



MOBILE POSITIONING DATA: A NEW DATA SOURCE FOR MEASURING POPULATION MOBILITY

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INDONESIA'S INITIATIVES WITH BIG DATA FOR OFFICIAL STATISTICS



Tourism Statistics



Price Nowcasting



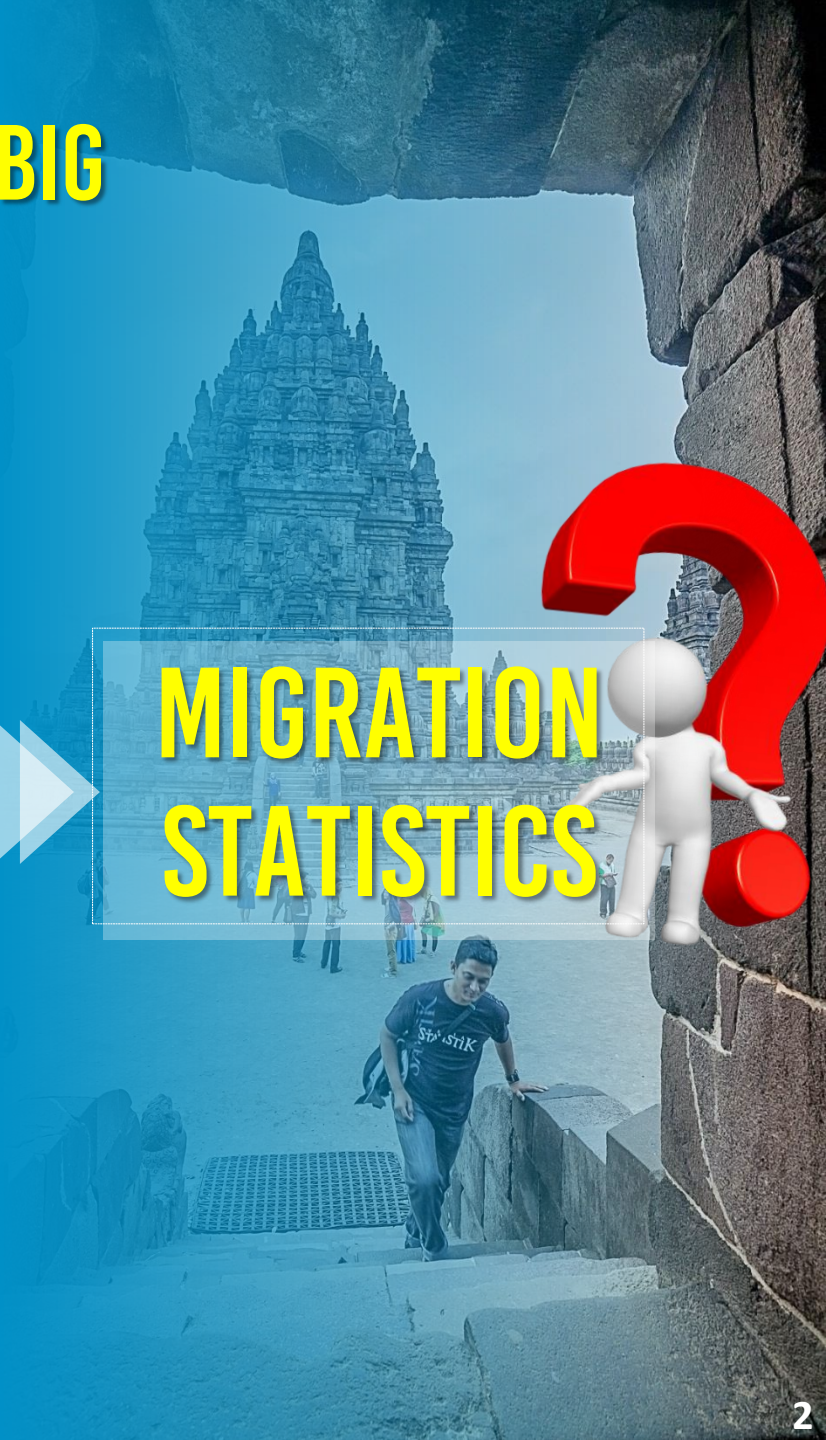
Commuting Statistics



Rice crop production



MIGRATION STATISTICS



DATA SOURCES FOR COMMUTING STATISTICS

LBS



CDR



MOU

BUY THE SERVICES

Location Based Service (LBS)

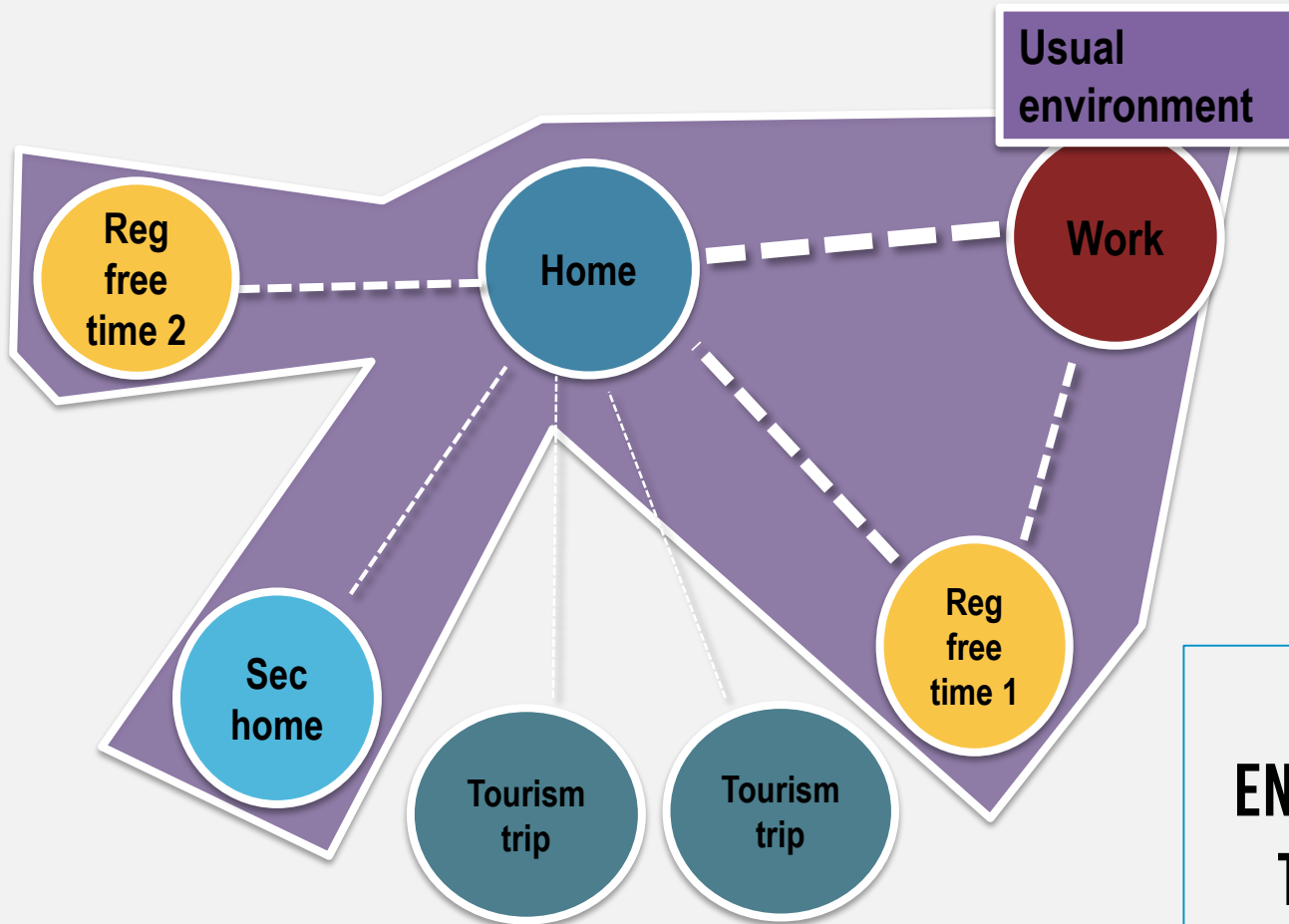
based on geo-data to calculate the presence of cellular subscriber in particular area

Call Detailed Record (CDR)

Based on geo-data to calculate all transactions of cellular subscriber in particular area



MODEL ORIGIN-DESTINATION



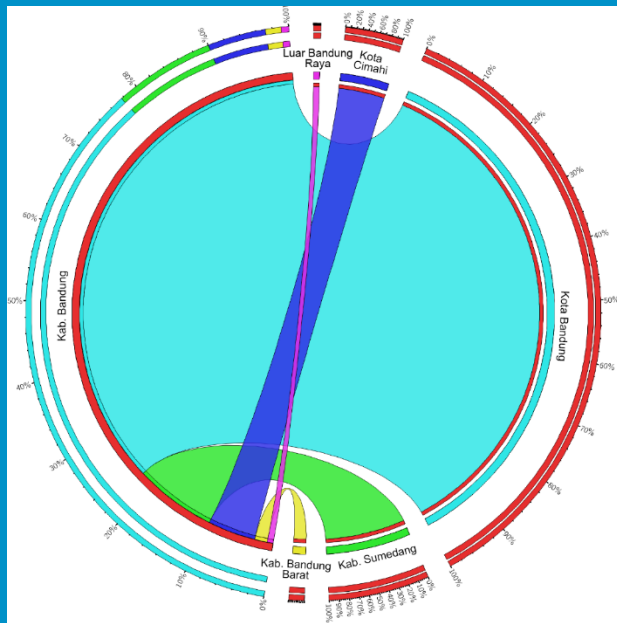
TRIP IN USUAL ENVIRONMENT USED TO IDENTIFY THE COMMUTER AND CIRCULAR ACTORS

COMPARISON OF SURVEY & MPD

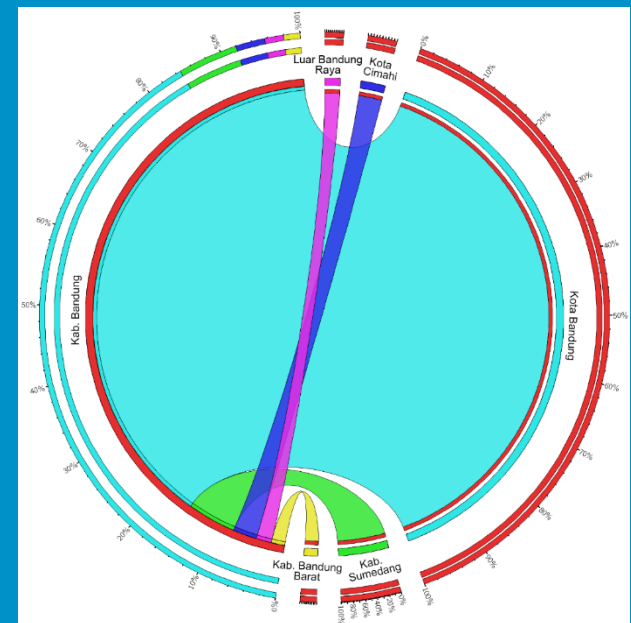


	SURVEY	MPD
REGION	BANDUNG REGENCY	BANDUNG REGENCY
PERIOD	JUNE, 2017	DECEMBER, 2017
UNIT SAMPLE	HOUSEHOLD SURVEY	TELKOMSEL SUBSCRIBER
SAMPLE SIZE	16.572	~ 2 MILLION?

COMMUTER ESTIMATION COMPARISON USING SURVEY VS MPD₍₂₎




SURVEY



MPD

TRACKING TRANSNATIONALISM WITH MOBILE TELEPHONE DATA

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1. HOW MANY TRANSNATIONAL PEOPLE ARE THERE **ORIGINATING** FROM INDONESIA?
 2. **HOW DO** THEY TRAVEL AND **WHO** ARE THEY?
 3. HOW SHOULD THIS **NEW INFORMATION** ON TRANSNATIONALISM **BE UNDERSTOOD** FROM THE POINT OF VIEW OF NATION-STATE AND TERRITORIALITY?

ADVANTAGES AND LIMITATIONS



ADVANTAGES

1. MPD CAN DESCRIBE MOVEMENTS BETWEEN TIMES
2. THE LONGER THE DATA SERIES THE BETTER THE ACCURACY PRODUCED
3. NEAR REAL TIME DATA

LIMITATIONS

1. BOUNDARIES ISSUE
2. PRIVACY ISSUE
3. DATA AUTHORIZATION
4. NEED TO ADJUST CONCEPTS AND METHODOLOGIES WITH THE CHARACTERISTICS OF BIG DATA

A young boy with short brown hair is looking through a large magnifying glass held over his right eye. The background is a solid blue color. The text is overlaid on the left side of the image.

**STATISTICS ARE
THE EYES OF
THE POLICYMAKER**

- KEITH MUHAKANIZI -

THANK YOU