 15<sup>th</sup> FSTPT International Symposium**

Dear Sir/Madam,

Please kindly let me inform you that the following paper:

**POLICY EVALUATION ABOUT THE SETTING PATTERN OF TRAFFIC FLOWS AT  
JUNCTION OF TRUNOJOYO ROAD - DIPONEGORO ROAD, JEMBER DISTRICT**

- 1) Nunung Nuring Hayati (Civil Engineering Departement, Engineering Faculty, Jember University)
- 2) Sonya Sulistyono (Civil Engineering Departement, Engineering Faculty, Jember University)
- 3) Hary Eka Prasetyawan (Civil Engineering Departement, Engineering Faculty, Jember University)

is accepted for presentation in the 15<sup>th</sup> FSTPT International Symposium to be held in School of Land Transport (STTD), Bekasi, Indonesia on November 24, 2012. Furthermore, presentation schedule will be announced in [www.fstpt.or.id](http://www.fstpt.or.id) and [www.fstpt-sttd.org](http://www.fstpt-sttd.org) on November 10, 2012.

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Thank you for your kind attention.

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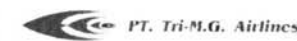
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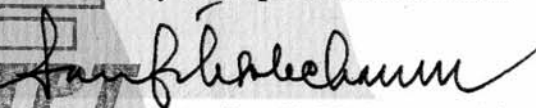
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SEKOLAH TINGGI  
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# **POLICY EVALUATION ABOUT THE SETTING PATTERN OF TRAFFIC FLOWS AT JUNCTION OF TRUNOJOYO ROAD - DIPONEGORO ROAD, JEMBER DISTRICT**

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## **ABSTRACT**

One of the transportation problems in Jember District is the setting pattern of traffic flow at the junction of Trunojoyo Road - Diponegoro Road (Simpang Semar). Two years after the setting of the downtown one-way traffic system, the Trunojoyo Road (segment of Semar Junction - Pasar Tanjung Junction) degree of saturation value (DS) increased from 0.3826 to 0.9894. POLRI have a discretionary action to reduce the traffic jam on Trunojoyo Road. This study aimed to evaluate the two setting patterns at Semar Junction (existing conditions (setting pattern 1) and discretion setting (setting pattern 2)). The result of the analysis shows the setting pattern 1 has a higher DS value than the settings pattern 2. The highest DS value of the setting pattern 1 (0.931) occur on Saturday (morning peak hour period). The greatest DS value difference of the setting pattern 1 and the setting pattern 2 is 0.345. The difference is proportional to the traffic flow that is diverted to Trunojoya Road at Semar Junction as big as 2145 motorcycle/hour and 593 light vehicles/hour in the morning peak hour time period.

*Keywords: traffic flow, degree of saturation, setting pattern 1, setting pattern 2*

## **INTRODUCTION**

Transportation problems such as congestion, delay, and noise and air pollution have to be at a critical stage in the major cities and continues to grow with the level of quality that is much more severe and much larger quantities and more complex forms (Tamin, 2000). Jember have transportation problems that need solving at an early stage. The pattern of the current settings in Trunojoyo Road - Diponegoro road three junction road (Semar Junction) to be one of the problems of transportation in downtown Jember.

The previous studies about the comparison of before and after the change of the system one-way traffic downtown Jember in 2010 stated that the traffic performance, after structuring the traffic system in the town center Jember do not show significant changes (Widayanti, 2011). But after resetting the one-way traffic system in 2010, the Trunojoyo Road after Semar Junction turned into saturated which is characterized by an increase of the degree of saturation (DS) from 0.3826 to 0.9894. The Trunojoyo Road traffic flow is high due to increase because it gets additional flow from Diponegoro Road. In addition, the density of the Pasar Tanjung activity become the cause of increased value of the DS, which is often the accumulation and long queues of vehicles on road segments Trunojoyo. The public does not have an alternative road to avoid this congestion. Jember Traffic Police Departement (Satlantas Polres Jember) has discretionary action by reversing the direction of traffic on Diponegoro Road. Based on the results of a survey that conducted in November 2011 acquired traffic volume of segment Trunojoyo Road after Semar Junction