

**ANALISIS KEBUTUHAN DAN KELAYAKAN EKONOMI
PEMBANGUNAN JALAN ARTERI ALTERNATIF
DI KOTA KANDANGAN**

TESIS

Disusun Dalam Rangka Memenuhi Persyaratan
Program Studi Magister Teknik Pembangunan Wilayah dan Kota

Oleh :

**MUHAMMAD ARIS APRIANOR
L4D007013**



**PROGRAM PASCA SARJANA
MAGISTER TEKNIK PEMBANGUNAN WILAYAH DAN KOTA
UNIVERSITAS DIPONEGORO
SEMARANG
2008**

ABSTRACT

Initial indication of roads problems in Kandangan town begin from density phenomenon of traffic in town worrying of as result of mixing between local traffic currents and regional traffic in using town main roads that is also was artery roads with trend of volume that is increasingly increases in line with regional development and improvement of resident mobility. To anticipate, gone through step of make new road in town in the form of alternative artery roads plans which had been started since the year 2003 with setting of trace roads, liberation of land, plan proposal, detail design, cost estimates, feasibility study and analysis about environmental impact. But because fund constraint till now out of seven internodes planned to do one new alternative artery road lanes one joint streets built up. On the other hand, even artery joint existing roads seen solid, but the fact have never been met traffic jam. On that account require to be checked again how problems that is now happened in joint artery road in Kandangan town and whether make of alternative artery road of precise as the solution.

Intention of this research is know the level of requirement and qualification of road and economics feasibility of artery alternative in Kandangan town, knows time estimate for correct and strategy matching with performance of local government in realizing it. To reach purpose of its applied by quantitative analysis technique with supported by qualitative description with a few approach where at early stage is identified condition of existing town and artery roads in it. The next of requirement will alternative artery roads of known by doing analysis level of service and traffic forecasting at condition of pre and post alternative artery road. Here in after qualification of economics feasibility of artery alternative is known by doing analysis to vehicle velocity, vehicle operating cost (VOC) and value of travel time saving of pre and post alternative artery road.

Result of research indicates that Kota Kandangan has not required alternative artery road because till end of the year 2008 all routes and segments of existing artery road still be classification in level of service A (good) what marked with comparison value of volume capacity ratio (VCR) low that is Ahmad Yani road (0,28), Sudirman road (0,38), HM. Yusie road (0,17) and M. Johansyah road (0,63). Alternative artery is starting required in the year 2012 where projected that M. Johansyah road with VCR= 0,82 having potency experiences traffic jam. If in the year is realisation, estimated alternative artery road can give can give highest velocity to vehicle passing it (38,0 km/hour) compared to Ahmad Yani road (34,0 km/hour), Sudirman road (29,8 km/hour), M. Johansyah road (21,9 km/hour) and HM. Yusie road (37,2 km/hour) causing makes alternative artery road having VOC which is lowest that is Rp.699,70/km (MC), Rp.1.988,76/km (LV) dan Rp.2.659,68/km (HV), on the contrary M. Johansyah road has highest VOC that is Rp.1.049,87/km (MC), Rp.2.697,22/km (LV) dan Rp.3.386,29/km (HV).. But because the route is longest (8,5 kms), alternative artery of improper economical because booking cost and time travel at least efficient where for once journey is required by average cost Rp.15.153,05 and travel time of 14,44 minutes. Where as existing routes that is Ahmad Yani-Sudirman roads (6,65 kms) requires average of cost Rp.12,502,12 and travel time 13,07 minutes for once journey, while routes Ahmad Yani-M. Johansyah-HM. Yusie roads (6,29 kms) most efficient with only requires travel cost Rp.12.126,66 and travel time 12,86 minutes for once journey.

Based on result of research is recommended before the year 2012 is better if the fund given high priority at road-works in rural to can open new hinterland and increases accessibility either between rural and also rural to urban. Adds artery road capacities massive that is M. Johansyah road causing can depress cost. As for strategy submitted is firstly divides execution of its development in four phases or year budget corresponds to APBD with still cope have recourse fund to central. Second, lessens length trace alternative roads of to earn is competent economical and last delivers authority and handling defrayal of alternative artery roads to government of province.

Keywords : alternative artery road of Kandangan town, level of service, traffic forecasting, vehicle operating cost, value of travel time