ASEAN AUSTRALIA SMART CITIES TRUST FUND
Asian Development Bank

Australian Government
Department of Foreign Affairs and Trade

ADB

AASCTF GUIDED LEARNING PROGRAM (GLP)

FINAL REPORT

April 2023

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Prepared by	Andy Brahney, Jacob Olsen, Kristine Lucero, Chona Cala-Or,
Checked by	Hillarie Cania
Approved by	Jens Christian Riise

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1) PROGRAM OVERVIEW

Program overview

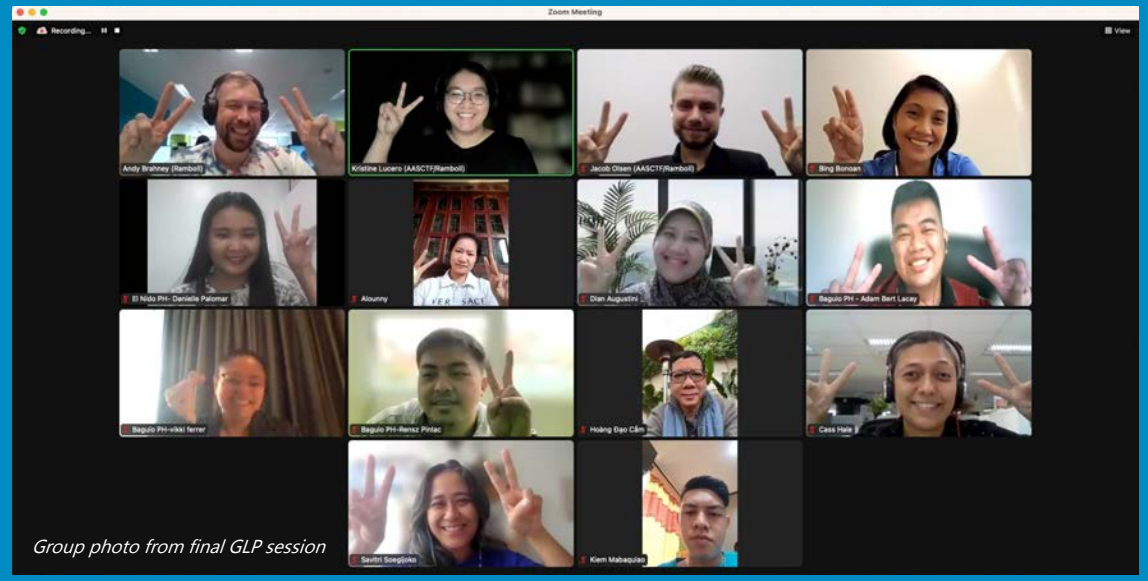
AASCTF is supporting capacity-building programs to enable ASEAN cities to develop holistic smart city plans that prioritize livability and resiliency.

The ASEAN Australia Smart Cities Trust Fund has completed the Guided Learning Program which aimed to assist cities in managing increasing amounts of data and enhance urban planning and services. The program aims to educate participants on data management for people-centric smart city development, helping cities in the region effectively handle growing data and use these insights to improve urban services.

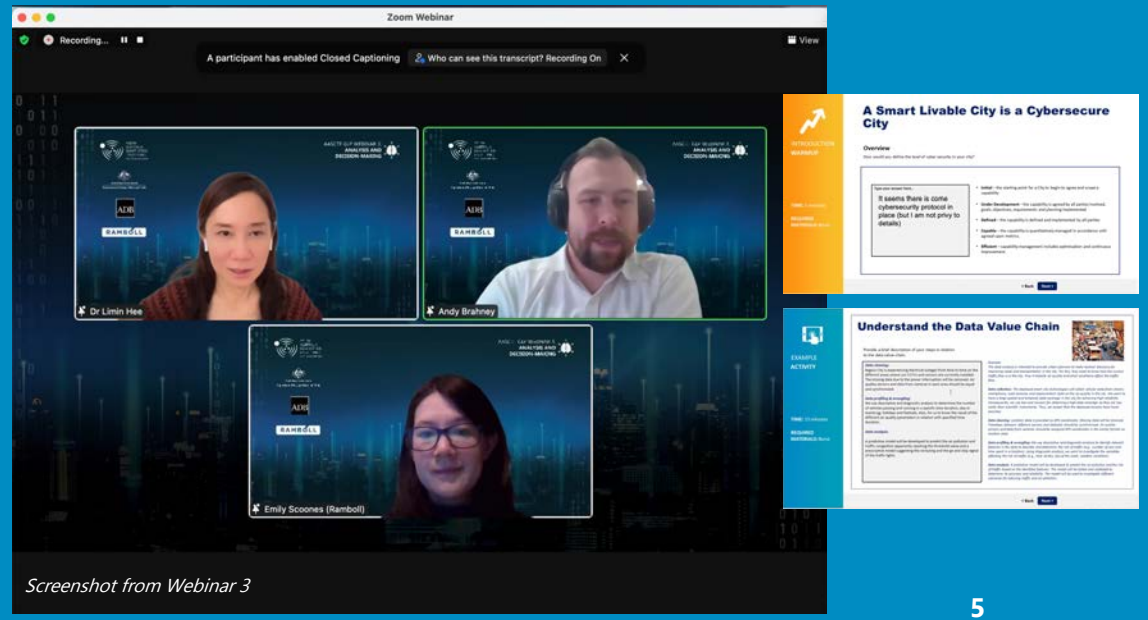
The program was designed to introduce participants to a user-centric approach for developing smart city data projects through learnings from:

- Data collection and storage
- Data governance and security
- Analysis and decision-making.

A total of 11 participants from 4 different countries were actively involved in sharing their experiences, findings, and reflections on the topics. All 11 participants (of the selected 24 who entered the program) successfully completed the requirements and received a certificate of completion. Combining online tools such as home exercises with mentor sessions, participants received a well-rounded and effective learning experience.



Group photo from final GLP session



Screenshot from Webinar 3

Program scope

The GLP Program was designed to develop an understanding of the significance of governance and security in smart cities, the importance of developing use cases to define data collection, and how to combine data with analysis for improved decision making.

Finally, the program aimed at enabling participants to create a basic smart city data project proposal for their cities. The goal of the program was to provide the participants with the knowledge and skills needed to effectively manage the growing amounts of data being generated in their cities and use that data to improve urban planning and services.

The program was designed to gradually introduce an innovative and user-centric approach to smart city data projects through the following format (1-4):

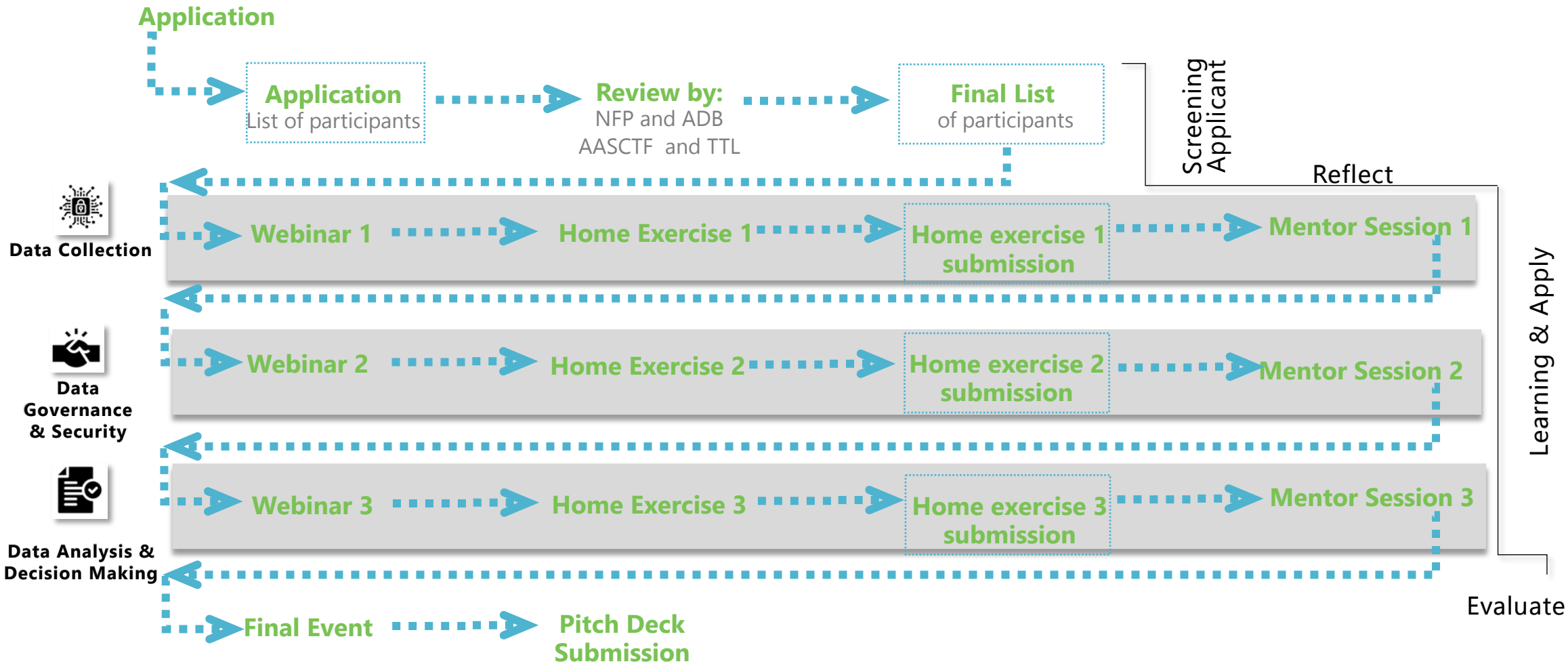
1	• **Webinar 1** – Creating understanding of local contexts with focus on the user experience and user journeys • **Mentor session** – Overview of the GLP course and presentation of 1st home exercise • **Home exercise 1** – Analyzing local context & big idea generation for smart city project
2	• **Webinar 2** – Creating understanding context of data protection and cybersecurity • **Mentor session 2** – Feedback session on home exercise 1, and presentation of home exercise 2 • **Home exercise 2** – Cyber security risks assessment
3	• **Webinar 3** – Creating understanding of data analysis and decision making • **Mentor session 3** – Feedback session on home exercise 2, and presentation of 3rd home exercise • **Home exercise 3** – Data management on smart city project
4	• **Mentor session 4** – Feedback session on home exercise 3, and presentation of pitch deck template • **Final event** • **Post-program survey** – Participants to provide their feedback and assess their knowledge on data management in smart cities after the completion of the program

Project team

Andy Brahney, Head of Smart (MEAP)
Jacob Olsen, Digital Client Consultancy Lead
Donya Sheikh Khan, Sustainability Consultant
Simone Toftegaard, Digital Learning Lead
Kristine Lucero, Communication Expert
Cassandra Hale, Graphic Designer
Elga Reyes, Communication Expert
Ida Linde Hansen, Project Coordinator
Chona Cala-or, ICT Student Assistant
Baythone lovanxay, National Focal Point, Lao PDR
Savitri Soegijoko, National Focal Point, Indonesia
Bing Bonoan, National Focal Point, Philippines
Jackson I. Pereira, National Focal Point, Malaysia

Program roadmap

All activities and exercises were designed to interlink and gradually build an understanding and application of data management in a smart city context.



Program timeline

The program was carried out from August 2022 to January 2023, during which 3 webinars, 4 mentor meetings, and a final event with all participants were held. During this period, three home exercises, each focusing on a different area of smart city data management, were assigned and completed by participants in-between webinars and mentor meetings.

DATA COLLECTION & STORAGE

UNDERSTAND THE IMPORTANCE OF DEVELOPING USE CASES TO DEFINE DATA COLLECTION

DATA GOVERNANCE & SECURITY

AN UNDERSTANDING OF THE SIGNIFICANCE OF GOVERNANCE AND SECURITY IN SMART CITIES

DATA ANALYSIS & DECISION MAKING

HOW WE COMBINE DATA WITH ANALYSIS TO IMPROVE DECISION MAKING

1 Jun 22
Application

6 Sep 22
Welcome email + Home exercise 1 sent to participants

8 Sep 22
Webinar 1

20 Oct 22
Webinar 2

3-4 Nov 22
1st Mentor sessions

11 Nov 22
Home exercise 1&2 submission

14-17 Nov 22
2nd Mentor sessions

1 Dec 22
Webinar 3

5-7 Dec 22
3rd Mentor sessions

19-21 Dec
4th Mentor sessions

13 Jan 23
Home exercise 2 final submission

17 Jan 23
Final event

2) GLP WEBINARS

Webinar 1: Data Collection and Storage

8 AUGUST 2022, 1:00 – 2:30 PM, VIA ZOOM

Webinar description:

Data is rapidly transforming our world. Cities are giant data machines – creating, consuming, and capturing vast amounts of data through a range of systems embedded in the functioning of different services and institutions, from transport control centers to timekeeping systems. Where does the data go? How can data be collected? Why collect data? The session provided a deeper examination of how data flows and impacts our cities. The barriers that local governments face in collecting and storing data were also discussed, and the session showcased innovative examples of data collection and storage that are part of ongoing smart city programs.

AGENDA | RECORDING | PRESENTATIONS

SPEAKERS

RAMBOLL

ANDY BRAHNEY
Head of SMART (MEAP), Ramboll

UNSW SYDNEY

SARA SHIROWZHAN
Lecturer/ Lead Convenor, Smart Cities and Infrastructure Cluster, School of Built Environment, University of New South Wales (Australia)

ADB

ARNDT HUSAR
Senior Public Management Specialist (Digital Transformation), Sustainable Development and Climate Change Department, Asian Development Bank

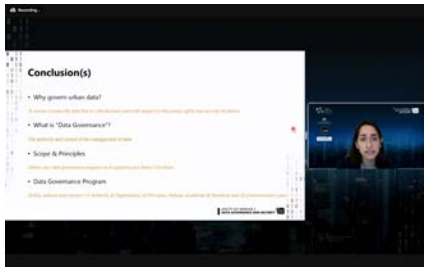
SPEAKER BIOS

Webinar 2: Data Governance and Security

20 OCTOBER 2022, 1:00 – 2:30 PM, VIA ZOOM

Webinar description:

This second session of the AASCTF Guided Learning Program (GLP) webinar series on data management discussed the ever-relevant topic of data protection and privacy, and how cities can navigate this challenging issue while aiming to manage the vast amounts of data generated in cities to improve urban life. After a deep dive into identifying and understanding the end users for data management projects, as well as the different data collection methods available, this webinar zoomed into the ways cities can make accurate data available and ensure data is maintained in a secure environment.



AGENDA | RECORDING | PRESENTATIONS

SPEAKERS

RAMBOLL

DONYA SHEIKH KHAN
Senior Specialist in Data Management, Sustainability Consultancy, Ramboll

RAJAH & TANN CYBERSECURITY

WONG ONN CHEE
Chief Executive Officer,
Rajah & Tann Cybersecurity

ADB

ARNDT HUSAR
Senior Public Management Specialist (Digital Transformation), Sustainable Development and Climate Change Department, Asian Development Bank

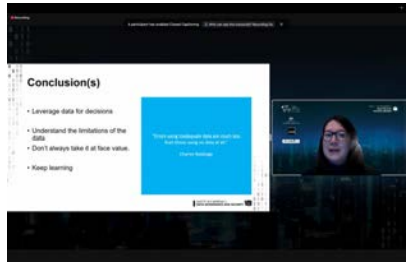
SPEAKER BIOS

Webinar 3: Analysis and Decision-Making

1 DECEMBER 2022, 1:00 – 2:30 PM, VIA ZOOM

Webinar description:

This webinar wraps up the lessons from the previous two webinars on Data Collection and Storage and Data Governance and Security, completing a journey into understanding urban data and how to develop a successful data project for cities. Webinar 3 zoomed in on data processing and analysis, as well as looked into potential pitfalls, such as bias and limited data.



AGENDA

RECORDING

PRESENTATIONS

SPEAKERS

RAMBOLL

EMILY SCOONES
Head of Digital Innovation (Building Services), Ramboll

CENTRE for LiveableCities SINGAPORE

LIMIN HEE
Director of Research
Centre for Liveable Cities (Singapore)

RAMBOLL

ANDY BRAHNEY
Head of SMART (MEAP), Ramboll

SPEAKER BIOS

3) WEBINAR ATTENDANCE & EVALUATION OVERVIEW

Objective

The objective and target of the program was:

“To create a network of innovators sharing knowledge of the latest innovations"

KPI targets

The following were the specific key performance indicators (KPIs) set for the webinars:

- **33% of attendees from government:** This goal was achieved. All webinars had government attendees well above 33% (see next page for statistics).
- **33% return attendees:** This goal was not achieved. For Webinar 1, only 9 out of 55 participants (16%) were return attendees. Webinar 2 had 9 out of 53 (17%) participants, while Webinar 3 had 9 out of 57 participants (16%) return attendees.
- **50% of attendees from outside the Philippines:** On average, this goal was not achieved. Only webinar 3 reached this target (51%). For webinar 1 and 2, they were at 39% and 47% respectively.

33% ATTENDEES FROM GOVERNMENT

33% RETURN ATTENDEES

50% OF ATTENDEES FROM OUTSIDE THE PHILIPPINES

Webinar registration and attendance insights

A total of 253 unique registrants signed up for the GLP webinars. Of these, only 9 were repeat attendees. To increase the number of repeat attendees for future webinars, the team may want to consider ways of attracting more repeat attendees, such as offering exclusive content/resources to live webinar attendees.

OVERALL

253 UNIQUE REGISTRANTS ACROSS ALL 3 WEBINARS

93 PEOPLE WHO REGISTERED FOR ALL 3 WEBINARS

124 UNIQUE ATTENDEES ACROSS ALL 3 WEBINARS

9 ATTENDEES WHO PARTICIPATED IN ALL 3 WEBINARS

PER WEBINAR

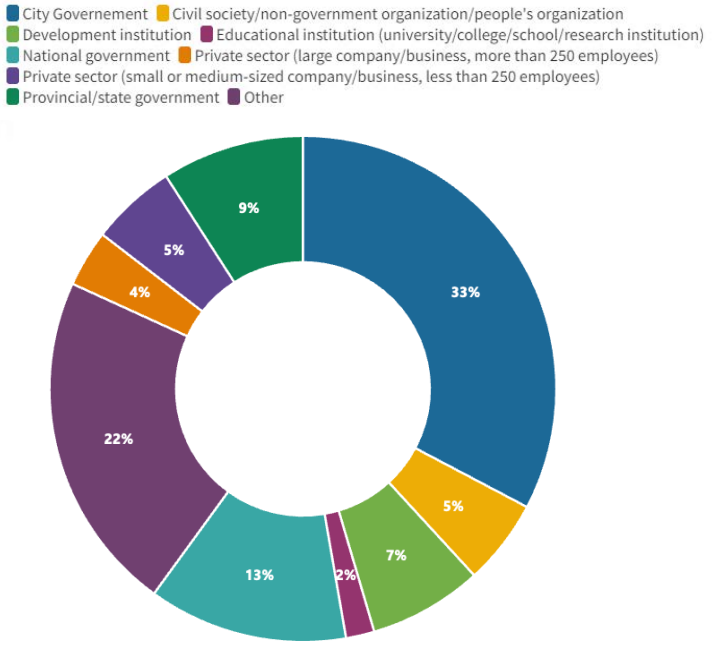
126 WEBINAR 1 REGISTRANTS	**55** WEBINAR 1 ATTENDEES	**44%** WEBINAR 1 ATTENDANCE RATE	**15** COURSE PARTICIPANT ATTENDEES
154 WEBINAR 2 REGISTRANTS	**53** WEBINAR 2 ATTENDEES	**34%** WEBINAR 2 ATTENDANCE RATE	**10** COURSE PARTICIPANT ATTENDEES
202 WEBINAR 3 REGISTRANTS	**57** WEBINAR 3 ATTENDEES	**28%** WEBINAR 3 ATTENDANCE RATE	**8** COURSE PARTICIPANT ATTENDEES

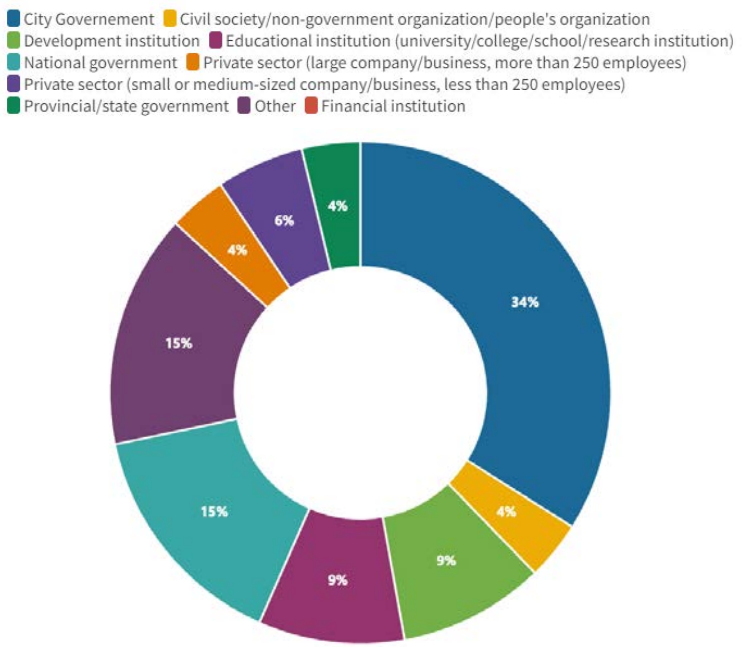
Webinar insights: government attendees

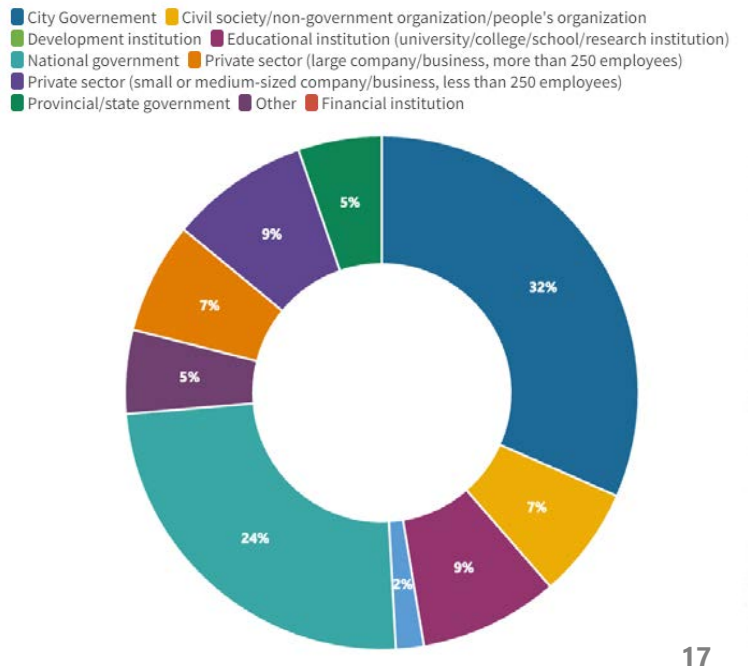
Based on the attendee list from webinars 1 to 3, it was possible to evaluate the distribution of attendees from the governmental sector, which comprise of city government and national government attendees.

For webinar 1, about 25 attendees (46%) came from the government, while webinar 2 had 26 attendees (49%) attendees from the government. Finally, webinar 3 had 32 government attendees, which is equivalent to 56% percent of attendees.

WEBINAR 1	WEBINAR 2	WEBINAR 3



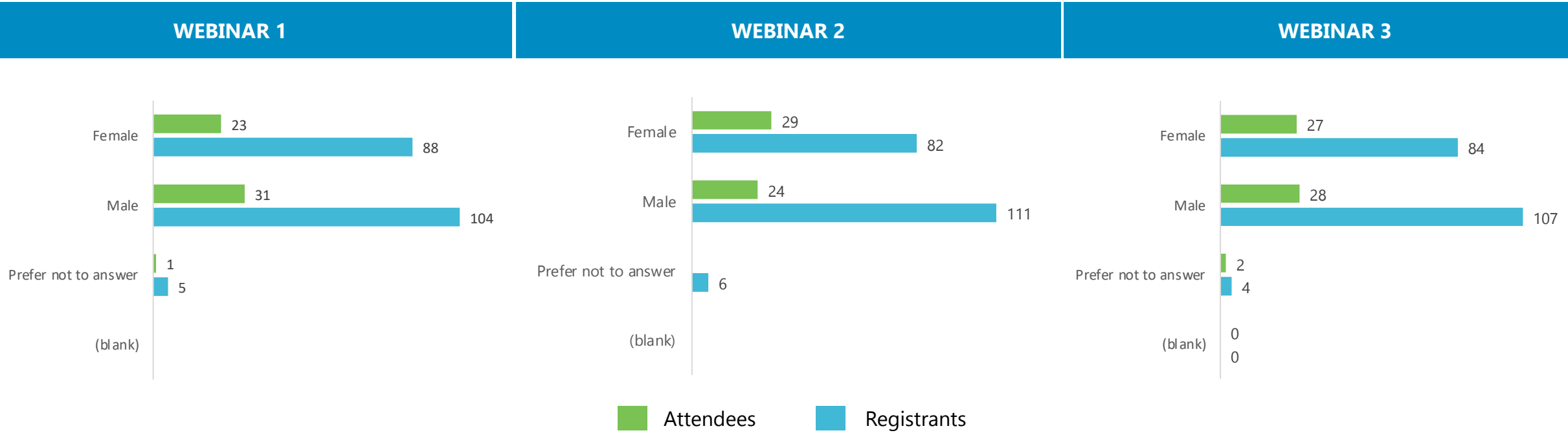




Webinar insights: attendee gender distribution

For all three webinars, the project team received more male registrants overall than other genders, with 57% male registrants for webinar 1, 56% for webinar 2, and 55% for webinar 3 . The trend continues for attendee numbers– for webinars 1 and 3, 56% and 49% of participants respectively are male, while for webinar 2, 55% of participants are female.

It would be interesting to know whether this trend is a reflection of the state of women's representation in the technology industry (particularly in data management roles) in Southeast Asia. If so, the project team should consider ways how to encourage more women and other genders to participate in future webinars.



Webinar insights: top 10 attendee countries

The Philippines continued to comprise the majority of both webinar registration and attendance numbers. For webinar 1, 34 attendees (61% of total attendees) were from the Philippines, while for webinar 2, it was 28 attendees (53%). Webinar 3 had 28 attendees (49%) from the Philippines. In addition to promoting the GLP webinars in the local language via the various AASCTF WhatsApp groups (such as for the cities of Pakse, Kaysone, Luang Prabang, Palembang, etc.), other improvements in the way the webinar is promoted should be explored to encourage more participants from other Southeast Asian cities to participate in future webinars.

WEBINAR 1

	REGISTRATION		ATTENDANCE	
	Country	#	Country	#
1	**Philippines**	53	**Philippines**	34
2	**United States**	12	**Indonesia**	6
3	**Indonesia**	10	**Lao PDR**	3
4	**Viet Nam**	7	**India**	2
5	**Cambodia**	6	**Pakistan**	2
6	**Denmark**	4	**Singapore**	2
7	**India**	4	**United States**	2
8	**Pakistan**	4	**Viet Nam**	2
9	**Singapore**	4	**Australia**	1
10	**Thailand**	3	**Iraq**	1

WEBINAR 2

	REGISTRATION		ATTENDANCE	
	Country	#	Country	#
1	**Philippines**	72	**Philippines**	28
2	**Indonesia**	19	**Indonesia**	7
3	**United States**	13	**India**	4
4	**Pakistan**	6	**Lao PDR**	3
5	**Viet Nam**	5	**Iraq**	2
6	**Lao PDR**	5	**Pakistan**	2
7	**India**	5	**Canada**	1
8	**Iraq**	5	**Hong Kong SAR**	1
9	**United Kingdom**	4	**Kenya**	1
10	**Cambodia**	3	**Sri Lanka**	1

WEBINAR 3

	REGISTRATION		ATTENDANCE	
	Country	#	Country	#
1	**Philippines**	92	**Philippines**	28
2	**Indonesia**	20	**Indonesia**	4
3	**United States**	17	**United States**	4
4	**Viet Nam**	11	**Viet Nam**	4
5	**India**	8	**Singapore**	3
6	**Cambodia**	6	**Cambodia**	2
7	**Pakistan**	5	**India**	2
8	**Singapore**	5	**Denmark**	2
9	**Iraq**	4	**Pakistan**	2
10	**United Kingdom**	4	**Australia**	1

Webinar insights: top 10 attendee cities

Similarly with cities where attendees are from, the top 10 cities mostly come from the Philippines. It can be noted that the webinars have attracted attendees from notable AASCTF cities such as Baguio City and Davao City. Improvements in the way the webinar is promoted should be explored to encourage more participants from other AASCTF cities to participate in future webinars.

WEBINAR 1

	City name	#	%
1	Baguio City	11	20%
2	Davao City	8	14%
3	El Nido	4	7%
4	Mandaluyong City	3	5%
5	Manila	3	5%
6	Quezon City	3	5%
7	Jakarta	2	5%
8	Luang Prabang	2	5%
9	Singapore	2	5%
10	Bandung	1	2%

WEBINAR 2

	City name	#	%
1	Davao City	8	15.09
2	Baguio City	5	9.43
3	Jakarta	3	5.66
4	Manila	3	5.66
5	Quezon City	3	5.66
6	Semarang	2	3.77
7	Aurangabad	1	1.89
8	Baghdad	1	1.89
9	Butuan City	1	1.89
10	City of Santa Rosa	1	1.89

WEBINAR 3

	City name	#	%
1	Baguio City	13	22.81
2	Davao City	7	12.28
3	Ha Noi	4	7.02
4	Singapore	4	7.02
5	City of Santa Rosa	2	3.51
6	Copenhagen	2	3.51
7	Jakarta	2	3.51
8	Phnom Penh	2	3.51
9	Aurangabad	1	1.75
10	Bangkok	1	1.75

Webinar evaluation feedback

The overall feedback based on the webinar evaluation surveys was positive. The rating of the likelihood of recommending the webinars to other colleagues had an average of 3.72. (1 = very likely and 5 = very unlikely), which is very low compared to the positive feedback given in the other questions in the evaluation form.

There was a generally high response rate on suggestions for future topics. 47.6% of the participants answered this question.

- 9 out of the 20 responded they were interested in data usage in cities.
- 6 out of the 20 responses had a relation to sustainability and green infrastructure.
- 5 out of 20 responses suggested planning and management
- 3 out of 20 responses suggested policies

The remaining feedback was mainly blank answers and some of them also were comments and general thoughts on the webinar.

Webinar evaluation feedback

Webinar 1

From the data in the evaluation survey for Workshop 1, the participants were moderately satisfied with the webinar. Overall the participants were positive about the presentations.

Two improvements have been suggested by participants:

- The level of expertise among the participants varied too much and decreased the satisfaction of other participants.
- A copy of the presentation in advance.
- More interactive and graphic presentations.

Webinar 2

The feedback from Workshop 2 was positive. All participants either agreed or strongly agreed on their knowledge within the presented areas had increased during the webinar. The only "neutral" response from one participant was whether their work process would change after they had participated in the workshop.

Compared to Workshops 1 and 3, the response rate for further improvements was very low, and the responses did not contain any specific improvements but to carry on.

Webinar 3

The evaluation of Workshop 3 varies depending on the participant. The overall response was positive, with majority of the participants agreeing or strongly agreeing on the increase in their knowledge and the relevance of the webinars to them.

For future webinars, the participants wish to have more interaction between participants and speakers. It was also suggested to have more frequent webinars and more time in general.

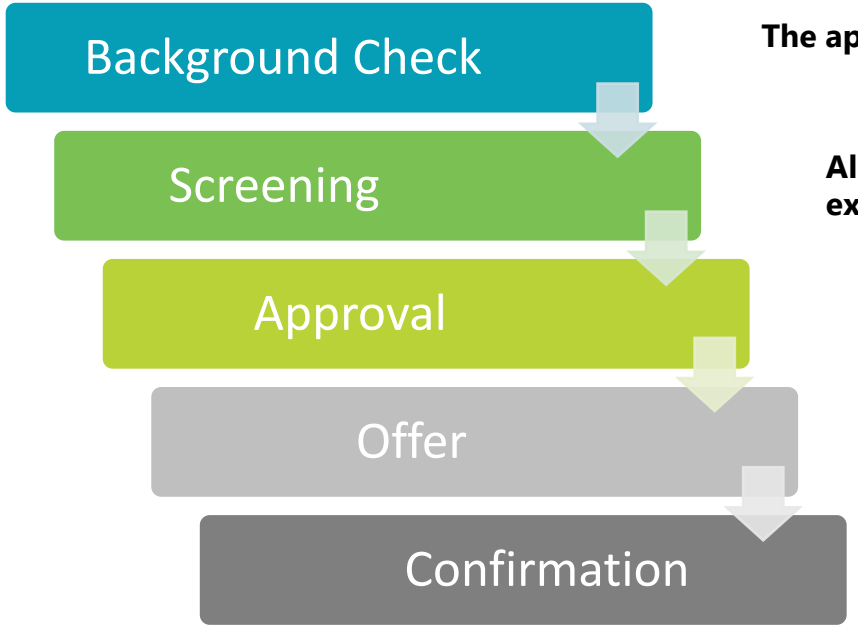
One participant had a specific wish to drag a parallel to DHSUD. This participant was also the one who gave the lowest score in the evaluation.

Refer to Annex A1 to A3 for the full GLP webinar evaluation statistics.

4) GLP COURSE PARTICIPANTS

GLP course screening process

The applicants for the e-learning course were screened to ensure that only the most qualified and motivated candidates were selected.



The applicant's background will be checked based on their experience in urban planning.

All applications will be carefully screened based on the motivational letter and relevant experience.

Approval will be given to the applications that meet the criteria.

The approved applicants will be offered a spot in the program. The applicants must accept the offer by confirming their attendance.

Finally, the applicants who have confirmed their attendance will be welcomed to the program.

Program participants

Total:
- **24 participants**
- **4 countries**
- **9 cities**

Participants in the GLP Program were selected through the AASCTF Capacity Building Application. The selection criteria included relevant work, experience or knowledge within urban planning and local city planning.

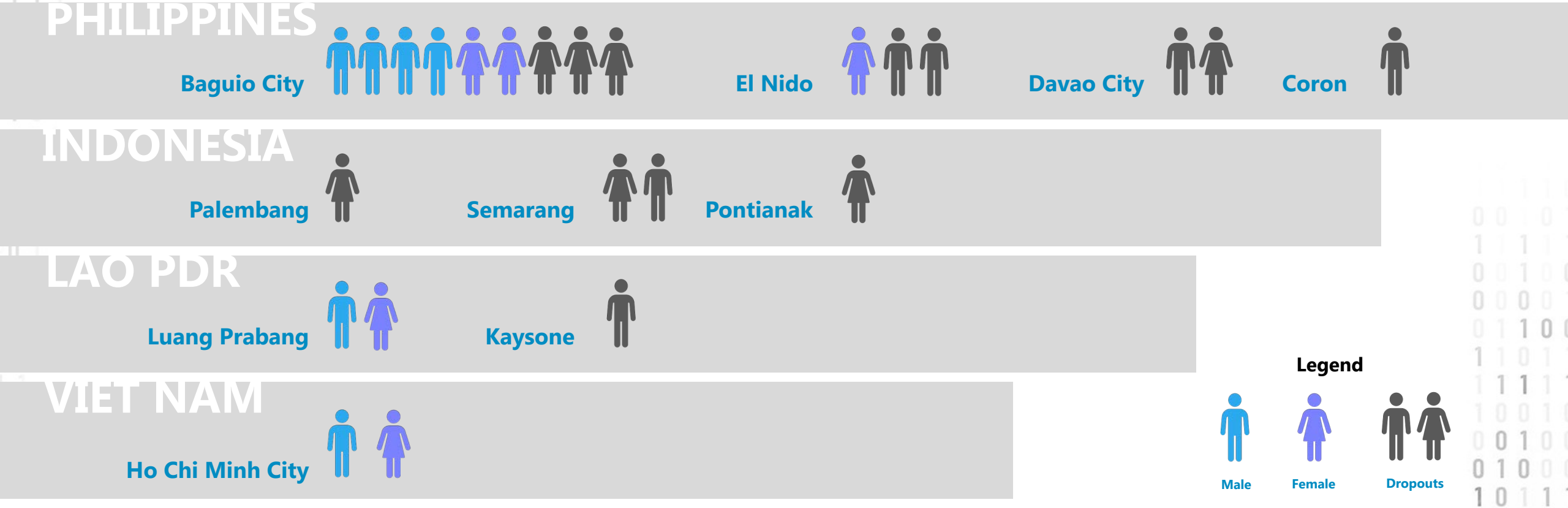
24 participants were selected to take part in the program out of 29 original nominees from the Philippines, Viet Nam, Indonesia, and Lao PDR.

In terms of gender distribution, 12 out of the 24 participants were female, and the remaining 12 were male.

- 15 of the participants were from the Philippines, of which 7 participants were female and the remaining 8 were male.
- Of the 2 participants from Viet Nam, 1 was female, and 1 was male.
- 3 participants from Lao PDR, 2 were male and 1 was female.
- Finally, 4 participants were from Indonesia, with 1 male participant and 3 female participants.

Participant course completion

From the 24 participants who were accepted for the program, 11 participants successfully completed the minimum requirements of the program. Based on informal conversations with some course participants, they cited competing priorities related to their roles in the city government as a primary reason why they were not able to complete the requirements of the course.



5) GLP MENTOR SESSIONS

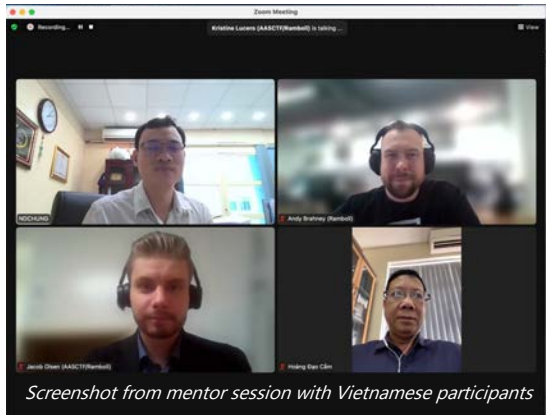
GLP Mentor sessions

The project team organized four mentor sessions with each group (segregated by country) to provide GLP course participants with an opportunity for participants to present their home exercise submissions, interact with course experts, and ask for advice or any clarifications on the exercises in an informal setting. These sessions were spaced out to allow participants to work on the home exercises and prepare to discuss them during the mentor sessions.

A final group meeting in January 2023 was organized to celebrate participants' course completion.

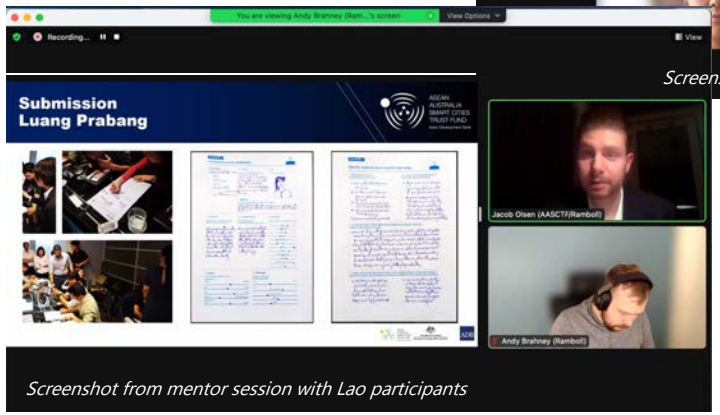
- **GLP Mentor Session 1:** 1, 3, November 2022
- **GLP Mentor Session 2:** 15, 16, 17 November 2022
- **GLP Mentor Session 3:** 5, 6, 7 December 2022
- **GLP Mentor Session 4:** 19, 20, 21 December 2022
- **Final Group Meeting:** 17 January 2023

Screenshot from mentor session with Lao participants



Screenshot from mentor session with Vietnamese participants

Screenshot from mentor session with Indonesian participants



Screenshot from mentor session with Lao participants

6) GLP HOME EXERCISES

A learning journey with a purpose

The GLP Program was created with a focus on the learning journey, incorporating proven learning methods to deliver an optimal learning experience for the participants. The accompanying home exercises were intended to encourage participants to try, apply, and reflect on the theories taught during the webinars and outlined in the exercises.

Home exercises were composed of three types of content: warmup activities, example activities, and reflect and submit activities.

Home exercise 1

LINK TO HOME EXERCISE 1

- **Date of dissemination:** 6 Sep 2022
- **Submission deadline:** 7 Oct 2022
- **# of submissions:** 12

This home exercise focuses on data collection and storage and introduces collecting data methods. It also discussed key steps in case development to define data collection to improve urban living, as well as the common barriers that cities face in collecting and storing urban data.

Participants were asked to reflect on why they are taking this course

Participants were asked to share their city/municipality's smart city vision, and create a profile of a key user in their city.

Participants were asked to develop a smart city use case based on their city's smart city vision and understanding of key users.

Home exercise 2

- **Date of dissemination:** 15 Nov 2022
- **Submission deadline:** 29 Nov 2022
- **# of submissions:** 8

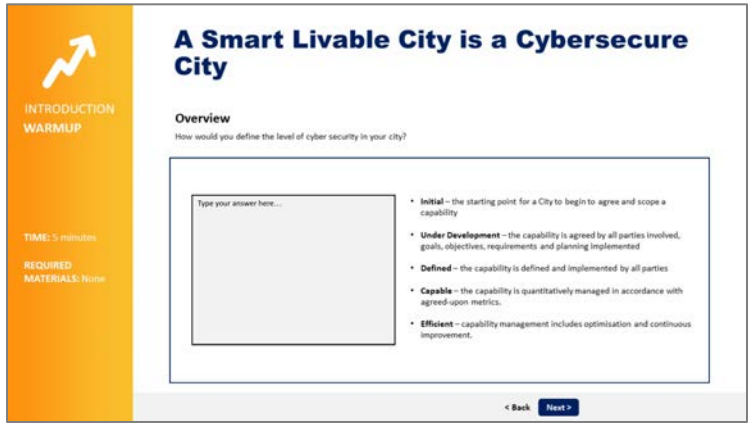
This module provided an introduction to data governance in a city setting and how it can be applied in an organization, highlighting the challenges cities face in making accurate data available and maintaining it in a secure environment. It aimed at giving an understanding of the significance of data governance and security in smart cities; concepts and principles of data protection; and security and methods for meeting data protection and security requirements.

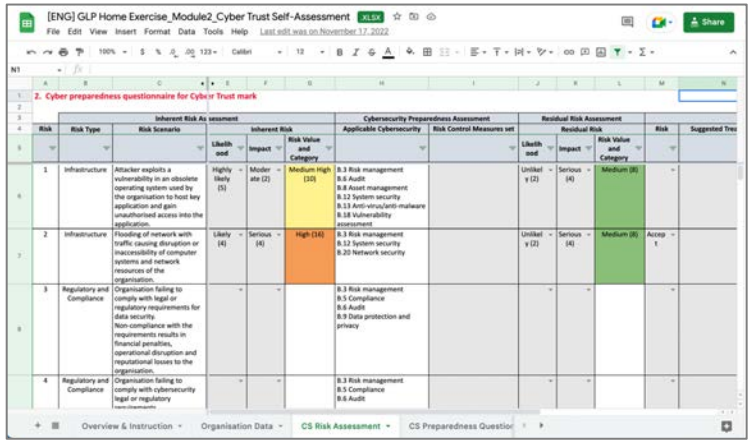
Participants were asked how they would define the level of cyber security in their city.

Participants were asked to reflect on initiatives their city has implemented to make it cybersecure.

Participants were asked to develop their own Data Protection Impact Assessment based on Singapore's Cyber-Trust Self-Assessment.

LINK TO HOME EXERCISE 2





Home exercise 3

LINK TO HOME EXERCISE 3

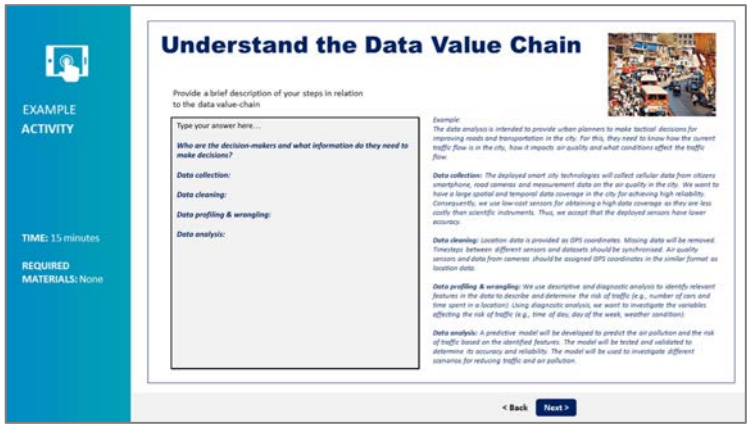
- **Date of dissemination:** 5 Dec 2022
- **Submission deadline:** 13 Jan 2023
- **# of submissions:** 5

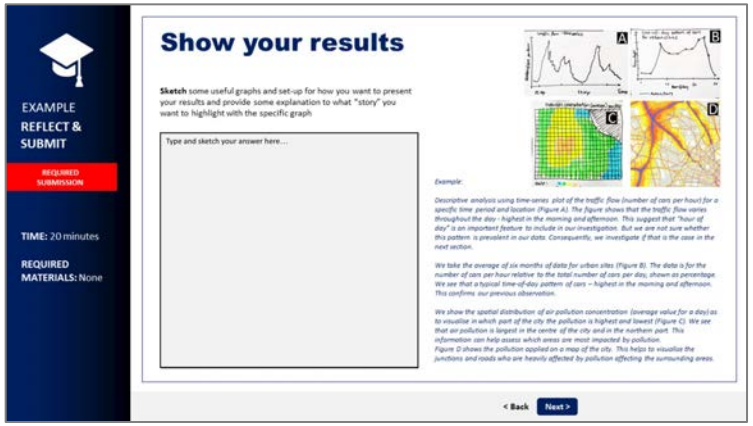
This module provided an introduction to data collection methods and key steps in case development to define data collection to improve urban living, as well as the barriers that cities face in collecting and storing urban data.

Participants were asked to provide the background, vision and objective for their data analysis-focused urban data project.

Participants were asked to provide a brief description of the steps they would take in relation to the data value chain.

Participants were asked to illustrate how they wanted to present the results of their data analysis.

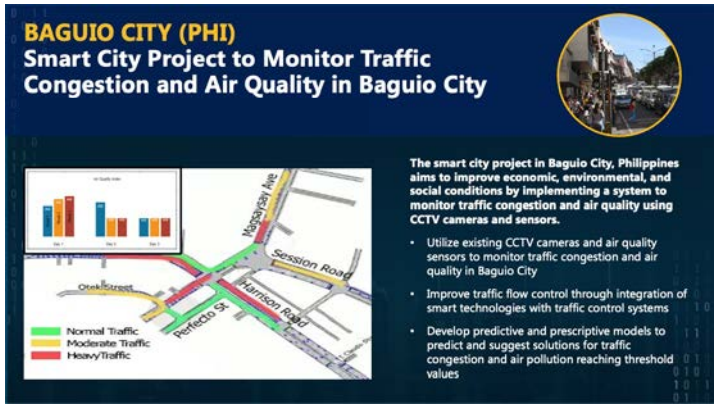


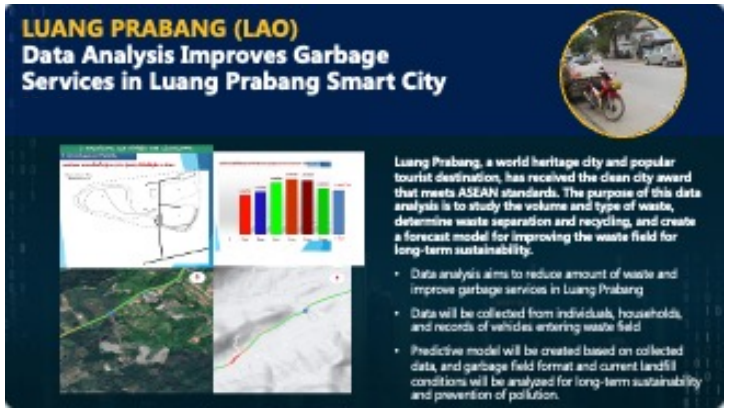


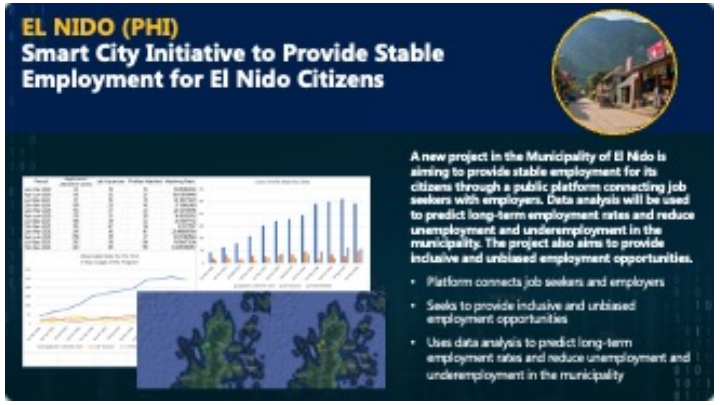
7) NOTABLE SMART CITY DATA PROJECT PROPOSALS

Smart city data project proposals

Based on participants' inputs and progress from the home exercises, smart city data project proposals have emerged. Four proposals were selected for this report and illustrated here. **Refer to Annex C for an overview of these smart city data project proposals.**







8) SMART CITY DATA PROJECT PITCH DECK TEMPLATE

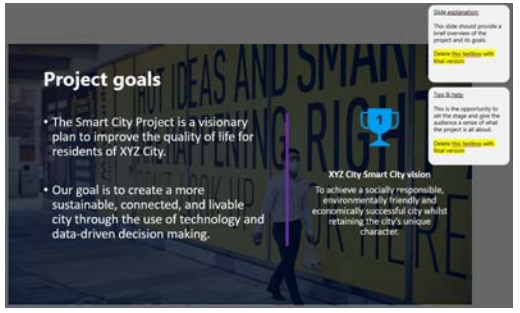
Pitch deck

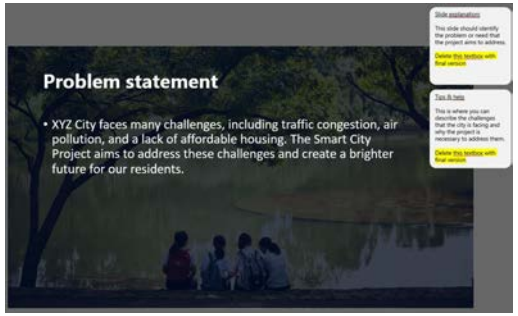
As a bonus for GLP course participants, a pitch deck template was provided to encourage them to further develop their smart data projects. The pitch deck was designed with helpful notes to guide them as they used the template.

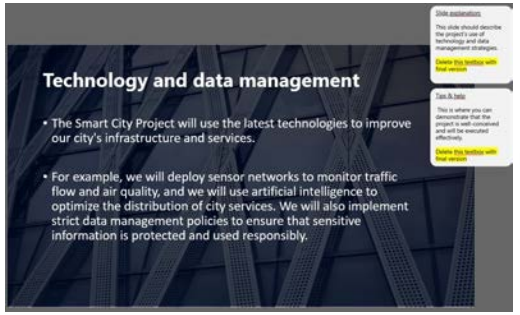
As an optional exercise, participants were encouraged to submit their pitch deck based on their smart data projects if they wished to get feedback from the experts.

The eleven participants who completed the guided learning programme and prepared a smart city project proposal are, in this context, considered superusers due to the knowledge, skills, and practical experience they gained through this program. They learned about the latest technologies, innovations, and best practices in smart city data management and developed critical thinking, problem-solving, communication, teamwork, and project management skills. As a result, they are valuable resources for others seeking to learn about or develop smart city projects.

LINK TO PITCH DECK







9) GLP COURSE EVALUATION OVERVIEW

GLP course feedback

A post-program evaluation survey was circulated to GLP course participants to gain feedback on the following:

1. Overall program satisfaction
2. Program content
3. Program structure and format
4. Relevance of home exercises
5. Acquired knowledge

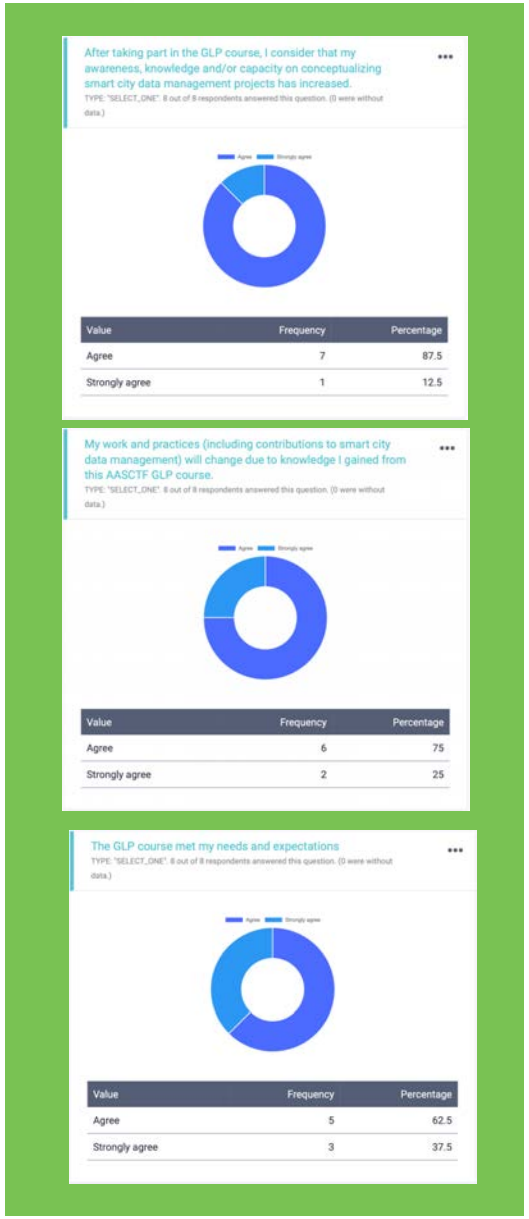
The degree of program satisfaction was high among participants who evaluated the course, with 100% (8/8) of respondents agreeing that the GLP course met their needs and expectations. All respondents agreed that the information and materials presented to them during the course was relevant to them, and was satisfied with how the GLP course was structured. Participants also agreed that their own work and practices will change because of the knowledge they gained from the course, and that their awareness, knowledge and capacity in conceptualizing smart city data management projects has increased after taking the course.

87.5% (7/7) of respondents indicated their satisfaction with the feedback they received from course experts on their home exercise submissions, with 100% (8/8) indicating that the course experts were well-qualified. The same percentage of respondents agreed that they were satisfied with the self-paced format of the GLP course.

75% (6/8) of participants agreed that the home exercises were relevant, and allowed them to apply their knowledge in conceptualizing smart city data management projects.

Participants indicated that they particularly appreciated the guides and mentor sessions as a form of recall on previous exercises and learnings. They also appreciated the useful feedback from the experts on their submissions.

Refer to Annex B for the full GLP course evaluation statistics.



10) KEY TAKEAWAYS AND LESSONS LEARNED

Lessons learned and key takeaways

FRAME, MONITOR & LEARN

- On the timing of the public webinars, scheduling future webinars either in the morning (from 10:00 am GMT+8) or later in the afternoon (3:00 pm GMT+8) should be considered to avoid the lunch period in the ASEAN region and perhaps attract more live attendees. The downside of doing the webinar in the morning though is that availability of European or Central Asian-based speakers would be less likely.

- A pre-course knowledge questionnaire would have been a useful exercise to establish a baseline knowledge of course participants before and after the GLP and serve as a guide to determine which level the topic should be tackled to avoid overwhelming the participants.

- Due to the interpretation requirements during webinars, there is still a need for a 3-person meeting support setup. One person focuses on the technical support aspects, a second person serves as the backup (on top of other roles such as monitoring of interpretation channels and chat/Q&A box), and a third person focuses on the communications aspect (i.e., live tweeting, etc).

- Due to the informal nature of the mentor sessions, a 1-person support team was possible as there was no other meeting complexity that required the participation of another team member.

- Organizing the mentor sessions by country helped to simplify interpretation requirements, as there was no need to monitor multiple language channels at once, allowing the team to focus better on the session content and interaction with participants**.**

- Translation of the home exercises was done under time constraints but was completed using Google Translate, as the team recognized that there was not much time for the usual translation provider to do the translation. NFPs have advised that document translation via Google Translate is not always accurate/reliable and is often informal. It is therefore important that future programs ensure that enough time for proper document translation is allocated (ideally 10 working days before the intended date of dissemination).

- The NFPs played a crucial role in the organization of the course. For example, the NFPs suggested that Google Drive could be used to disseminate home exercises, as this was a familiar tool to participants. They have also been helpful in the quality control of the language interpretations during the meeting and in vetting the Google-translated course materials, as the timeframe between the materials development and the mentor sessions did not give us much time to have the materials translated by our usual translation provider. The NFPs were also valuable in coordinating with participants on questions about the home exercises and reminding/following up on mentor session attendance and home exercise submissions with participants.

Lessons learned and key takeaways

FRAME, MONITOR & LEARN (continued)

Public webinars can have both benefits and drawbacks when included as part of a program. On the one hand, they can provide a platform for reaching a wider audience and sharing knowledge and expertise with a larger community. They can also serve as a valuable marketing tool, helping to raise awareness of a program or organization and generate interest in its offerings.

On the other hand, public webinars may reduce the sense of exclusivity that some participants may value and may make them feel less engaged with the program overall. This is because they may feel that the content is not tailored specifically to them, and that they are not receiving the same level of attention and support as those who are part of a more exclusive group.

Ultimately, whether to include public webinars in a program will depend on the specific goals and objectives of the program, as well as the preferences and needs of its target audience. If the goal is to reach as many people as possible and generate widespread interest in the program, public webinars may be a valuable tool. However, if exclusivity and a sense of community are important factors in the program's success, it may be better to focus on more targeted, personalized content and support.

BUILD LASTING PARTNERSHIPS

- As the course was originally designed to be self-paced, the team acknowledges that there was not as much peer-to-peer interaction between course participants. There were also not many interactions during the mentor sessions. Based on the success of the NBS and SCFM teams in the use of the Miro board for remote collaboration, future programs should consider using this in the program design to encourage collaboration.

- The effectiveness of partnerships in co-developing and implementing the Guided Learning Program has been significantly enhanced by engaging organizations from diverse sectors. These organizations have contributed to the program's home exercises and public webinars, ensuring a high degree of formalization and knowledge sharing throughout the learning process.

Lessons learned and key takeaways

SUSTAINABILITY, REPLICABILITY, AND SCALABILITY

- The Guided Learning Program and e-learning course: 'Unleashing the Power of Data: An Introduction to Data Management for Smart Cities' can be continually updated with new content and advancements in smart city technology, ensuring that they remain relevant and valuable for participating cities.
- The e-learning course 'Unleashing the Power of Data: An Introduction to Data Management for Smart Cities' has been produced and delivered as a free online course (accessible on ADB eLearn). The course introduces the topic of urban data and its role in smart city development, including introducing the types of data that can be collected and the importance of data governance in ensuring the safe and efficient use of data in urban planning and decision-making.
- The course development was closely aligned with and evolved out of the learnings and content development of the AASCTF GLP. With this course, lessons learned through the GLP will now be open to all, whereby the course itself will be designed as a practical and hands-on guide for participants to learn how to develop smart city data projects, which can help their cities to become more livable. The course can be taken at any time and comes with a certificate upon completion.

Lessons learned and key takeaways

STRENGTHEN CAPACITIES

- The value of translating the course content into the local language for non-English participants has helped participants to more confidently submit their home exercises, as it allowed them to submit responses in their local language.
- The importance of organizing a welcome/introductory session with course participants in order to get to know participants and brief them about what to expect, what is required from them, and introduce the program's timeline and milestones.
- The organization of mentor sessions in between home exercise submissions provided an opportunity for participants to interact with course experts and ask for advice or any clarifications on the exercises. This was not initially planned in the early stages of the course planning and therefore should be considered and scheduled earlier so that participants can already block relevant dates early, which may help to increase the chances of them attending the mentor sessions.
- Preparing an example of the filled-out home exercises may be useful to give participants an idea of how these exercises should be accomplished, which may help more participants accomplish the exercises more successfully.

INNOVATE VIA SANDBOX APPROACH

- The Guided Learning Programme and the data management e-learning course introduces participants to actual methods of data collection and key steps in use case development with a human-centric approach towards smart livable cities incl. how to identify key users, map user journeys and understand user needs.
- Google Drive was used as the main tool for disseminating and submitting the home exercises, as Google seems to be a common and accessible tool to all participants. There were minimal issues in this regard, indicating that this was a good approach to take.

Lessons learned and key takeaways

ELEVATE THE CONVERSATION

- To help enhance DFAT's visibility through AASCTF events, future webinars should consider the participation of someone from DFAT and ADB to deliver the opening or closing remarks of the session. This could be done through either a live or recorded speech.
- There is a need to strengthen how future webinars are marketed beyond AASCTF's social media platforms to improve the diversity of countries and cities attending the webinar. Some ideas for consideration include:
    1) Partnering or reaching out to local government organizations or associations in target countries that promote smart city initiatives to reach a wider audience and build credibility with the target audience; and
    2) Translating promotional materials into Indonesian, Khmer, Lao, Thai, and Viet to make it easier for city officials to understand the value of their participation in the webinars.
- To try and improve the attendance rate, the team needs to ramp up short-term email (or mobile, if possible) reminders to registrants to remind them about the webinar time, as well as a one-click link for them to join the session.

RAISE THE BAR ON INCLUSION & RESILIENCE

- Based on registration and attendance statistics, there is a need to improve the diversity of webinar attendees, including increasing the number of women attendees. Some ideas for consideration include:
    1) Include more gender, disability, and social inclusion-specific challenges and opportunities in smart city development/ initiatives as the topic of future webinars; and
    2) Partner with women-led organizations in the smart city space to help promote future webinars. This can help expand our reach and build credibility with women in ASEAN cities interested in smart city development/initiatives;
- While the team did not receive any requests to accommodate specific disabilities, future webinars should consider being more proactive by including a checkbox in the registration form for participants to indicate the specific support they need (i.e., sign language support, specific language transcription, etc.) during the webinar.

ANNEXES

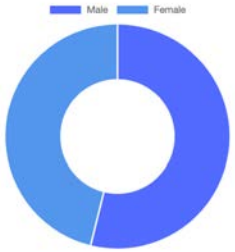
ANNEX A:
GLP WEBINAR ATTENDANCE AND EVALUATION

ANNEX A1: GLP Webinar 1 Evaluation

TOTAL RESPONDENTS 13

Your gender

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Male	7	53.85
Female	6	46.15

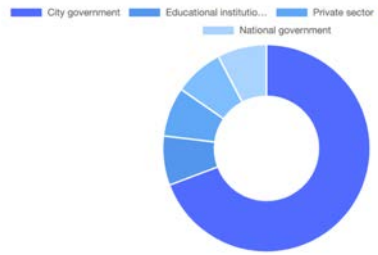
City / Municipality

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)

Value	Frequency	Percentage
Davao	5	38.46
Baguio	4	30.77
El Nido	2	15.38
Semarang	1	7.69
Other	1	7.69

Please choose which sector best describes the organization you are affiliated with:

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)

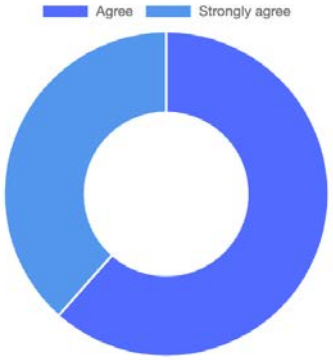


Value	Frequency	Percentage
City government	9	69.23
Educational institution (university/college/school/research institution)	1	7.69
Private sector	1	7.69
Development institution	1	7.69
National government	1	7.69

ANNEX A1: GLP Webinar 1 Evaluation

I found the first presentation "User Experience Design: Starting at the End" informative and useful.

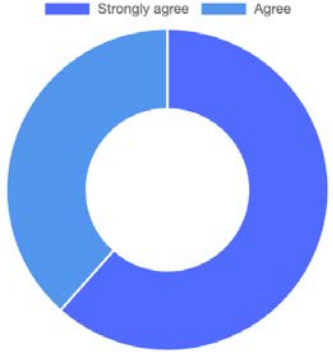
TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	8	61.54
Strongly agree	5	38.46

I found the second presentation "Data Collection Methods" informative and useful.

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Strongly agree	8	61.54
Agree	5	38.46

ANNEX A1: GLP Webinar 1 Evaluation

Overall, this webinar met my needs and expectations.

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)

Value	Frequency	Percentage
Agree	7	53.85
Strongly agree	5	38.46
Neutral	1	7.69

After taking part in the webinar, I consider that my knowledge of data collection and storage has improved:

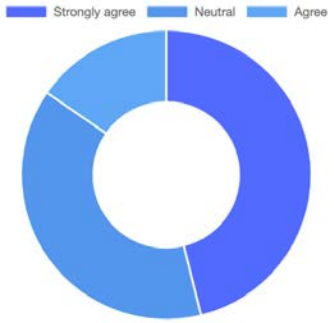
TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)

Value	Frequency	Percentage
Agree	10	76.92
Strongly agree	3	23.08

ANNEX A1: GLP Webinar 1 Evaluation

My work and practices (including potential contributions to data management) will change due to knowledge I gained from this webinar.

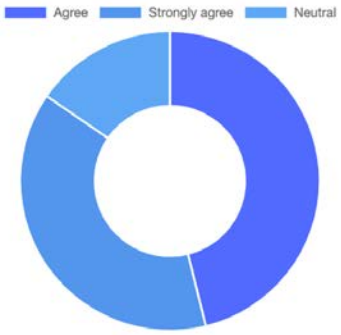
TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Strongly agree	6	46.15
Neutral	5	38.46
Agree	2	15.38

After taking part in the webinar, I consider that my awareness, knowledge, and/or capacity in digitalization and smart city development has increased.

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	6	46.15
Strongly agree	5	38.46
Neutral	2	15.38

ANNEX A1: GLP Webinar 1 Evaluation

Is there anything the organizers can improve on to make future webinars and events better?

TYPE: "TEXT". 8 out of 13 respondents answered this question. (5 were without data.)

Value	Frequency	Percentage
none	1	7.69
The presentations are great although they can be more interactive.	1	7.69
The use of more graphic and 3d presentation	1	7.69
Keep up the good work. well organized.	1	7.69
None. Overall was great and the webinar is inclusive.	1	7.69
Cannot think of anything at the moment. It was very organized and good time management.	1	7.69
For me, much better that we can have a advance copy of the presentation.	1	7.69
the diversity of participants made the webinar more interesting but it was a challenge too, as expertise and qualifications were so different, so the content would not have been satisfactory and usefull for all. Also a planned presentation was not delivered, I guess	1	7.69

What other topics related to smart city development would you like to learn more on in our future events?

TYPE: "TEXT". 6 out of 13 respondents answered this question. (7 were without data.)

Value	Frequency	Percentage
smart city and climate resilience relationship	1	7.69
Climate resiliency during monsoons and natural disasters.	1	7.69
Digital Twin of City and Development of Artificial Intelligence towards planning	1	7.69
ITS	1	7.69
None so far.	1	7.69
Management/planning utilities	1	7.69

On a scale of 1 to 5, how likely are you to participate or recommend future AASCTF webinars or events to a colleague/peer?

TYPE: "RANGE". 13 out of 13 respondents answered this question. (0 were without data.)

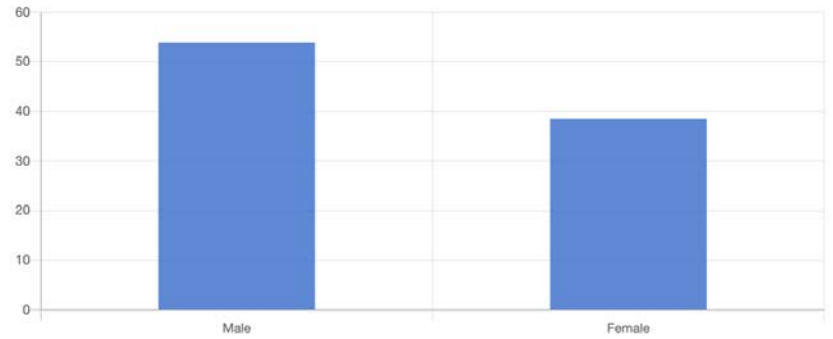
Mean	Median	Mode	Standard deviation
3.77	5.00	5.00	1.79

ANNEX A2: GLP Webinar 2 Evaluation

TOTAL RESPONDENTS 13

Your gender

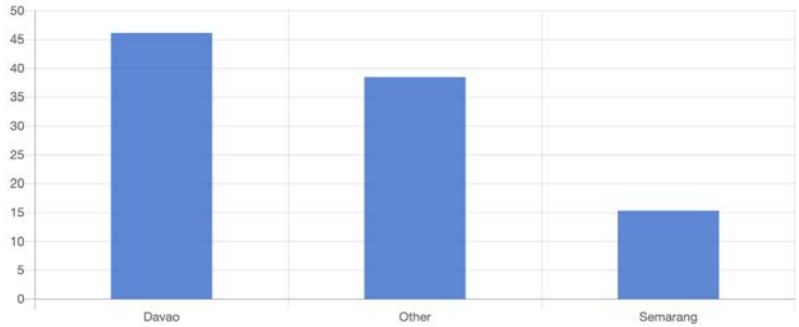
TYPE: "SELECT_ONE". 12 out of 13 respondents answered this question. (1 were without data.)



Value	Frequency	Percentage
Male	7	53.85
Female	5	38.46

City / Municipality

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Davao	6	46.15
Other	5	38.46
Semarang	2	15.38

Other

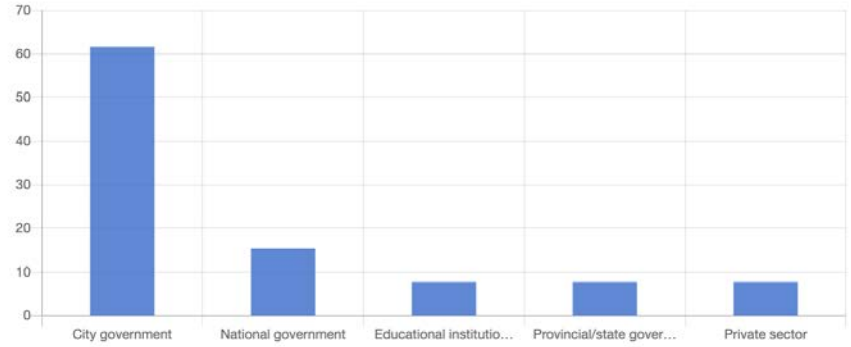
TYPE: "TEXT". 5 out of 13 respondents answered this question. (8 were without data.)

Value	Frequency	Percentage
Davao City	1	7.69
Quezon City Philippines	1	7.69
Pasig	1	7.69
Agusan del Norte	1	7.69
New Delhi	1	7.69

ANNEX A2: GLP Webinar 2 Evaluation

Please choose which sector best describes the organization you are affiliated with:

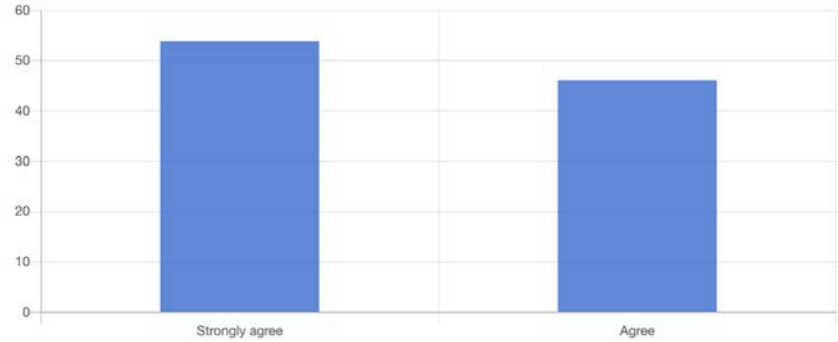
TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
City government	8	61.54
National government	2	15.38
Educational institution (university/college/school/research institution)	1	7.69
Provincial/state government	1	7.69
Private sector	1	7.69

I found the first presentation "Data Protection and Cybersecurity" informative and useful.

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)

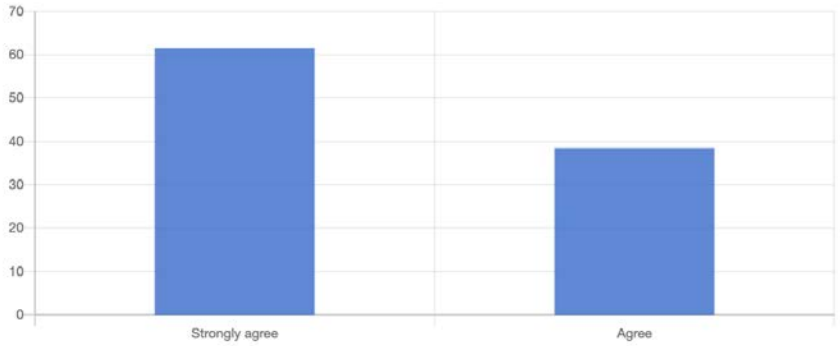


Value	Frequency	Percentage
Strongly agree	7	53.85
Agree	6	46.15

ANNEX A2: GLP Webinar 2 Evaluation

I found the second presentation "Data Governance for Smart Cities" informative and useful.

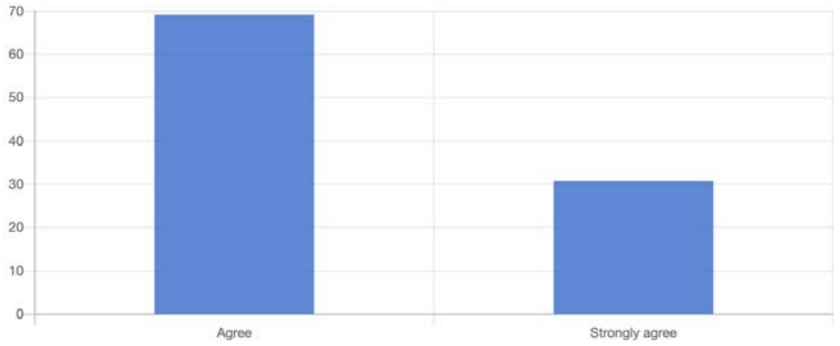
TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Strongly agree	8	61.54
Agree	5	38.46

Overall, this webinar met my needs and expectations.

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)

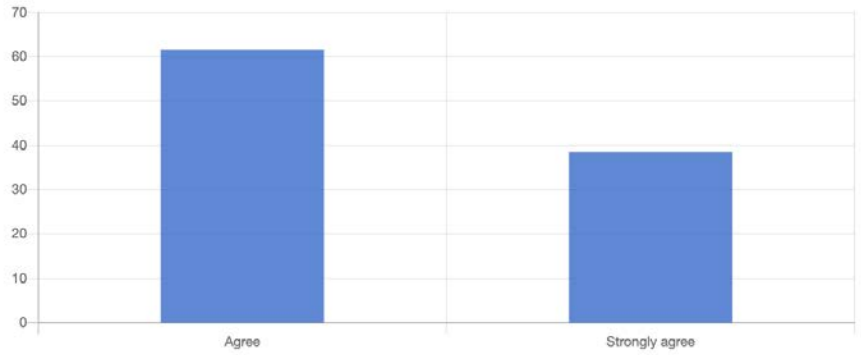


Value	Frequency	Percentage
Agree	9	69.23
Strongly agree	4	30.77

ANNEX A2: GLP Webinar 2 Evaluation

After taking part in the webinar, I consider that my knowledge of data collection and storage has improved:

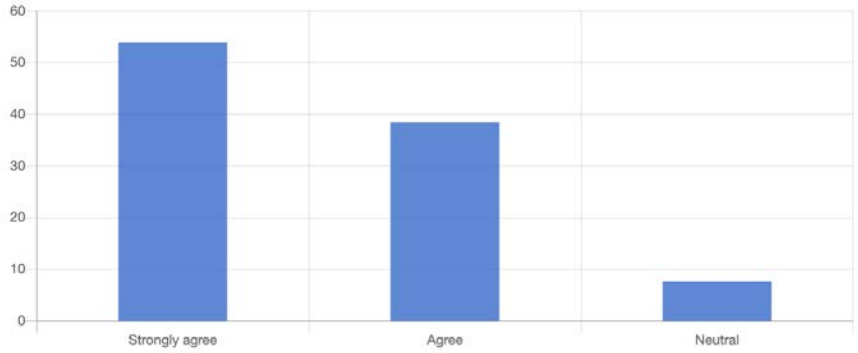
TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	8	61.54
Strongly agree	5	38.46

My work and practices (including potential contributions to data management) will change due to knowledge I gained from this webinar.

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)

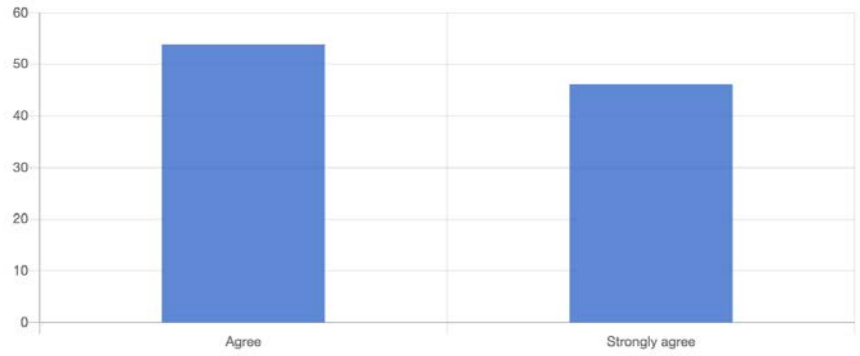


Value	Frequency	Percentage
Strongly agree	7	53.85
Agree	5	38.46
Neutral	1	7.69

ANNEX A2: GLP Webinar 2 Evaluation

After taking part in the webinar, I consider that my awareness, knowledge, and/or capacity in digitalization and smart city development has increased.

TYPE: "SELECT_ONE". 13 out of 13 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	7	53.85
Strongly agree	6	46.15

Is there anything the organizers can improve on to make future webinars and events better?

TYPE: "TEXT". 7 out of 13 respondents answered this question. (6 were without data.)

Value	Frequency	Percentage
none	2	15.38
+	2	15.38
Keep going. Thank you	1	7.69
The webinar for me was well organized.	1	7.69
No	1	7.69

What other topics related to smart city development would you like to learn more on in our future events?

TYPE: "TEXT". 5 out of 13 respondents answered this question. (8 were without data.)

Value	Frequency	Percentage
+	2	15.38
Topic focusing on Accessibility of Smart Cities can be considered in the future.	1	7.69
Use of advanced technologies on government usual transactions.	1	7.69
Similar Topics	1	7.69

On a scale of 1 to 5, how likely are you to participate or recommend future AASCTF webinars or events to a colleague/peer?

TYPE: "RANGE". 11 out of 13 respondents answered this question. (2 were without data.)

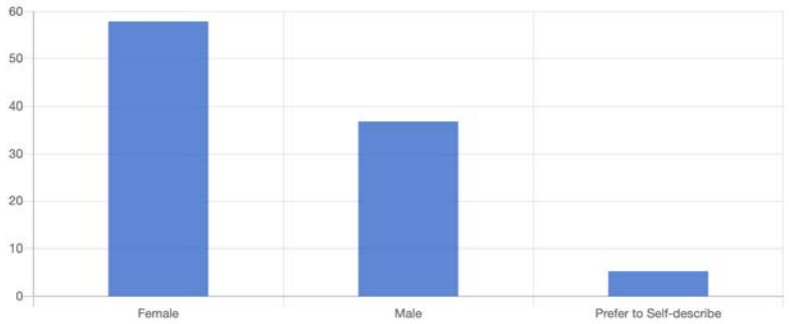
Mean	Median	Mode	Standard deviation
3.82	5.00	5.00	1.66

ANNEX A3: GLP Webinar 3 Evaluation

TOTAL RESPONDENTS 19

Your gender

TYPE: "SELECT_ONE". 19 out of 19 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Female	11	57.89
Male	7	36.84
Prefer to Self-describe	1	5.26

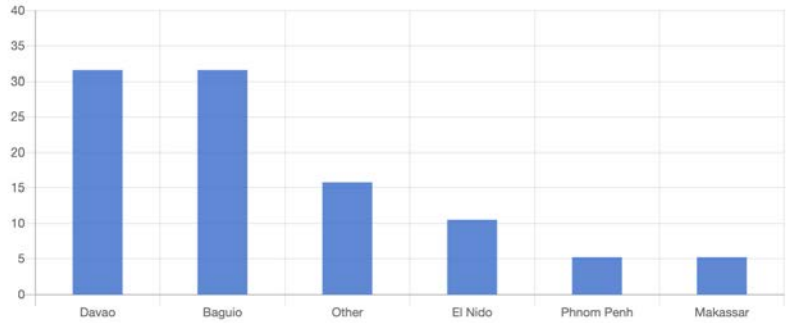
If "prefer to self-describe", please specify:

TYPE: "TEXT". 1 out of 19 respondents answered this question. (18 were without data.)

Value	Frequency	Percentage
Non-binary	1	5.26

City / Municipality

TYPE: "SELECT_ONE". 19 out of 19 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Davao	6	31.58
Baguio	6	31.58
Other	3	15.79
El Nido	2	10.53
Phnom Penh	1	5.26
Makassar	1	5.26

Other

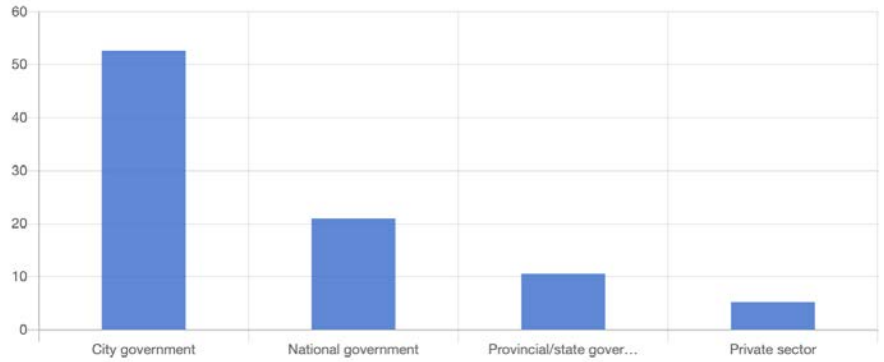
TYPE: "TEXT". 3 out of 19 respondents answered this question. (16 were without data.)

Value	Frequency	Percentage
Aurangabad city Maharashtra India	1	5.26
Quezon City	1	5.26
City of Santa Rosa	1	5.26

ANNEX A3: GLP Webinar 3 Evaluation

Please choose which sector best describes the organization you are affiliated with:

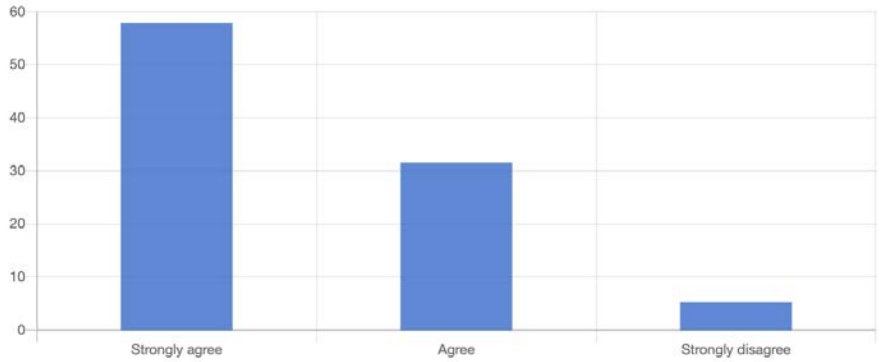
TYPE: "SELECT_ONE". 17 out of 19 respondents answered this question. (2 were without data.)



Value	Frequency	Percentage
City government	10	52.63
National government	4	21.05
Provincial/state government	2	10.53
Private sector	1	5.26

I found the first presentation "Data-Led Decision Making" by Emily Scoones informative and useful.

TYPE: "SELECT_ONE". 18 out of 19 respondents answered this question. (1 were without data.)

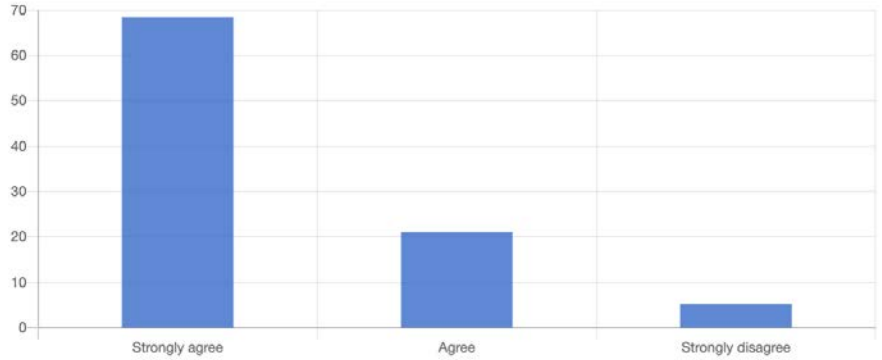


Value	Frequency	Percentage
Strongly agree	11	57.89
Agree	6	31.58
Strongly disagree	1	5.26

ANNEX A3: GLP Webinar 3 Evaluation

I found the second presentation "Leveraging the Science of Cities for Liveability, Sustainability & Resilience" by Limin Hee informative and useful.

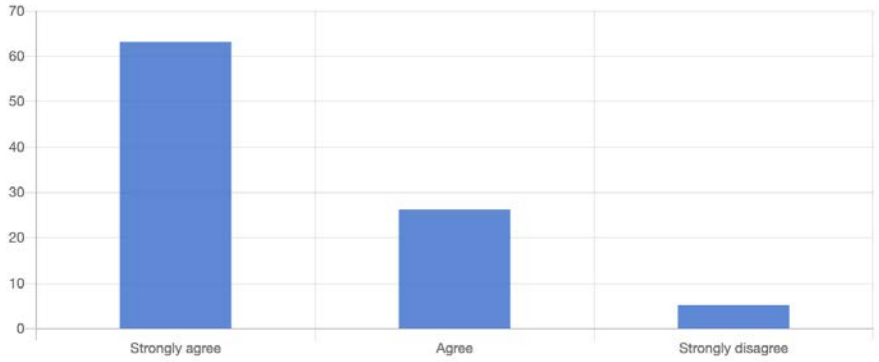
TYPE: "SELECT_ONE". 18 out of 19 respondents answered this question. (1 were without data.)



Value	Frequency	Percentage
Strongly agree	13	68.42
Agree	4	21.05
Strongly disagree	1	5.26

Overall, this webinar met my needs and expectations.

TYPE: "SELECT_ONE". 18 out of 19 respondents answered this question. (1 were without data.)

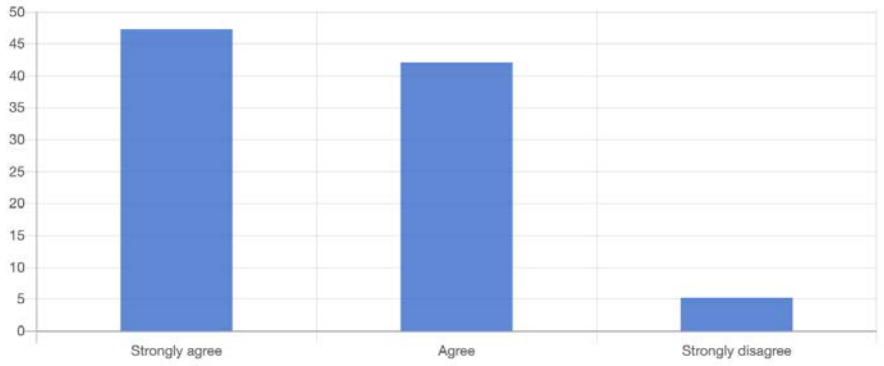


Value	Frequency	Percentage
Strongly agree	12	63.16
Agree	5	26.32
Strongly disagree	1	5.26

ANNEX A3: GLP Webinar 3 Evaluation

After taking part in the webinar, I consider that my knowledge of data collection and storage has improved:

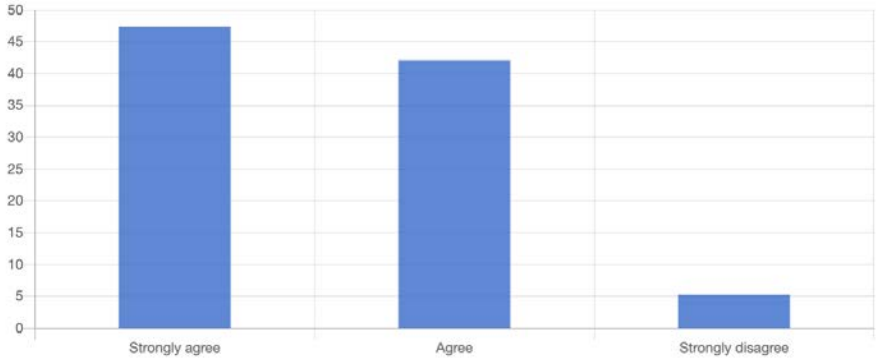
TYPE: "SELECT_ONE". 18 out of 19 respondents answered this question. (1 were without data.)



Value	Frequency	Percentage
Strongly agree	9	47.37
Agree	8	42.11
Strongly disagree	1	5.26

My work and practices (including potential contributions to data management) will change due to knowledge I gained from this webinar.

TYPE: "SELECT_ONE". 18 out of 19 respondents answered this question. (1 were without data.)

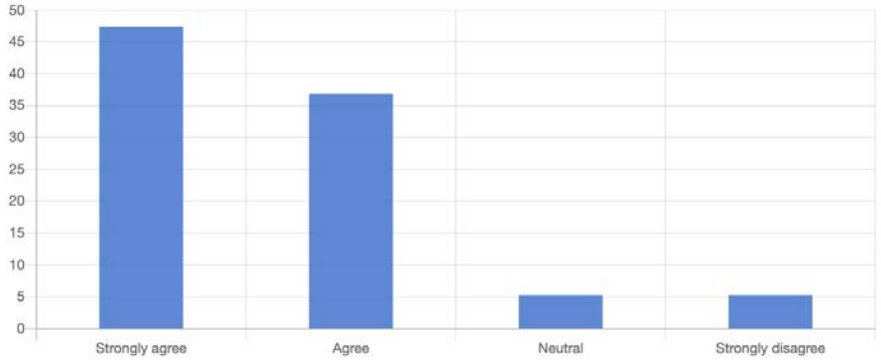


Value	Frequency	Percentage
Strongly agree	9	47.37
Agree	8	42.11
Strongly disagree	1	5.26

ANNEX A3: GLP Webinar 3 Evaluation

After taking part in the webinar, I consider that my awareness, knowledge, and/or capacity in digitalization and smart city development has increased.

TYPE: "SELECT_ONE". 18 out of 19 respondents answered this question. (1 were without data.)



Value	Frequency	Percentage
Strongly agree	9	47.37
Agree	7	36.84
Neutral	1	5.26
Strongly disagree	1	5.26

Is there anything the organizers can improve on to make future webinars and events better?

TYPE: "TEXT". 12 out of 19 respondents answered this question. (7 were without data.)

Value	Frequency	Percentage
More time for the webinar	3	15.79
I am very satisfy with organizer.	1	5.26
More programs like this, I want to learn more.	1	5.26
More interaction	1	5.26
Some energizer questions (kahoot style perhaps) in-between presentations.	1	5.26
Excellent webinar with insightful learnings. It was really greatly put by team.	1	5.26
I wish you also address this topic to Department of Human Settlements and Urban Development	1	5.26
Frequency of the webinars more extra	1	5.26
I am good on how the presentation has been presented	1	5.26
None	1	5.26

ANNEX A3: GLP Webinar 3 Evaluation

What other topics related to smart city development would you like to learn more on in our future events?

TYPE: "TEXT". 12 out of 19 respondents answered this question. (7 were without data.)

Value	Frequency	Percentage
New innovations using software	4	21.05
How to make decision / time management to delegate project on time.	1	5.26
Planning for Dense and Green vertical cities, remote tree measurement system, climate sensitive design, integrated environmental modelling.	1	5.26
Green Construction	1	5.26
Enabling Policies and funding institutions available	1	5.26
Climate change Adaptation projects, success stories on risk resilience	1	5.26
How to gathered necessary data for urban planning and development by using smart phones thru facebook, instagram, youtube, tiktok application.	1	5.26
One data policy	1	5.26
Urban planning in the usage of sustainable renewable energy	1	5.26

On a scale of 1 to 5, how likely are you to participate or recommend future AASCTF webinars or events to a colleague/peer?

TYPE: "RANGE". 19 out of 19 respondents answered this question. (0 were without data.)

Mean	Median	Mode	Standard deviation
3.58	5.00	5.00	1.84

ANNEX A4: GLP Webinar 1 attendance statistics

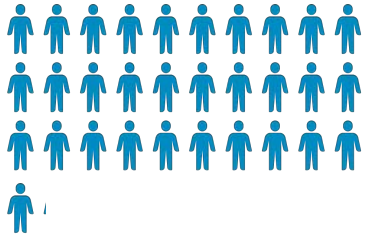
TOTAL REGISTRATIONS	126
TOTAL ATTENDEES	55
ATTENDANCE RATE	44%

TOP 3 MOST REPRESENTED COUNTRIES
PHILIPPINES (62%)
INDONESIA (11%)
LAO PDR (5%)

TOP 3 MOST REPRESENTED CITIES
BAGUIO CITY (PHI) (20 %)
DAVAO CITY (PHI) (14%)
EL NIDO (PHI) (7%)

ATTENDEES' GENDER

FEMALE : 23 (41%)

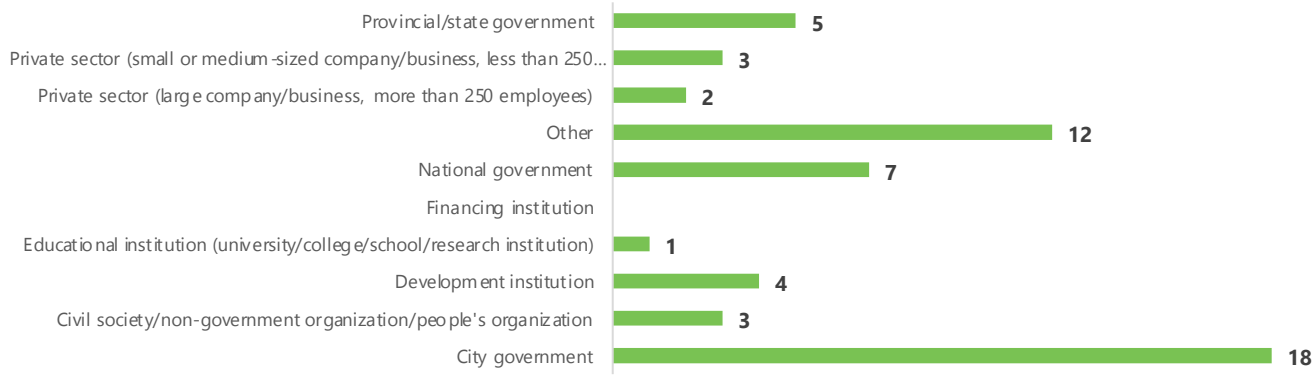


MALE : 31 (56%)

?

PREFER NOT TO SAY: 1 (2%)

SECTOR DISTRIBUTION



ANNEX A5: GLP Webinar 2 attendance statistics

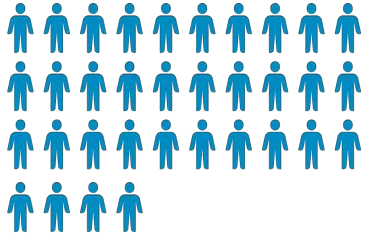
TOTAL REGISTRATIONS	154
TOTAL ATTENDEES	53
ATTENDANCE RATE	34%

TOP 3 MOST REPRESENTED COUNTRIES
PHILIPPINES (53%)
INDONESIA (13%)
INDIA (6%)

TOP 3 MOST REPRESENTED CITIES
DAVAO CITY (15%)
BAGUIO CITY (9%)
JAKARTA (6%)

ATTENDEES' GENDER

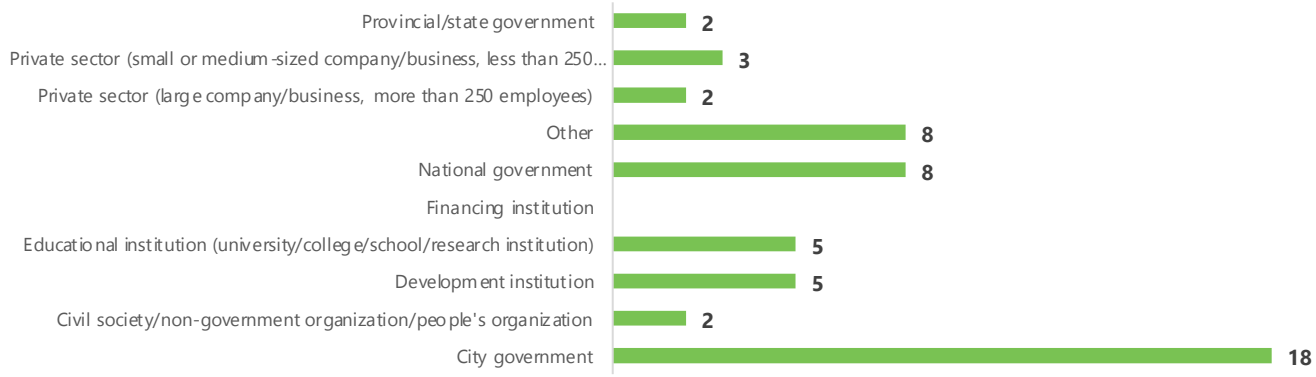
FEMALE : 29 (55%)



MALE : 24 (45%)

PREFER NOT TO SAY: 0 (0%)

SECTOR DISTRIBUTION



ANNEX A6: GLP Webinar 3 attendance statistics

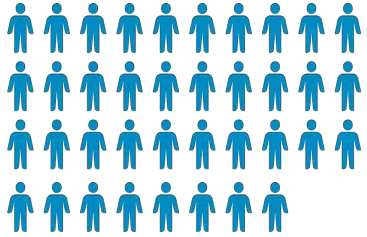
TOTAL REGISTRATIONS	202
TOTAL ATTENDEES	57
ATTENDANCE RATE	28%

TOP 3 MOST REPRESENTED COUNTRIES
PHILIPPINES (49%)
INDONESIA (7%)
VIETNAM (7%)

TOP 3 MOST REPRESENTED CITIES
BAGUIO CITY (23%)
DAVAO CITY (7%)
HA NOI (4%)

ATTENDEES' GENDER

FEMALE : 27 (47%)

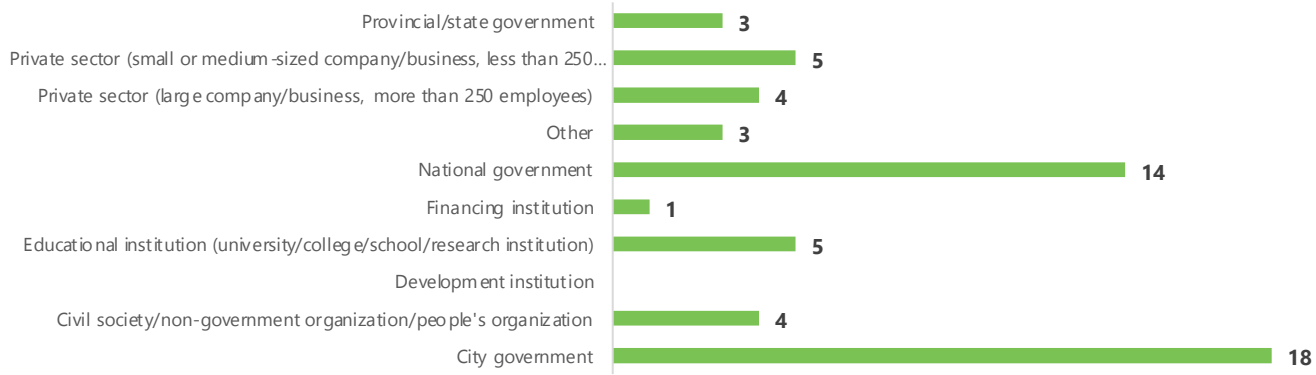


MALE : 28 (49%)

? ?

PREFER NOT TO SAY: 2 (3%)

SECTOR DISTRIBUTION



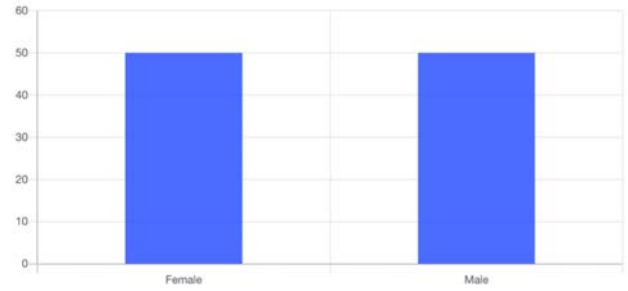
ANNEX B:
GLP COURSE EVALUATION

ANNEX B: GLP Course Evaluation

TOTAL RESPONDENTS 8/11

Your gender

TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Female	4	50
Male	4	50

City / Municipality

TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)

Value	Frequency	Percentage
Baguio	3	37.5
Luang Prabang	2	25
Ho Chi Minh City	2	25
El Nido	1	12.5

After taking part in the GLP course, I consider that my awareness, knowledge and/or capacity on conceptualizing smart city data management projects has increased.

TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)

Value	Frequency	Percentage
Agree	7	87.5
Strongly agree	1	12.5

ANNEX B: GLP Course Evaluation

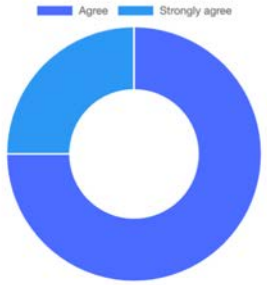
My work and practices (including contributions to smart city data management) will change due to knowledge I gained from this AASCTF GLP course.

TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)

Value	Frequency	Percentage
Agree	6	75
Strongly agree	2	25

I was satisfied with how the GLP course was structured

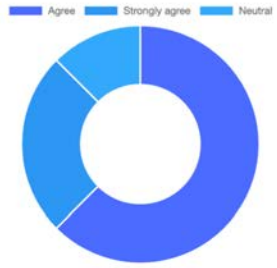
TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	6	75
Strongly agree	2	25

I was satisfied with the self-paced format of the GLP course

TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)

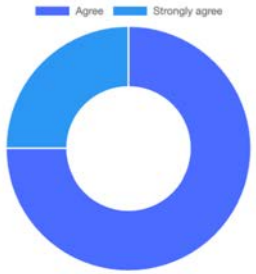


Value	Frequency	Percentage
Agree	5	62.5
Strongly agree	2	25
Neutral	1	12.5

ANNEX B: GLP Course Evaluation

The information and materials presented during the GLP course were relevant to me

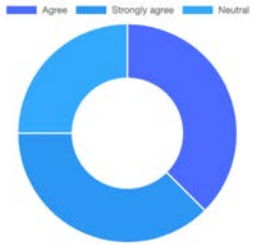
TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	6	75
Strongly agree	2	25

The homework exercises were relevant, and allowed me to apply my knowledge in conceptualizing smart city data management projects

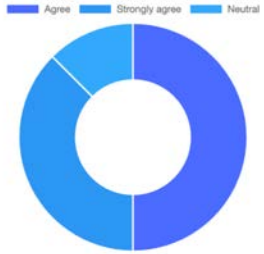
TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	3	37.5
Strongly agree	3	37.5
Neutral	2	25

I was satisfied with the level of interactivity and engagement during the GLP course

TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)

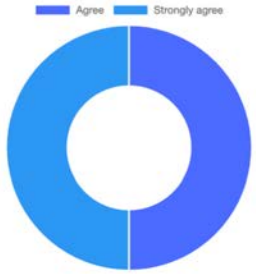


Value	Frequency	Percentage
Agree	4	50
Strongly agree	3	37.5
Neutral	1	12.5

ANNEX B: GLP Course Evaluation

The GLP course experts were well-qualified, and their technical knowledge was adequate

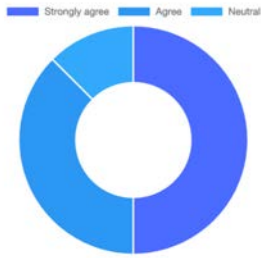
TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	4	50
Strongly agree	4	50

I was satisfied with the feedback I have received from the GLP course experts on the homework exercises I submitted

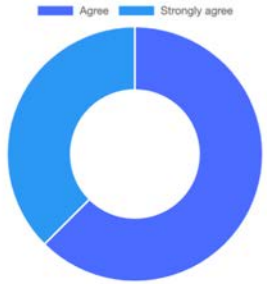
TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Strongly agree	4	50
Agree	3	37.5
Neutral	1	12.5

The GLP course met my needs and expectations

TYPE: "SELECT_ONE". 8 out of 8 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Agree	5	62.5
Strongly agree	3	37.5

ANNEX B: GLP Course Evaluation

5/6

On a scale of 1 to 5, how likely are you to participate or recommend future AASCTF courses/workshops/training events to a colleague/peer?

TYPE: "RANGE". 8 out of 8 respondents answered this question. (0 were without data.)

Mean	Median	Mode	Standard deviation
4.25	4.00	4.00	0.46

ການເນະນຳກ່ຽວກັບການຄຸ້ມຄອງຂໍ້ມູນແລະວິທີເກັບຂໍ້ມູນແມ່ນມີຄວາມລະອຽດຫລາຍ.	1	12.5
Người hỗ trợ Mr Cầm rất nhiệt tình giúp đỡ, hướng dẫn.	1	12.5
The organization is very thoughtful	1	12.5
It a great course, teachers are so kind and patience	1	12.5
Cybersecurity	1	12.5
All the activities and exercises GLP provided	1	12.5
getting feedbacks from the resource speakers	1	12.5

Is there anything the organizers can improve on to make future courses/workshops/training events better?

TYPE: "TEXT". 8 out of 8 respondents answered this question. (0 were without data.)

Value	Frequency	Percentage
Hopefully we can get more Philippine examples/experts that we can relate to!	1	12.5
ຢາກໃຫ້ຫຍໍ້ໄລຍະເວລາເຂົ້າ	1	12.5
Thời gian tổ chức, có thể cuối tuần hoặc các buổi tối sẽ thuận lợi hơn.	1	12.5
The organizers introduce supporting tools in the process of implementing smart city projects	1	12.5
Make the long course and more example from experiences countries	1	12.5
More activity	1	12.5
None so far since I'm satisfied on how the workshop organized	1	12.5
I found the way the topics and instructions were expressed not comprehensible in one reading. Suggest to perhaps use 'simpler sentence construction' (for lack of a better description :)) although I know that the realm of smart cities has its own jargon. Maybe it is just me :) Homeworks could include more templates and examples to use as reference.	1	12.5

What other topics related to smart city development would you like to learn more on in our future courses/workshops/training events?

TYPE: "TEXT". 8 out of 8 respondents answered this question. (0 were without data.)

Value	Frequency	Percentage
Information storage! We're really struggling with data storage and we're very paper-based, so we hope to change that up!	1	12.5
ການນ້ຳໃຊ້ເຄືອງມືຕົວຈິງເຂົ້າຊ່ວຍ ໃນການເກັບຂໍ້ມູນຈະໄວຂຶ້ນໃນອານາຄົດ	1	12.5
Dữ liệu ngành nước, Cấp nước thông minh	1	12.5
Topics about digital transformation	1	12.5
Learn, practice and field survey	1	12.5
Data Governance	1	12.5
Big Data Analysis for data modelling	1	12.5
- workshop on evaluating current and varied available data in the city and how to harmonize them to be meaningful inputs in a Smart City system	1	12.5

ANNEX B: GLP Course Evaluation

On a scale of 1 to 5, how likely are you to participate or recommend future AASCTF courses/workshops/training events to a colleague/peer?

TYPE: "RANGE". 8 out of 8 respondents answered this question. (0 were without data.)

Mean	Median	Mode	Standard deviation
4.25	4.00	4.00	0.46

ANNEX C:
SMART CITY DATA PROJECT PROPOSALS FROM GLP PARTICIPANTS

BAGUIO CITY (PHI)

Smart City Project to Monitor Traffic Congestion and Air Quality in Baguio City

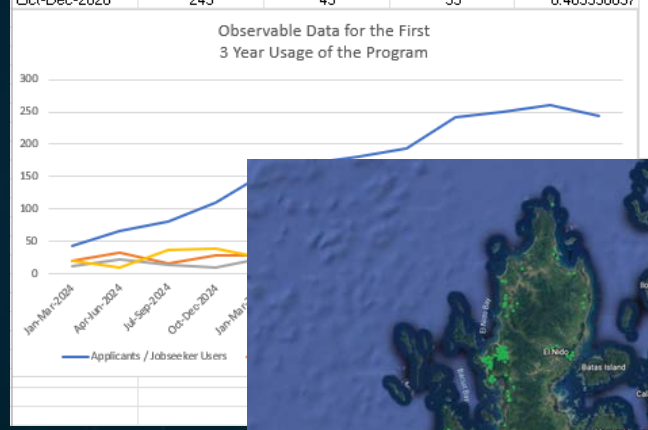
The smart city project in Baguio City, Philippines aims to improve economic, environmental, and social conditions by implementing a system to monitor traffic congestion and air quality using CCTV cameras and sensors.

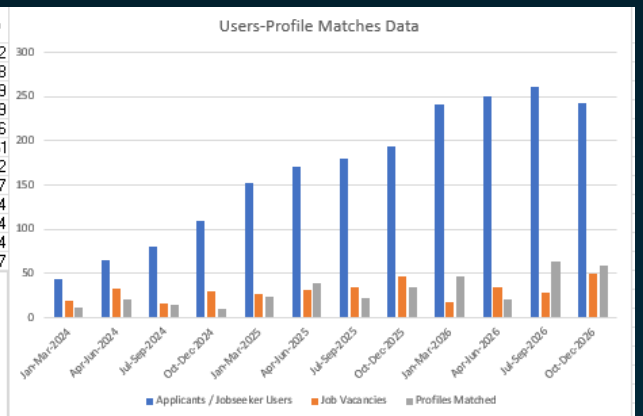
- Utilize existing CCTV cameras and air quality sensors to monitor traffic congestion and air quality in Baguio City
- Improve traffic flow control through integration of smart technologies with traffic control systems
- Develop predictive and prescriptive models to predict and suggest solutions for traffic congestion and air pollution reaching the threshold values

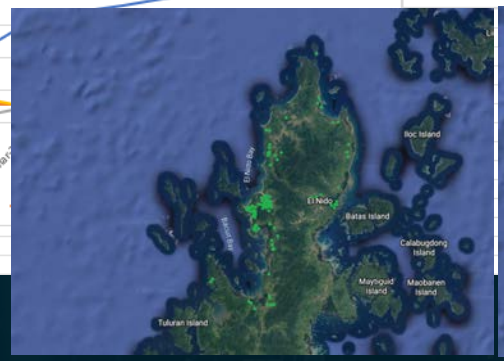
EL NIDO (PHI)

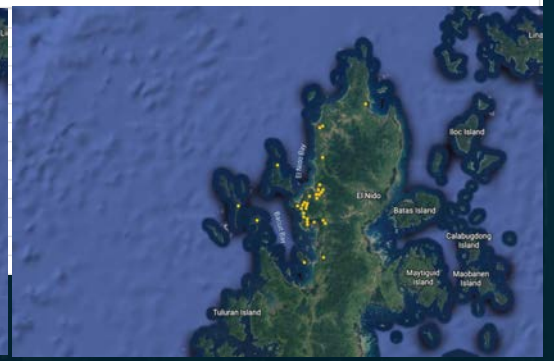
Smart City Initiative to Provide Stable Employment for El Nido Citizens

Period	Applicants / Jobseeker Users	Job Vacancies	Profiles Matched	Matching Ratio
Jan-Mar-2024	43	19	12	18.85964912
Apr-Jun-2024	65	32	21	9.672619048
Jul-Sep-2024	81	16	14	36.16071429
Oct-Dec-2024	109	29	10	37.5862069
Jan-Mar-2025	153	27	23	24.63768116
Apr-Jun-2025	170	31	39	14.06120761
Jul-Sep-2025	180	34	22	24.06417112
Oct-Dec-2025	193	47	34	12.077597
Jan-Mar-2026	241	18	47	28.48699764
Apr-Jun-2026	250	35	21	34.01360544
Jul-Sep-2026	261	28	64	14.56473214
Oct-Dec-2026	243	49	59	8.405396057









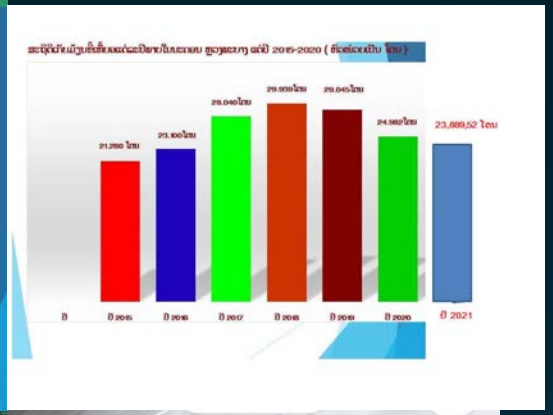
A new project in the Municipality of El Nido is aiming to provide stable employment for its citizens through a public platform connecting job seekers with employers. Data analysis will be used to predict long-term employment rates and reduce unemployment and underemployment in the municipality. The new project also aims to provide inclusive and unbiased employment opportunities.

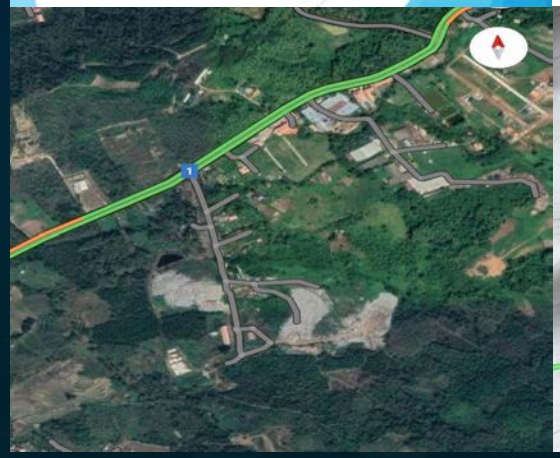
The platform:

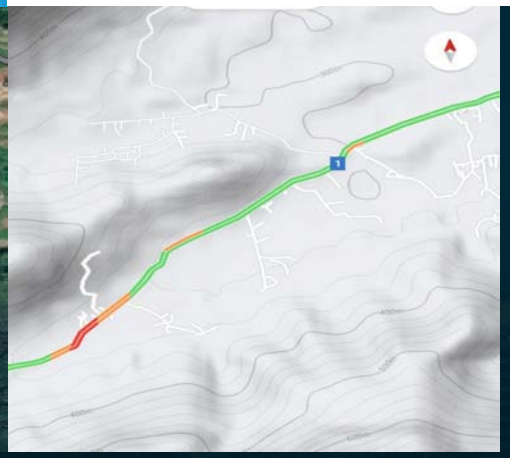
- Connects job seekers and employers;
- Seeks to provide inclusive and unbiased employment opportunities; and
- Uses data analysis to predict long-term employment rates and reduce unemployment and underemployment in the municipality.

LUANG PRABANG (LAO)

Data Analysis Improves Garbage Services in Luang Prabang Smart City





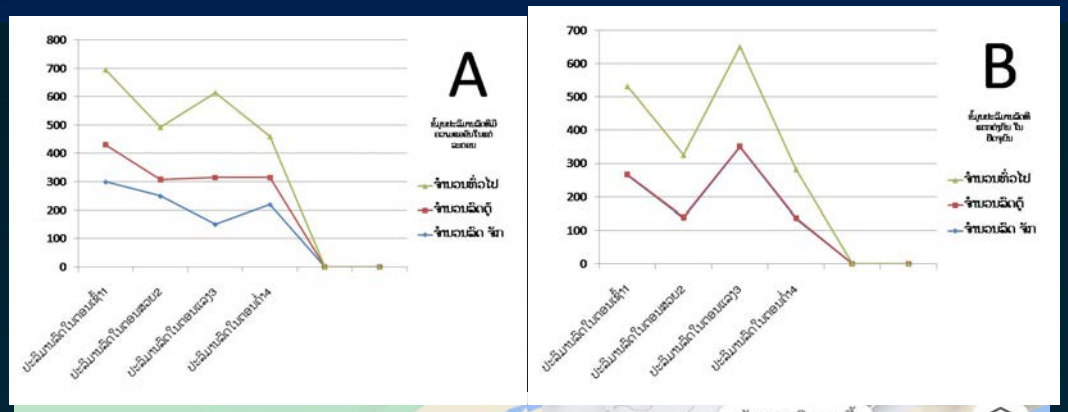


Luang Prabang, a world heritage city and popular tourist destination, has received the clean city award that meets ASEAN standards. The purpose of this data analysis is to study the volume and type of waste, determine waste separation and recycling, and create a forecast model for improving the waste field for long-term sustainability.

- Data analysis aims to reduce the amount of waste and improve garbage services in Luang Prabang
- Data will be collected from individuals, households, and records of vehicles entering the waste field
- A predictive model will be created based on collected data, and garbage field format and current landfill conditions will be analyzed for long-term sustainability and prevention of pollution.

LUANG PRABANG (LAO)

Data Analysis Helps Address Traffic Congestion and Pollution in Luang Prabang



Tourist congestion in the World Heritage City of Luang Prabang has led to increased traffic and air pollution. To address these issues, the city is collecting data on transportation patterns and using it to improve urban planning and implement environmentally-friendly transportation options.

- Data on traffic patterns, vehicle numbers, and tourism is being collected and analyzed to address congestion and pollution in Luang Prabang.
- The city plans to reduce congestion and pollution through improved road traffic planning and the introduction of electric vehicles.
- The data collected will be used to create a traffic prediction model to help the city make informed decisions about transportation in the future.

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About the ASEAN Australia Smart Cities Trust Fund

The ASEAN Australian Smart Cities Trust Fund (AASCTF) assists ASEAN cities in enhancing their planning systems, service delivery, and financial management by developing and testing appropriate digital urban solutions and systems. By working with cities, AASCTF facilitates their transformation to become more livable, resilient, and inclusive, while in the process identifying scalable best and next practices to be replicated across cities in Asia and the Pacific. The Trust Fund is supported by the Australian Government through the Department of Foreign Affairs and Trade, managed by the Asian Development Bank, and implemented by Ramboll.

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