# Development of Local Original Income Potential (PAD) in Magelang City with System Parking Subscribe

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#### Abstract

The Magelang City Government increases its Regional Original Income through parking fees in line with increasing need for provision of supporting facilities needed by the community. Magelang City has a land area of around 18.12 km<sup>2</sup> with an average population growth from 2017- 2020 as big as 3%. By Because That, Magelang City need arrangement parking Which effective And efficient. Studies This aims to compile and analyze parking management strategies that have an impact on increasing PAD Magelang City. Location studies implemented in 11 block parking Magelang City with using method quantitative descriptive research source the data came from secondary data. The analysis that done use comparison between System For Results And System Parking Subscribe. Results analysis shows that parking fee income with the Subscription Parking System has potential value which is better in increasing the Original Regional Income of Magelang City compared to the Revenue Sharing System.Results.

Keywords: Parking, Retribution Magelang City, System for Results, System Parking Subscribe

## **1. Introduction**

Magelang City is Wrong One city developing in Central Java Province, Indonesia. The position of Magelang City is on the route north coast rated very strategic, because located on track main Which often passed by vehicle from cities big in Island Java. Matter the make Magelang City need Lots facility supporters, both facilities and infrastructure. Along with with implementation autonomy area, activity government area in Magelang City the more increase Which covering all aspect And field.

Government Magelang City make an effort increase income the area as optimal as possible perhaps through parking fees in Magelang City, because retribution parking is Wrong One PAD contributing components that have potential more for dug up and developed. A problem Which precisely happen is development mark retribution parking in Magelang City tend "stagnant" or no develop. Condition This Then cause a dilemma due to development progress Which "notabene" bring up zone activity economy and tourist No capable support improvement Income Original Area (PAD) from sector retribution parking.

For operationalize Handling parking problem in Magelang City is needed more detailed strategies include planning and programs for dig potential and in development service to public Magelang City, so that required a recommendation regarding potential parking fees Which is sector contributor PAD Which potential.

Program This aiming for analyze potential and problem location parking Which developing in Magelang City, knowing the steps to prepare a development plan for the point location parking Which There is And Which will developed, and know method for compile strategy parking handlers that have an impact on increasing PAD Magelang City.

#### 2. Method

#### a. Method Collection Data

Data collection methods used with approach descriptive quantitative that is through survey secondary and survey primary. SurveySecondary is done by visiting the agency related for request a number of documentation data from the transportation system management institution and parking, planner order room, and a number of other agencies that can provide data Which related with implementation program. This secondary data is in the form of condition data existing socio-economic, provision network transportation, use room in region devotion.

Survey primary done with observation/ calculation/ interview direct, specifically Which related with modeling And For performance/operation system parking and spatial development plans in future. Primary data relating to parking generally obtained from direct observation in the field, the data including data on the volume of parked vehicles, both wheel two and also wheel four, condition and operation place parking. Whereas data primary other than the interview results are needed in particular for catch aspiration area in develop parking.

b. Stage Implementation

The implementation stages consist of: preparation stage, data collection stage, stage analysis and planning, And stage finalization.

## 1) Stage Preparation

On stage preparation done a number of activities as beginning (initialization) from all over series activity Which planned. Stage preparation includes consolidation methodology, do studies literature, me *review* regulation related, and identify the initial condition problem on system parking Which There is in region Magelang City. The purpose of strengthening the methodology is for plan in more detail the stages stage implementation activity next and establish modeling methods and analysis Which will used. Studies literature aiming for to examine a number of method implementation devotion system parking integrated and maximize the possibilities use of data and models that have been developed in region devotion Which similar. *Reviews* regulation related aiming for compile draft parking area development, know plan order room, and compile a number of indicator evaluation performance system parking.

2) Stage Collection Data

On stage collection data done collection data, good data from source secondary (agency related) as well as primary data obtained from survey in field. Implementation survey secondary Forget all data territoriality, data demand, data infrastructure and facilities, and system data parking Which There is in region Magelang City. Whereas survey primary done for get data condition existing place parking as well as existing parking services in the form of surveys r reconnaissance, interviews, volume surveys and duration parking For get data case And perspective about development potential and constraints management parking.

3) Stage Analysis and Planning

On stage analysis and planning consists of from analysis beginning and analysis details. Analysis beginning activity This done for verify quality and type data Which obtained as a start for develop mindset, identify a number of problems Which There is in in system parking region Magelang City, to form base data Which operative For form a development concept parking management. While detailed analysis includes prediction of parking service demand (rise and pull) movement in the years- year review, analysis need development network transportation based on on estimate request movement, qualification/ benchmarking condition And performance existing place parking in integrated parking development context; do analysis potential And constraint development system parking region Magelang City; do compilation plan development place parking And system management parking Which based on on relatedness region.

4) Stage Finalization

Finalization stage of parking management in where various input from a number of parties from series presentation Which done will be input for making improvements reporting And compile conclusion as well as recommendations from program results devotion This.

#### 3. Results and Discussion

Based on the results of the survey that has been conducted on 11 Block parking in all over Magelang City during 12 hours with a total of 133 observation points survey, income total retribution parking per day shared based on magnitude cost in accordance type vehicle as following :

Motorcycle (MC) : Rp 1,000,-

Car (LV) : Rp 2,000,-

Magnitude cost retribution the Already referring to on REGIONAL REGULATION Magelang City No.3 Year 2017 Regarding General Service Retribution. The following is total parking fee income per day that has been done survey in 11 block Which Already divided into 2, namely weekdays and weekends, shown in table following.

BLOCK	TYPE VE	HICLE	Rates	Rates	INCOME		TOTAL	
BLUCK	MOTOR	CAR	Motor	Car	MOTOR	CAR	IUIAL	
Block 1	1550	693			1,550,000	1,386,000	2,936,000	
Block 2	1431	579			1,431,000	1,158,000	2,589,000	
Block 3	1036	295			1,036,000	590,000	1,626,000	
Block 4	946	461			946,000	922,000	1,868,000	
Block 5	402	246			402,000	492,000	894,000	
Block 6	239	80	1,000	2,000	239,000	160,000	399,000	

Table 1. Total Income Retribution Parking Weekday in Magelang City

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BLOCK	<b>TYPE VEHICLE</b>		Rates	Rates Rates	INCOME		- TOTAL
	MOTOR	CAR	Motor	Car	MOTOR	CAR	- IUIAL
Block 7	332	227	_		332,000	454,000	786,000
Block 8	160	46			160,000	92,000	252,000
Block 9	367	277			367,000	554,000	921,000
Block 10	210	87			210,000	174,000	384,000
Block 11	718	274			718,000	548,000	1,266,000
		TO	TAL INCOME	E 1 DAY			13,921,000

BLOCK	TYPE VE	HICLE	Rates	Rates	INCOME		– TOTAL	
	MOTOR	CAR	Motor	Car	MOTOR	CAR	- IUIAL	
Block 1	1107	495			1,107,000	990,000	2,097,000	
Block 2	1101	445			1,101,000	890,000	1,991,000	
Block 3	740	211			740,000	422,000	1,162,000	
Block 4	676	329			676,000	658,000	1,334,000	
Block 5	287	176			287,000	352,000	639,000	
Block 6	171	57	1,000	2,000	170,800	114,800	285,600	
Block 7	237	162			237,000	324,000	561,000	
Block 8	114	33			114,400	65,000	179,400	
Block 9	262	198			262,000	396,000	658,000	
Block 10	150	62			150,000	124,000	274,000	
Block 11	513	196			513,000	392,000	905,000	
		T01	TAL INCOME	E 1 DAY			13,921,000	

Source : Analysis Result (2022)

From the potential parking revenue per day, then can simulated more carry on about income from retribution parking per year.

## Total Income 1 Year = Total Income 1 day x Total Effective Weekdays Each Year

#### And

## Total Income 1 Year = Total Income 1 Day x Total Weekend Each Year

With consider a number of factors that can affect performance parking in Magelang City in One year (change weather, fatigue or Sick from parking attendants, etc.), effective performance days parking in the city of Magelang is not taken as much 365 days. By Because That, with approach/ assumption day holiday on calendar year 2021 not used as a parking work day, then day effective Work performance parking in Magelang City in One year as much as 298 day or as big as 67.95%. Thus we can calculate magnitude income per year Good from total day Work weekday And from total day holiday weekend . Here is a table of total expenses from retribution parking in the Magelang City.

Type Income	TOTAL			
Total Income 1 Day	13,921,000			
Total Income 1 Month	345,240,800			
Total Income 1 Year	4,148,458,000			
Source : Analysis Result (2022)				

Table 3. Total Expenditure Retribution Parking Weekday in Magelang City

Table 4. Total Expenditure Retribution Parking Weekend in Magelang City

Type Income	TOTAL			
Total Income 1 Day	10,086,000			
Total Income 1 Month	56,313,800			
Total Income 1 Year 675,762,000				
Source : Analysis Result (2022)				

Then total the results to be round with total amount day each the year reach 365 day so will get results following :

Table 5. Total Expenditure Retribution Parking Weekend and Weekday in Magelang City

Type Income	TOTAL			
Total Income 1 Month	401,554,300			
Total Income 1 Year	4,824,220,000			
Source : Analysis Result (2022)				

From results analysis on that total income combination between weekday And weekend in 1 month reach Rp 401,554,300 and in 1 year reaches Rp. 4,824,220,000.

a. System for Results

In real conditions, the total of the retribution parking No all over income enter into the PAD, but cut to income of each parking attendant/parking officer. Total expenditure retribution This We call with the term profit sharing. As for the profit sharing results in management retribution service service parking in Magelang City recommended 82 : 18, that is as big as 82% For officer parking/attendant parking And 18% For cash area (PAD) Magelang City. The following is a table of profit sharing calculations. between officer parking/attendant parking with PAD :

Table 6. Total For Result Retribution Parking Per Month

No Block	Income Retribution Parking Per Month	Income Original Region (PAD) Per Month	Income Parking Attendant Per Month
	raiking rei Montii	18%	82%
Block 1	84,556,000	15,220,080	69,335,920
Block 2	75,356,800	13,564,224	61,792,576

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No Block	Income Retribution	Income Original Region (PAD) Per Month	Income Parking Attendant Per Month	
	Parking Per Month	18%	82%	
Block 3	46,832,000	8,429,760	38,402,240	
Block 4	53,796,800	9,683,424	44,113,376	
Block 5	25,749,600	4,634,928	21,114,672	
Block 6	11,494,560	2,069,021	9,425,539	
Block 7	22,634,400	4,074,192	18,560,208	
Block 8	7,254,240	1,305,763	5,948,477	
Block 9	26,525,600	4,774,608	21,750,992	
Block 10	11,057,600	1,990,368	9,067,232	
Block 11	36,464,800	6,563,664	29,901,136	
TOTAL	401,722,400	72,310,032	329,412,368	

For know mark income one parking attendant per month in each block is with share results total parking attendant income by number of attendants parking in every block.

No. Block	Amount Parking Attendant	Income 1 The Interpreter Parking Per Month	
Block 1	48	1,444,498	
Block 2	53	1,165,898	
Block 3	39	984,673	
Block 4	29	1,521,151	
Block 5	12	1,759,556	
Block 6	26	362,521	
Block 7	43	431,633	
Block 8	9	660,942	
Block 9	17	1,279,470	
Block 10	27	335,823	
Block 11	9	3,322,348	
TOTAL	312	13,268,513	
	AVERAGE	1,206,228	

Table 7. Income Per 1 Parking Attendant Each Block Per Month

Source : Analysis Result (2022)

In development performance room parking in the Magelang City area in the year Furthermore, the potential for increasing PAD can predicted using variables growth vehicle motorized Which Where from growth vehicle we are can know percentage increase amount vehicle in Magelang City in year previously.

Indicator	2017	2018	2019	2020	Average
Growth Vehicle	5.273	4.237	3.377	3.189	4.019
Percentage Vehicle (%)	0.061	0.046	0.032	0.031	0.043

Table 8. Percentage of Vehicle Growth in Magelang City	y
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From table on show number percentage increase in vehicles in Magelang City as big as 0.043% average per the year will but in this study we use numbers percentage the smallest that is 0.031% with meaning see limit income minimum per year that goes into the Regional Treasury. Variables the can influential to income original area (PAD) retribution parking year 2022 - 2026. Prediction Which produced on studies This restricted start year 2022 until with year 2026. Results parking performance survey that has been conducted on 11 parking blocks can be used as point reference prediction potential income parking fees in 2021. Then prediction income retribution parking on year furthermore predicted based on 2021 analysis results and estimation results growth in the number of vehicles and the results adjustment of parking attendant income. Analysis results predictions and potential for local revenue (PAD) retribution parking on year 2022 – 2026 is as following :

## Table 9. Income Retribution Parking in Year 2021

Doulsing	Percentage		
Parking Year 2021	Service Parking (83%)	PAD (17%)	
4,824,309,400	3,955,933,708	868,375,692	

Source : Analysis Result (2022)

		Indicator	
Year	Income Retribution Parking	PAD (18%)	Parking Attendant (82%)
2022	4.973.862.991	895.295.338	4.078.567.653
2023	5.128.052.744	923.049.494	4.205.003.250
2024	5.287.022.379	951.664.028	4.335.358.351
2025	5.450.920.073	981.165.613	4.469.754.460
2026	5.619.898.595	1.011.581.747	4.608.316.848

Table 10. Prediction Income Retribution Parking in Year

Source : Analysis Result (2022)

#### b. System Parking Subscribe

According to Regulation Area Magelang City Number 3 Year 2017 About Change On Regulation Area Magelang City Number 17 2011 Regarding Public Service Retribution, Parking subscribe is collection retribution parking with payment a number of Money Which has determined in the term period of 1 (one) year. On this basis, it is planned to create a tariff parking subscribe during One year moment payment of motor vehicle tax, so that income original area from part parking has a fixed value and even increases every year consequence growth vehicle motorized. The following is a table of the number of vehicles bicycle motor And vehicle car in year 2020.

Amount	Percentage
87,721	86%
14,350	14%
102,071	100%
	87,721 14,350

Table 11. Percentage Vehicle in Year

Source : Analysis Result (2022)

From the table above, the number of vehicles in 2020 for motorcycle type vehicles as much as 87,721 vehicle whereas For type vehicle car as much as 14,350 vehicle. Following is a calculation of income parking during five year year forward If use rates subscribe with mark magnitude that is Rp 25,000,- For vehicle bicycle motor, Rp 35,000,- For vehicle car, Rp. 40,000 for pick up and Rp. 40,000 for For micro bus.

Table 12. Rates Parking Subscribe

Vehicle	Cost (Per Year)	
Motor	25,000	
Car	35,000	
Pick U	40,000	
Micro Bus	40,000	
Source : Analysis Result (2022)		

Source : Analysis Result (2022)

Table 13. Level	l Growth Vehic	le Magelang	City in Year	r 2022 - 2026
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Year	Bicycle Motor	Car	Pick Up	Micro Bus	Total	Growth Vehicle
2022	96,613	16,555	7,515	1,631	122,314	0
2023	100,464	17,964	8,019	1,691	128,138	5,824
2024	104,793	17,816	8.355	1,716	132,680	4,543

Year	Bicycle Motor	Car	Pick Up	Micro Bus	Total	Growth Vehicle
2025	108,646	17,914	8.294	1,662	136,516	3.836
2026	113,405	18,803	8,421	1,728	142,357	5,842
		0		1. (2022)		

Based on table on, so obtained total growth vehicle in Magelang City in year 2026 as much as 5,842 with the final total number of vehicles is 142,357. Of the 4 types of vehicles mentioned above can predicted total overall income each the year, Which later will used in System Parking Subscribe (SPB). Following is table prediction income per year with 4 type vehicle.

Year	Income Bicycle Motor	Income Car	Income Pick Up	Income Micro Bus	Income Parking (PerYear)
2022	2,415,325,000	579,425,000	300,600,000	65,220,000	3,360,570,000
2023	2,511,600,000	628,740,000	320,760,000	67,620,000	3,528,720,000
2024	2,619,825,000	623,560,000	334,200,000	68,640,000	3,646,225,000
2025	2,716,150,000	626,990,000	331,740,000	66,480,000	3,741,360,000
2026	2,835,125,000	658,105,000	336,840,000	69,120,000	3,899,190,000

Table 14. Prediction Income SPB Year 2022 – 2026

Source : Analysis Result (2022)

From table in on can concluded that income from System Parking Subscription (SPB) has increased which was originally in 2022 with a total income Rp 3,360,570,000,- per year, until on year 2026 with total income Rp 3,899,190,000,- per year. However results the Not yet in for ForIncome Original Area (PAD) And Also Income The interpreter Parking. Which where in He recommended this study for Juru Parking own Income Which in o'clock flat and not like the profit sharing system which which of these systems, the income of the clerk parking very No evenly and it happened big small income each 1 interpreter the parking lot per month. Following is table parking attendant income but income This can changeable in accordance with request Government Magelang City.

Amount	Per Parking attendant	Parking attendant	Parking attendant
Parking	Income	Income	Income
attendant	Per Month	Per Month	Per Year
312	700,000	218,400,000	2,620,800,000

Table 15. Table Income T	he interpreter Parking
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Year	Parking (Every Yers)	Income Every	District
	(Evory Vorc)		
	(Every rels)	Year	Daerah(PAD)
2022 3	8.360.570.000		739.770.000
2023 3	8.528.720.000		907.920.000
2024 3	8.646.225.000	2.620.800.000	1.025.425.000
2025 3	8.741.360.000		1.120.560.000
2026 3	8.899.190.000		1.278.390.000

Table 16. Prediction Income in Year 2022 – 2026

Source : Analysis Result (2022)

From Table in on show that the benefits are on both sides, which from Income Original Area (PAD) own a drastic increase compared to the system profit sharing and income equalization Parking attendant per month than the sharing system results have income per month who does not fair Because existence difference amount The interpreter Parking per block so that income Also No balanced between parking attendant in block One with block other.

c. Results Weighting Second System

In results weighting This We can knowing about the results of Regional Original Income (PAD) with Income The interpreter Parking Which later Can become reference as system parking in Magelang City.

1. Weighting System For Results

Table 17. Prediction System For Results Year 2022 -2026

	Average	INDICATOR		
Parking Year		Income Retribution Parking	PAD	The interpreter Parking
			18%	82%
2022		4,973,862,991	895.295.338	4,078,567,653
2023		5,128,052,744	923,049,494	4,205,003,250
2024	0.031	5,287,022,379	951,664,028	4,335,358,351

	- Average	INDICATOR		
Parking Year		Income Retribution	PAD	The interpreter Parking
		Parking 18%		82%
2025		5,450,920,073	981.165.613	4,469,754,460
2026		5,619,898,595	1,011,581,747	4,608,316,848

## 2. Weighting System Parking Subscribe

Year	Income Parking Fee(Every Year)	All over Parking attendant (312 Person) Income Per Year	Original Income Area (PAD)
2022	3,360,570,000.00		739,770,000.00
2023	3,528,720,000.00		907,920,000.00
2024	3,646,225,000.00	2,620,800,000	1,025,425,000.00
2025	3,741,360,000.00		1,120,560,000.00
2026	3,899,190,000.00		1,278,390,000.00

#### Table 18. Prediction System Parking Subscribe Year 2022 -2026

Source : Analysis Result (2022)

Judging from the second weighting results table system, greater benefits are directed at Subscription Parking System (SPB) compared with System For Results. By therefore, we recommend to use System Parking Subscribe (SPB) so that impact Good on increasing the potential for Regional Original Income (PAD) in Magelang City.

# 4. Conclusion

- 1. Results analysis condition existing in 11 blocks in dayWork *(weekdays)* there is volume parking bicycle motor as much as 7,391 vehicle and car as much as 3.265 vehicle.
- 2. Results of analysis of existing conditions in 11 blocks today work (weekend) there is a bicycle parking volume motor as much as 5.358 vehicle and car as much as 2,364 vehicles.
- 3. Concluded that Income Original Area (PAD) from System For Results on year 2022 own total income as big as Rp 895,295,338,- per year whereas in year 2026 own total income as big as Rp 1,011,581,747,- per year. And for Parking Attendants own total income per 1 parking attendant range between Rp 335.823.- Every Month.

4. And finally, that Regional Original Income (PAD) from System Parking Subscribe (SPB) on year 2022 own total income amounting to Rp. 739,770,000 per year, while in year 2026 own total income as big as Rp 1,278,390,000,- per year. And for Parking Attendants has a total income per parking attendant of Rp. 700,000,- Every month.

# Acknowledgment

On this occasion the author would like to express accept love to parties which help in finish study this in among others to:

- 1. Allah Almighty Which has given all outpouring Grach and Love sadly
- 2. Agus wibowo, ST., MT as Dean Faculty Technique University Pancasakti Tegal
- 3. Dr. Mr. Dear, M. Si as head Institution Study and Program Devotion Public University Pancasakti Tegal
- 4. Muhammad Jonah, S. ST(TD)., MT as partner Program Devotion to Public And representative director CV. Shaka Amora Persada

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