



NATIONAL URBAN DEVELOPMENT PROGRAM:
CITYPLANNINGLABS
PROGRESS REPORT
SPRING 2015

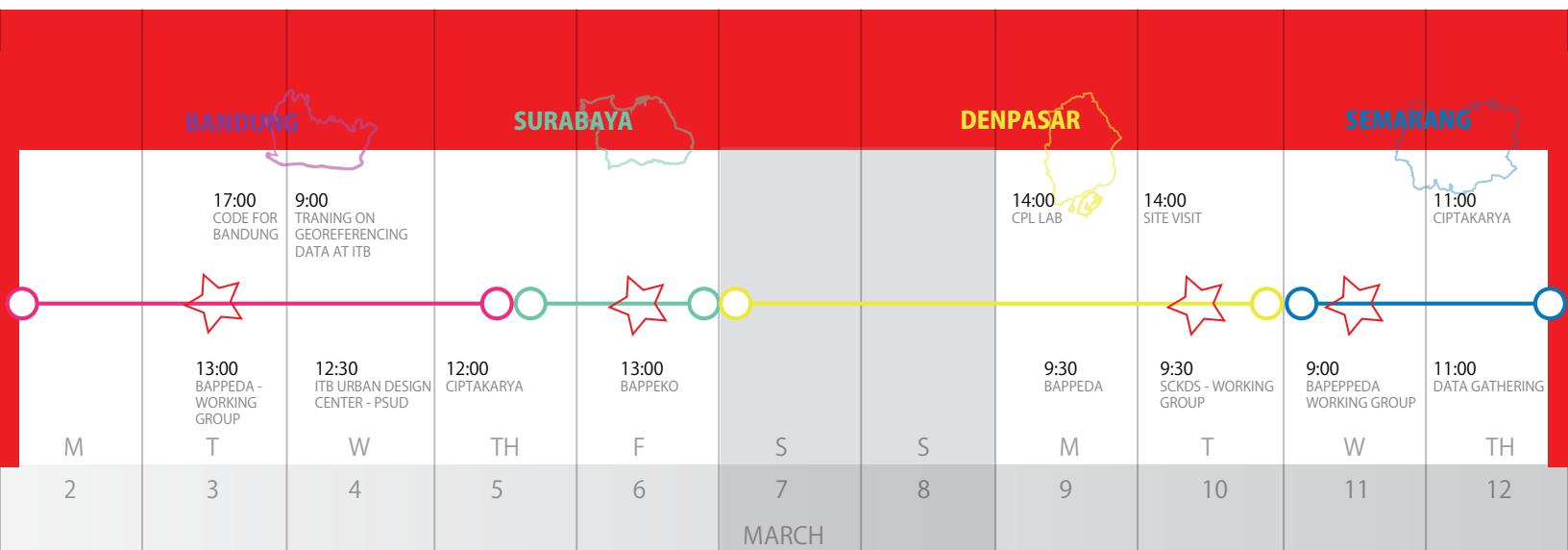
Matt Steele GPS and Planning Specialist



World Bank | City Planning Labs

SCHEDULE

SPRING ENGAGEMENT



CPL Consultants traveled to each city to meet with the working groups formed, gather additional data and make preparations for the proposed workshops and trainings. This was the second engagement for the second phase of CPL. The trip was originally intended to also introduce CPL's local counterpart of geospatial technical consultants, but the local firm's contract is currently in limbo until the source trust fund's end date is extended.





This photo was taken in the Informal Settlement of
Jematang, Denpasar, Bali
Mr. Chopra was given a quick tour of Jematang during his
visit to Denpasar in the last engagement.

SUMMARY

Substantial progress has been made in each city. In this second engagement, consultants were able to meet with proposed working groups and gather substantial data. Access to information and internal communication has been, and will be, aided by the issuance of mayoral decrees in the cities we are working with, save Surabaya, where a pre-existing relationship due to other engagements officiates the consultant's activities and requests.

AIT has hired new staff with extensive planning and GIS skills. One of these new consultants, Ravi Chopra, flew to meet us in Denpasar. He directs the GIS lab at the Indian Institute for Human Settlements and has worked extensively on slums development in India. He appears highly competent and well positioned to provide expertise on informal settlement management as well as spatial data infrastructure. He is adept at creating online data management dashboards, a skill that may prove useful in our work with each city. For example, he can direct the local team to help in building data dashboards for each city. The other key consultant, Dr. Awais Piracha, is distinguished faculty from the University of West Sydney, where he directs their program on geography and urban planning. He has a Masters in Environmental Engineering and a Masters in Planning, as well as a PhD in planning. While their availability is limited, their support will greatly enhance the analytics CPL can provide to cities.

Semarang has made the most progress. This is in part because its city government has been proactive and forthcoming with city resources. City staff have provided extensive access to data and quickly passed enabling legislation.

CPL consultants face continued hesitance among Bandung's city staff for moving forward with the engagement. The expressed concern is the lack of formal relationship between the Bank and the city. Pak Anton, the managing lead in BAPPEDA, Kota Bandung, is the primary source of this concern. A Mayoral decree would insist on his

cooperation, and has been drafted by the Mayor's consultants, Aryani Murcahyani and Astrid Haryati. Both consultants are running the decree through the City's legal department and it should be processed shortly, thus enabling the work of CPL's consultants in Bandung.

Denpasar's analytics are slowed by low-quality data. Significant inconsistencies have been found with the data provided by the city. Since data development and creation is not something AIT is willing to do, such work will need to be done by the technical consultants in partnership with city staff. Further studies of informal settlements necessitate the implementation of a site-survey, which AIT did not budget for previously. AIT has proposed a \$500 USD stipend for student surveyors, in partnership with a local university. AIT can't visit to oversee the process, but they have provided Pak Putu instruction over Skype to do so. In the future, I suggest collaborating with the Indonesian open street map team for surveying.

In each of the cities, strong relationships to a prominent public university have been cultivated. Pak Helmi of the UNDIP has helped connect the team to a massive archive of data for Semarang. Local faculty in each location are open to collaboration on training for city staff. Local faculty will assist with the surveying proposed for Denpasar.

Surabaya city staff request more regular engagement, and wish to see analytics and training combined. A constant engagement with highly competent international planning consultants will be important for moving forward in that city. This will be difficult to provide given AIT's consultant's distance and their limited budget on travel. Thus the proposed training program will involve a large commitment from the local CPL firm and may require more involvement from WB spatial planning consultants.

The major **next tasks relate to preparing for the workshops**, which have become an intermediary point, whereby AIT is expected to have produced and present preliminary analytics for feedback. Bandung's workshop will be a collaboration with PSUD. Semarang should be ready to host



a workshop by May. Surabaya's workshop will showcase the analytics built through the training that will be provided to the staff for feedback.

A critical piece of the CPL initiative is the development of Spatial Data Infrastructure.

This core component of the initiative was to be implemented by a Local Team of Geospatial Engineers who can provide ongoing technical assistance to the cities in developing systems and programs for managing, producing, updating, automating, quality controlling, editing, and disseminating data. These services would be of immediate value to each of the cities and will aid in building critical relationships for accessing data and making use of it for the series of analytics proposed for each city, the primary responsibility of AIT. While the firm that would be implementing this component of CPL was selected through the Bank's contracting process, their contract has remained in limbo while the trust fund that would fund the contract is extended through the end of the year. Without their consistent local presence, progress in each city has been slower than originally hoped.

Key to the success in each city has been the availability and capacity of the local counterparts to maintain communication for each city.

Pak Helmi in Semarang has been useful in accessing data and maintaining regular communication with Semarang. Pak Leo has adequately maintained communication for both Surabaya and Denpasar. Bandung's communication has been unproductively complex and infrequent. Pak Santo, a close friend of Pak Anton, presented himself as the main point of contact for the World Bank, only to be supplanted by Rizqi. Rizqi represents ITB and the Bank, and holds more responsibility over CPL on the whole. Further his availability has been limited due to obligations as ITB faculty. Additionally AIT has appointed their own local counterpart, Aditya, who lacks highly effective communication skills. Further the focus of communication has alternated between the both of the Mayor's consultants and Pak Anton of BAPPEDA. Any communication issues will likely abate when the local counterpart is mobilized, as their presence will be consistent and of immediate value.

Immediate Overarching

Next Steps:



Coordination

1. Review inputs for workshops
2. Develop proposal for website
3. Send Bi-weekly letters
4. Establish a better and more consistent communication strategy for the cities.
5. Make progress on a legal basis for Bandung's engagement
6. Figure out how to build synergies between the Open Data team and the Disaster Risk Management team activities and engagements.
7. Revisit and update workplans



Analytical Team

1. Implement Denpasar survey
2. Clean related data and structure analysis for Denpasar
3. Develop Training Program for each city, focusing first on Surabaya.
4. Finalize program and structure for Surabaya's engagement.
5. Prepare Urban Growth Analytics in Semarang for the Semarang workshop
6. Finish Content Resource Packages



Local Team

1. Establish local counterparts for each city.
2. Develop SDI Plan for each city
3. Come up with a strategy for the web portals and online resources to be provided, in communication with the open data team.
4. Build partnership with BIG and local universities.
5. Propose plan for data development and create an array of tools for each city.

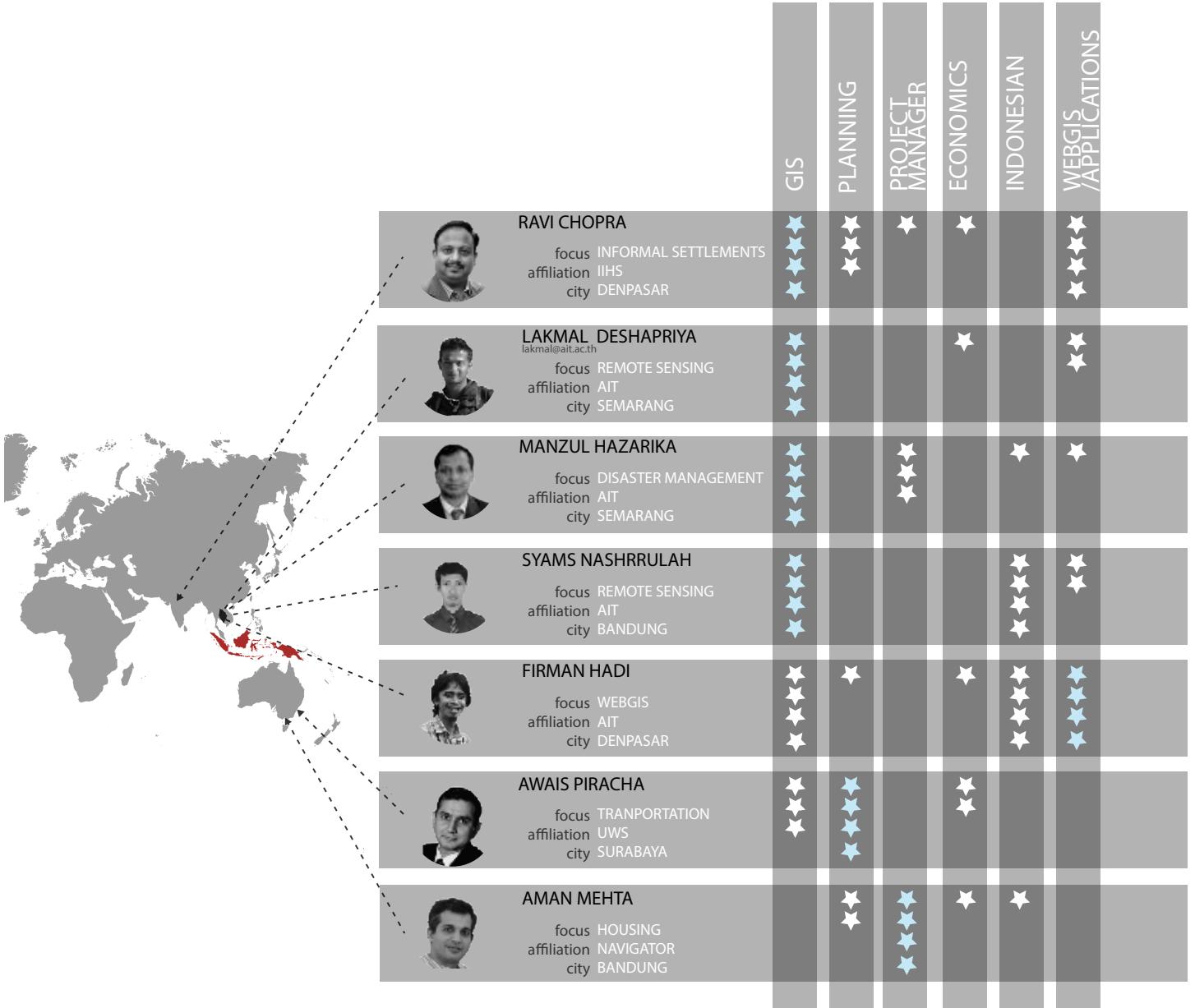


Waiting to hear Mayor Kamil Speak about Open Data at the Open Data Event in the
Bank of Indonesia Building, Bandung
(April 20th)

The Mayor is a major advocate of Open Data. He discussed existing legislation at the provincial level that requires that Bandung make its datasets available and accessible to the public.

City Infra Report Card		Denpasar	Bandung	Surabaya	Semarang
Base Map	6	6	4	5	5
Information Sharing	5	2	7	5	5
Software	5	2	7	5	5
Data Quality	5	2	7	7	7
City Development Ambition	5	8	6	4	4
Facilities	7	2	6	6	6
WebPortal	6	7	8	4	4
Strength of University GIS Center	5	5	6	7	7
Data Inventory	5	5	7	9	9
CPL Progress Report Card		Denpasar	Bandung	Surabaya	Semarang
Excitement	6	5	7	5	5
Relationships Built	7	7	7	5	5
Understanding of Capacity	7	7	6	5	5
Analytical Theme Selection	5	4	9	5	5
ToRsFlushed Out	5	5	5	7	7
Departmental Commitment	5	4	5	5	5
University Relationship	5	9	7	5	5
City Coordinator	5	7	7	5	5
Working Group Formed	7	4	5	5	5
Work Plan	4	2	4	5	5
Formal Agreement	5	5	7	5	5
Workshop Planning	6	2	1	7	7
Training Program	5	2	6	4	4
Budget Allocation	4	1	2	5	5
Access to Data	5	2	6	5	5
GIS Staff Hired	5	2	6	7	7
Data Management System	5	2	7	6	6

weak  strong



TEAM COMPOSITION AND INDICATIVE TIME INPUTS

Key Personnel			Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Indicative Time Inputs
Name	Position		1	2	3	4	1	2	3	4	1	2	3	4
1. Aman Mehta	Senior Project Manager and Team Leader	Home	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	60.0
2. Manzul Hazarika	Geospatial Data Specialist and Deputy Team Leader	Field	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	70.0
3. Awais Piracha	Senior Urban Planning and GIS Specialist	Home	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	40-50
4. Ravi Chopra	Urban Planning and GIS Specialist	Home	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	20-30
5. Leo F. Helmi, Aditya	City Coordinators (GIS Specialist)	Home	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	42.0
6. Petrus P. / Luwin E. Darwini	Spatial Analyst	Field	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	22.0
7. Firman Hadi	WebGIS Specialist	Home	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	20.0
8. Dimesh Dharamthilake	Web Development Specialist	Field	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	20.0
9. Syams Nashrrullah	Remote Sensing Specialist	Home					■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	15.0
10. TBD	Others as needed	Field					■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	15.0

Legend:

- Home Continuous
- Field Continuous
- Home interim
- Field interim



KEY CONCERNS

1. Improve Communication / Local Consultant

More regular communication and active engagement is needed. This includes communication to city officials as well as local consultants and university staff. Regular communication is the primary barrier to making progress in each city. **Communication will be greatly aided once the local counterpart is hired.** The technical assistance the local counterpart will provide will be of immediate value for local governments. This team will be able to improve data systems and help build applications that will systematize the production, maintenance and dissemination of data. A constant presence will allow for a continuum of communication between the Bank, expert consultants and city staff. Data quality is a major issue that the local team can begin to tackle by helping build systems to improve existing data as well as future data through automated and online data processes. Regular reports from City Coordinators have yet to manifest, but progress is being made. To ensure systematic formal engagement, it would be wise to regularly and formally communicate to the cities. I would recommend letters to cities are sent more regularly, potentially every two weeks for each.

2. Training

Unlike the previous phase for CPL, training has become a component to each engagement, especially Bandung and Surabaya. In those two cities, the analytics are expected to be the production of a collaborative process that involves training and oversight by CPL's consultants. Such intimate collaboration will ensure that the analytics produced are owned by and informed by local staff. Further the more the analytics are co-produced the more they will inform actionable plans of infrastructure development. Unfortunately given the limited ability for AIT's consultant's to travel, the level of engagement required for co-producing the proposed analytics in Bandung and Surabaya will only be possible through the effective use of a local counterpart and more involvement by WB consultants.

Bandung and Surabaya's city staff requested that intensive training occur before the analytical process began. Because of these requests and AIT's limited ability to travel, AIT proposed an intensive training to take place at AIT's campus in Thailand.

When we presented the prospect of training to the cities in our last engagement, each showed interest in joining. While Bandung and Surabaya had originally requested the training, it appeared of great interest to the

other cities as well.

Unfortunately the cities were unable to come up with the money in time to attend during the proposed dates. It appears that travel funds for staff was a key item under scrutiny across Indonesia during the last wave of budget reforms. Denpasar was in the end the only city able to fund the travel of consultants. Bandung was under the false impression that the travel would be paid for by the Bank, despite AIT's clarifications during our last visit. Upon touching base with the cities, each still appears interested in coming for an intensive, but they would need more time to find funding for the travel. AIT has suggested that they could compensate very cheap airfare through budget airlines like AirAsia.

Hosting the training in Thailand was in AIT's interest because lodging and travel costs for their dispersed team eat tremendously into their budget. AIT has provided intensive training to 50 organizations from 20 countries for the last ten years. They have an established protocol, an extensive faculty to draw from, and high quality facilities to provide this training. Bringing people to an external locale would have ensured an intensive engagement and expedite the progress on analytics in each city with the consultants. The key participants would then have become critical bridges for information and can augment both capacity building and data development, once trained. Further the allure of going somewhere different would have made the participants more open to learning and more engaged generally. For these reasons AIT is still highly keen on seeing intensive training at AIT occur, at a later date.

Training will also take place in the cities but they will be limited in breadth and frequency given the distance AIT must travel to conduct them. AIT will work with the local counterpart and partner with local universities to provide this training.

3. **Surveying**

Both in Bandung and in Denpasar the focus of the analysis will be on informal settlements. Because these settlements are informal, there is little data available at the micro level. For this reason a survey will need to be conducted to map and analyze the settlements. In Denpasar, AIT will provide a small per diem to student participants. Pak Putu Perdana will oversee this process. Because AIT's consultants can not physically oversee this process it is unclear if the outcomes of this survey will be useful. Alternatively the Humanitarian Open Street Team (HOT), based out of Jakarta, might be available to provide more involved surveying techniques. This option will be explored in the near future. HOT is already a vendor and recently worked closely with Pak Iwan Gunawan to conduct a slum redevelopment survey in Yogyakarta. HOT has developed methods for providing consistently high quality data that meets national data standards set by BIG. For example, HOT provides surveying apps to students or local surveyors.



4. Work closely with the World Bank Open Data Team

CPL's consultants should work more closely with and in the same cities as other engagements, such as the Open Data initiative, led by Noriko Toyota and the disaster management work, led by Pak Iwan Gunawan. The World Bank's Open Data Team has made substantial progress on data development, access, and inventorying. In doing so they have also built critical relationships in Bandung and in Jakarta. They have also developed a thorough understanding of the legal parameters surrounding data use and can prove helpful in addressing barriers relating to accessing data. The WB Open Data team can also aid in integrating data systems at every level of government through the CKAN system. The team is also highly networked into the communities of data scientists in Indonesia. This privileges them to regular updates on the relevant data happenings throughout Indonesia.

Pak Iwan Gunawan has been conducting a spatial analytical study in Yogyakarta for incremental development of informal settlements. He is replicating this strategy in Jakarta. He works closely with local university faculty and has gone through the necessary steps for accessing data and working with city governments. His insights, relationships, and involvement generally could greatly expedite progress on the proposed analytics for each city. Coordinating spatial planning studies throughout Indonesia will provide more consistently comparable analytical framework, allowing for city to city comparisons.

5. Workshops

Currently the consultants are planning for the workshops to function as an intermediary milestone, whereby preliminary analytics will be presented and feedbacked. Such a presentation will gather buy-in from local participants and ensure that projects have impact by incorporating feedback during a stage where that feedback can be incorporated and a new direction taken if necessary. Previously the workshops for CPL operated as the initiation of the analytics proposed and functioned as the extent of that city's engagement.

Surabaya's workshop will showcase the analytics conducted at an intermediary point, but given that the proposed training program will produce the analysis largely with the local consultants, the workshop for Surabaya will be as much an opportunity for AIT to provide feedback as other city staff. Bandung's workshop will be co-facilitated with PSUD and offer the opportunity for PSUD's staff to engage the public for feedback on the proposed plans. Semarang's workshop will showcase the work to date for Urban Development Strategies

Assuming the local consultants are in play in the near future, the Workshop may also be an opportune time to introduce and feedback a plan for SDI development for each city.



Open Data Team, Open Data Day, Bank of Indonesia Building,
Bandung
(April 20th)

Robert on the far right is helping build a data inventory in Bandung with DISKOMINFO. On his left is Pandu Kartika, the lead organizer for Code for Bandung. He and Prasetyo Andy, on Noriko's right, are interested in building apps for data development and has offered to support technical assistance by connecting CPL consultants to local start up community interested in building applications or making use of city data.



meeting with Open Data Key figures at the national and local level.
Bank of Indonesia Building, Bandung
(April 20th)

BANDUNG

DECEMBER, 12-14th, 2014



The city of Bandung is in an exciting time. Mayor Kamil is tech savvy and a proponent of Open Data. He has created the Bandung Command Control Room as a space to make use of city data. The Open Data initiative is already working with DISKOMINFO in collecting data and building a data portal.

While his current enthusiasm for innovation and development is promising, the Mayor has inherited a government that was notoriously dysfunctional. The previous Mayor was corrupt. He and many of his administration were sent to prison.¹ The previous Head of BAPPEDA was not a planner and is said to have contributed to the dysfunction. The new Head of BAPPEDA has a planning background and has expressed her enthusiastic support for the CPL initiative.

The Mayor has placed high expectations of increased technological and logistical efficiency on his city departments. The existing staff, most of whom have worked in their positions for years, resent the amount of pressure the Mayor has placed on them to evolve. Due to these tensions, the Mayor has chosen to make use of external consultants to make progress on his development agenda, often bypassing interaction with existing staff. As an approved initiative of the Mayor, the CPL program will be associated with the pressure from the Mayor to reform. While this situation creates political difficulties, the Bank's CPL initiative offers a way for city staff to meet the expectations of the Mayor.

During the last series of meetings in Bandung in March we were able to build on the relationships established previously and to gather data. We met with a proposed working group, to be led by Pak Anton at BAPPEDA. Each of the members was excited about moving forward and open to coming to the proposed training. In our meetings with the staff of DISTARCIP, we gathered data relating to housing and an archive of maps produced

¹ <http://thejakartaglobe.beritasatu.com/news/former-bandung-mayor-serve-10-years-bribery/>

ANALYTICAL THEME

LEAD EXPERT

CITY COORDINATOR

MAIN POINTS OF CONTACT

Ravi Chopra, Indian Institute of Human Settlements

Rizqi Abduharis

Astrid Haryati
Terra Lumen
Mayor's Consultant



Aryani Murcahyani
Terra Lumen
Mayor's Consultant



OBSTACLE

The lack of legal basis has made collaboration with existing consultants difficult and contributes to the unease with CPL's consultant's use of data.

STRATEGY

WORKSHOP

The CPL Consultants will work closely with PSUD's urban design team to inform their plans for a sustainable urbanism corridor for Bandung, the centerpiece of the Mayor's development agenda. The consultants will work closely with the city staff to vet the proposed plans using various analytical modules, much of which will be focused on the impact to current local residents in the proposed site.

Date (tentatively): late May. The proposed workshop would be a collaboration with PSUD, offering PSUD's staff the opportunity to showcase their plans.





Waiting to meet with Bandung Working Group members,
Pan Anton's Office,
BAPPEDA, Bandung

The working group formed by Pak Anton was very excited and forthcoming. The two most eager were Gustiman Farid of DISTARCIP and Andhi Purwoko of DISKOMINFO. Both were excited about attending the training in Bangkok.



Presenting examples of data analytics and discussing data sharing protocol.

DISTARCIP
Bandung

DISTARCIP's staff was concerned about data sharing protocol. For this reason it wasn't clear if CPL consultants were being given the full picture on DISTARCIP's data process and maintenance systems. From what we were shown, it appears that DISTARCIP lacks the technology to systematize their permitting process, as is in play in Semarang. They have limited and, by their description, low quality data.

by consultants. We provided an agreement for data sharing and discussed the current efforts DISTARCIP has been engaged in for developing informal settlements.

While in Bandung we met with ITB's Center for Urban Design Studies (PSUD), the firm working on the Sustainable Urbanism Corridor, to learn more about their plans and discuss potential collaboration. There was continued confusion over what would be an appropriate focus for the CPL Consultants. PSUD's proposed plans lack a substantial consideration of the existing informal settlements that line the river and make up much of the eco-district for which they are planning. CPL consultants proposed providing an analysis relating to this work, but it seems that the PSUD's staff problematically see the informal settlements as a barrier to implementing their proposed plans and thus they do not want their presence substantiated by studies and analysis.

The current proposal for CPL consultants is to work with BAPPEDA and DISTARCIP to conduct analytics that would vet the proposed plans by PSUD. CPL consultants would support BAPPEDA in implementing analytical modules in preparing an analysis of the proposed plans by PSUD, and in doing so they could establish a means of analyzing proposed development projects conducted by external consultants, as well as their own staff, moving forward. Working with BAPPEDA rather than the PSUD consultants fits more closely to the mission of CPL and would allow the city and CPL consultants more flexibility to explore the analysis of the proposed projects, including the impact to informal settlements.

To provide immediate support and orientation to city staff, throughout the morning of April 4th, Rizqi led the working group of SKPD representatives through a workshop at ITB's GIS Lab demonstrating basic steps for spatializing data (adding lat longs and projecting). Such training was easy to implement and can be built on once Agrisoft and ITB's contract is in play, and their consultants mobilized.

We were unable to meet with DISKOMINFO due to timing issues, but they are intimately in

touch with Noriko's team. Noriko provided us the outcomes for the "data discovery workshops" that a group from DISKOMINFO (with support from Robert of Noriko's Team) have been doing with each department to create a comprehensive data inventory. Given the progress that the Open Data team has made in Bandung, they may be able to provide support in building relationships and accessing data.

While we provided a sense of how CPL will help them in building their spatial data systems, we put off discussing the logistics of doing so for a later date when the local technical team can be present. The interest among staff is largely related to the potential support in helping them build their data systems. This is partly due to the pressure the Mayor has placed on his departments to create data systems. Pak Anton and others have suggested that they would prefer to see data systems built, data developed and skills sharpened before the analytics are conducted. We explained that the analytical work would provide a means to begin this infrastructure development, helping review and develop data related to a theme of interest, providing a basis to build from.

Pak Anton Sunar Wibowo of BAPPEDA requested an MOU in August. Without knowing it was not possible to create such an MOU, Rizqi agreed to look into it. While it has since been conveyed to Pak Anton that such an MOU is not possible, he has continued to insist on one before moving forward. The MoU has been mentioned so continuously at this point that Pak Anton still considers it a possibility. To remedy this issue, we have been working with Astrid and Aryani, counsels to the Mayor, in developing a Mayoral Decree, similar to the one done in Semarang. See the appendix 3 for the Mayoral Decree that was drafted. The Mayor has given Aryani the power to put the decree together. While we have provided her input and a draft has been produced, she is reluctant to move forward without the consent of Pak Anton. Pak Anton would like to see a document that discusses, officially, the CPL program and see a formal invitation to participate in CPL provided. Unfortunately I don't think that such a document was created.

Currently Astrid and Aryani are processing the Mayoral Decree through the legal team of City of Bandung. It might be useful to have the Bank send a letter requesting that a Mayoral Decree be issued, attaching the ToRs drafted and the dating sharing agreement.



Pusat Studi Urban Desain

Center for Urban Design Studies

"PSUD is a center of Urban design study formed in April 1994 by a professor from ITB (Bandung Technology Institution) who was expert in architecture and urban design,. Its main goal is to become a world-class center of excellence for research and development in urban design development.

Next Steps

1. Send a letter to the Mayor requesting the issuance of the Mayoral Decree and attaching the ToRs drafted and data sharing agreement.
2. Develop a ToR program for reviewing PSUD's proposed plans
3. Develop a training program, in partnership with ITB.
4. Introduce technical firm.

Previous Projects:

URBAN DESIGN GUIDELINES

- UDGL for Dharmala Gandaria Superblock Development, Jakarta
- UDGL for Karet Tengsin Superblock Development, Jakarta
- UDGL for Sudirman Superblock Development, Jakarta
- Corridors
- Development Controls for Soekarno-Hatta Corridor, Bandung
- UDGL for Said Corridor, Jakarta
- Urban Landscape Design Guidelines for Prof. Dr. Satrio Corridor, Jakarta
- Urban Design Plan for Main Street of Cilegon City
- Urban Design Plan for Rancaekek, Bandung
- Thamrin Pedestrian Spine Planning

MASTERPLAN

- CBD Block and Mall Kemayoran, Jakarta
- Grand Masterplan Ancol
- Detail Planning and Design for Government in Deltamas New City, Bekasi
- Detail Planning and Development Priority for Ranai
- Masterplan for Pesona Mahakam
- Urban Design Plan for Sangatta

HERITAGE

- Guidelines for Jakarta Conservation Areas (Old Jakarta kota, Menteng and Kebayoran Baru)
- Heritage Plan for Kembang Jepun District, Surabaya
- Planning and Development Controls for Kemang Residential District

REDEVELOPMENT

- Urban Design Plan for Cirebon
- Urban Design Plan for Taman Sari, Bandung
- Urban Design Plan for Jatinangor

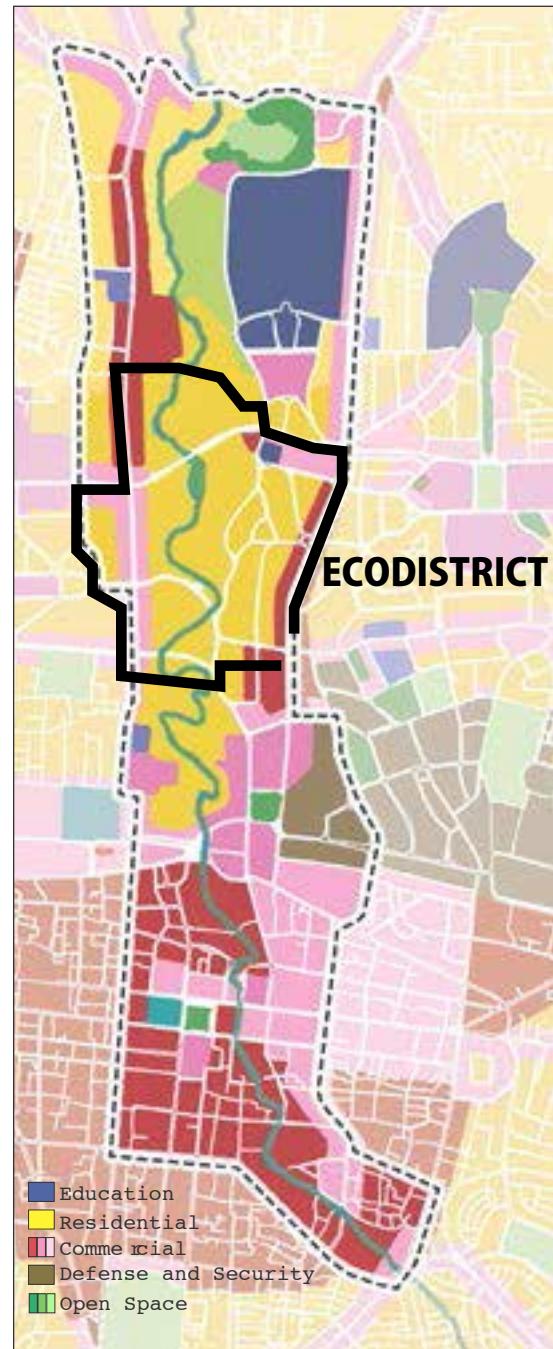




PSUD are a capable urban design firm engaged in many of the major development projects occurring in Indonesia, including the Surabaya MRT. They were participants in the CPL workshop for Surabaya for the proposed plans for MRT and played a role in helping come up with the designs for the lines and supporting TOD analysis. They are the key consultants helping move forward the development agenda of Mayor Kamil in Bandung, helping shape and realize his vision for a more sustainable, smart and urban Bandung. Their plans for Bandung's Sustainable Urbanism Corridor displayed a reasonable level of statistical analysis, though they served more for understanding of context than to vet the proposals.

PSUD's office,
Bandung

SAMPLES FROM PSUD'S
PLAN FOR THE BANDUNG
'SUSTAINABLE URBANISM
CORRIDOR'



SEMARANG

DECEMBER, 15TH-16TH, 2014



In Semarang, CPL consultants met with BAPPEDA and DISTARCIP staff. The first meeting with BAPPEDA introduced us to the working group and allowed us to gain some consensus about the workshop. The analytics took up the bulk of the discussions during our first meeting. We also met with staff in DISTARCIP to discuss data infrastructure built to date. The city is especially primed to have spatial data infrastructure built. The city benefited from an ADB grant to build "Urban Data Management Systems", which focused largely on spatial data infrastructure. We had an intensive review of DISTARCIP's permitting process and their in-house GIS Lab, and was given a tour of what appears to be an expansive data set, which includes high resolution photography and a highly detailed cadastral. The technical team, when mobilized, will be able to augment BAPPEDA's planning considerably by helping build a centralized and integrated data management system.

In Semarang we have progressed the most quickly logically, thanks in large part to effective organizing support of Ibu Dayu, as well as to Semarang's highly cooperative city staff. The Mayoral Decree for the CPL initiative has been issued and CPL consultants can work closely with an already confirmed and organized working group. The Semarang Mayoral Decree has acted as a template that we have provided to other cities participating in CPL for producing similar decrees.

Ibu Dayu has suggested that AIT focus on urban growth analysis to inform scenario planning for the city. The analysis will include flooding and drainage considerations as well as overall physical suitability (such as slope) for making predictions of future development. But it will also consider factors that are access oriented and market oriented. Due to the broad scope of an urban extent analysis, AIT consultants may have to engage the provincial government for further data needs.

This shift in focus from storm water management was pragmatic. A focus on Urban Growth Analysis

ANALYTICAL THEME

LEAD EXPERT

CITY COORDINATOR

MAIN POINTS OF CONTACT

OBSTACLE

STRATEGY

WORKSHOP

Urban Growth Analysis

Manzul Kumar,
Geospatial Engineer, Remote Sensing.
Lakmal Deshapriya
Geospatial Engineer, Remote Sensing.

Muhammad Helmi
GIS Professor,
UNDIP



Purnomo Sasongko,
Deputy Director,
BAPPEDA



Suseng Hartanto,
Planning,
BAPPEDA



Ferry Kunto Aji
GIS specialist in DISTARCIP

All spatial data infrastructure appears concentrated in DISTARCIP. The sole focus of the GIS Lab in DISTARCIP is 'permitting'. DISTARCIP has historically been reluctant to share data and provide support across departments, especially for planning purposes.

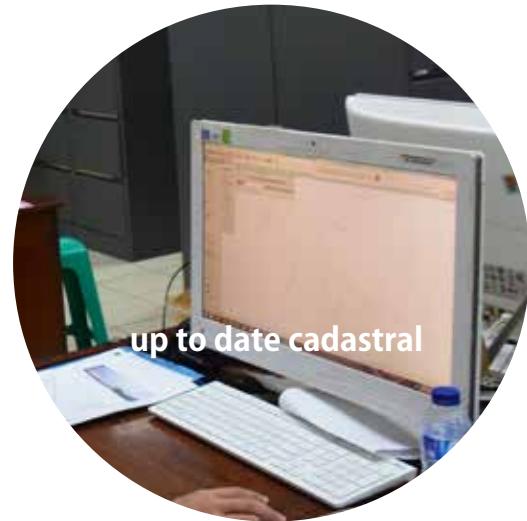
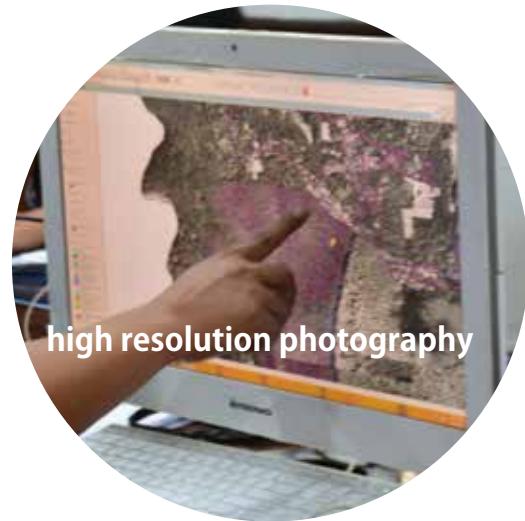
AIT will work closely with UDS consultants to inform a large development strategy for the city. Once hot spots are identified in the analysis, a micro analysis will be conducted for each.

The workshop is planned for late May. Preparations are currently in process.



DISTARCIP's GIS Lab
Semarang

Pak Ferry directs a lab with 10 computers. Each reviews permits, referencing existing zoning protocol. Once a permit is approved, staff edit the existing cadastral. The system provides an automated report with parcel details that is sent to the applicants of each approved permit. At the end of each day the cadastral is updated to a secure online database, providing constantly updated information to other departments. The computers are outfitted with a customized version of ArcGIS.



will assist the Urban Development Strategies (UDS) initiative in place in Semarang. The analysis will fulfill one of the three components of the UDS program. The other reason for the shift in focus is that the previous focus, storm water management, has been sufficiently investigated for the city.

Manzul was able to acquire substantial data during the engagement. Substantial progress has been made since the engagement. Because of this the CPL consultants are prepared to host preliminary analytics in a Semarang Workshop, still scheduled for late May. A ToR will be produced and feedbacked by the city staff in coming weeks.

EXISTING DATA

AIT is exploring two basic urban extent growth models. The Sleuth model and an R model. Both are fairly fundamental considering primarily physical constraints to growth. The R model is more adaptable for consideration of social and economic variables, outside the original mostly physical structure. The Sleuth model brings in a random variable and assumes slopes are growth deterrents while roads attract growth.

Data quality is poor. For satellite data, the urban extent increase between the 2009 and 2014 period are significantly more than would be expected, and are likely due to differences in methodology. AIT's staff will need to review the original satellite imagery or find new imagery and process the data themselves to come up with more consistent outputs that can support growth projections.

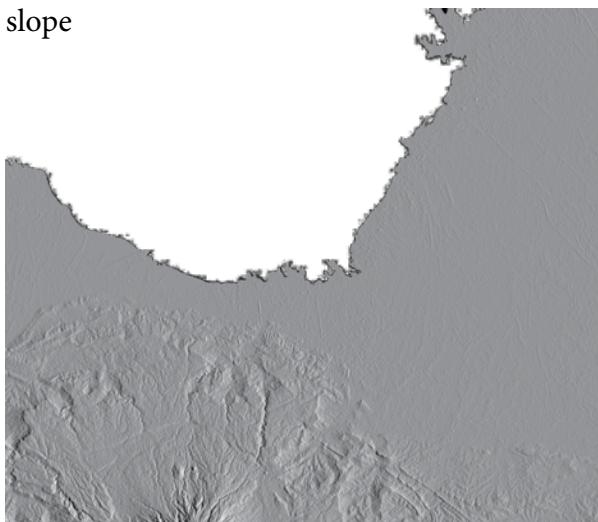
Adjacent one can see the urban extents for periods 1999, 2007, 2009, and 2014. This data was collected by Pak Helmi of UNDIP, in coordination with city staff. The urban extent in 2014 is too significantly different from 2009 to be accurate. The map in red is using data from the Platform for Urban Management Analysis (PUMA) (World Bank) Urban Extent Data for 2000 to 2010. The PUMA data more closely corresponds to the data prior to 2014.

Next Steps

1. Workshop Preparation (ToR, Materials, Invitations, Venue identification and preparation)
2. Improve data and model for urban growth analyses
3. Training participants, schedule and budget

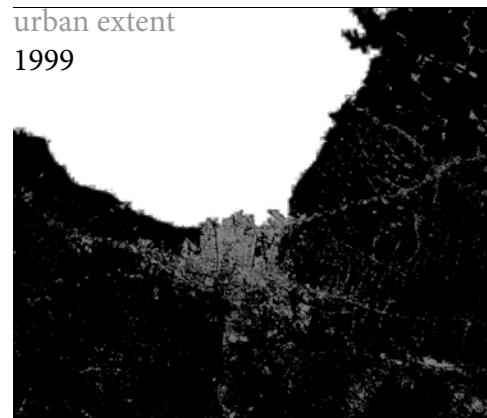


slope



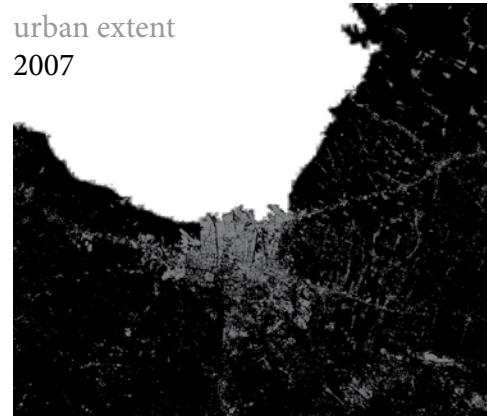
urban extent

1999



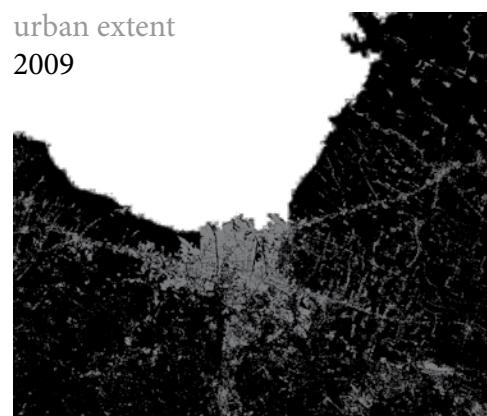
urban extent

2007

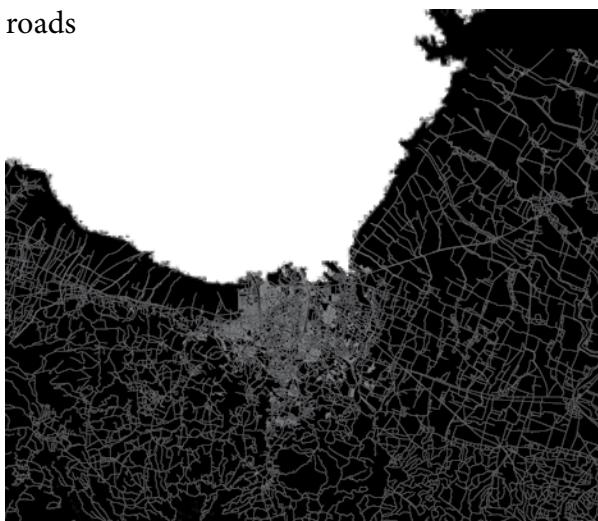


urban extent

2009

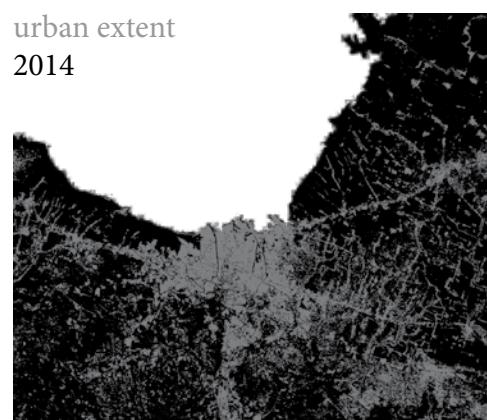


roads



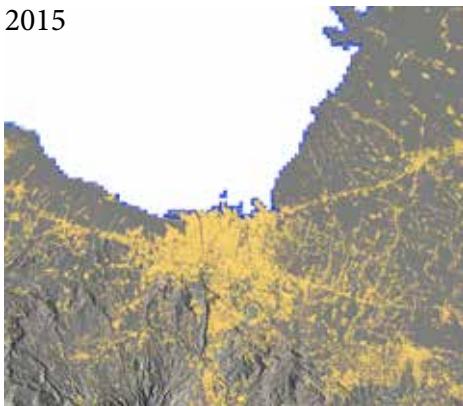
urban extent

2014

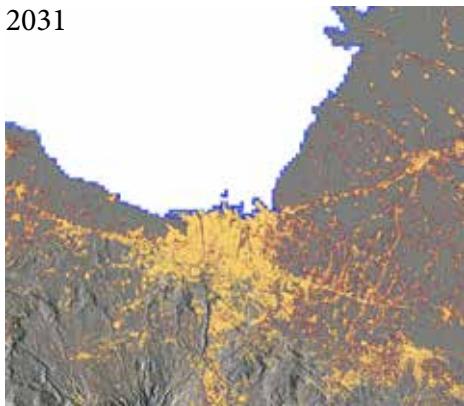


PROJECTIONS

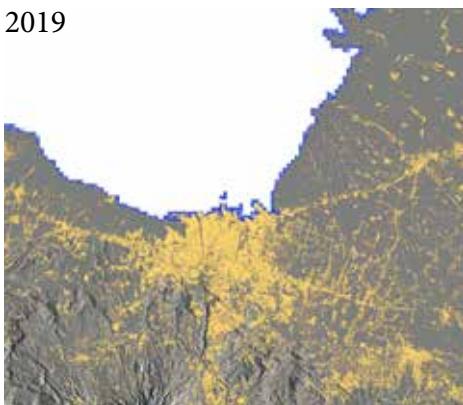
2015



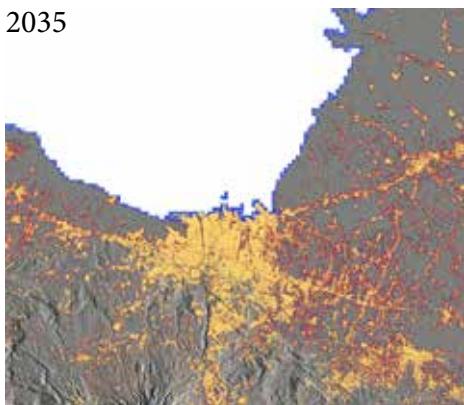
2031



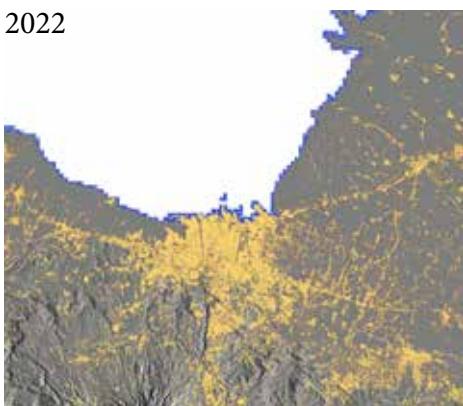
2019



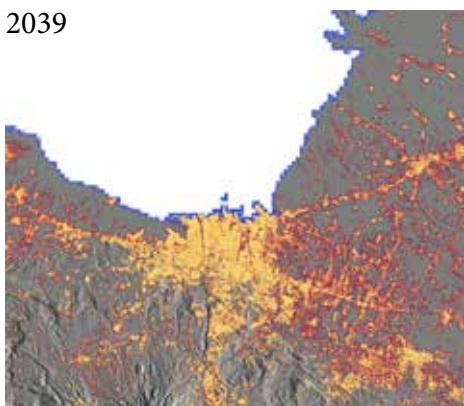
2035



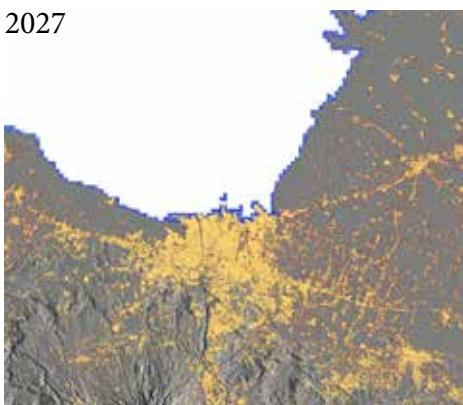
2022



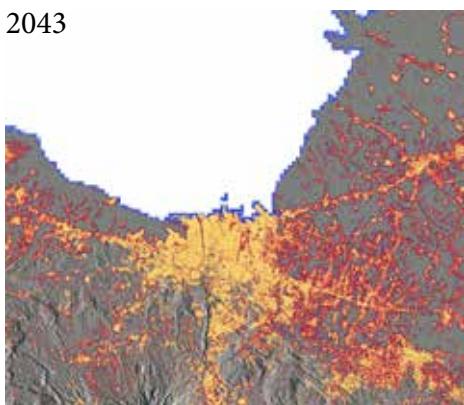
2039



2027



2043





Manzul walked through the methodology for providing the Urban Growth Projections.
DISTARCIP GIS Lab, Kota Semarang

SURABAYA

DECEMBER, 17TH-19TH, 2014



CPL consultants met with BAPPEKO in Surabaya on May 6th. Those present (Pak Dwija, Bu Olivia, and Pak Agus as well as their staff) explained what kind of support they wish to receive. While they were insistent on the delivery of a training program, they requested that this training still culminate into a tangible analytical deliverable. Pak Dwija requested that the training and analysis focus on "socio-economic" analysis relating to transportation planning.

Pak Dwija requested that the form of the ongoing training be what he described as "on-the-job" training in Surabaya. This would require more regular engagements. We proposed that the AIT training at Bangkok would be a training of trainers, which would help develop the skills of 2 to 3 key staff people who could then be internal points for building capacity thereafter. The key staff who attend would gain advanced skills and could then aid CPL consultants in building skill sets among other staff moving forward, making it a catalytic approach. Pak Agus and company appeared very interested in this prospect. CPL consultants presented the adjacent time-line to clarify what we were proposing. We also discussed the hiring of Dr. Awais P., who is an expert on transportation planning and spatial analysis, and how he will provide structure to the proposed training. By the end of our conversations they seemed far more at ease than in our last engagement. Pak Leo will continue conversations moving forward.

In Surabaya all interactions have been brokered by Rizqi due to previous tensions. Direct relationships only have just started to be built that will allow the CPL consultants to move forward. AIT's city coordinator, Leo Pantimena, has established a working relationship with Ibu Olivia for moving forward.

A draft of the analytical proposal has been drafted by Dr. Awais for Surabaya and is in Appendix. It has been submitted to Ibu Olivia for feedback.

ANALYTICAL THEME

Social and Economic Dimensions of Transportation Planning

EXPERTISE

Dr. Awais Piracha

Director of Academic Programs
(Geography, Urban Planning, Heritage and Tourism)

University of Western Sydney



CITY COORDINATOR

Leo Pantimena
Waindo

MAIN POINTS OF CONTACT

Pak Dwija
Transportation Planning



Ibu Olivia
DISTARCP



Pak Agus
BAPPEDA



OBSTACLE

Level of engagement desired requires more trips than AIT can afford.

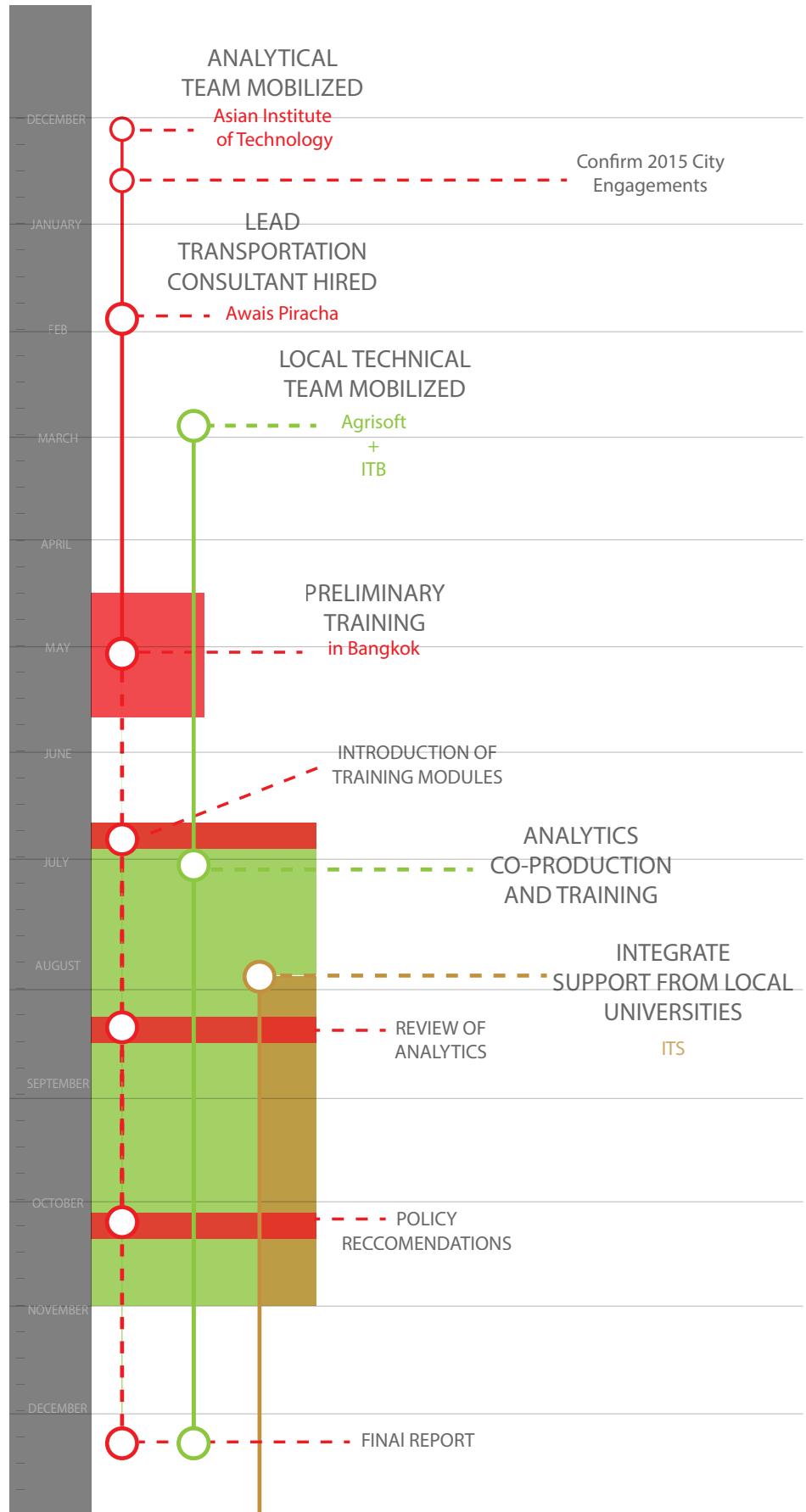
STRATEGY

The analytics will be produced through a training program implemented by local counterpart with oversight and guidance by AIT's network of experts.

WORKSHOP

Workshop has yet to be discussed. It might be reasonable to assume that the workshop would operate as an intermediary point to present the analytics to date, likely later in the year.





DENPASAR

DECEMBER, 20-24th, 2014



Denpasar's analytics are well underway. Ibu Rini has worked with Pak Rizqi to establish a Mayoral Decree that will enable the work of CPL consultants in developing the analytics for a plan for informal settlements in Denpasar. The consultants are building from previous research on informal settlements and are working with Denpasar's staff and local university faculty to survey a few select sites.

During the last engagement In Denpasar, CPL consultants met with a prospective working group assembled by Ibu Rini Ambarwati, representing various parts of Denpasar's city government. This group is intended to facilitate communication and help fill the data gaps for the proposed analysis. A Mayoral decree is to be issued in short order, which will legitimate the working group and facilitate data sharing.

Relative to other cities participating in CPL, Denpasar is operating at very low technical and planning capacity. Given the low quality of data and the scarcity of skills among existing staff people, some present worried about the cities ability to produce and make use of quality data, spatial and otherwise, moving forward once the consultants were no longer involved. For that reason those in the proposed working group requested that more training provided. We assured them that training would be provided.

Over the weekend leading up to the meetings, Manzul, Firman, Leo and Ravi Chopra arrived and helped planned for the engagement. Ravi appears very knowledgeable of development strategies and analysis for informal settlements, boasting 12 years of experience supporting projects across India. He also has both strong planning and strong GIS skills. Further he has developed impressive dashboards and web-based interfaces for exploring and analyzing data, which facilitate data's use by non-technically savvy officials.

CPL consultants also met with the Head of

ANALYTICAL
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STRATEGY

Informal Settlements

Ravi Chopra
Head of Geospatial lab
IIHS

Leo Pantimena
Waindo



Rini Ambarwati
BAPPEDA



Putu Perdana
Kusuma Wiguna
CPL Lab



Data Quality for the city is poor. The attribute of the various shapefiles host different names and the qualities of the shapefiles are not consistent, with roads having different lengths, for example. This can be rectified, but it will take time and ideally the support of the local counterpart.

CPL's consultants will conduct housing economic research and attempt to understand the factors that cause informal settlement growth at the macro scale. their research will highlight a few key case studies of informal settlements. The analytics will then inform a development plan, reflecting international best practices for slum upgrading.



BAPPEDA, Agus Sonhaji on the trip. Ravi Chopra excited him in a demonstration of the data dashboards Ravi has built for other cities. Pak Agus gave us his enthusiastic support. He provided his full confidence to Ibu Rini in implementing the analytical project and building data support. The head is a new appointment and so has little knowledge of CPL's previous activities.

Pak Gede Ika Kusumajaya has been appointed manager of the CPL project. He seems super willing to help with this work, but he doesn't speak English and has no planning or GIS background.

The analysis of informal settlements, by its nature, necessitates some degree of original surveying work, ground or otherwise. Ravi is taking the lead in devising and implementing a household survey. Putu recruited a faculty member from the UNHI to assist in conducting this survey. The professor will incorporate the proposed surveying work into the coursework of his urban planning seminar. The students, led by Pak Putu, are currently in the process of surveying. They have found mostly Rooms and Kosts. Their budget for the project was 800, but their stated costs have reached 1,200, a 50% increase. CPL consultants are exploring more resource and time efficient means of surveying through the Open Street Map's surveying team for the future.

Pak Putu was very keen on receiving further training and working closely with the CPL consultants in Bangkok. The urgency of the survey work was in part to produce data to work on while at AIT. Additionally, Pak Kusuma Diputra, Head of Spatial and Housing Management Division, showed interest in coming for the training. Pak Putu, the key CPL contact, turns out to be an external consultant and not staff, and thus has limited ability to request funds for his travel. They were unable to organize the survey nor their travel in time for the proposed training's dates. Details for future trainings are currently being worked out.

Next Steps

1. Provide support to Pak Putu in finalizing the slum survey arrangements including budget clarifications
2. Liaise with Team Leader to ensure the slum survey is tracking as planned.
3. Respond to any technical queries from Ravi
4. Devise a new plan for training, including participants, schedule and budget
5. Keep contact with the key SKBD's representatives to maintain the progress in collecting data from various Dinas

Roads



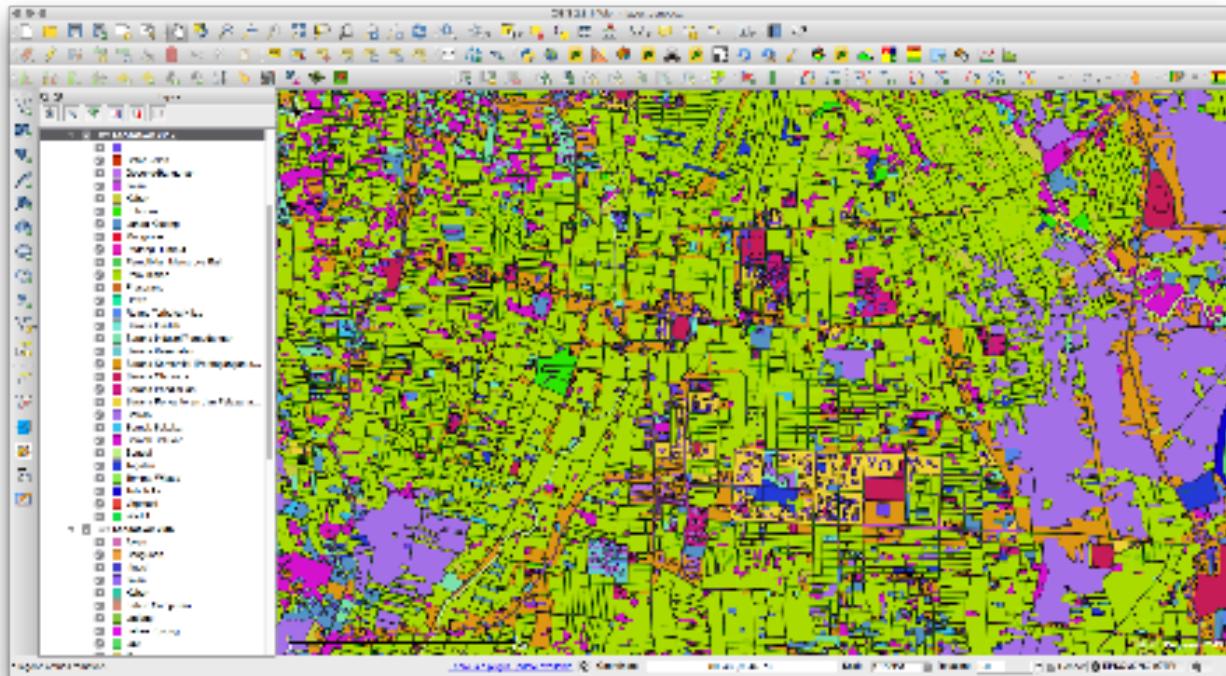
parcels



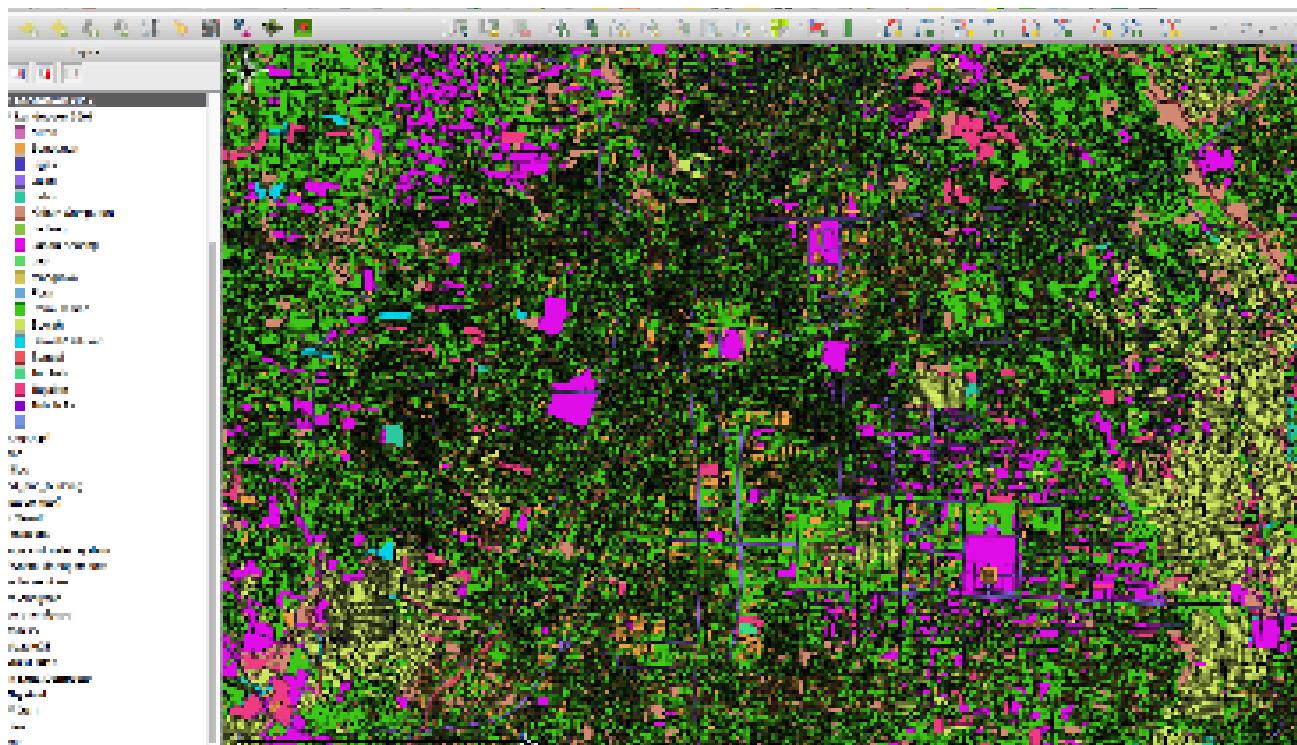
water
supply



landuse map 2007



landuse map 2012



The landuse map of 2012 has many more classifications than 2007, which makes for a difficult comparison.



Pemecutan Kaja, Denpasar



Jematang, Denpasar

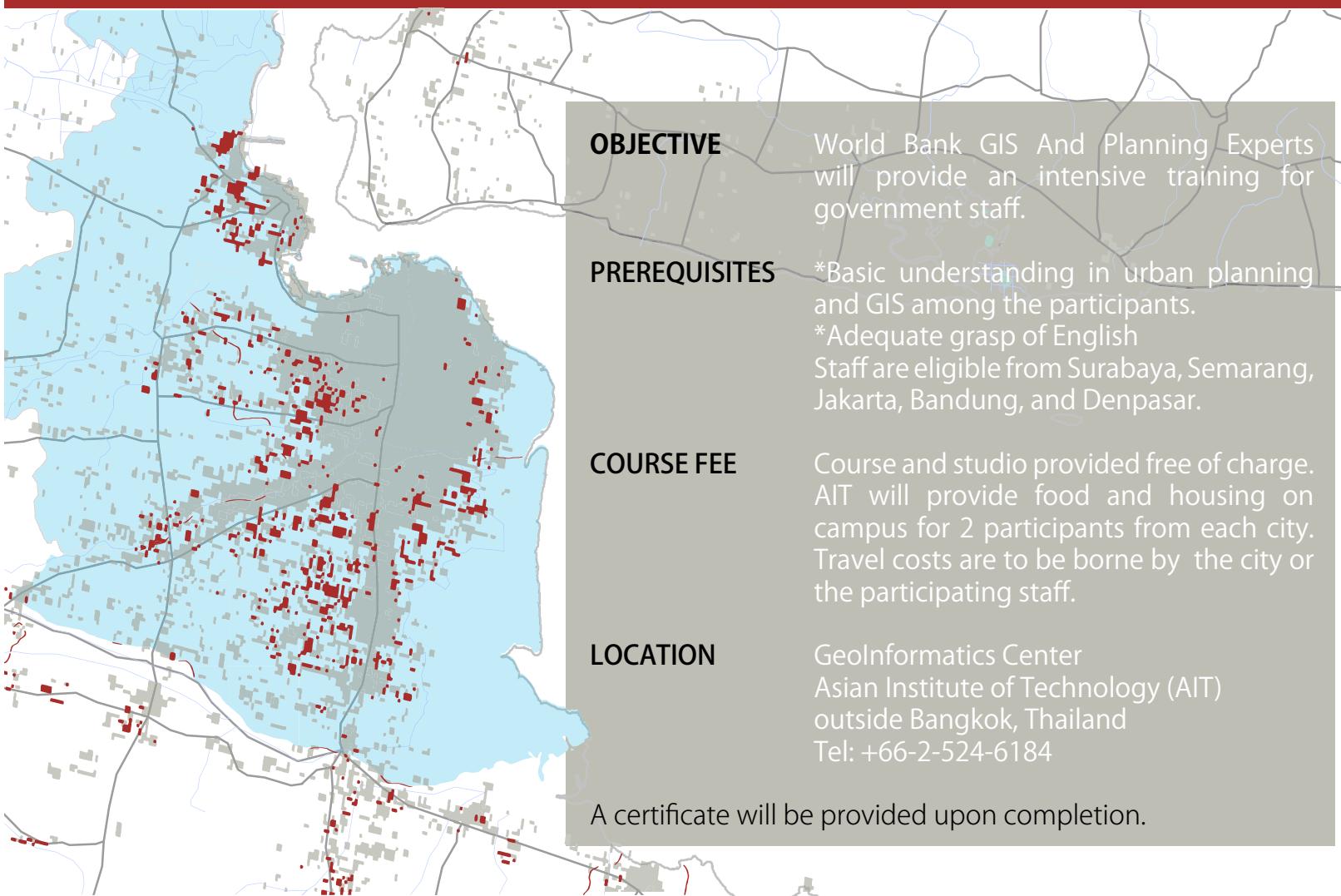
APPENDIX

- 1) TRAINING BROCHURE
- 2) WORKPLAN
- 3) ToRS
- 4) MAYORAL DECREES
- 5)DATA SHARING
AGREEMENT IN BANDUNG



CITY PLANNING LABS TRAINING ON SPATIAL ANALYTICS

20 Apr— 09 May 2015



COURSE MODULES

Module I : Introduction

This module will provide an introduction to the participants to Remote Sensing and GIS and develop skills in handling spatial data for subsequent spatial analytics.

- Basic concepts (Remote Sensing and GIS)
- Introduction to Remote Sensing and GIS tools
- GIS data handling and management
- Data analysis

Module II : Slum Analytics

This module will help in analysing slums and informal settlements with accurate representation of the socioeconomic conditions of the population for planning and decision making.

- Slum identification from satellite data
- Slum survey methods
- Exposure mapping of slums to floods
- Precedence from other studies

Module III : Urban Growth Analysis

This module will explore the growth of urban areas in a city, the effects of population migration in the city.

- Analysis of historical census data
- Urban migration
- Urban growth modeling and analysis

Module IV : Accessibility Analysis and Planning

This module introduces the concepts and methods of analysis related to accessibility and multi-modal transport planning. It also provide essential skills in relevant GIS and transport modeling tools.

- Accessibility types and complexities
- GIS based accessibility analysis
- Urban transport planning process
- GIS and modeling for transportation planning

CONTEXT

The World Bank is supporting the Government of Indonesia to develop a programmatic response to the challenges and opportunities of sustainable urbanization. A key component of the Bank's support in this area includes building the technical and institutional capacity of municipal governments in core management areas including the management and use of enhanced geospatial data for planning. In this regard, the Bank has developed the City Planning Lab (CPL) initiative, which works with key partner cities to augment each city's technical capacity to conduct the geospatial analysis that inform planning, policy and infrastructure decisions.

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