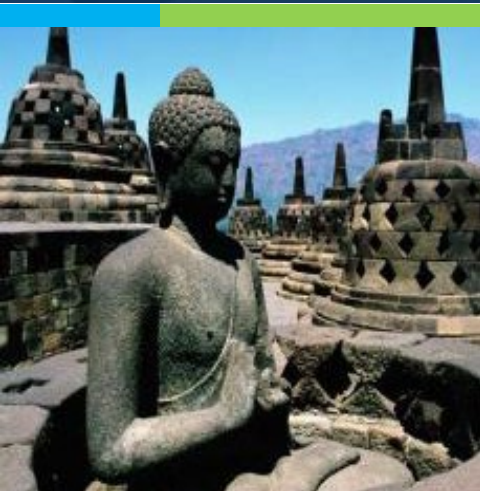


# Mobile Positioning Data Make sub Region Tourism Visible

RIFA RUFADI

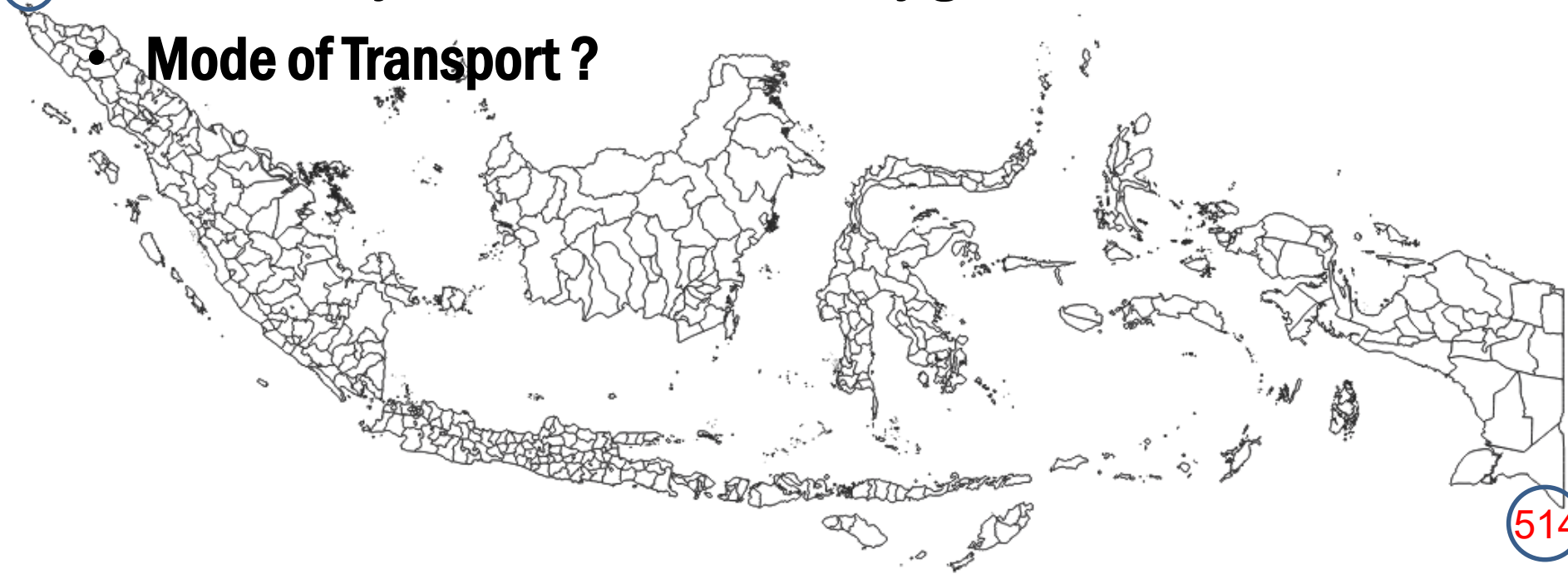




# Domestic Tourism

- **34 Province → 514 Kabupaten**
- **256 Million People**
- **How Many Domestic Tourism ?**
- **How Much Their Expenditure ? For what**
- **Where they come from, where they go**
- **Mode of Transport ?**

1



514



# INBOUND & OUTBOUND THROUGH 10 COUNTRIES BORDER



**NOT ALL GATE  
HAVE 24/7  
IMMIGRATION  
SERVICE**



**Under Coverage  
Inbound & Outbound  
Data (7%)**



**BORDER SURVEY is  
TOO EXPENSIVE**



# COLLABORATION IS THE SUCCEES KEY



BADAN PUSAT STATISTIK  
Statistic Indonesia

2016  
&  
2017



- BPS define concept & method of conversion MPD to Inbound Tourism Statistics
- MoT support budget to apply the method in border country MPD from the largest Mobile Network Operator

2018



BADAN PUSAT STATISTIK  
Statistic Indonesia



- Fine Tune Inbound MPD to get better Tourism Statistics
- Produce Domestic Tourism Statistics using MPD
- Training
- Write Handbook
- Develop QAF



# LEES PEOPLE MORE OUTPUT



Team Leader



Alfatihah Reno  
BPS

Data Scientist



Amanda Putra P.  
BPS

Software Engineer Statistician



Ignatius Aditya S.  
BPS



Agus Ruslani  
BPS



Wa Ode Zuhayeni  
BPS

Data Scientist



Amalia Sharfina S.  
Telkomsel



Amin Rois Sinung  
BPS

Data Engineer

7 staff can handle work load that usually need 8.000 employee for each quarter on HH survey<sub>5</sub>



# BUDGETING STRATEGY 2018



Rp 40 Billion

DOMESTIC  
TOURISM  
STATISTICS

38 %

62 %



MOBILE POSITIONING DATA



HOUSEHOLD SURVEY

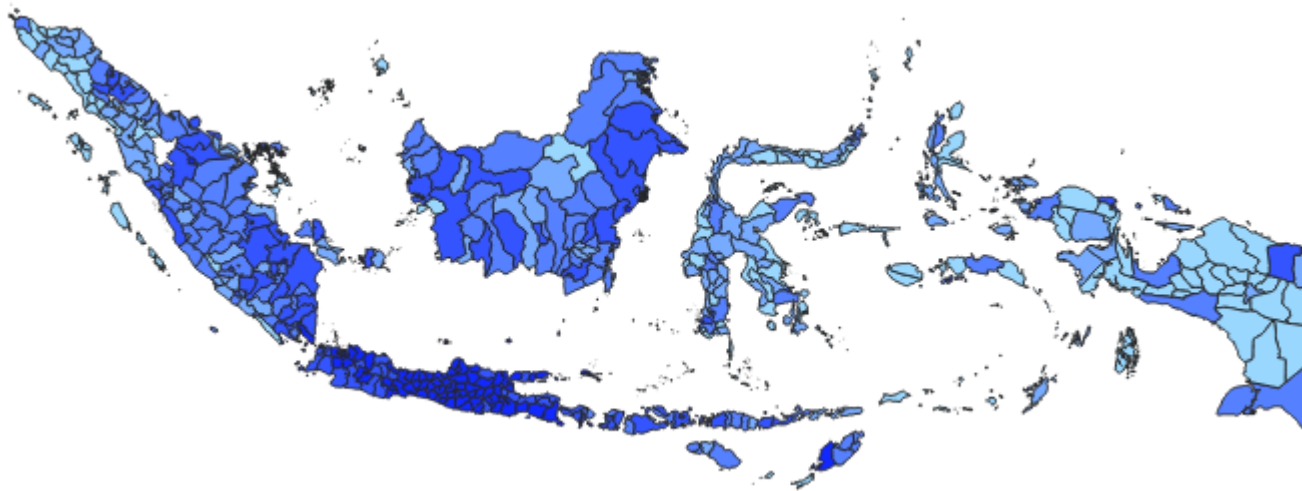
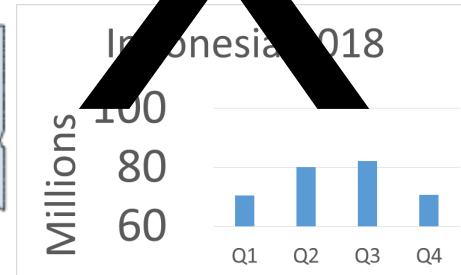


# LESS PRICE DEEPER DATA



Number of Domestic Tourism Yogyakarta Origin

~~62 %~~ **2020**  
**Budget**



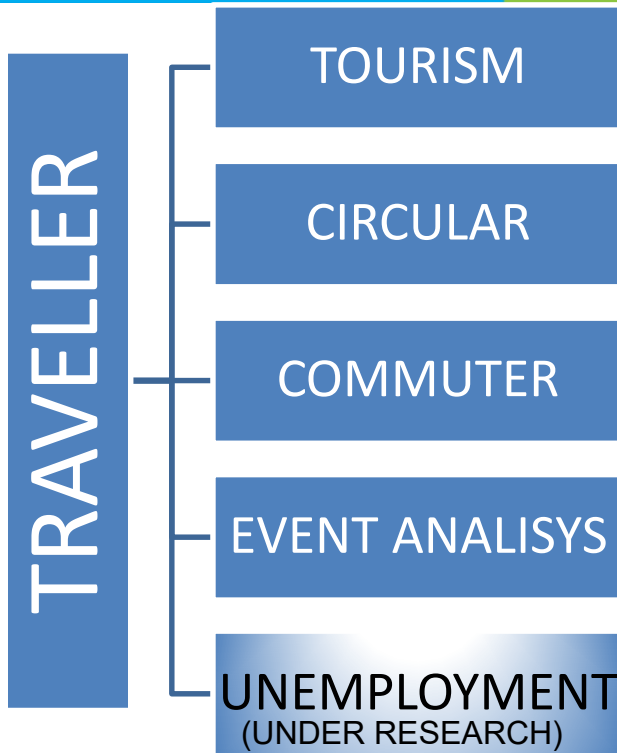
**38 %**  
**Budget**



Before non mpd adjustment

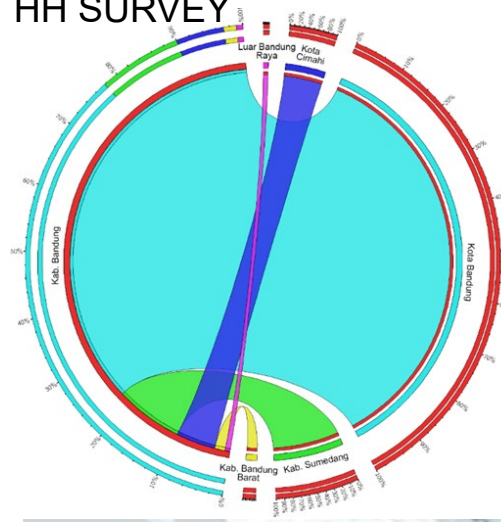


# LESS BUDGET MORE DATA IN ONE STEP

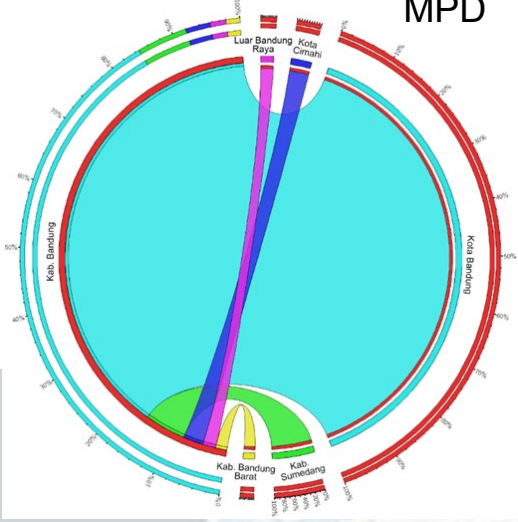


## COMMUTER IN BANDUNG AREA 2018

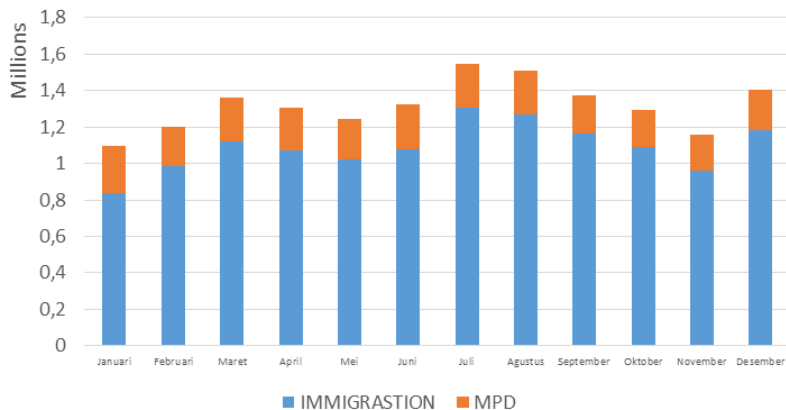
HH SURVEY



MPD

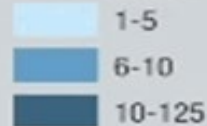


INBOUND TOURISM 2018



### Other destinations for Asian Games visitors out of a 1000 people

Destinations exclude: Jakarta, Palembang, Bekasi, Tangerang, Depok, Bogor



Asian Games locations







# SUMMARY

- MPD can be used for official statistics related to
  - Number of people
  - Movement
  - Location
  - Duration
  - Density
- Collaboration and Mutual Trust among Institutions is the Key for Success of using MPD
- MPD can be used for Official Statistics if NSO have access to MNO data, need regulation and Global Recommendation

