



DISKOMINFOTIK
Provinsi DKI Jakarta



JOURNEY OF JAKARTA SMART CITY FROM ANALYTICS PERSPECTIVE

Juan Intan Kanggrawan
Head of Data & Analytics

INTRO



AGENDA

1

JAKARTA SMART CITY: OVERVIEW & EVOLUTION

2

STRATEGIC ROLES OF ANALYTICS TEAM

3

SUCCESS STORIES, CURRENT WORKS, WISH-LIST



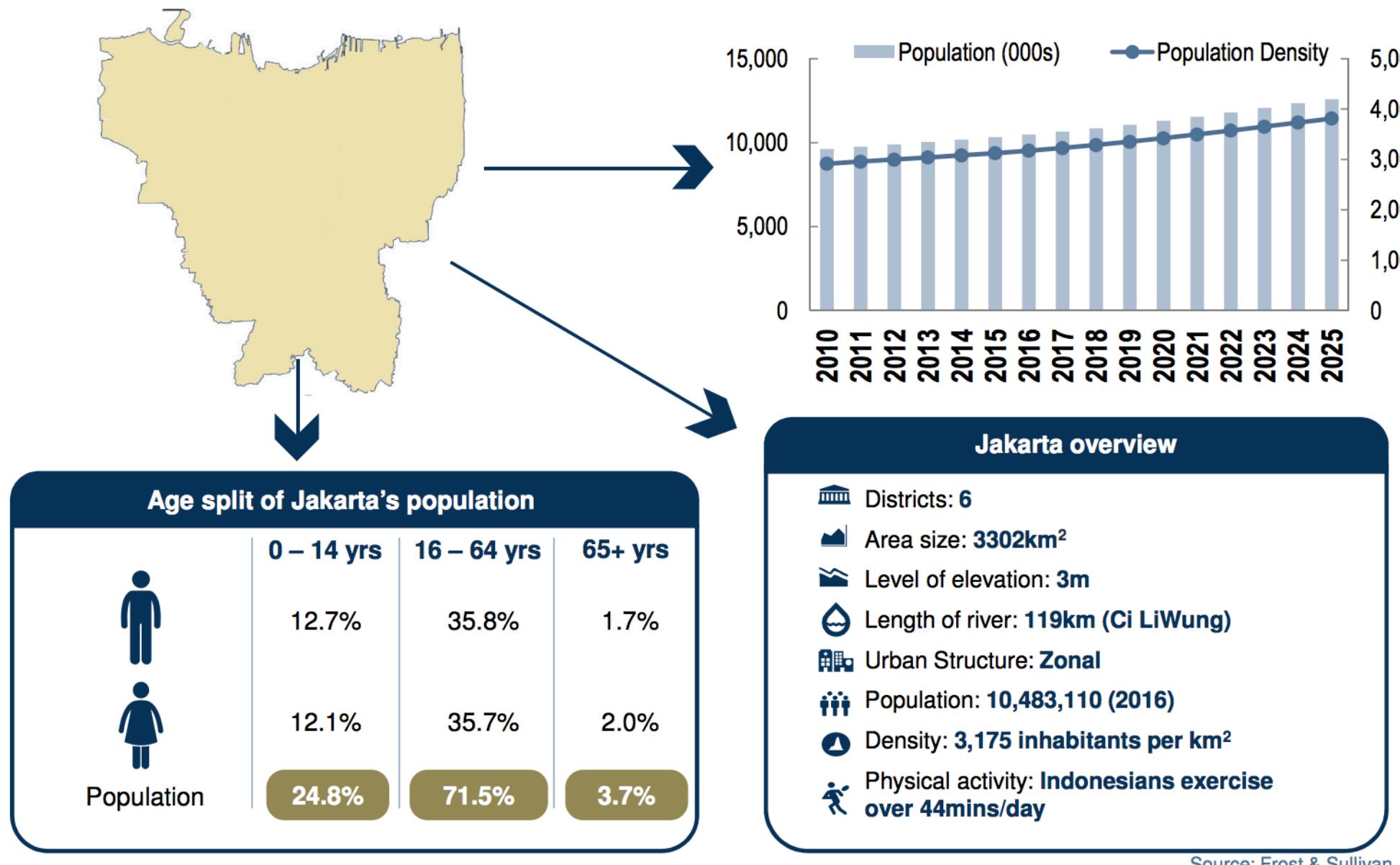
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JAKARTA SMART CITY: OVERVIEW & EVOLUTION

OVERVIEW: JAKARTA

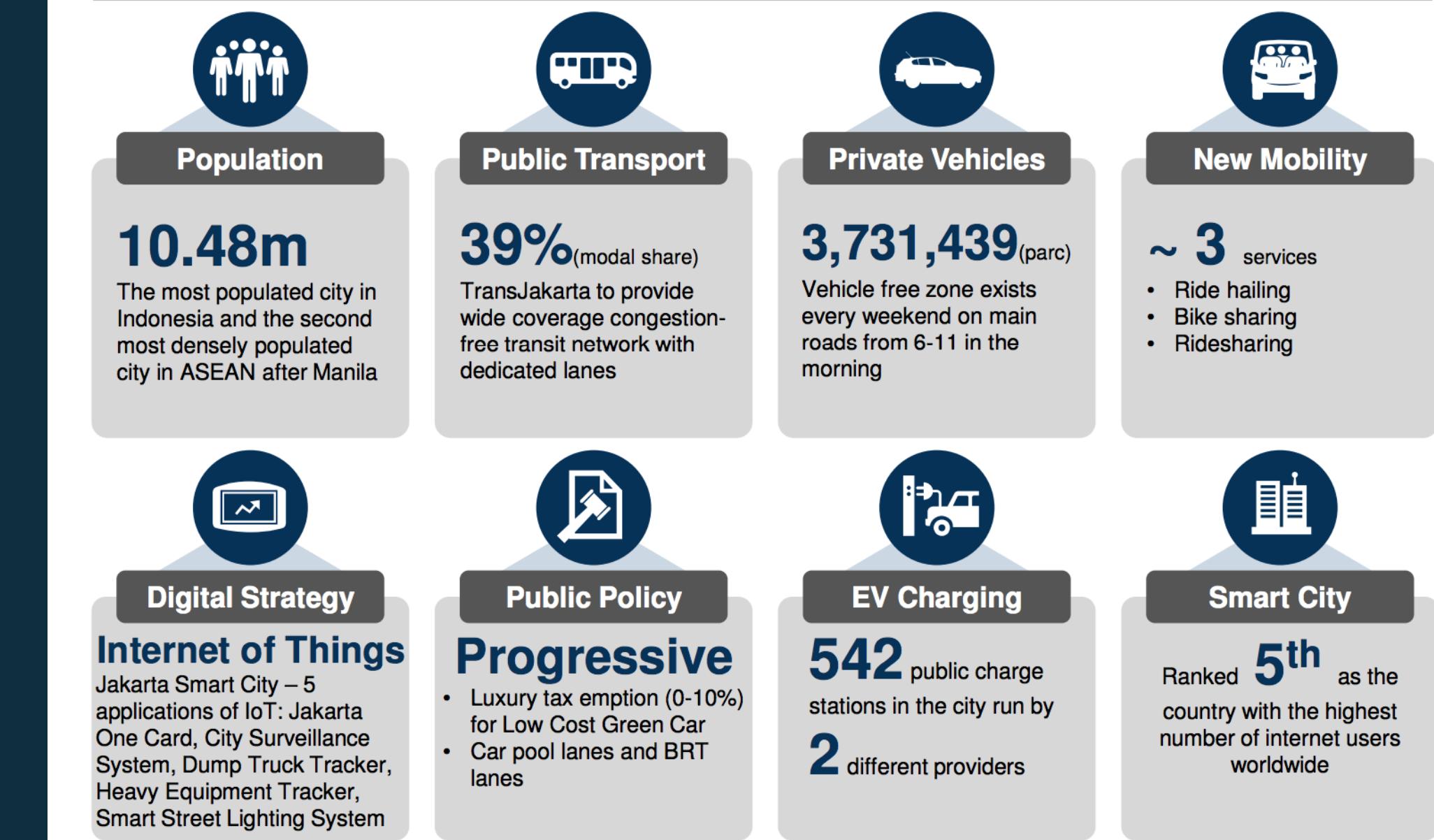
Jakarta at a Glance

New initiatives are undertaken to further establish Jakarta Smart City vision as an integrated information hub in Indonesia, altogether with crowdsourcing as a measure of data collection



Jakarta – Smart City Attractiveness

Jakarta has a clear transport vision focusing on reducing car usage, improving public transport and upscaling digitalization





ABOUT JAKARTA SMART CITY

- Established in 2015
- A management unit under Communications, Informatics and Statistics Agency of Jakarta Provincial Government
- Runs with a system of work that combines the culture of government bureaucracy and start-up in the field of ICT

Jakarta Smart City: Data & Analytics Division

SMART CITY 4.0

4 LEVELS OF CITY EVOLUTION





Jakarta City 4.0

4 Principles

5 Co-Creators

6 Outcomes

7 Programs

Improving The Lives of Jakartans

Smart City Indicator



Governance



People



Mobility



Living



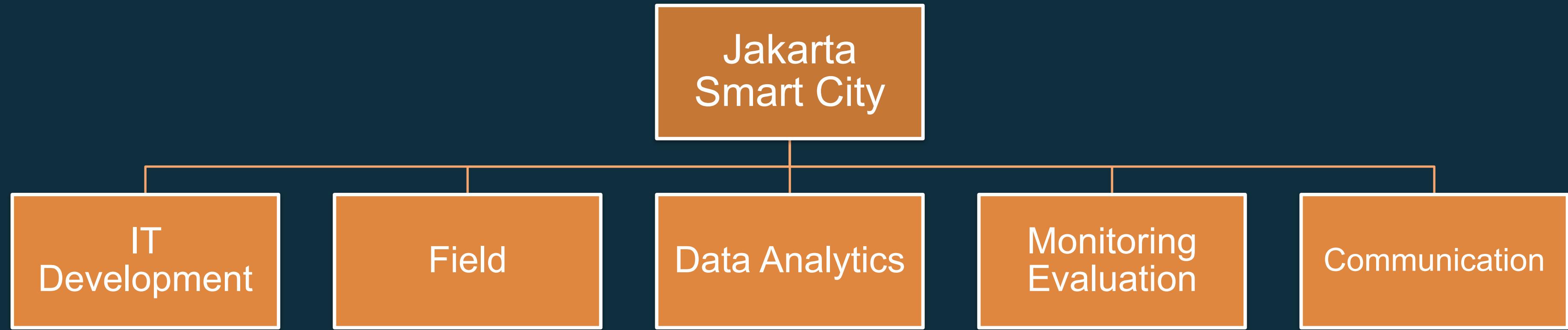
Economy



Environment

Jakarta Smart City

STRUCTURE & DIVISIONS



Monitoring Room



Jakarta Smart City: Data & Analytics Division



JSC Lounge

Jakarta Smart City: Data & Analytics Division

JSC Team



Jakarta Smart City: Data & Analytics Division

2

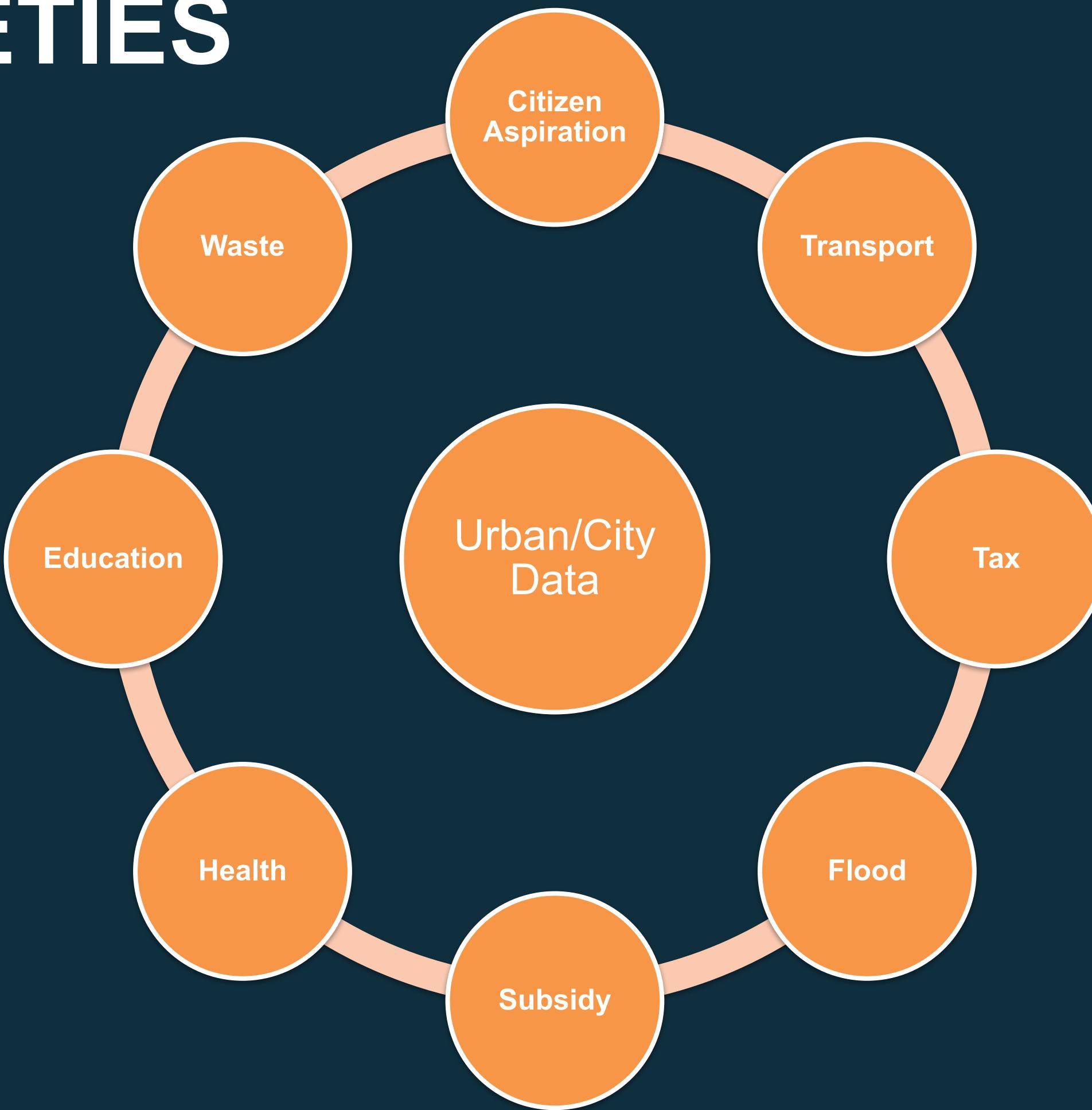
STRATEGIC ROLES OF ANALYTICS TEAM

Role of Data & Analytics:
“to make better decisions, faster”

Alignment with JSC’s Vision:
“To improve satisfaction from citizen towards government,
through data-driven public policy & public services”

DATA VARIETIES

(Not Exhaustive List)



Utilizing IoT in Jakarta

IoT uses internet connection to connect devices in order to monitor and control.

The Application of IoT by Jakarta Provincial Government



Monitors TransJakarta buses



Monitors garbage truck and heavy duty vehicles



Monitors ambulance



Monitors air quality



Monitors water level



Controls public street lights

OPEN DATA

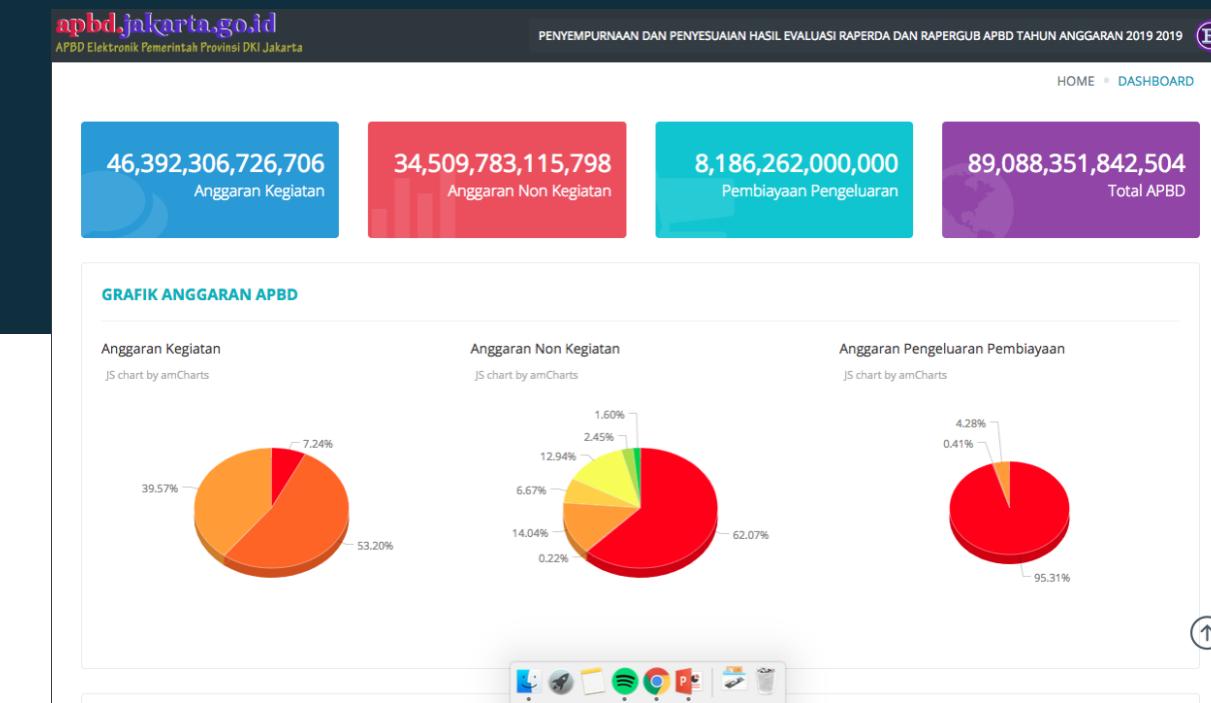
A transparent (open) government can increase public trust in government performance. It is transparent if the administration is easily accessible or known by the community therefore that the community can keep track and evaluate the performance of the government.



Open Data Portal

Presenting data and information from all Agency of Jakarta Provincial Government needed by the community and fulfilling public rights as a form of e-government implementation in realizing transparent and accountable governance.

data.jakarta.go.id



APBD Jakarta

The DKI Jakarta Electronic Budget is a platform for realizing open government in Jakarta. Through this website, the public can see in detail the DKI Jakarta provincial budget annually.

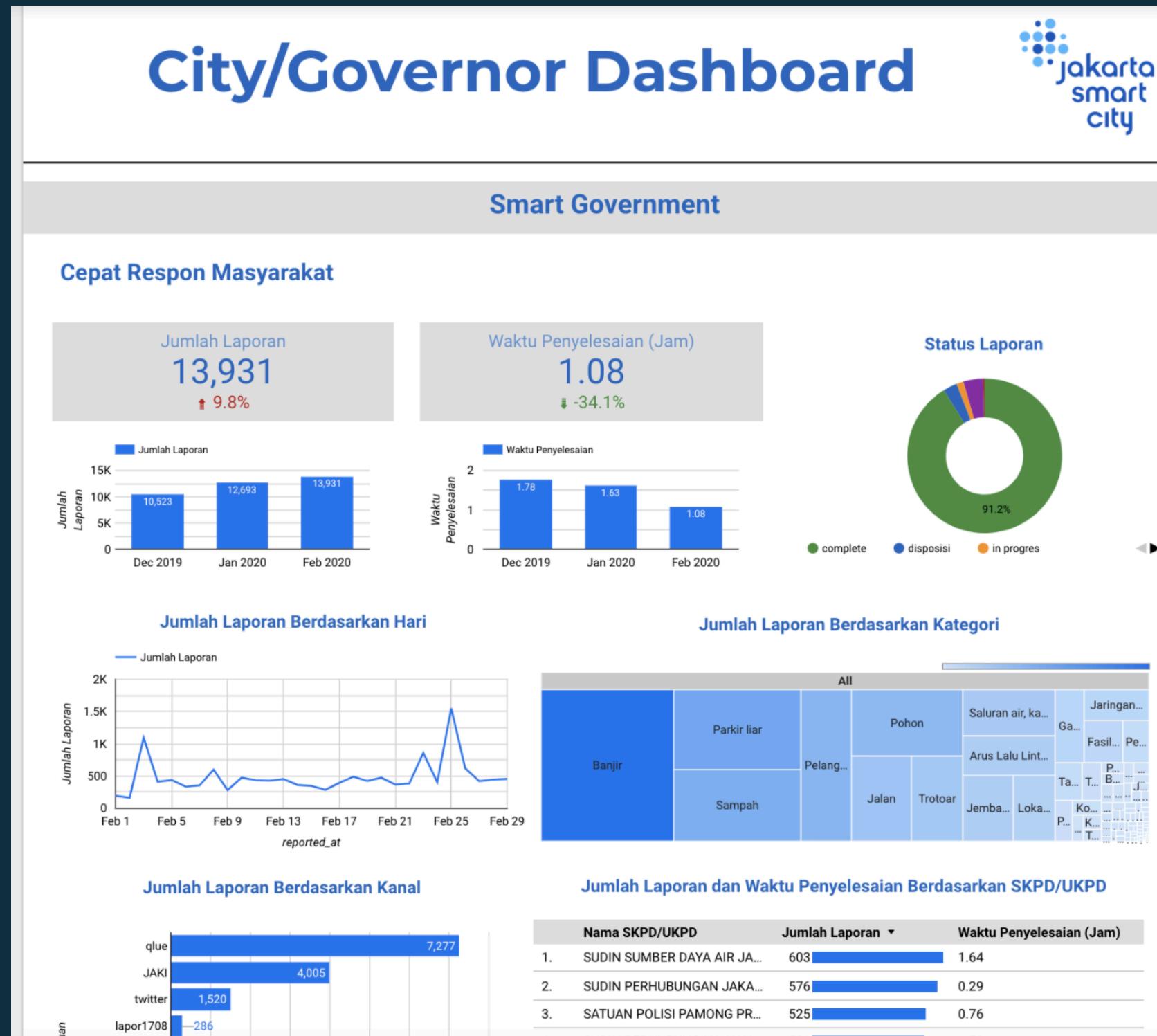
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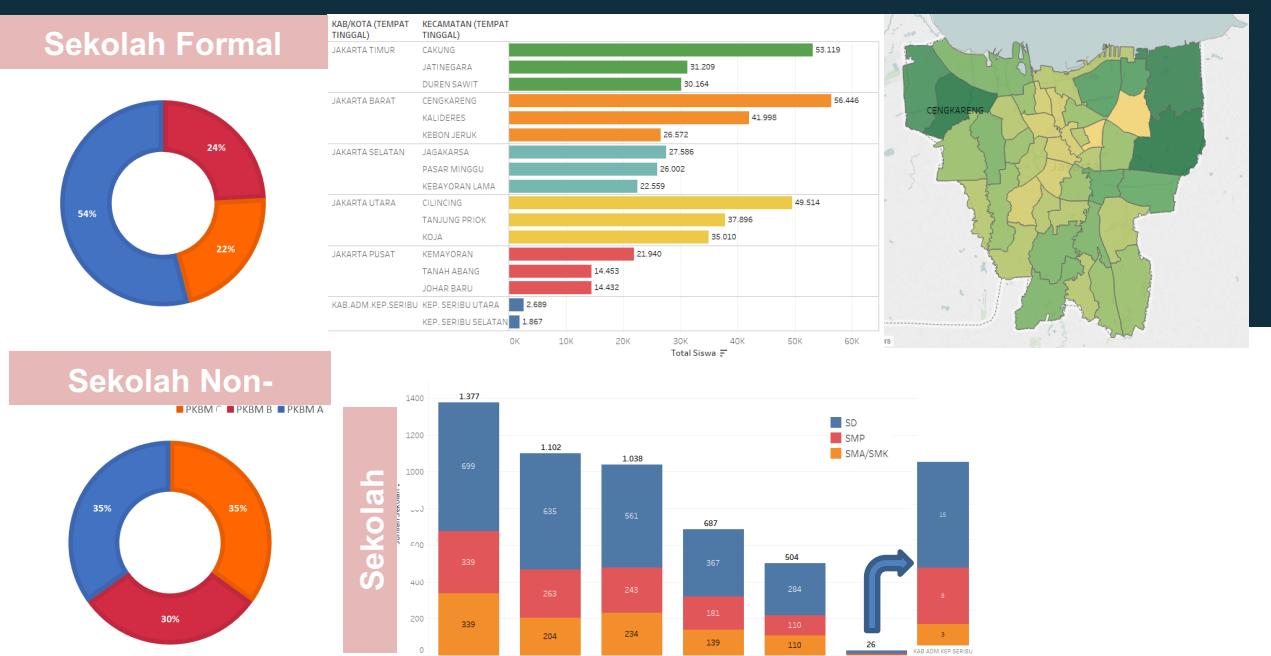
SUCCESS STORIES, CURRENT WORKS, WISH-LIST

SUCCESS STORIES

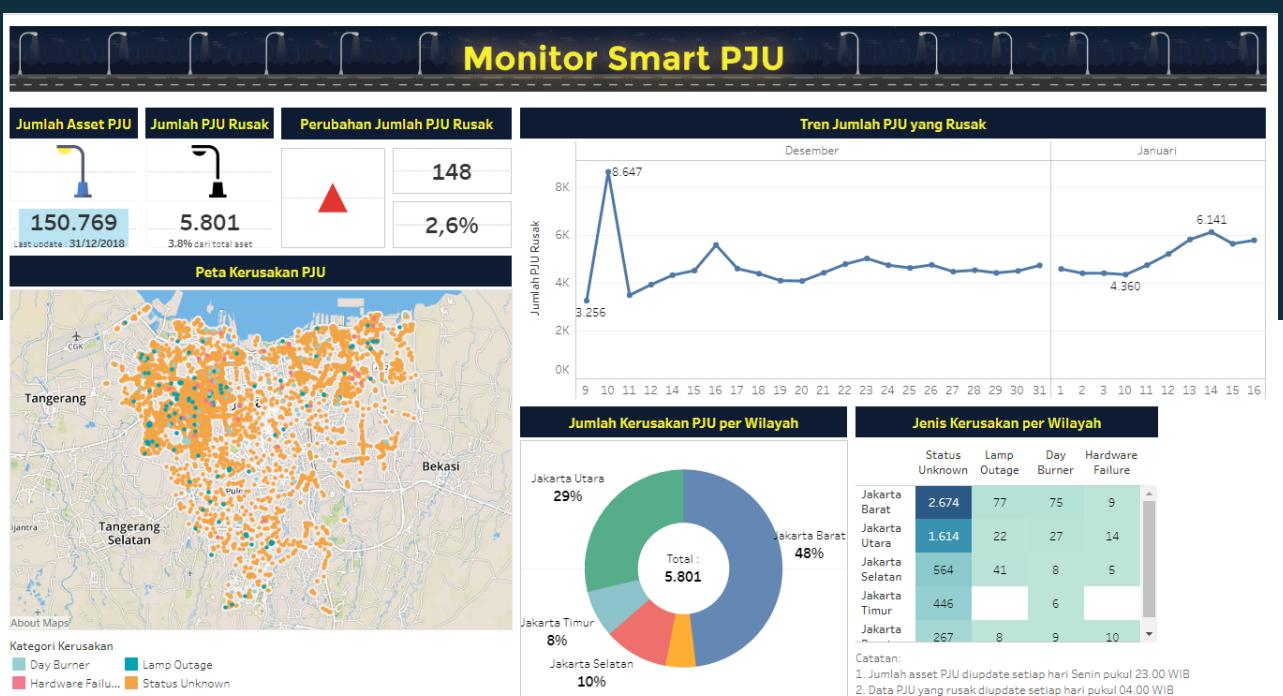


DATA DRIVEN POLICY

Analytics Kartu Jakarta Pintar Plus



Public Street Light Smart System Dashboard



Analytics Citizen Relation Management

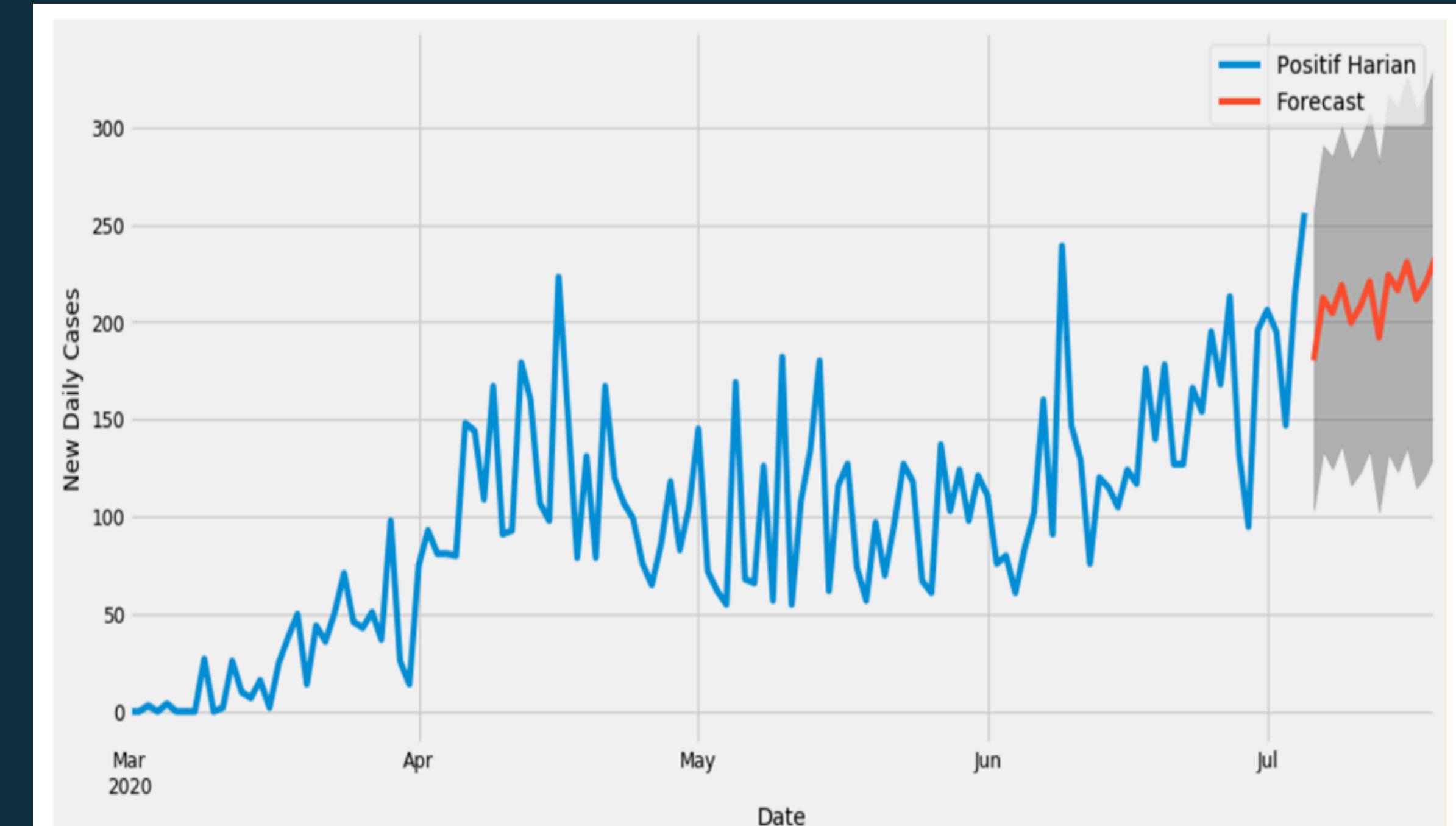
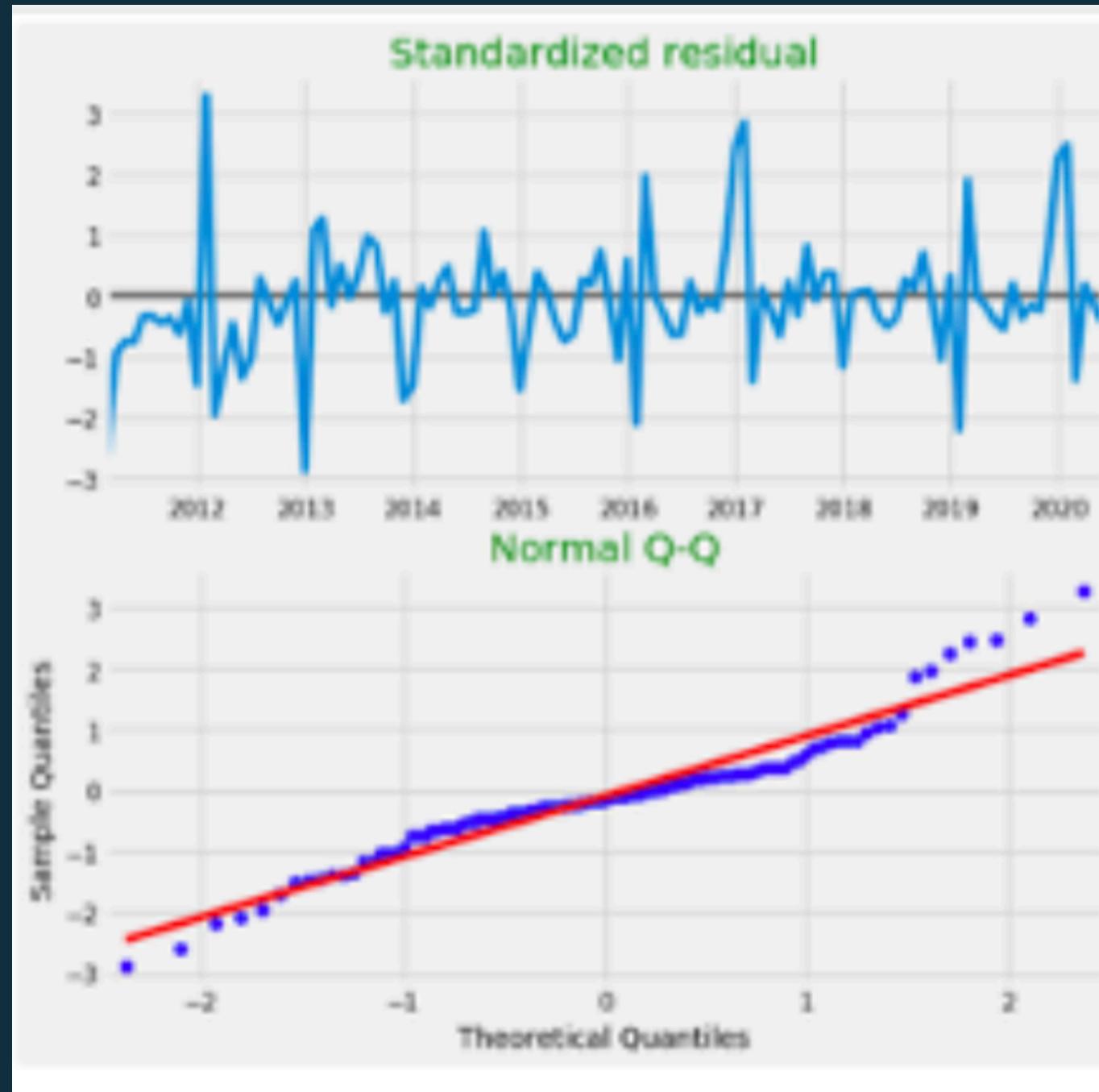


- Supervising and detect irregularities in the use of KJP together with the Jakarta Education Agency and Bank Office
- Supporting policy making relating to underprivileged school students (eg book bazaar, cheap basic food, free Transjakarta)
- Providing information regarding the habitual pattern of KJP usage transactions for each student
- Providing information regarding the problem use of KJP and the absorption of the KJP budget

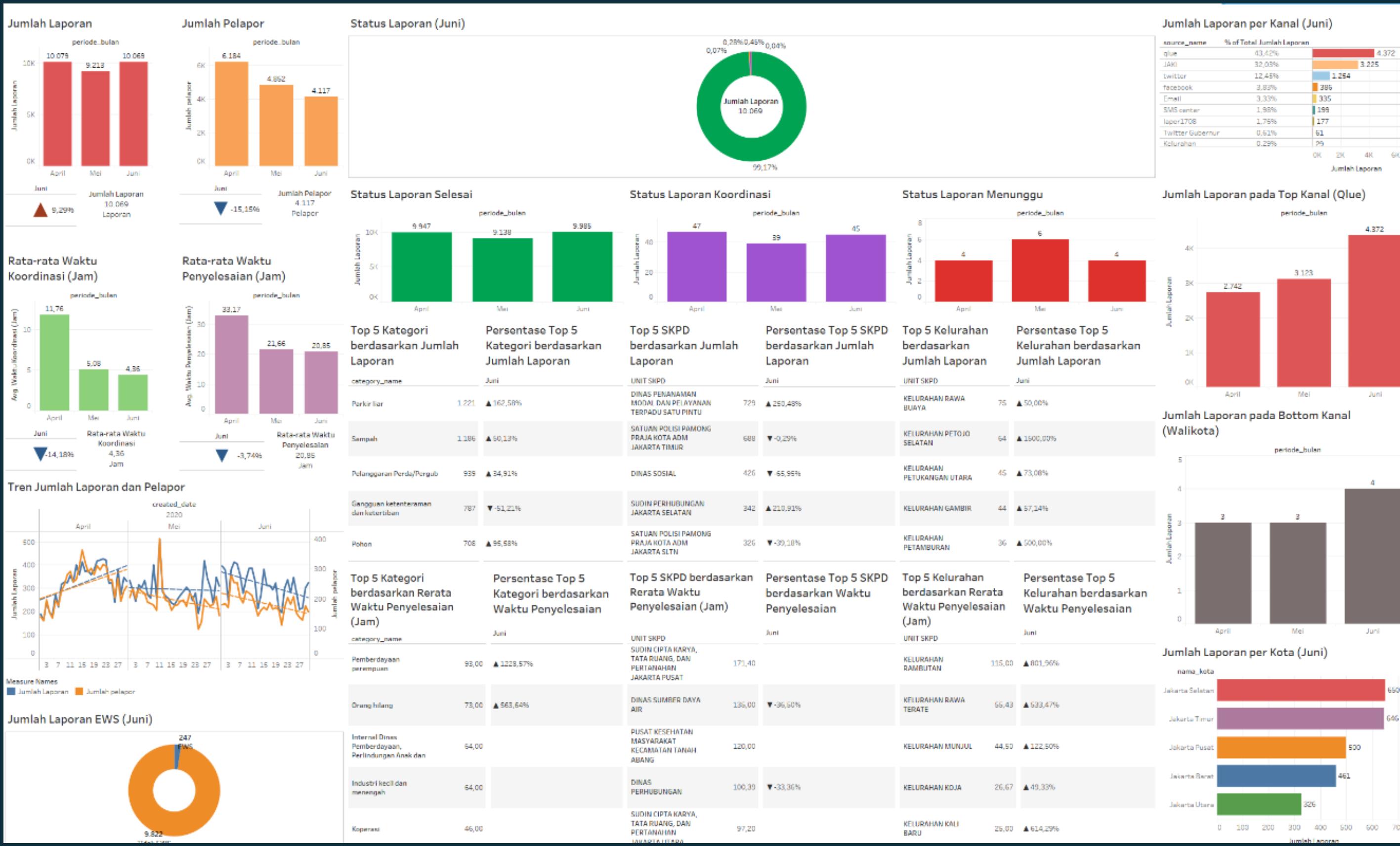
- Knowing the number of public street lighting assets
- Displaying a map of public street lighting damage in DKI Jakarta
- Percentage of damage to public street lighting per city area in DKI Jakarta
- Analyzing damage to lamps that are routinely monitored
- Trends of public street lighting damage per day for the past two months

- Knowing the number of reports that enter each month
- Knowing how long it takes to solve problems in each category and sub category
- Knowing how long it will take between SKPDs to coordinate reports
- Knowing the number of reports in each report category and sub-category
- Knowing the distribution of reports throughout the DKI Jakarta area

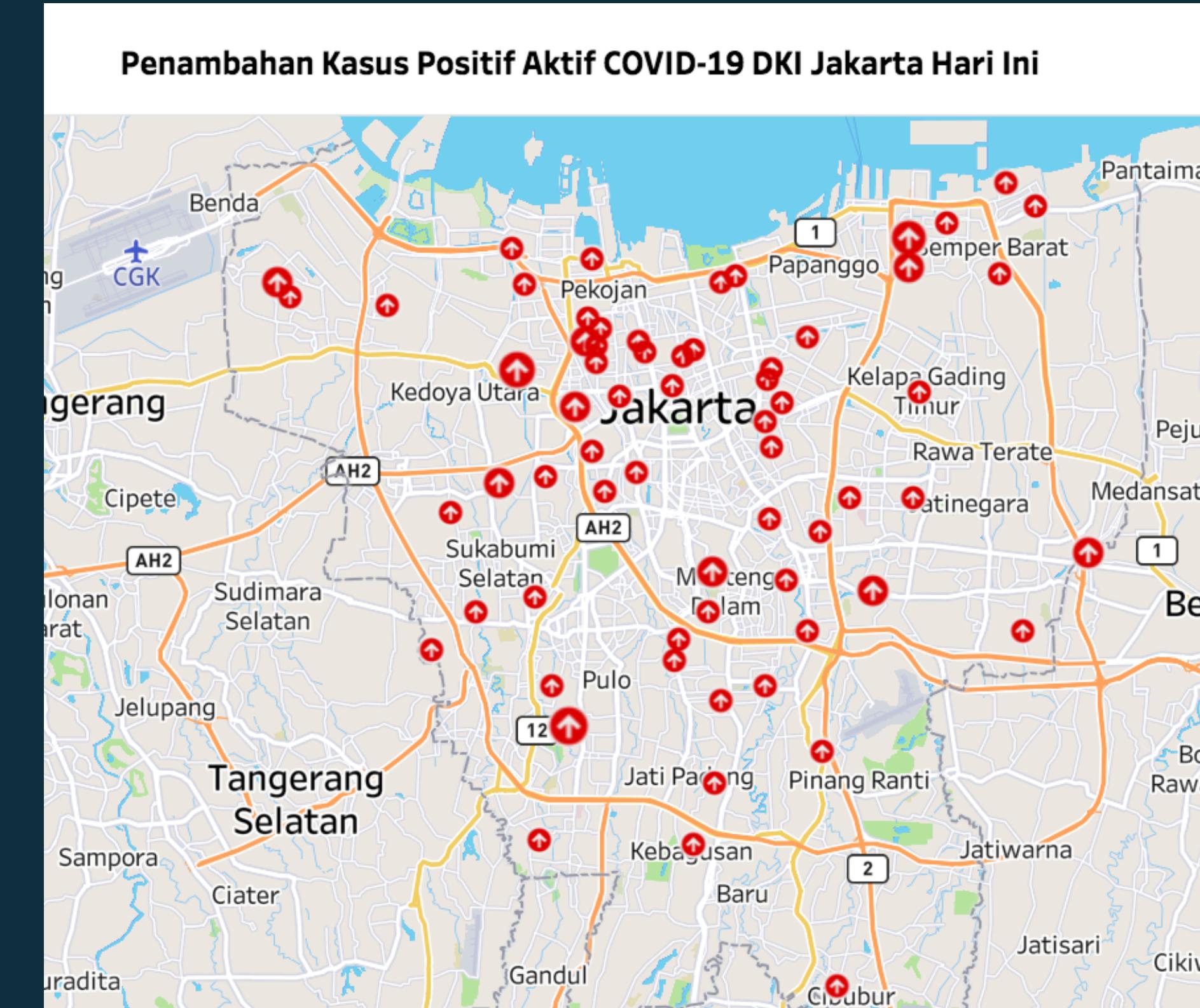
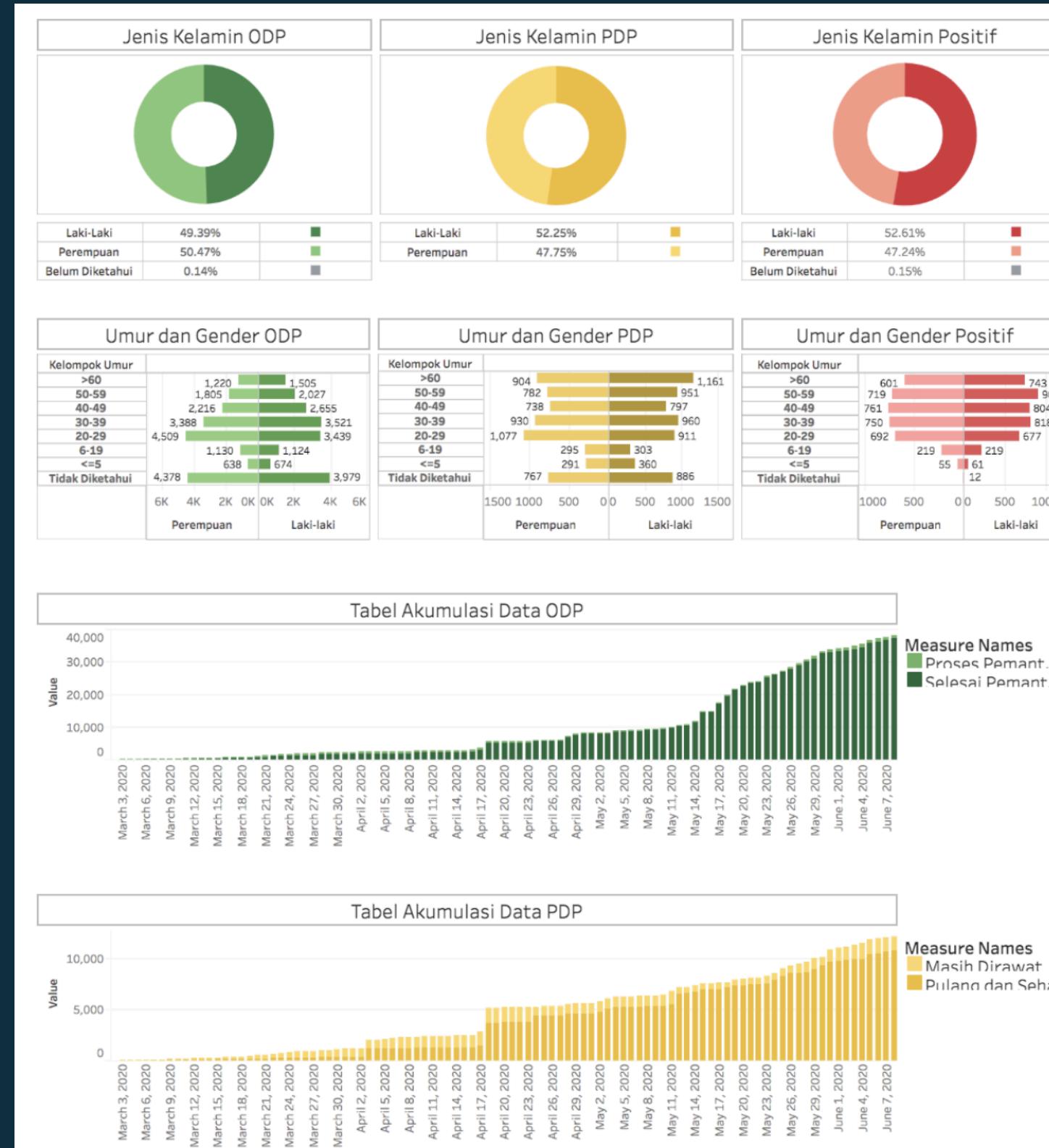
PREDICTIVE ANALYSIS



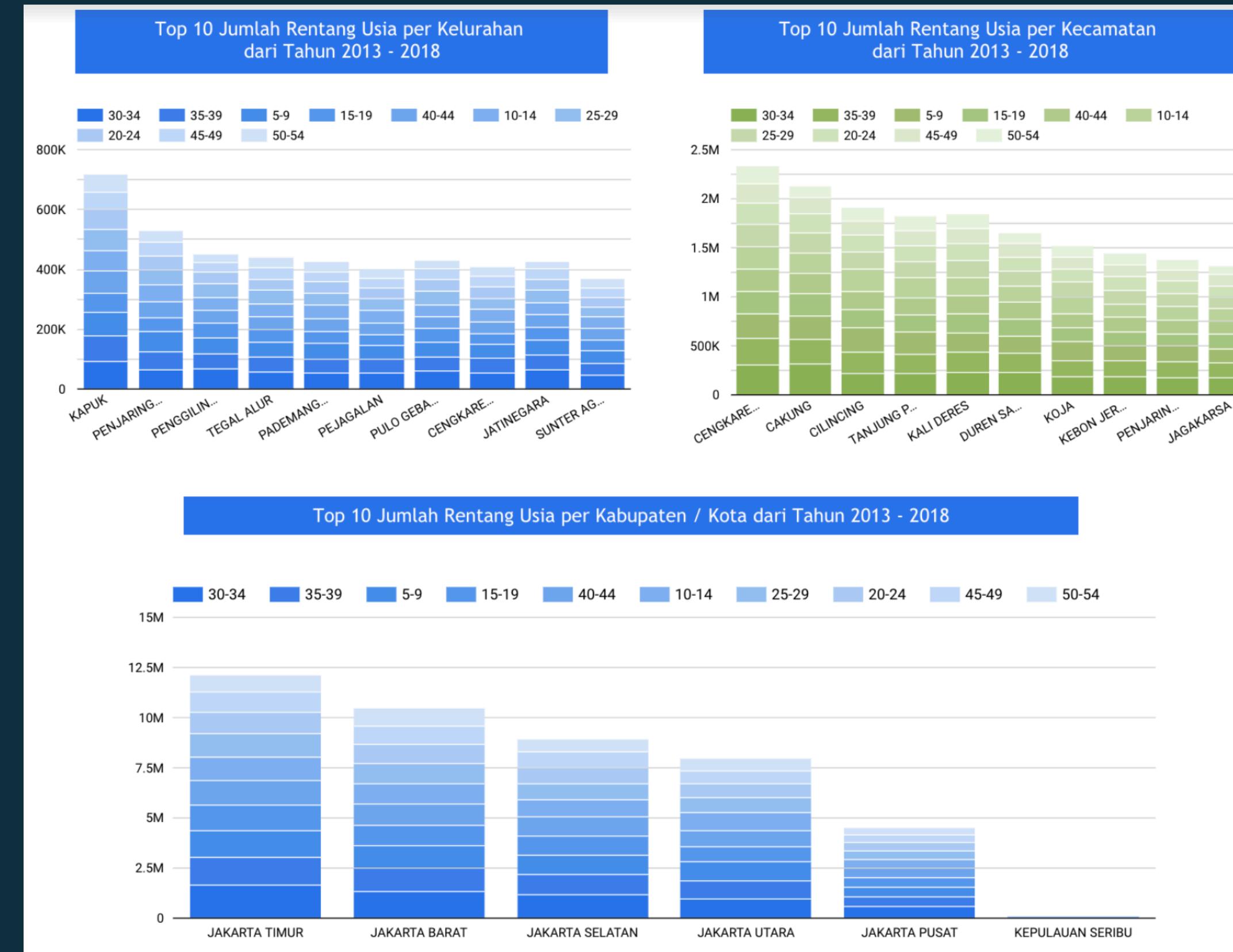
CITIZEN ASPIRATION ANALYSIS



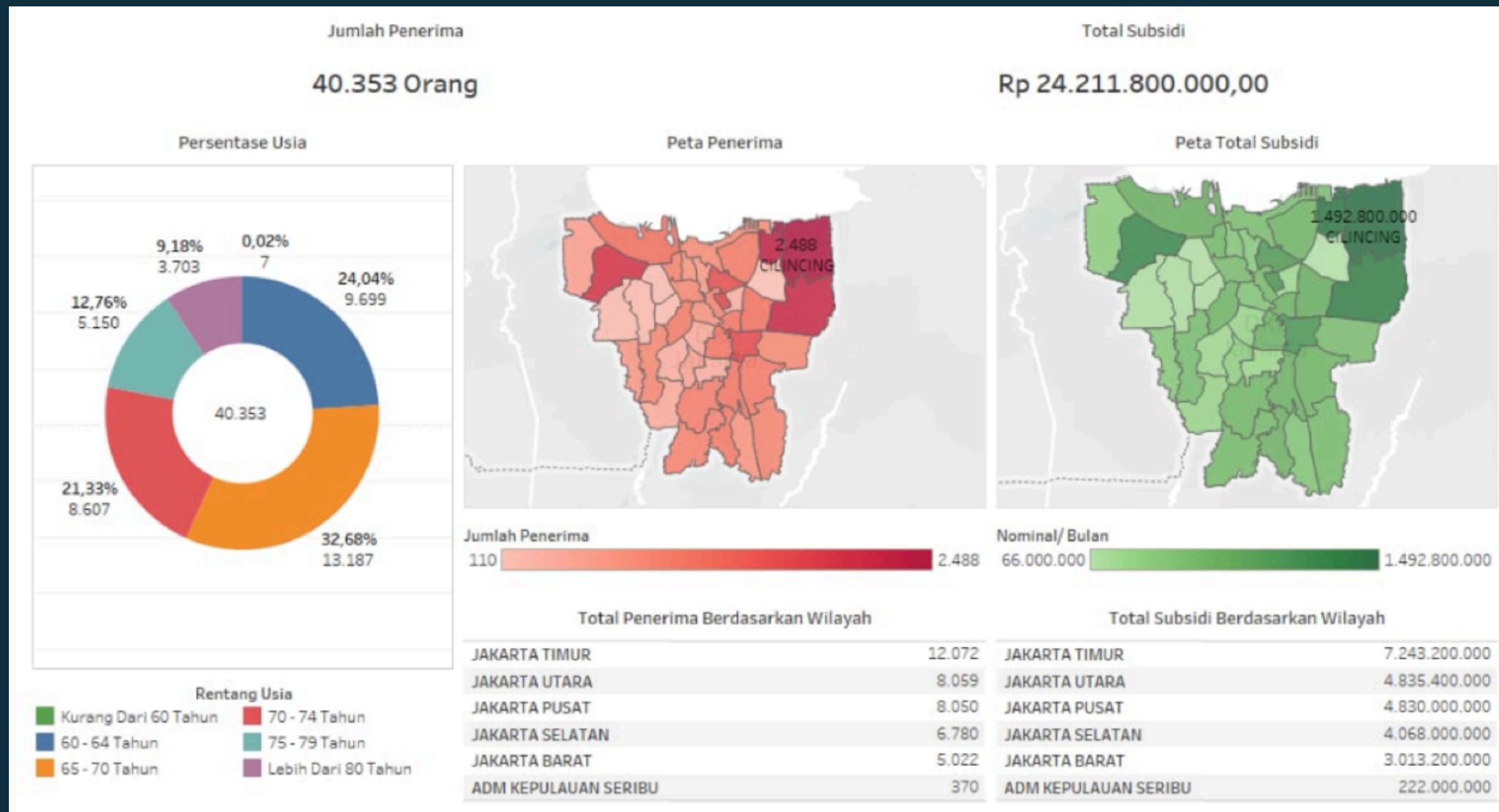
COVID-19 ANALYSIS



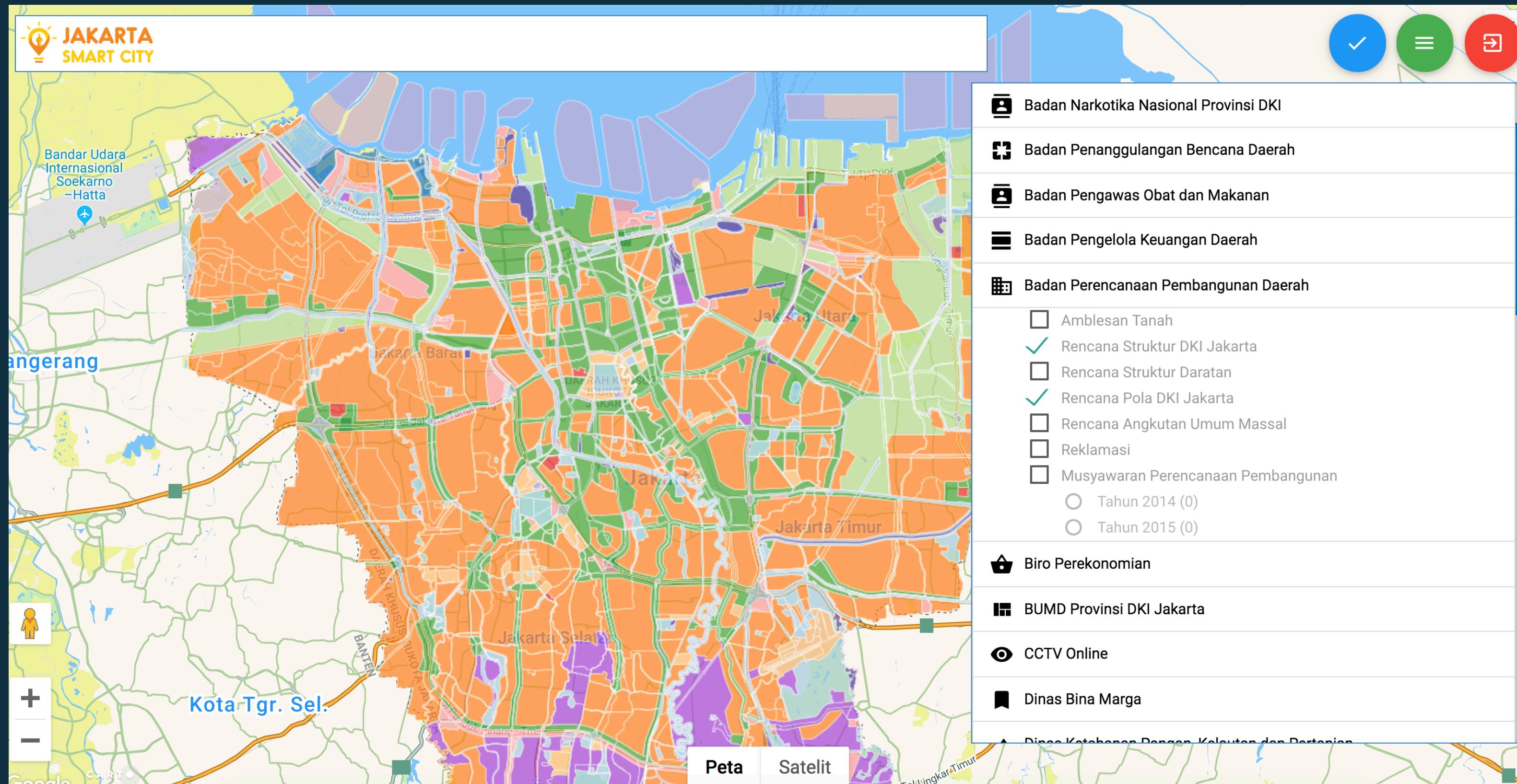
CITIZEN DEMOGRAPHY ANALYSIS



SUBSIDY ANALYSIS

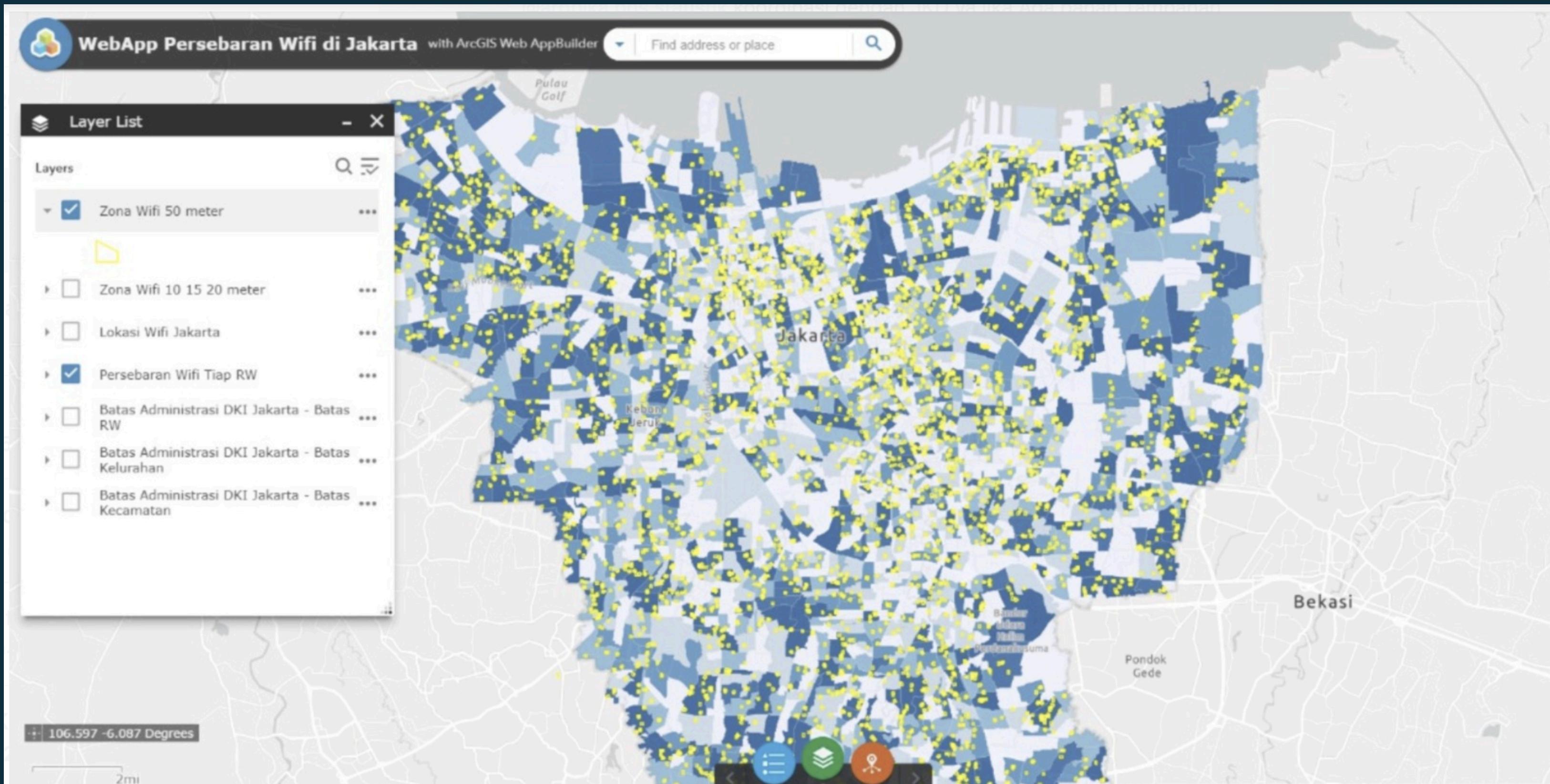


REAL-TIME MAP: REGIONAL PLANNING



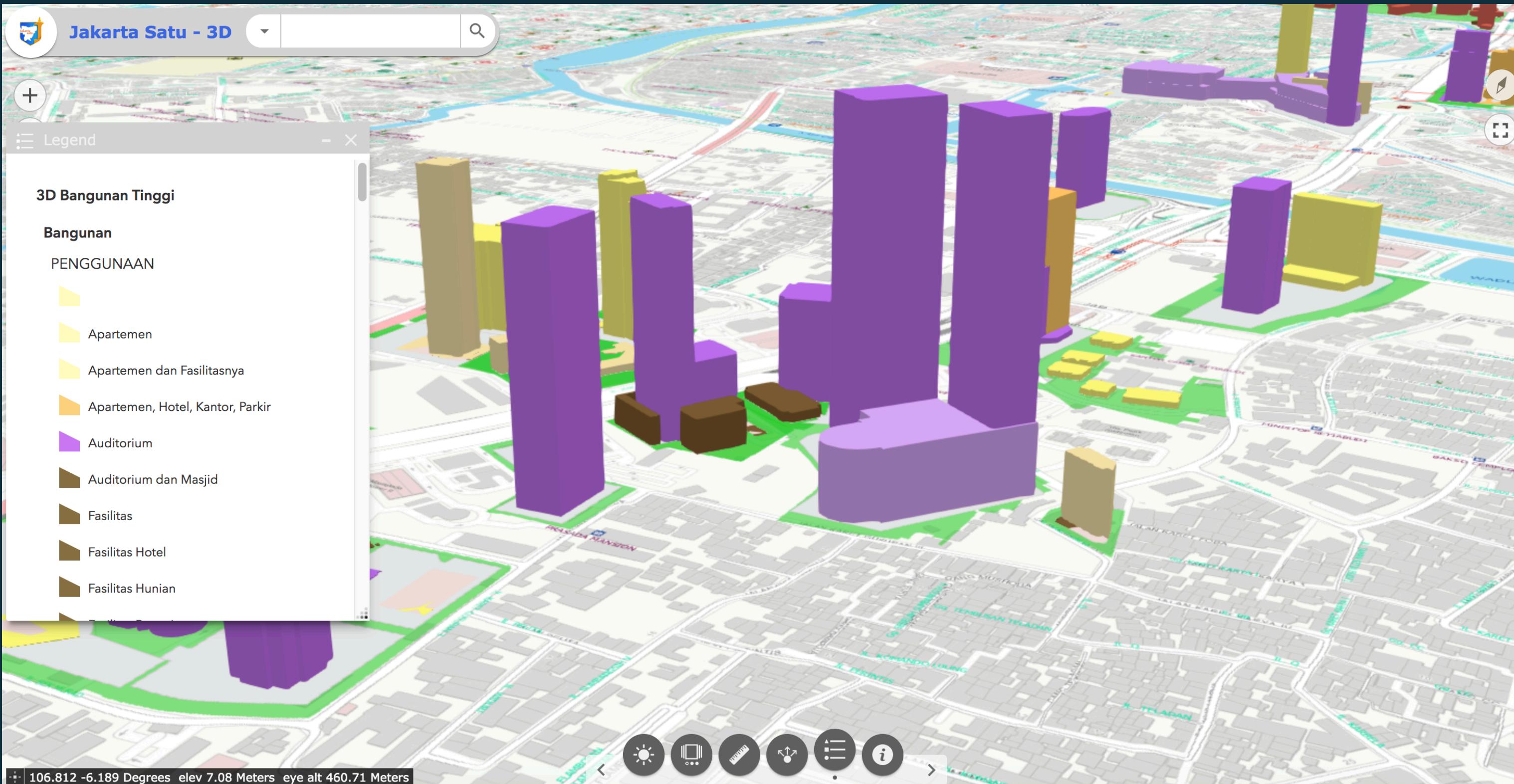
Jakarta Smart City: Data & Analytics Division

REAL-TIME MAP: REGIONAL PLANNING



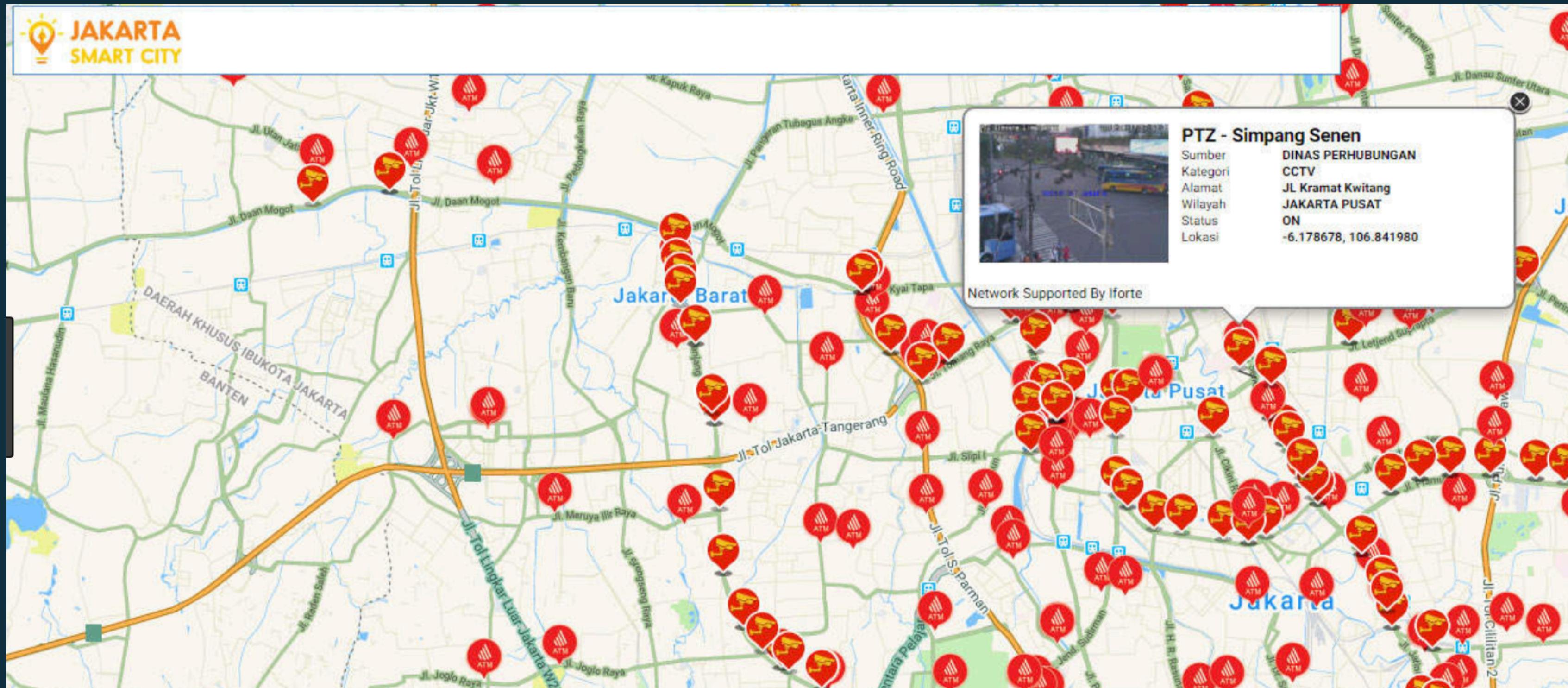
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REAL-TIME MAP: REGIONAL PLANNING

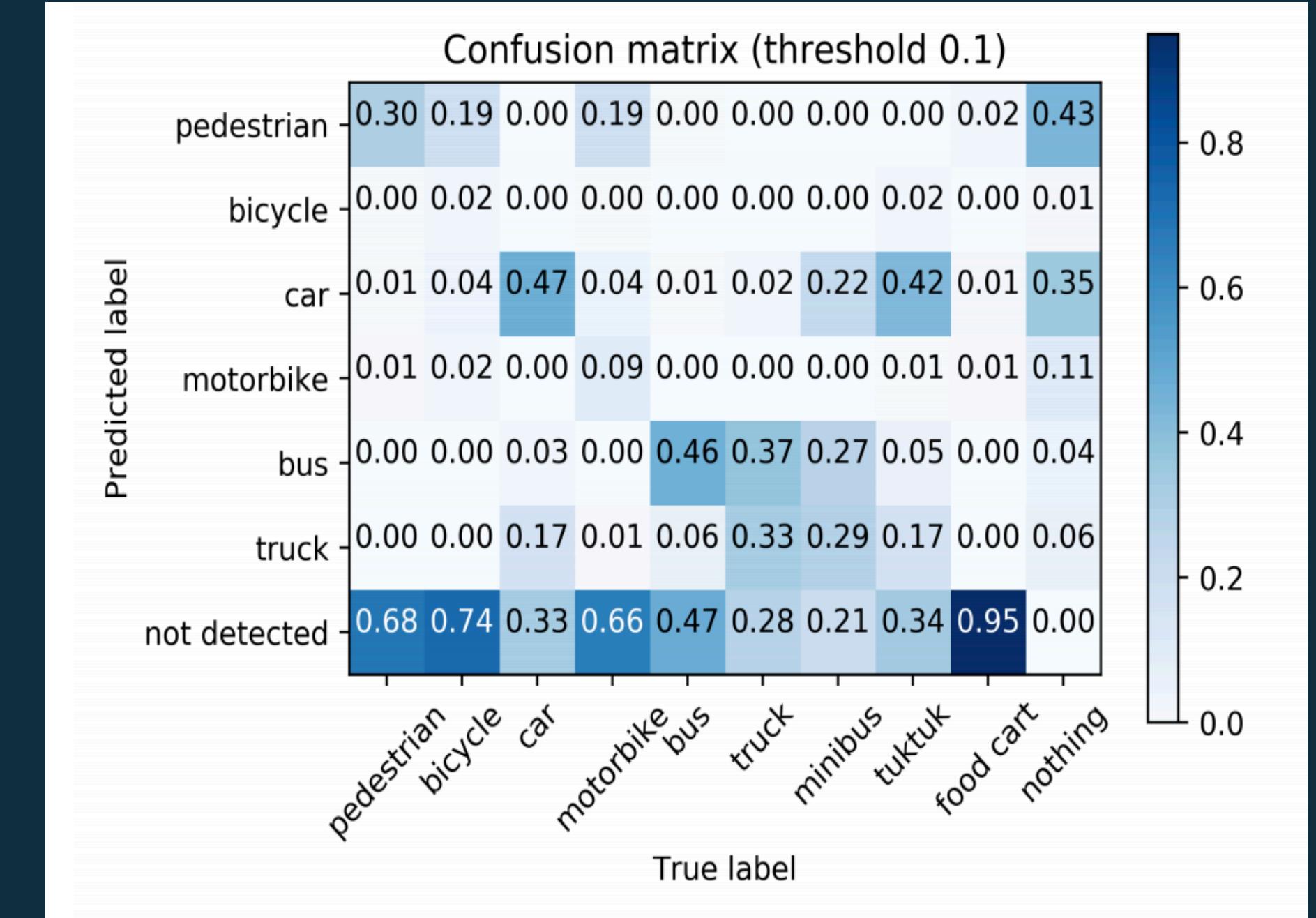
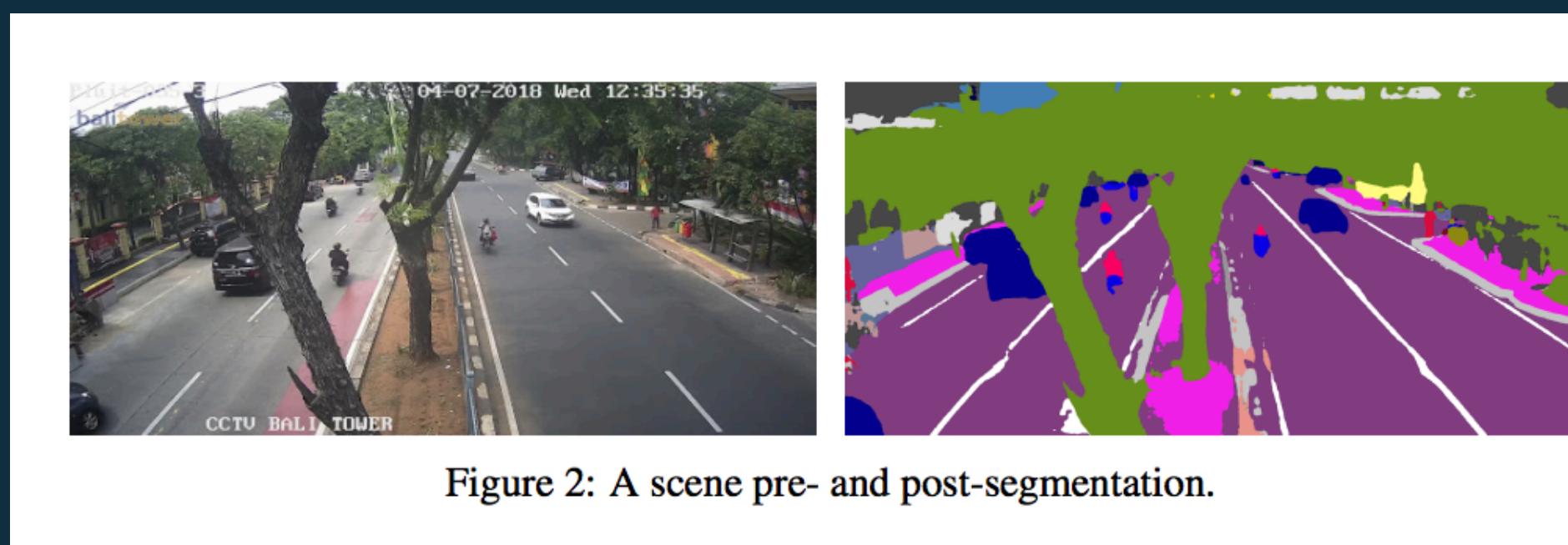
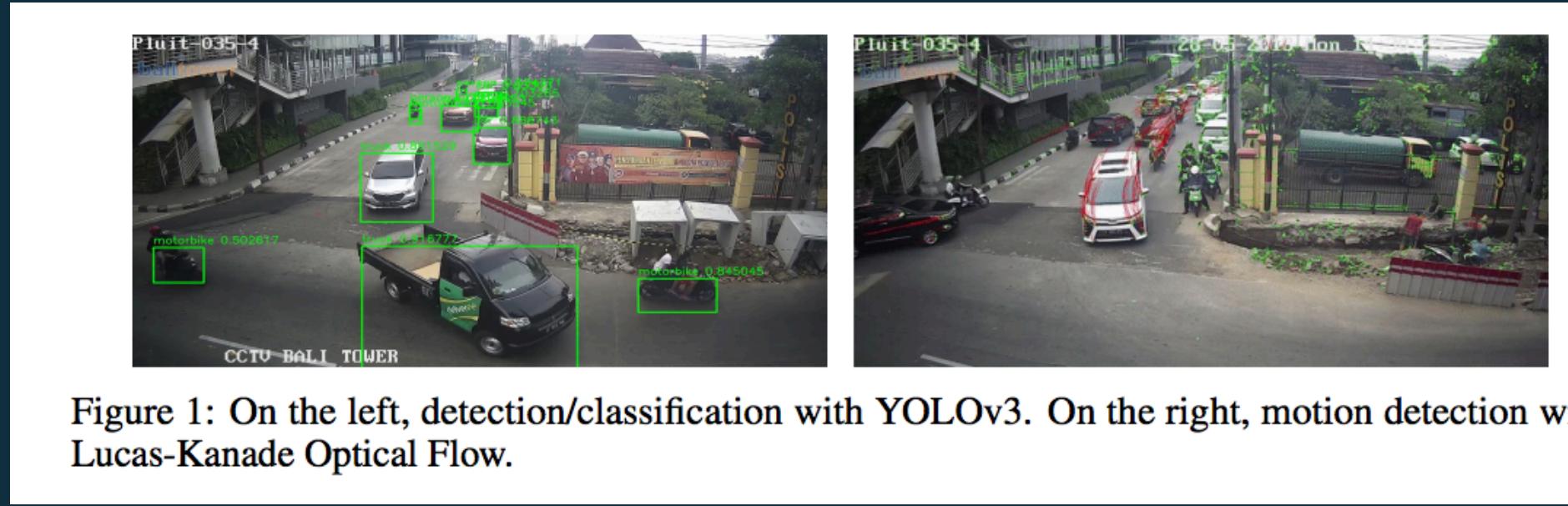


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CCTV MONITORING VIA PUBLIC REAL-TIME MAP



VIDEO ANALYTICS FOR TRAFFIC SAFETY



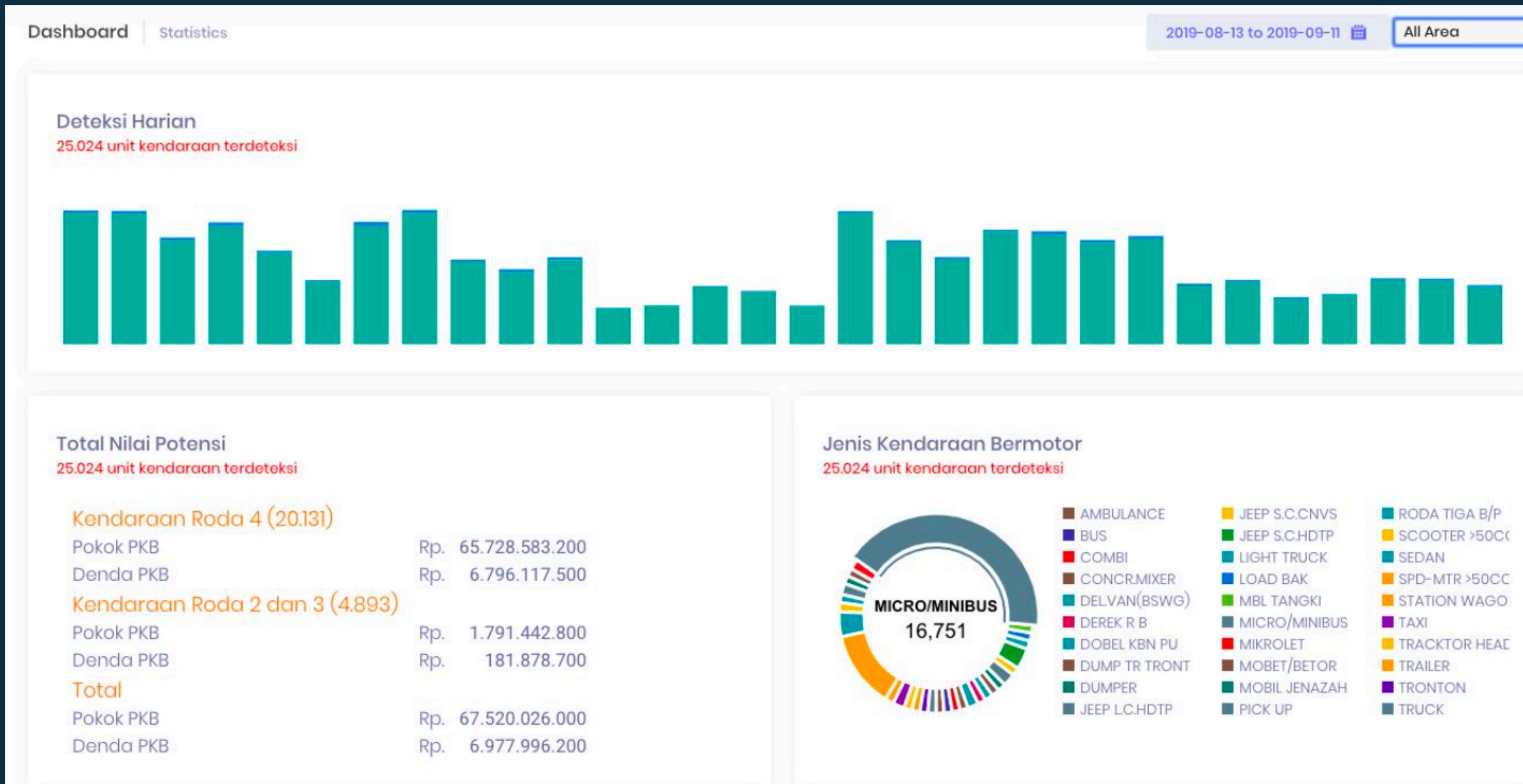
PILOT AI INITIATIVE WITH NODEFLUX



PILOT AI INITIATIVE WITH NODEFLUX



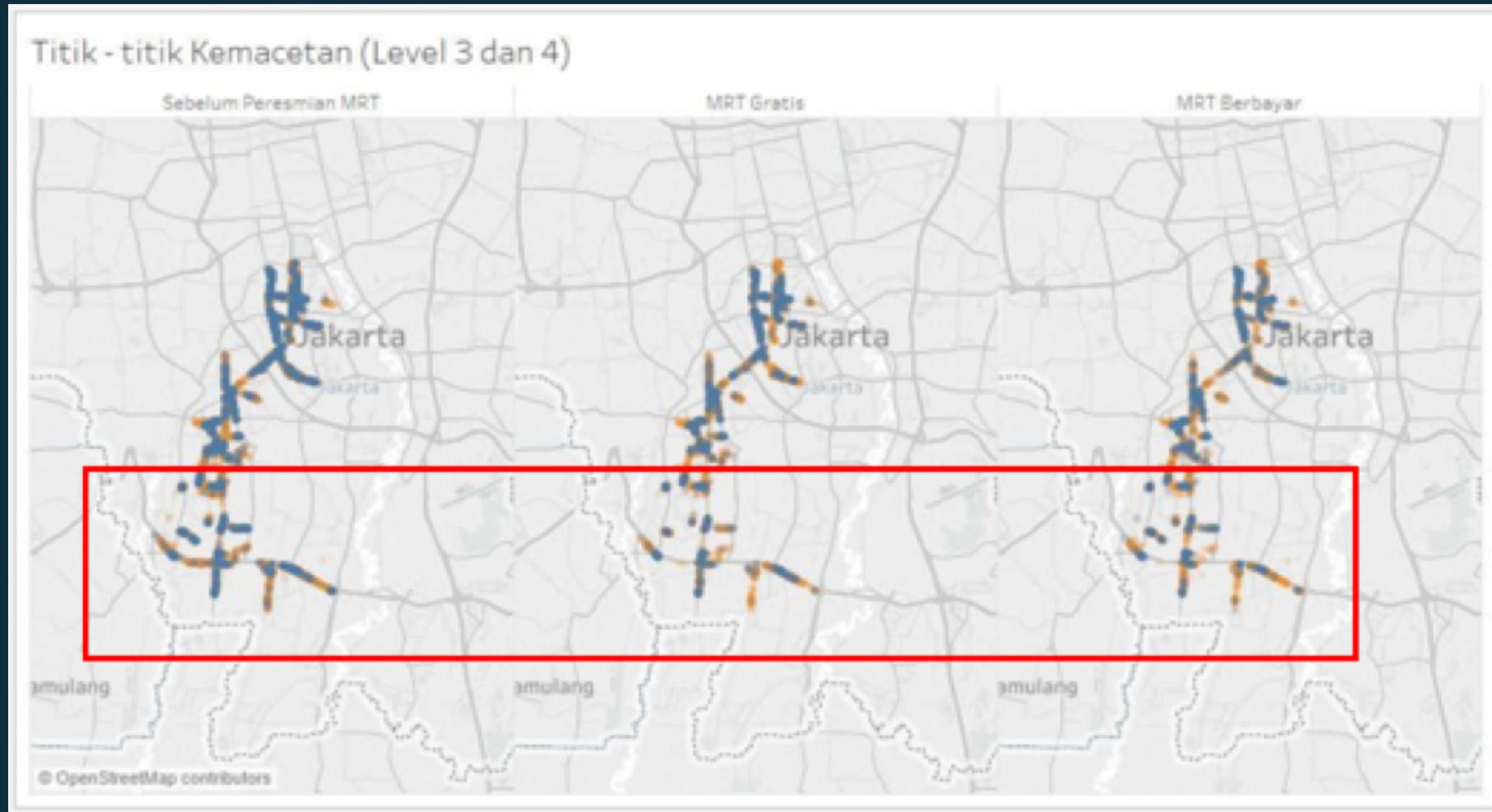
PILOT AI INITIATIVE WITH NODEFLUX



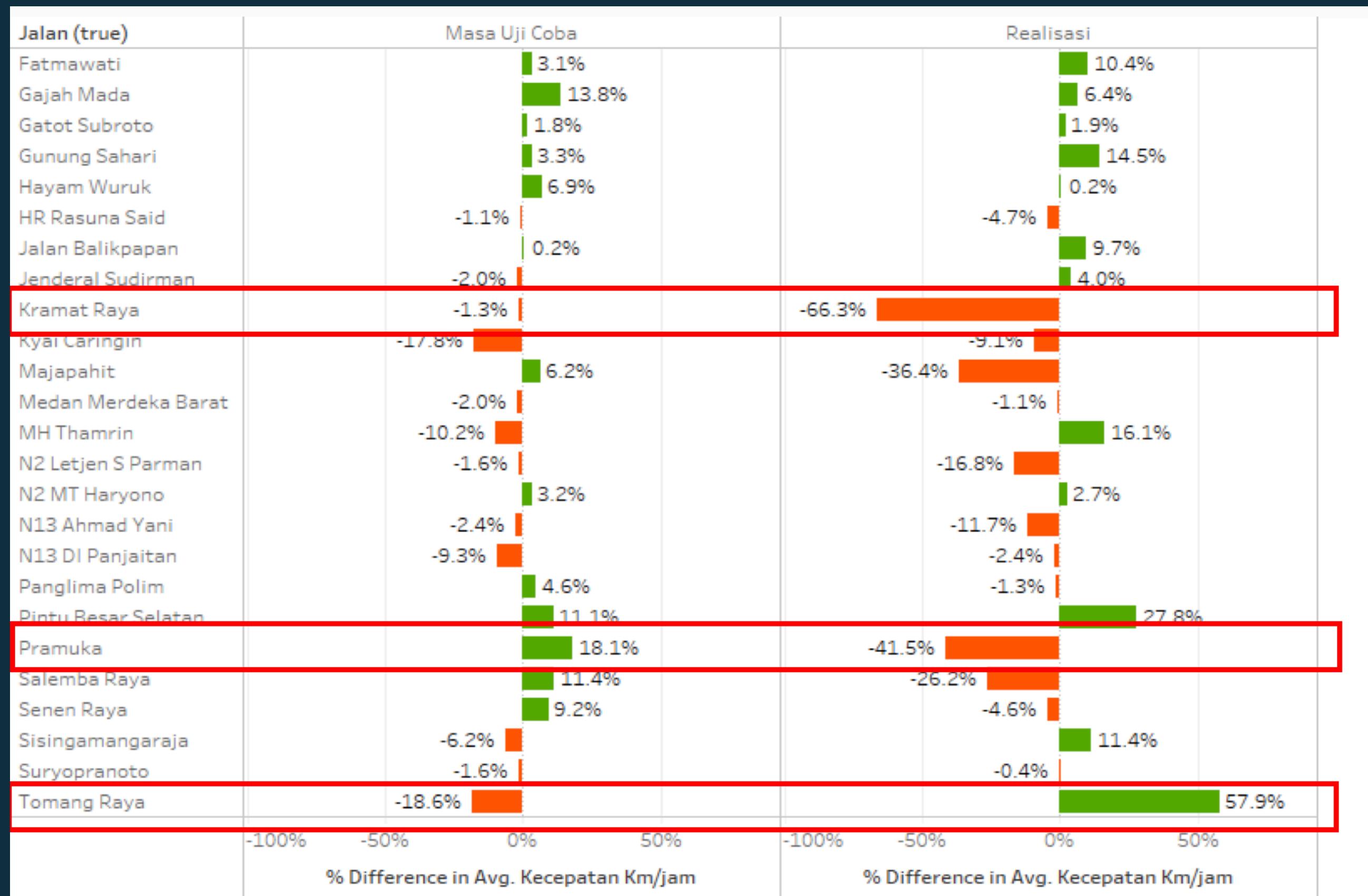
IMPACT OF MRT (1st APRIL 2019)



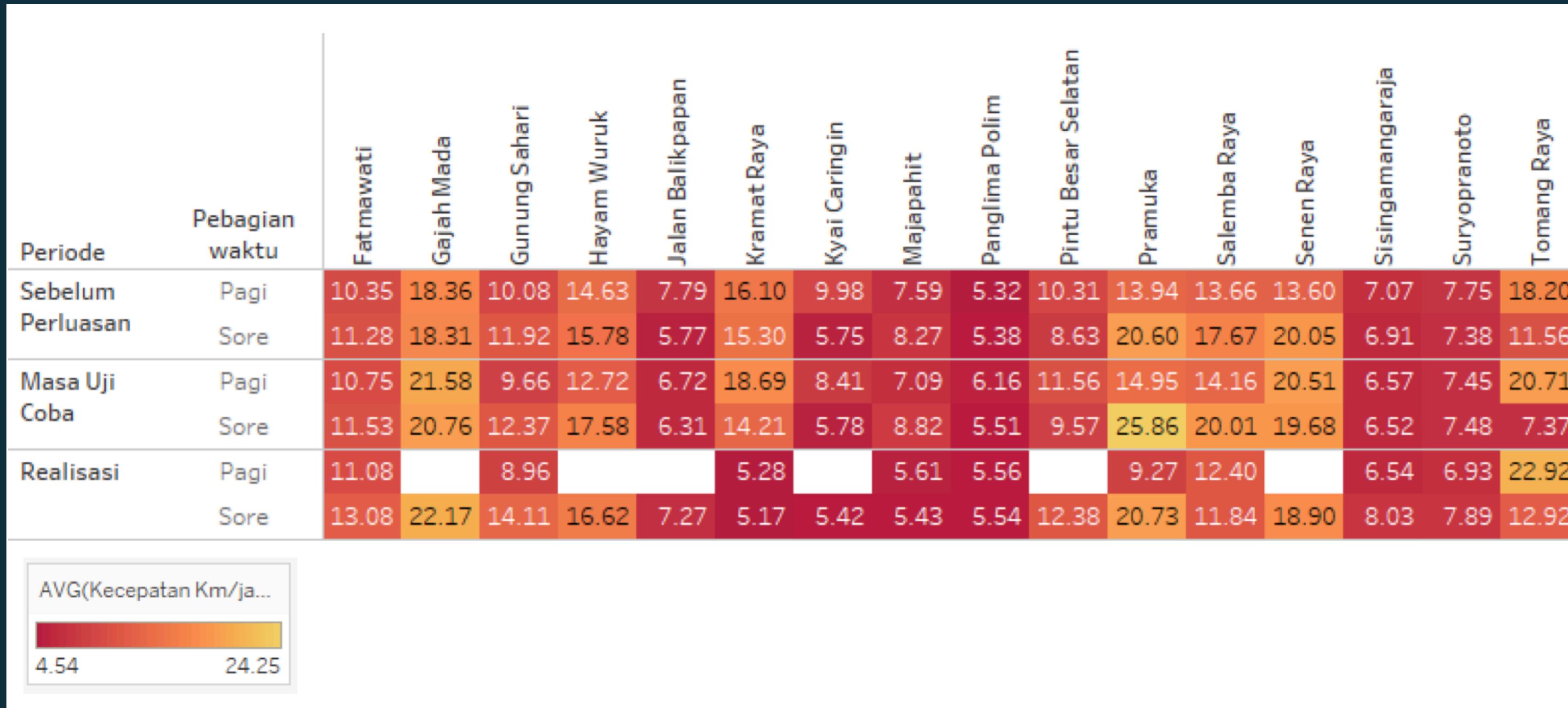
IMPACT OF MRT (1st APRIL 2019)



ODD-EVEN POLICY ANALYSIS



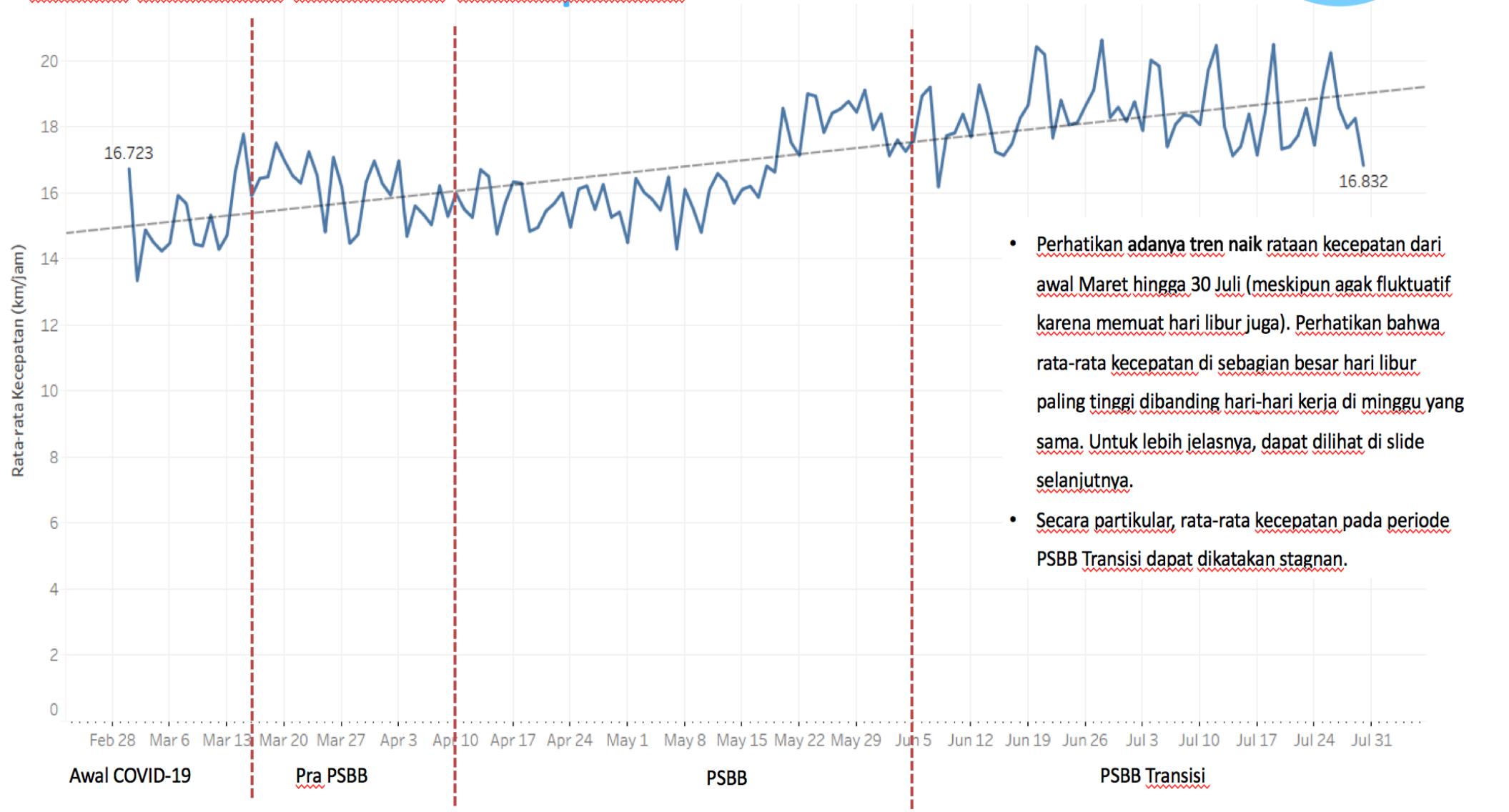
ODD-EVEN POLICY ANALYSIS



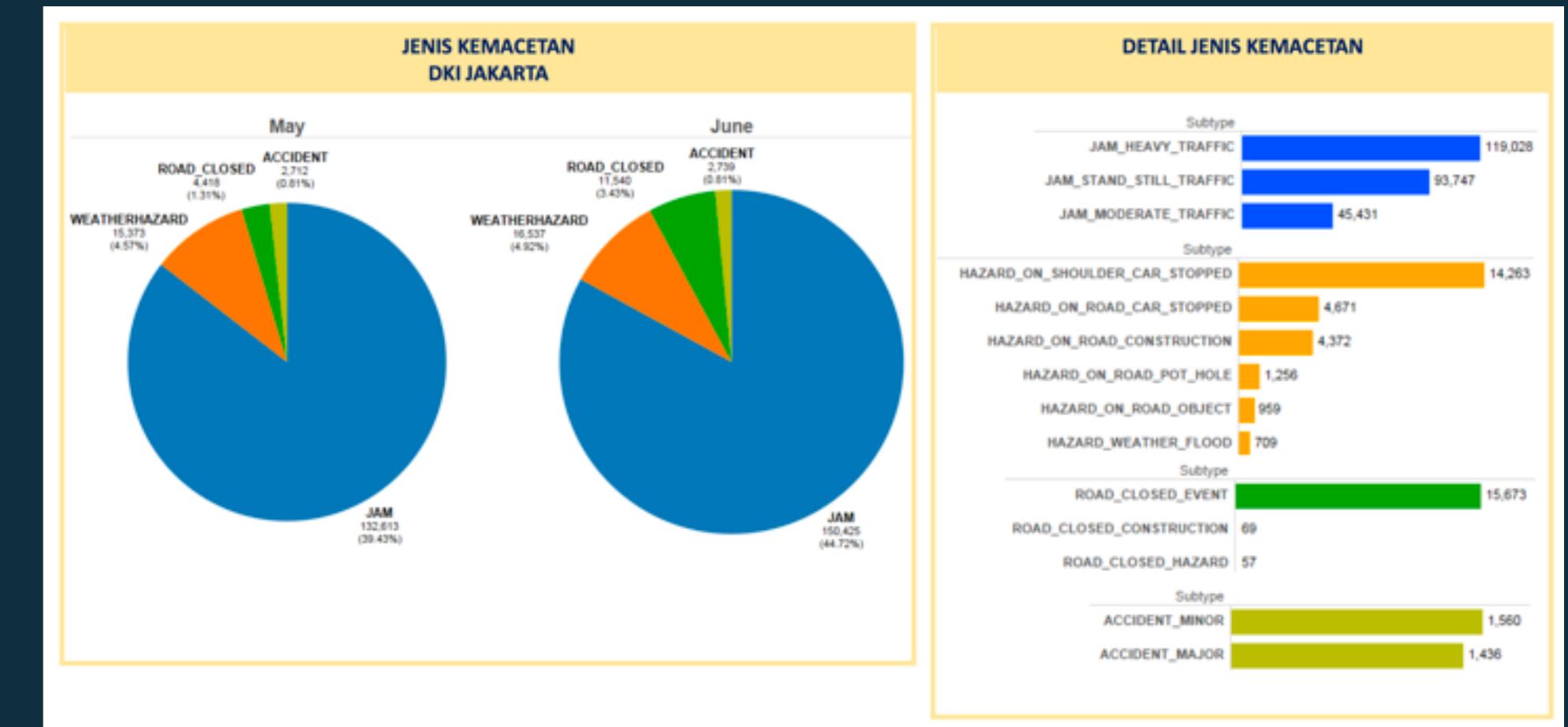
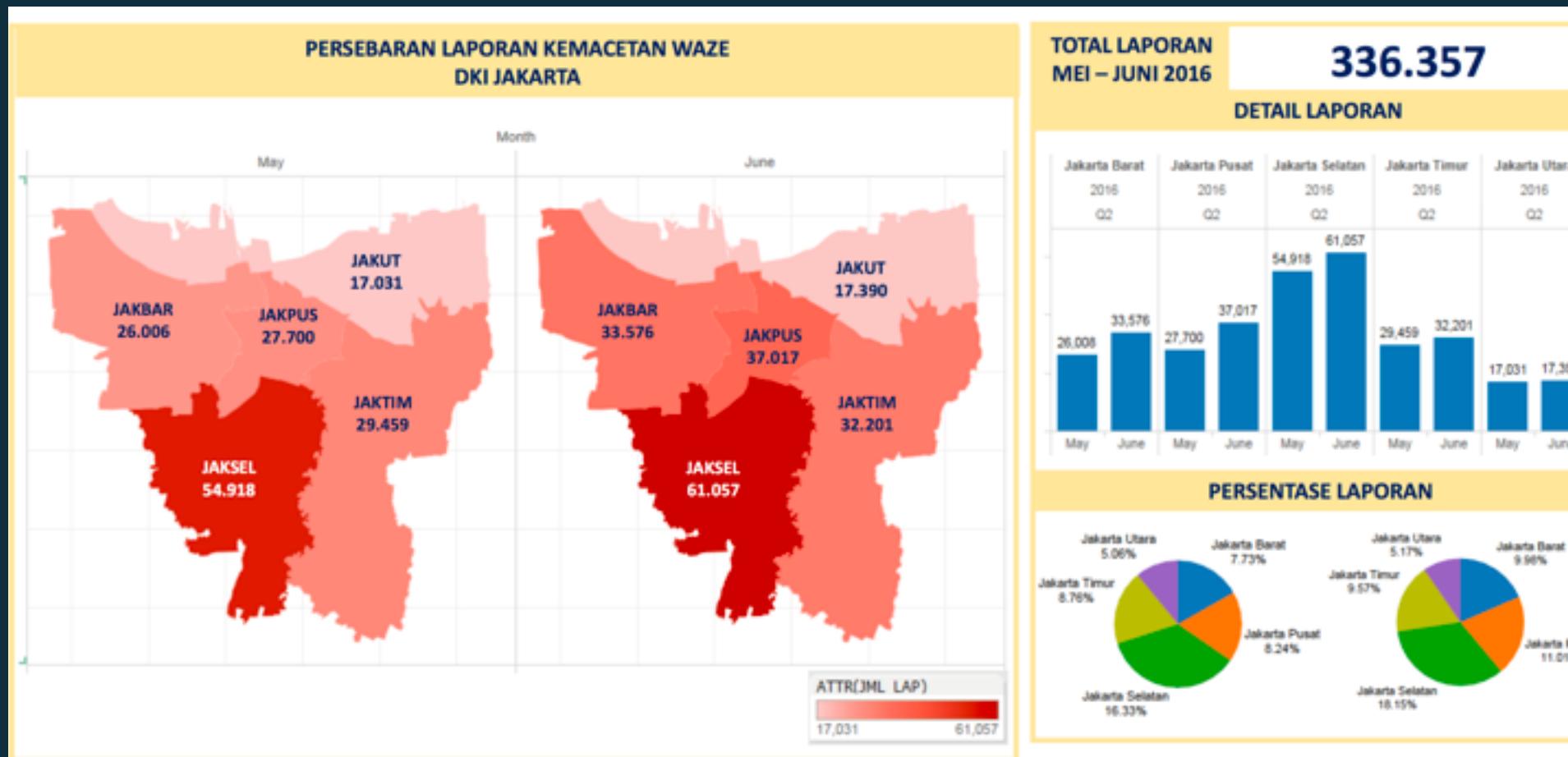
SOCIAL MOBILITY LIMITATION ANALYSIS

Jalan	Hari / Pagi/Sore											
	Monday		Tuesday		Wednesday		Thursday		Friday		Grand Total	
	Pagi	Sore	Pagi	Sore	Pagi	Sore	Pagi	Sore	Pagi	Sore		
Marunda Makmur	9.27	11.86	9.84	12.06	9.26	12.51	9.34	11.74	8.03	11.15	10.61	
Mampang Prapatan	12.35	10.19	12.12	10.46	12.07	10.56	12.62	11.94	12.91	11.59	11.68	
Tambak	12.61	12.07	11.96	10.71	11.97	12.12	13.04	11.63	11.05	12.18	11.97	
RC Veteran	12.01	13.59	12.04	13.61	12.06	14.19	12.63	14.71	12.40	14.39	13.21	
Gunung Sahari	12.78	14.44	12.81	14.02	12.35	13.85	12.51	14.30	12.83	13.95	13.39	
N1 Jalan Raya Bekasi	13.09	14.42	13.05	14.21	13.12	14.36	13.89	14.29	13.84	13.80	13.80	
Ciledug Raya	12.04	14.56	14.01	14.34	13.64	14.08	14.01	13.71	14.22	14.15	13.85	
Pangeran Tubagus Angke	13.97	13.70	14.18	14.47	14.66	14.86	14.74	14.10	13.93	14.19	14.28	
Joglo Raya	12.92	15.17	13.69	15.20	12.86	15.23	13.72	15.29	13.26	15.50	14.32	
Cempaka Putih Raya	14.19	13.57	16.24	15.18	13.80	14.21	14.92	14.67	14.60	14.16	14.50	
Fatmawati	14.45	12.83	15.55	14.47	15.54	14.43	15.97	14.55	15.23	13.79	14.66	
Karang Tengah Raya	16.64	16.57	16.67	16.63	16.84	16.05	16.44	15.98	15.83	15.65	16.33	
Pondok Gede Raya	15.99	16.96	16.90	16.26	17.31	16.47	16.64	16.71	15.94	17.59	16.68	
MH Thamrin	18.50	14.61	16.67	15.51	17.17	16.25	16.94	16.21	17.53	17.36	16.72	
Inspeksi Banjir Kanal Timur	16.31	16.95	14.59	18.10	15.00	16.12	19.92	17.53	18.34	19.11	17.23	
Raden Saleh	16.34	16.83	17.41	17.27	16.98	17.56	18.24	17.26	17.11	17.50	17.25	
Panjang Raya	16.37	19.06	16.14	18.55	16.36	18.79	15.51	19.17	16.69	19.16	17.59	
Kapuk Kamal Raya	17.99	17.50	17.67	17.50	18.05	18.10	17.87	17.48	17.50	17.34	17.70	
Kalimalang	18.41	19.33	19.55	20.40	18.18	20.38	20.06	19.83	19.27	19.85	19.56	
N2 Jalan Raya Bogor	18.46	20.15	20.42	21.26	20.78	19.93	20.98	20.03	20.62	19.21	20.19	
Lingkar Luar Barat	19.42	22.42	20.38	21.91	20.26	21.35	19.20	21.75	19.55	20.82	20.79	
Salemba Raya	20.28	21.90	20.36	21.86	20.27	23.53	21.49	23.00	21.91	22.86	21.66	
N1 Daan Mogot	19.18	22.21	22.31	22.71	22.55	23.91	23.66	23.10	23.21	23.75	22.62	
N1 Perintis Kemerdekaan	22.39	24.73	20.43	23.94	21.07	26.88	21.27	27.68	23.10	25.49	23.79	
I Gusti Ngurah Rai	23.17	24.99	23.80	22.84	25.32	23.63	25.86	24.36	26.39	24.68	24.43	
Grand Total	15.94	16.97	16.56	17.12	16.57	17.33	16.91	17.28	16.81	17.21	16.87	

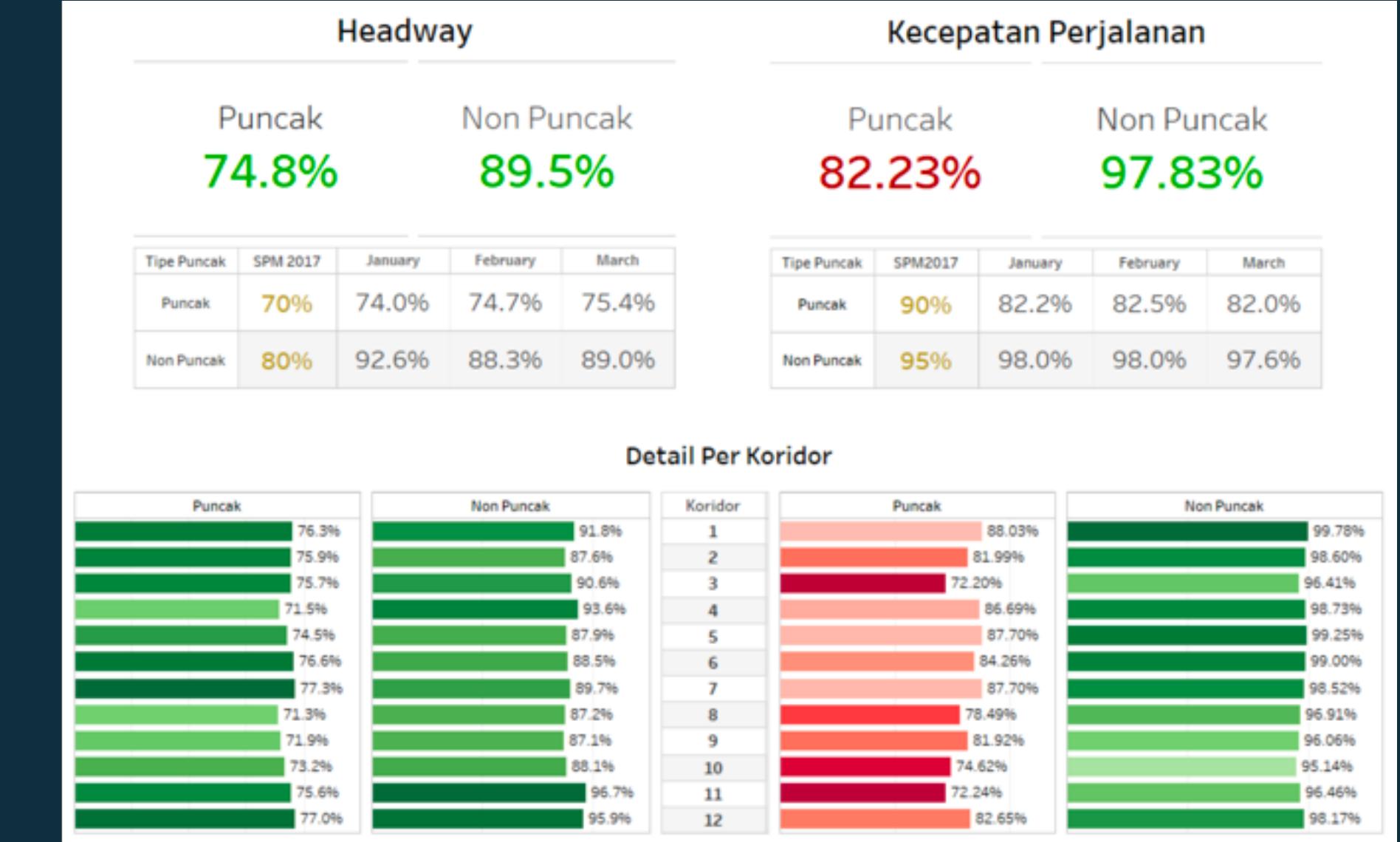
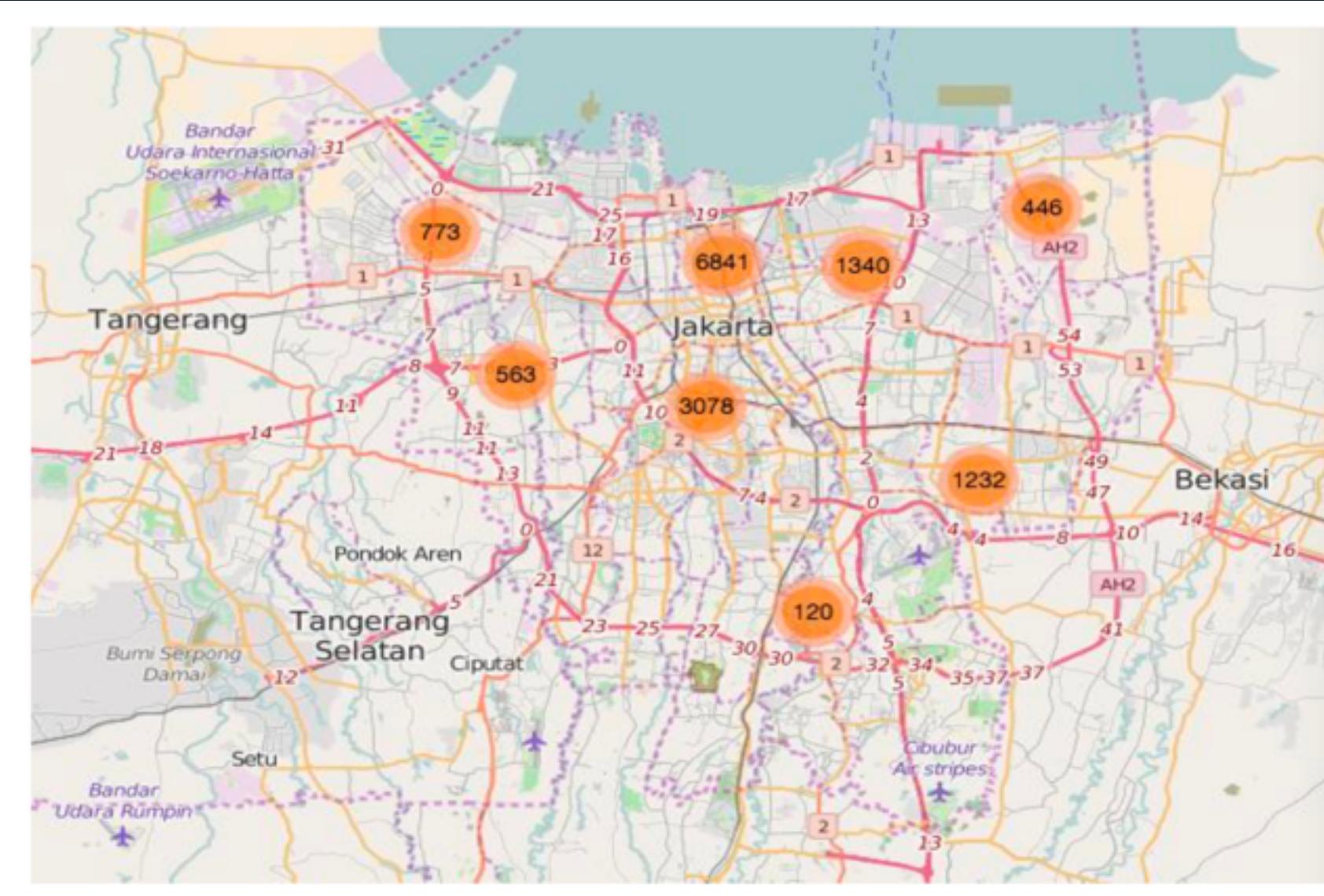
Tren Harian Rataan Kecepatan



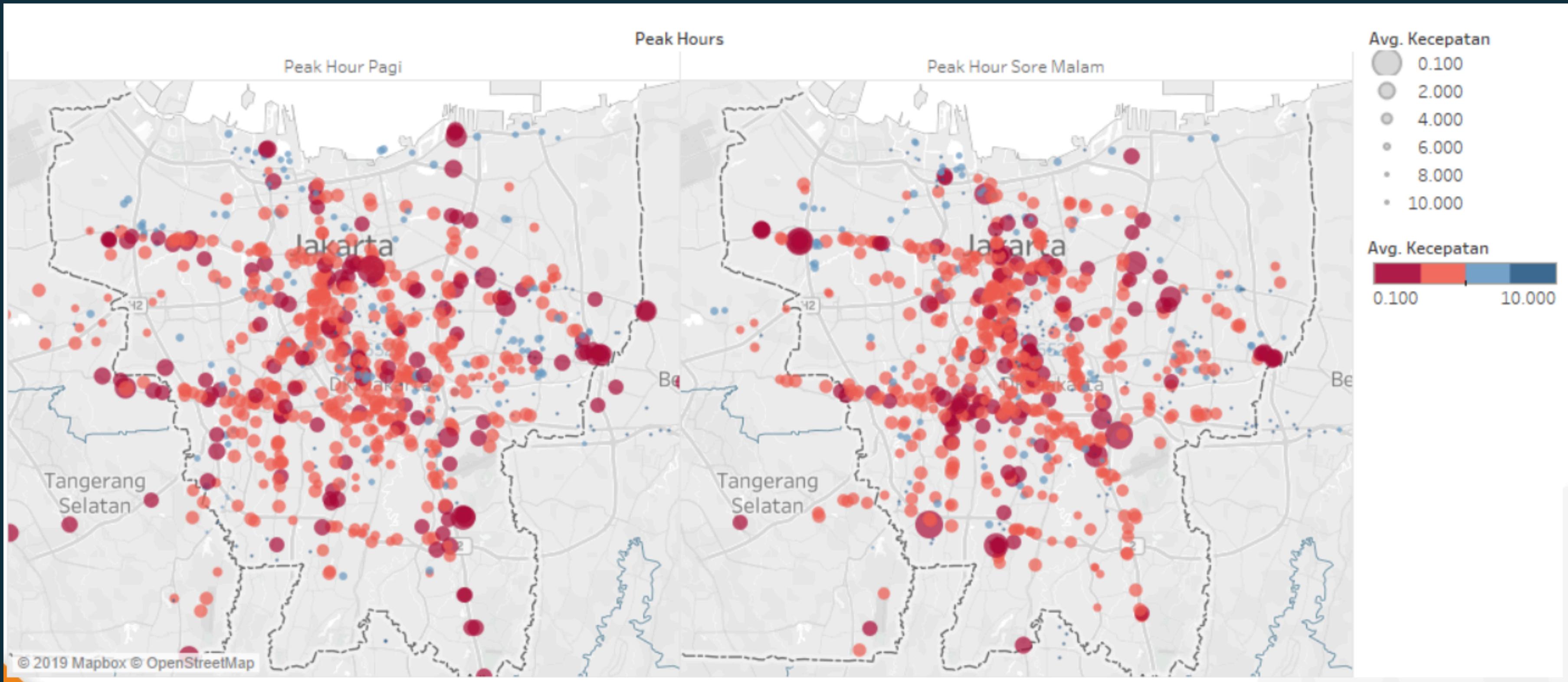
MULTI-MODAL TRANSPORT ANALYSIS



MULTI-MODAL TRANSPORT ANALYSIS



MULTI-MODAL TRANSPORT ANALYSIS



WISH-LIST

On-going exploratory & aspirational initiatives

- Citizen comprehensive single view
- Systematic causal-impact policy analysis
- Robust predictive model for flood, traffic, crime, waste
- Citizen movement via Telco & MRT data
- Multi-modal transportation analysis
- Media & social media analysis
- Geo-spatial & building Analysis
- CCTV (video) analysis

Thank You!

