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MEASUREMENT OF ROAD SAFETY DECADE OF ACTION PROGRAM PERFORMANCE IN INDONESIA

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ABSTRACT

Even though the government has established the National General Plan for Road Traffic and Transportation Safety (RUNK LLAJ), questions about the effectiveness and performance measurement of this program still remain. Therefore, further research is needed to optimize traffic safety and road transportation in Indonesia. This study aims to determine how to measure the performance of the implementation of Traffic and Road Transportation safety in the National Scope, DKI Jakarta Province, and Sukoharjo Regency based on the criteria/indicators of the five Pillars and their action programs, as well as knowing the use of methods used in measuring the performance of their implementation. This research was conducted by direct observation in the field using a data collection tool in a questionnaire and analyzed using the Analytic Network Process (ANP) and Rating Scale methods. ANP is used to determine the weighting, and the Rating Scale is used to score the performance questionnaire. Based on the results of the analysis that has been carried out, it is known that the performance of the implementation of Traffic and Road Transportation safety in the National Scope is in the "GOOD" category, while in the Sukoharjo Regency, it is in the "VERY GOOD" category.
Keywords: Analytic Network Process (ANP), Rating Scale, RUNK, Safety

ABSTRAK

Meski pemerintah telah menetapkan Rencana Umum Nasional Keselamatan Lalu Lintas dan Angkutan Jalan (RUNK LLAJ), pertanyaan tentang efektivitas dan pengukuran kinerja program ini masih ada. Oleh karena itu, penelitian lebih lanjut diperlukan untuk mengoptimalkan keselamatan lalu lintas dan angkutan jalan di Indonesia. Penelitian ini bertujuan untuk mengetahui bagaimana mengukur kinerja penyelenggaraan keselamatan Lalu Lintas dan Angkutan Jalan di Lingkup Nasional, Provinsi DKI Jakarta dan Kabupaten Sukoharjo berdasarkan kriteria/indikator lima Pilar dan program aksinya tersebut, serta mengetahui penggunaan metode yang digunakan dalam pengukuran kinerja penyelenggaraanya. Penelitian ini dilakukan dengan observasi secara langsung di lapangan menggunakan alat pengumpul data berupa kuesioner dan dianalisa menggunakan metode Analytic Network Process (ANP) dan Rating Scale. ANP digunakan untuk menentukan pembobotan dan Rating Scale digunakan untuk pemberian nilai kuesioner kinerja. Berdasarkan hasil analisa yang telah dilakukan diketahui kinerja penyelenggaraan keselamatan Lalu Lintas dan Angkutan Jalan pada lingkup Nasional adalah termasuk kategori "BAIK", Sedangkan pada lingkup Kabupaten Sukoharjo termasuk kategori "SANGAT BAIK".
Kata kunci: Analytic Network Process (ANP), Rating Scale, RUNK, Keselamatan

1. INTRODUCTION

Indonesia is one of the developing countries with a high accident rate. Based on data from the Korlantas Polri, the number of traffic accidents in Indonesia will reach 103,645 cases in 2021. This number is higher than the 2020 data of 100,028 patients. Traffic accident cases in 2021 have killed 25,266 victims, with material losses reaching IDR 246 billion. Meanwhile, the number of seriously injured victims of traffic accidents last year was 10,553 people, and 117,913 people with minor injuries. Of the types of vehicles, motorcycles were the most involved in traffic accidents with a percentage of 73% (databoks.katadata, 2022). Drivers are the dominant factor causing traffic accidents, driver fatigue is divided into 2, namely physical fatigue and activity fatigue (Aprianto et al., 2021). The high number of accidents also occurs globally.

The UN General Assembly has declared the Decade of Action for Road Safety 2011-2020 which aims to control and reduce the fatality rate of road traffic accident victims globally. Law No. 22 of 2009 mandates that the Government is responsible for ensuring the safety of Road Traffic and Transportation (LLAJ). In 2013, the Presidential Instruction of the Republic of Indonesia Number 4 of 2013 concerning the Road Safety Decade Action Program was issued, which instructs the implementation of coordination between stakeholders dealing with safety issues in Indonesia. Efforts to improve road safety have started through a road-worthiness test. However, in general the results are conditionally accepted and the facts on the ground show that the number of accidents is still high. (Tjahjono, 2016)

As time went on, the realization of this program was strengthened by the Government Regulation of the Republic of Indonesia Number 37 of 2017 concerning Traffic Safety and Road Transportation. The target for the decade of road safety action in 2020 is to reduce accidents by 50% and the target for reducing accidents in 2035 is 80% (Farida, 2018). Several attempts were made by police officers to reduce the incidence of traffic accidents, (Sulistyono, 2012) conducted a review of the implementation of the Partnership Road Safety Action (PRSA) road safety program on the Surabaya-Tuban Pantura route from June to December 2010. The evaluation results showed that the PRSA program was successful. reduce the number of accidents that occur by 63.61%. Another effort was made by the East Java Regional Police by running the OK BOS program. The results of evaluating program implementation from research results (Sulistyono et al., 2018) show the effectiveness of this program in reducing traffic accident rates. The reduction in accident rates during program implementation reached 21%. Other evaluation results show that program implementation is still not optimal and uneven

Implementation of the General National Safety Plan (RUNK) is carried out at the national, provincial, and district/city levels. (Farida, 2018) who studied the safety of bus transportation in Garut found that to achieve safety in bus transportation, efforts to minimize the number of traffic accidents were carried out by guaranteeing administrative order, driver readiness, and vehicle/facility roadworthiness. Implementations that can be carried out include carrying out vehicle feasibility tests, the company's obligation to create and implement a public transport safety management system, supervision and law enforcement against violations, and tightening permits for people's transport. In implementing the RUNK program, of course, it is necessary to measure how effective this program is in realizing road safety; therefore, it is necessary to measure the performance of the implementation of RUNK activities already underway.

Although the government has set targets to reduce accidents, there is no information on how progress or achievement of these targets is measured and reported. This is related to the aim of your research to find out how the performance of traffic safety and road transportation is measured. so there is a need to measure how effective the RUNK program is in realizing road safety; Therefore, it is necessary to measure the performance of ongoing RUNK activity implementation. This is directly related to your research objectives regarding the use of methods in measuring the performance of its implementation.

2. METHODOLOGY

The method used in this study is the Analytical Network Process (ANP), by measuring the performance of the implementation of RUNK activities that are already running. The ANP measures the multi-criteria used and prioritizes the absolute values of individual judgments, which are more general in the form of calculations when compared to the Analytic Hierarchy Process (AHP) (Saaty, 2003).

Research conducted (Liu et al., 2021) shows that the combined ANP-QFD method has applicability and effectiveness in the conceptual product design process. The ANP method is also used to prioritize the barriers mentioned earlier. In their study, (Salehi et al., 2021) found that the ANP method can find that the customer barrier indicator is the most critical in evaluating information technology barriers at the supply chain level. (Dano et al., 2019) used this method to assess flood vulnerability in Malaysia and manage its impact on humans and the environment (Giannakis et al., 2020) Highlight the potential dependencies between some sustainability performance indicators using ANP

In this study, secondary data were obtained from surveys of relevant agencies at the national, provincial, and district/city levels. At the same time, primary data was obtained from data inventory surveys by way of questionnaires and also direct interviews with agencies dealing with RUNK. The results of this questionnaire will be quantified, tables compiled and analyzed to find out the weighting with a predetermined method, and then used to measure safety performance at the study location. Validity and reliability tests were also used to measure the precision and accuracy of the variables used in this study.

The ANP stage is carried out in several stages, starting from the Unweight Supermatrix, Weight Supermatrix, Limiting Supermatrix stages, the weighting stage, and the weighting of the highest score resulting from the rating scale. The flowchart of this research can be seen in the following diagram.

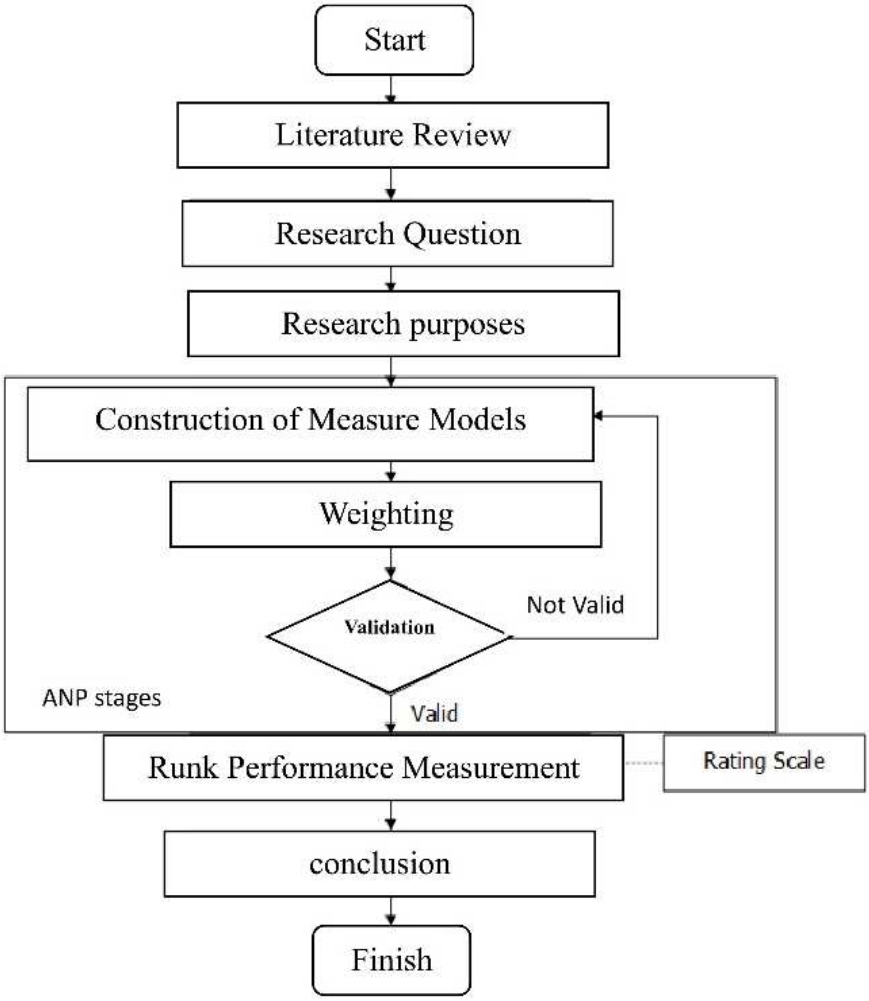

Figure 1. *Research Flowchart*

3. RESULT AND DISCUSSION

The use of ANP to measure the performance of LLAJ safety implementation begins with creating a measurement model. This study used the Super Decision software tool to build the measurement model. After the measurement model is created, each indicator/criteria/alternative is weighed out. The data is processed and calculated using super decisions software to determine the weighting. However, the Unweighted Supermatrix and Weighted Supermatrix stages were carried out before knowing the weighting results.

Table 1. *Unweight Supermatrix Recap*

CLUSTER AND NODE ANP		***GOAL***	**CRITERIA**				
		WEIGHT	**PILLAR 1**	**PILLAR 2**	**PILLAR 3**	**PILLAR 4**	**PILLAR 5**
ALTERNATIVE PILLAR 1	Dana Ke~	0.125	0.18937	0	0	0	0
	Kemitra~	0.125	0.11124	0	0	0	0
	Penyela~	0.125	0.15583	0	0	0	0
	Protoko~	0.125	0.06846	0	0	0	0
	Regulas~	0.125	0.19597	0	0	0	0
	Riset k~	0.125	0.0562	0	0	0	0
	SMK	0.125	0.09549	0	0	0	0
	Surveil~	0.125	0.12745	0	0	0	0
ALTERNATIVE PILLAR 2	Badan J~	0.25	0	0.53833	0	0	0
	Lingkun~	0.25	0	0.30508	0	0	0
	Peningk~	0.25	0	0.07829	0	0	0
	Perenca~	0.25	0	0.07829	0	0	0
ALTERNATIVE PILLAR 3	Kepatuh~	0.125	0	0	0.33766	0	0
	Overloa~	0.125	0	0	0.04559	0	0
	Pembata~	0.125	0	0	0.05196	0	0
	Pengemb~	0.125	0	0	0.08128	0	0
	Penghap~	0.125	0	0	0.05196	0	0
	Penyele~	0.125	0	0	0.14311	0	0
	Penyemp~	0.125	0	0	0.09449	0	0
	Standar~	0.125	0	0	0.19395	0	0
ALTERNATIVE PILLAR 4	Elektro~	0.125	0	0	0	0.08867	0
	Kampany~	0.125	0	0	0	0.18278	0
	Pembina~	0.125	0	0	0	0.12792	0
	Pemerik~	0.125	0	0	0	0.04857	0
	Penanga~	0.125	0	0	0	0.169	0
	Pendidi~	0.125	0	0	0	0.28994	0
	Peningk~	0.125	0	0	0	0.02553	0
	Penyemp~	0.125	0	0	0	0.06759	0
ALTERNATIVE PILLAR 5	Alokasi~	0.14286	0	0	0	0	0.18038
	Asurans~	0.14286	0	0	0	0	0.04682
	One Acc~	0.14286	0	0	0	0	0.11218
	Riset Penangana n~	0.14286	0	0	0	0	0.15058
	Penjaminan ~	0.14286	0	0	0	0	0.0635
	Rehabil~	0.14286	0	0	0	0	0.0791

CLUSTER AND NODE ANP		***GOAL***	**CRITERIA**				
		WEIGHT	**PILLAR 1**	**PILLAR 2**	**PILLAR 3**	**PILLAR 4**	**PILLAR 5**
	Sistem ~	0.14286	0	0	0	0	0.36744
GOAL	BOBOT~	0	0	0	0	0	0
CRITERIA	PILAR 1	0.2	0	0	0	0	0
	PILAR 2	0.2	0	0	0	0	0
	PILLAR 3	0.2	0	0	0	0	0
	PILLAR 4	0.2	0	0	0	0	0
	PILLAR 5	0.2	0	0	0	0	0
Total		**6.00002**	**1.00001**	**0.99999**	**1**	**1**	**1**

The results of the unweighted supermatrix above have not been weighted because the number of columns/cells has not all been 1 (one); therefore, it is necessary to do the weighting so that the total of each column/cell is 1. The results of the weighted supermatrix can be seen in the table below.

Table 1 . *Weight Supermatrix Recap*

CLUSTER AND NODE ANP		**GOAL**	**CRITERIA**				
		WEIGHT	**PILLAR 1**	**PILLAR 2**	**PILLAR 3**	**PILLAR 4**	**PILLAR 5**
ALTERNATIVE PILLAR 1	Dana Ke~	0.02083	0.18937	0	0	0	0
	Kemitra~	0.02083	0.11124	0	0	0	0
	Penyela~	0.02083	0.15583	0	0	0	0
	Protoko~	0.02083	0.06846	0	0	0	0
	Regulas~	0.02083	0.19597	0	0	0	0
	Riset k~	0.02083	0.0562	0	0	0	0
	SMK	0.02083	0.09549	0	0	0	0
	Surveil~	0.02083	0.12745	0	0	0	0
ALTERNATIVE PILLAR 2	Badan J~	0.04167	0	0.13512	0	0	0
	Lingkun~	0.04167	0	0.35691	0	0	0
	Peningk~	0.04167	0	0.19950	0	0	0
	Perenca~	0.04167	0	0.30846	0	0	0
ALTERNATIVE PILLAR 3	Kepatuh~	0.02083	0	0	0.33766	0	0
	Overloa~	0.02083	0	0	0.04559	0	0
	Pembata~	0.02083	0	0	0.05196	0	0
	Pengemb~	0.02083	0	0	0.08128	0	0
	Penghap~	0.02083	0	0	0.05196	0	0
	Penyele~	0.02083	0	0	0.14311	0	0
	Penyemp~	0.02083	0	0	0.09449	0	0
	Standar~	0.02083	0	0	0.19395	0	0
ALTERNATIVE PILLAR 4	Elektro~	0.02083	0	0	0	0.08947	0
	Kampany~	0.02083	0	0	0	0.16977	0
	Pembina~	0.02083	0	0	0	0.12867	0
	Pemerik~	0.02083	0	0	0	0.04916	0
	Penanga~	0.02083	0	0	0	0.17107	0
	Pendidi~	0.02083	0	0	0	0.29475	0
	Peningk~	0.02083	0	0	0	0.02583	0
	Penyemp~	0.02083	0	0	0	0.07128	0

CLUSTER AND NODE ANP		GOAL	CRITERIA				
		WEIGHT	PILLAR 1	PILLAR 2	PILLAR 3	PILLAR 4	PILLAR 5
ALTERNATIVE PILLAR 5	Alokasi~	0.02381	0	0	0	0	0.18038
	Asurans~	0.02381	0	0	0	0	0.04682
	One Acc~	0.02381	0	0	0	0	0.11218
	Riset Penanga~	0.02381	0	0	0	0	0.15058
	Penjami~	0.02381	0	0	0	0	0.0635
	Rehabil~	0.02381	0	0	0	0	0.0791
	Sistem ~	0.02381	0	0	0	0	0.36744
GOAL	BOBOT~	0	0	0	0	0	0
CRITERIA	PILAR 1	0.03333	0	0	0	0	0
	PILAR 2	0.03333	0	0	0	0	0
	PILAR 3	0.03333	0	C0	0	0	0
	PILAR 4	0.03333	0	0	0	0	0
	PILAR 5	0.03333	0	0	0	0	0
Total		**1**	**1**	**1**	**1**	**1**	**1**

The number of columns that previously did not add up to 1 in the unweighted supermatrix now amounts to 1 per column, namely in the weighted supermatrix. A limiting matrix is performed to get a stable priority value. Following are the results of normalizing the limiting matrix, which is the last stage of the ANP method. The normalization results of this limiting matrix are the weighting results that will be used to measure the performance of LLAJ safety implementation at Level 5 Ministry Agencies, DKI Jakarta Province, and Sukoharjo Regency.

Table 2. *Results of Normalization and Limiting Supermatrix*

Node and Cluster	Normalized By Cluster	Limiting
Road Safety Fund	0.18937	0.018937
Road Safety Partnership	0.11124	0.011124
Alignment and coordination of road safety	0.15583	0.015583
Emergency vehicle traffic protocol	0.06846	0.006846
Road Safety Regulations	0.19597	0.019597
Road safety research	0.0562	0.00562
SMK	0.09549	0.009549
Injury Surveillance and Integrated Information System	0.12745	0.012745
Road Safety Agency	0,13512	0.013512
Safe Road Environment	0.35691	0.035691
Improved roadworthiness standards	0.1995	0.01995
Planning and Implementation of road works	0.30846	0.030846
Vehicle Operation Compliance	0.33766	0.033766
Overload Handling	0.04559	0.004559
Vehicle Speed Limitation	0.05196	0.005196
KB Research and Design Development	0.08128	0.008128

Node and Cluster	Normalized By Cluster	Limiting
Vehicle Removal	0.05196	0.005196
Implementation and Improvement of SOP Keur and Type Test	0.14311	0.014311
Improvement of SOP Type test	0.0945	0.00945
AU Safety Standards	0.19395	0.019395
Law Enforcement Electronics	0.08947	0.008947
Road Safety Campaign	0.16977	0.016977
Driving School Technical Development	0.12867	0.012867
Driver Condition Check	0.04916	0.004916
Handling 5 plus factor	0.17107	0.017107
Road Safety Formal and Informal Education	0.29475	0.029475
SIM Test SarPras Improvement	0.02583	0.002583
SIM Test Improvements	0.07128	0.007128
Allocation of Insurance Premiums for Road Safety Funds	0.18038	0.018038
Third-Party Insurance	0.04682	0.004682
One Access Code	0.11218	0.011218
Accident Victim Handling Research	0.15058	0.015058
Insurance for Accident Victims	0.0635	0.00635
Post Accident Rehabilitation	0.0791	0.00791
Emergency Service System	0.36744	0.036744
WEIGHTING	0	0
PILLAR 1	0.2	0.1
PILLAR 2	0.2	0.1
PILLAR 3	0.2	0.1
PILLAR 4	0.2	0.1
PILLAR 5	0.2	0.1

The results of the above weighting are acceptable if the measuring instrument used is valid and the CR value is <0.1 (reliable). The validity test that has been carried out with construct validity produces professional judgment, namely, the measuring instruments and performance measurement models for implementing LLAJ safety are valid and appropriate.

Table 3. *Consistency Ratio Value*

No	Criteria	CR Value
1	Pillar I	0,00065
2	Pillar II	0,04417
3	Pilalr III	0,05207
4	Pillar IV	0,08175
5	Pillar V	0,07951

Based on the table above, it is known that the consistency value (CR) of each cluster is <0.1. Which means the above comparison matrix is acceptable.

RUNK Performance Measurement Results

Table 5. *National Level Weighted Questionnaire Score Results*

No	Criteria and Sub Criteria	Score	Final Weight	Weighted Final Grade
I	PILLAR 1			
1	Road Safety Fund	4	19%	0,76
2	Road Safety Partnership	4	11%	0,44
3	Alignment and coordination of road safety	3	16%	0,48
4	Emergency vehicle traffic protocol	2	7%	0,14
5	Road Safety Regulations	4	20%	0,8
6	Road safety research	1	6%	0,06
7	SMK	3	10%	0,3
8	Injury Surveillance and Integrated Information System	3	13%	0,39
	Total Pillars I			3,37
II	PILLAR 2			
1	Road Safety Agency	3	54%	1,62
2	Safe Road Environment	4	31%	1,24
3	Improved roadworthiness standards	2	8%	0,16
4	Planning and Implementation of road works	4	8%	0,32
	Total Pillars II			3,34
III	PILLAR 3			
1	Vehicle Operation Compliance	3	34%	1,02
2	Overload Handling	2	5%	0,1
3	Vehicle Speed Limitation	3	5%	0,15
4	KB Research and Design Development	3	8%	0,24
5	Vehicle Removal	3	5%	0,15
6	Implementation and Improvement of SOP Keur and Type Test	3	14%	0,42
7	Improvement of SOP Type test	3	9%	0,27
8	Public Transport Safety Standards	4	19%	0,76
	Total Pillars III			3,11
IV	PILLAR 4			
1	Law Enforcement Electronics	3	9%	0,27
2	Road Safety Campaign	3	18%	0,54
3	Driving School Technical Development	2	13%	0,26
4	Driver Condition Check	1	5%	0,05
5	Handling 5 plus factor	2	17%	0,34
6	Road Safety Formal and Informal Education	2	29%	0,58
7	SIM Test SarPras Improvement	2	3%	0,06
8	SIM Test Improvements	3	7%	0,21
	Total Pillars IV			2,31
V	PILLAR V			
1	Allocation of Insurance Premiums for Health Funds	3	18%	0,54
2	Third Party Insurance	2	5%	0,1
3	One Access Code	1	11%	0,11
4	Handling Accident Victims	2	15%	0,3
5	Insurance for Accident Victims	3	6%	0,18
6	Post Accident Rehabilitation	2	8%	0,16
7	Emergency Service System	2	37%	0,74
	Total Pillars V			2,13

No	Criteria and Sub Criteria	Score	Final Weight	Weighted Final Grade
	Total			**14,26**

Table 6. *Province-Level Weighted Questionnaire Score Results*

No	Criteria dan Sub Criteria	Score	Final Weight	Weighted Final Grade
I	PILLAR 1			
1	Road Safety Fund	2	21%	0,42
2	Road Safety Partnership	3	11%	0,33
3	Alignment and coordination of road safety	4	14%	0,56
4	Emergency vehicle traffic protocol	4	9%	0,36
5	Road Safety Regulations	2	17%	0,34
6	Road safety research	1	13%	0,13
7	SMK	2	10%	0,2
8	Injury Surveillance and Integrated Information System	3	4%	0,12
	Total Pillars I			2,46
II	PILLAR 2			
1	Road Safety Agency	3	46%	1,38
2	Safe Road Environment	4	28%	1,12
3	Improved roadworthiness standards	2	13%	0,26
4	Planning and Implementation of road works	4	13%	0,52
	Total Pillars II			3,28
III	PILLAR 3			
1	Vehicle Operation Compliance	3	28%	0,84
2	Overload Handling	2	8%	0,16
3	Vehicle Speed Limitation	3	7%	0,21
4	KB Research and Design Development	3	7%	0,21
5	Vehicle Removal	3	5%	0,15
6	Implementation and Improvement of SOP Keur and Type Test	3	11%	0,33
7	Improvement of SOP Type test	3	10%	0,3
8	Public Transport Safety Standards	4	21%	0,84
	Total Pillars III			3,04
IV	PILLAR 4			
1	Law Enforcement Electronics	3	13%	0,39
2	Road Safety Campaign	3	22%	0,66
3	Driving School Technical Development	2	18%	0,36
4	Driver Condition Check	1	9%	0,09
5	Handling five-plus factor	2	3%	0,06
6	Road Safety Formal and Informal Education	2	33%	0,66
7	SIM Test SarPras Improvement	2	1%	0,02
8	SIM Test Improvements	3	1%	0,03
	Total Pillars IV			2,27
V	PILLAR V			
1	Allocation of Insurance Premiums for Health Funds	3	16%	0,48
2	Third-Party Insurance	2	9%	0,18
3	One Access Code	1	12%	0,12
4	Handling Accident Victims	2	16%	0,32
5	Insurance for Accident Victims	3	4%	0,12

No	Criteria dan Sub Criteria	Score	Final Weight	Weighted Final Grade
6	Post Accident Rehabilitation	2	7%	0,14
7	Emergency Service System	2	36%	0,72
	Total Pillars V			2,08
	Total			**13,13**

Table 7. *District-Level Weighted Questionnaire Score Results*

No	Criteria dan Sub Criteria	Score	Final Weight	Weighted Final Grade
I	PILAR 1			
1	Road Safety Fund	4	11%	0,44
2	Road Safety Partnership	4	8%	0,32
3	Alignment and coordination of road safety	4	17%	1,04
4	Emergency vehicle traffic protocol	1	26%	0,24
5	Road Safety Regulations	4	6%	0,44
6	Road safety research	4	6%	0,46
7	SMK	2	12%	0,24
8	Injury Surveillance and Integrated Information System	4	14%	0,56
	Total Pillars I			3,54
II	PILLAR 2			
1	Road Safety Agency	4	33%	1,32
2	Safe Road Environment	3	19%	0,50
3	Improved roadworthiness standards	4	24%	0,96
4	Planning and Implementation of road works	4	24%	0,96
	Total Pillars II			3,74
III	PILLAR 3			
1	Vehicle Operation Compliance	4	27%	1,08
2	Overload Handling	1	17%	0,05
3	Vehicle Speed Limitation	4	30%	1,20
4	KB Research and Design Development	2	3%	0,08
5	Vehicle Removal	4	3%	0,21
6	Implementation and Improvement of SOP Keur and Type Test	4	3%	0,57
7	Improvement of SOP Type test	3	3%	0,09
8	Public Transport Safety Standards	1	14%	0,19
	Total Pillars III			3,36
IV	PILLAR 4			
1	Law Enforcement Electronics	4	11%	0,44
2	Road Safety Campaign	4	40%	1,6
3	Driving School Technical Development	4	22%	0,88
4	Driver Condition Check	4	2%	0,08
5	Handling five-plus factor	4	1%	0,04
6	Road Safety Formal and Informal Education	1	8%	0,00
7	SIM Test SarPras Improvement	4	11%	0,44
8	SIM Test Improvements	4	13%	0,55
	Total Pillars IV			3,48
V	PILLAR V			
1	Allocation of Insurance Premiums for Health Funds	3	10%	0,30
2	Third-Party Insurance	4	14%	0,56
3	One Access Code	4	25%	1,00
4	Handling Accident Victims	4	18%	0,72

No	Criteria dan Sub Criteria	Score	Final Weight	Weighted Final Grade
5	Insurance for Accident Victims	1	18%	0,00
6	Post Accident Rehabilitation	3	3%	0,12
7	Emergency Service System	1	10%	0,00
	Total Pillars V			2,70
	Total			**16,82**

RUNK Road Safety Performance Assessment

1. Implementation of National LLAJ Safety RUNK

The results of the analysis of the decision software for the implementation of LLAJ safety in the National Scope of the 5 RUNK Pillar Agencies in the Ministry, and which category the results of the performance calculations fall into, namely:

Weighted total score (α) = 14,26

Assessment category value $= \frac{\alpha}{\text{Skor maksimum}}$ x 100%

$= \frac{14,26}{20}$ x 100%

= 71,3 %

Rating category value = 71.3% compared to scale category values in the interval 62.50% - 81.24%. Therefore it can be concluded that the performance of the National LLAJ safety implementation is "GOOD."

Table 8. *Contribution of Each National Level RUNK Pillar*

No	Pillar	Total Weighted Value	Contribution	Percent Contribution
1.	Pillar I	3.37	0.25	25%
2.	Pillar II	3.34	0.23	23%
3,	Pillar III	3.11	0.22	22%
4.	Pillar IV	2.31	0.16	16%
5.	Pillar V	2.13	0.14	14%
Amount		14.26	1.00	100%

2. Implementation of RUNK Safety LLAJ Scope of DKI Jakarta Province

As for the results of the analysis of the decision software for the implementation of LLAJ safety in the Provincial Scope of the 5 RUNK Pillar Agencies in DKI Jakarta Province, and which category the performance calculation results in fall into, namely:

Wighted Total Score (α) = 13,13

Assessment category value $= \frac{\alpha}{\text{Skor maksimum}}$ x 100%

$= \frac{13,13}{20}$ x 100%

= 65,6 %

Rating category value = 65.6% compared to the scale category values in the interval 62.50% - 81.24%. Therefore, it can be concluded that the performance of the DKI Jakarta Province LLAJ safety implementation is "GOOD."

Table 9. Contribution of Each RUNK Pillar at DKI Jakarta Provincial Level

No	Pillar	Total Weighted Value	Contribution	Percent Contribution
1.	Pillar I	2.46	0.19	19%
2.	Pillar II	3.28	0.25	25%
3,	Pillar III	3.04	0.23	23%
4.	Pillar IV	2.27	0.17	17%
5.	Pillar V	2.08	0.16	16%
Amount		13.13	1.00	100%

3. Implementation of RUNK Safety LLAJ Scope of Sukoharjo Regency

The results of the analysis of the decision software for the implementation of LLAJ safety in the National Scope of the 5 RUNK Pillar Agencies in the District, and which category the performance calculation results in fall into, namely:

Weighted total score (α) = 16,82

Assessment category value $= \frac{\alpha}{\text{Skor maksimum}}$ x 100%

$= \frac{16,82}{20}$ x 100%

= 84,1 %

Rating category value = 84.1% when compared to the category value scale in the interval 81.25% - 100%. Therefore, it can be concluded that the performance of the LLAJ safety implementation in Sukoharjo Regency is "**VERY GOOD**."

Table 10. *Contribution of Each RUNK Pillar at the Sukoharjo Regency Level*

No	Pillar	Total Weighted Value	Contribution	Percent Contribution
1.	Pillar I	3.54	0.21	21%
2.	Pillar II	3.74	0.23	23%
3,	Pillar III	3.36	0.19	19%
4.	Pillar IV	3.48	0.20	20%
5.	Pillar V	2.70	0.17	17%
Amount		16.82	1.00	100%

In the context of previous research, the ANP results show that the performance of RUNK implementation at the national and provincial levels of DKI Jakarta is in the "GOOD" category, while in Sukoharjo Regency it is in the "VERY GOOD" category. This shows that there are differences in the effectiveness of implementing traffic and road transport safety programs at various levels of government.

However, while these assessments provide a general picture of performance, there is still a need to dig deeper into how they are obtained. The Analytic Network Process (ANP) and Rating Scale methods are used to measure performance by determining the weight of measurement indicators using the ANP method, then measuring LLAJ's safety performance with a questionnaire that is given a value (score) according to the Rating Scale method.

However, the previous gap analysis reflects that there is still a need to better understand how these methods are used practically in measuring implementation performance. For example, how are weights determined for each indicator? Are the same weights used at all levels (national, provincial, district)? How are questionnaire questions designed and how are responses translated into scores? The answers to these questions will help clarify the performance measurement process and may also help identify potential areas for improvement.

Additionally, even though RUNK's performance is rated as good to excellent at a certain level, it is still important to see how far this achievement approaches the government's overall target of reducing accidents by 50% by 2020 and 80% by 2035. Analyzing the related data can provide a better picture of whether these targets can be achieved with the current strategy or whether additional efforts are needed.

4. CONCLUSION

From the ANP results, the National Scope of RUNK Implementation Performance (5 RUNK Pillar Ministry Agencies) is in the "GOOD" category, while the DKI Jakarta Provincial Scope is in the "GOOD" category, and the Sukoharjo Regency Scope is in the "VERY GOOD" category. 2. The use of the Analytic Network Process (ANP) method and the Rating Scale for measuring the performance of LLAJ safety implementation is carried out by determining the weight of the measurement indicators using the ANP method, then measuring LLAJ safety performance with a questionnaire given a value (score) according to the Rating method. Scale, and finally, the performance appraisal results are multiplied by the weights that have been obtained so that the total value of the performance that has been weighted can be known.

From these results, of course, there is a difference because, in addition to the different characteristics of the national, provincial, and regional scope, there are also different priorities

or interests in administering government and community affairs within the scope of the study, including the implementation of each program. Action on RUNK LLAJ. For this reason, the weighting of this action program can only be used in areas that are the object of research. All of the above steps must be carried out, and each action program's re-weighting is determined if the performance measurement of LLAJ safety implementation is to be carried out in other provinces and districts/cities. This is by the mandate of Law Number 23 of 2014 concerning an autonomous system in which the regional government, through the Regent or Mayor, has the right and authority to regulate and manage government affairs and the interests of the local community by statutory regulations. In other words, if it is related to the objectivity of the research, the methods and stages as above are sufficient.

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