

GLOBAL SMART CITY PARTNERSHIP PROGRAM PHASE 2 COMPLETION REPORT



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LIST OF TABLE, FIGURES, AND BOXES	II
ABBREVIATIONS AND ACRONYMS	III
ACKNOWLEDGEMENT	V
EXECUTIVE SUMMARY	VI
Key Achievements of GSCP2 Component 1	1
Key Achievements of GSCP2 Component 2	1
Feedback on GSCP2 Performance and Lessons Learned	3
1 INTRODUCTION	4
2 KEY ACHIEVEMENTS UNDER GSCP PHASE 2	8
Component 1. Just-in-time technical assistance and operational support	10
Component 2. Knowledge sharing and dissemination	16
3 PROGRAM EVALUATION AND LESSONS LEARNED	20
Feedback on program performance	21
Lessons learned from GSCP2 implementation	21
4 MOVING FORWARD: GSCP PHASE 3	24
APPENDICES	26
Appendix A. GSCP2 Project Portfolio	27
Appendix B. Knowledge and Learning Activities	28

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List of Table, Figures, and Boxes

Table 2.1. GSCP2 EOI and support statistics	10
Figure 1.1. GSCP program evolution	5
Figure 1.2. Global Smart City Partnership Program network	6
Figure 2.1. GSCP2 Portfolio by region and global practice (GP)	10
Figure 2.2. Smart city strategic planning activities (number and combination) that GSCP2 supported	11
Figure 2.3. Analysis of GSCP Support to investment planning: key elements, sectors and smart solutions supported	13
Figure 2.4. Type and theme of knowledge activities under GSCP2	16
Box 2.1. Learning from each other: Amman and İzmir's smart city journeys	12
Box 2.2. Some selected examples of how Korean smart city experiences are adopted in supporting the WBG clients	15
Box 2.3. 2022 Smart City Leadership Knowledge Exchange in Korea	17
Box 2.4. GSCP2 Case Studies	19

Abbreviations and Acronyms

AFE	Eastern and Southern Africa
AFW	Western and Central Africa
AGF	Agriculture and Food
BCMM	Buffalo Municipality Smart City Strategy
DD	Digital Development
DPL	Development Policy Loan
ECA	Europe and Central Asia
EOI	Expression of Interest
GP	Global Practice
GRM	Grievance Redress Mechanism
GSCP	Global Smart City Partnership Program, Korea-World Bank Smart City Partnership Program
GSCP1	GSCP Phase 1
GSCP2	GSCP Phase 2
GSCP3	GSCP Phase 3
IFC	International Finance Corporation
IPF	Investment Project Financing
JIT TA	Just-In Time Technical Assistance
KAIA	Korea Agency for Infrastructure Technology Advancement
KCN	Korean City Network program
KOICA	Korean International Cooperation Agency
KWPF	Korea-World Bank Partnership Facility
MNA	Middle East and North Africa
MOLIT	Ministry of Land, Infrastructure, and Transport of the Republic of Korea
NIA	National Information Society Agency
OS	Operational Support
PforR	Performance for Results
SCEWC	Smart City Expo World Congress
SSI	Social Sustainability and Inclusion
SURGE	Sustainable Urban and Regional Development Umbrella Program
TOR	Terms of Reference
TTL	Task Team Leader
URL	Urban, Disaster Risk Management, Resilience and Land
WBG	World Bank Group
WSCE	World Smart City Expo



Acknowledgement

This report was written by the Global Smart Cities Partnership (GSCP) team, led by Narae Choi (Senior Urban Development Specialist), and co-authored by Jessica Grisanti (Urban Specialist) and Maria Jesus Ferreira Trujillo (Urban Consultant). Gunes Basat (Knowledge Management Consultant), Jonathan Todo Hasoloan (Urban Consultant) and Sung Up Yoon (Urban Specialist) provided intensive support as the GSCP core team members and provided comments and inputs to this report. The team worked under the guidance of Bernice Van Bronkhorst, Global Director of the Urban, Disaster Risk Management, Resilience, and Land Global Practice and Maitreyi Das, former Practice Manager and Angelica Nuñez, Practice Manager for the Global Programs Unit under which GSCP is housed. GSCP is a program supported by the Korean Ministry of Land, Infrastructure and Transport (MOLIT) and the Korea-World Bank Partnership Facility (KWPF), which enabled the team to support World Bank Group task teams and clients on smart city development and gather this valuable engagement into a consolidated report. The team greatly appreciates the generous support from MOLIT and KWPF to this work.

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EXECUTIVE SUMMARY

The Global Smart City Partnership Program (GSCP) was launched in February 2018 by the World Bank in partnership with the Ministry of Land, Infrastructure, and Transport (MOLIT) of the Republic of Korea. The program aims to introduce and mainstream smart city approaches and solutions in the World Bank Group (WBG) engagement and investments by breaking sectoral silos and facilitating an integrated and innovative approach to urban development across sectors. Over the past five years since its inception, GSCP Phase 1 (GSCP1, 2018–2021) and GSCP Phase 2 (GSCP2, 2021–2023) provided demand-driven technical advisory services to various WBG teams and clients on smart city good practices and solutions through two main components:

1. Just-In time technical assistance (JIT TA) and operational support (OS)

2. Knowledge sharing and dissemination

The program receives smart city demands from WBG teams through an open call for expression of interests (EOIs), circulated to all related Global Practices (GPs) and the International Finance Corporation (IFC). For selected EOIs, the program identifies relevant global and local smart city experts in various technical areas and deploys them as part of WBG teams. Technical and operational support under component 1 of the program is deepened by collaboration among client governments, technical experts, and leading smart cities and institutions facilitated through peer-learning and networking under component 2 of GSCP.

Key Achievements of GSCP2 Component 1

This report presents the achievement and lessons of GSCP2, which closed on June 30, 2023. Since its inception, GSCP2 supported a total of 22 projects selected through three calls for EOIs, including two projects that continued from GSCP1 and four projects that received extended support across multiple rounds of EOI. Fifteen projects were implemented by June 2023, and the rest will continue under Phase 3 to yield tangible results. Fifty-nine percent of the projects

supported during the second phase of the program are from the urban and transport sectors. Africa accounts for the largest share of engagements or 32 percent of the regional distribution.

GSCP2 engagements are categorized into seven upstream strategic planning projects and 13 downstream investment design projects, demonstrating the program's coverage across the smart city development chain. Although linking the two streams remains a challenge, GSCP2 highlights the value of supporting projects for multiple rounds of EOI or an extended period, which helps increase the impact of the engagement. Demand for Korean experiences and expertise remained substantial under GSCP2 and Korean experts were central to meeting the increasing demand for smart city development in the WBG client countries.

Key Achievements of GSCP2 Component 2

Knowledge sharing, capacity building and best practice transfer were delivered through workshops, webinars, conferences, forums, and knowledge exchange programs both virtual and in-person. In total, the program delivered 17 knowledge activities under Phase 2 on a diverse range of topics related to smart cities. GSCP2 resumed high visibility events such as World Smart City Expo (WSCE) 2022 in the Republic of Korea and Smart City Expo World Congress (SCEWC) 2022 in Barcelona, Spain, after the COVID-19 pandemic and demonstrated their importance as an opportunity to showcase smart city experience of developing countries and cities globally and grow strategic partnerships with key smart city actors.

A major achievement of GSCP2 is the development of global knowledge assets— notably the Smart City Engagement Guidance Note and GSCP Phase 1 and Phase 2 Case Studies. In addition, GSCP's public-facing website¹ launched in September 2021 and has served as a major communication and networking channel for the program. The program also maintains a knowledge repository on the World Bank's Collaboration for Development Platform.²

Feedback on GSCP2 Performance and Lessons Learned

Overall, GSCP2 was successful in meeting WBG teams' needs and adding value to the supported projects. A satisfaction survey with WBG teams and selected clients indicate that GSCP experts are fulfilling their expectations and that the teams proposed smart city solutions relevant to the clients' interests. Most task team leads—75 percent of them—felt the duration of the engagement was appropriate, although 25 percent suggested it was too short. All GSCP experts considered that the duration of the support can be extended.

Valuable feedback and experience accumulated during GSCP2 are crystallized in several lessons that helped improve the program operationally and strengthen its impact moving forward. Three main lessons are:

- The multisectoral nature of smart city engagements requires an extended period of support and will benefit from a larger resource allocation for scale impact.
- A weak middle between upstream and downstream smart city engagements can be strengthened as the top-down,

strategic, whole system approach and the bottom-up, sector-focused, issue-specific approach come together at a common point. This common point requires cross-sector collaboration and effective portfolio management, geared towards systemic improvement.

- Institutional capacity building and dedicated technical support are essential to move smart city engagements to the next level.

After closing the second phase, the program will continue under Phase 3 (GSCP3), which will run for another three years, 2023–2026. Lessons and recommendations from GSCP2 have shaped the strategic direction, organizational setup, and program design of activities under this new phase. GSCP3 will include components similar to those under GSCP2 and will introduce a new component that provides grant support directly from the Sustainable Urban and Regional Development Trust Fund to selected strategic projects. A major improvement proposed for GSCP3 is the standardization of smart city approaches to framing demands from WBG teams and the organization of technical support on the supply side. GSCP3 will continue to nurture and expand its partnership with external actors, including those in the private sector and civil society, which will be critical for exchange of good practices, networking, and peer learning.

Notes:

1. www.worldbank.org/en/programs/global-smart-city-partnership-program
2. <https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities.html>

Platform Center for Smart Village



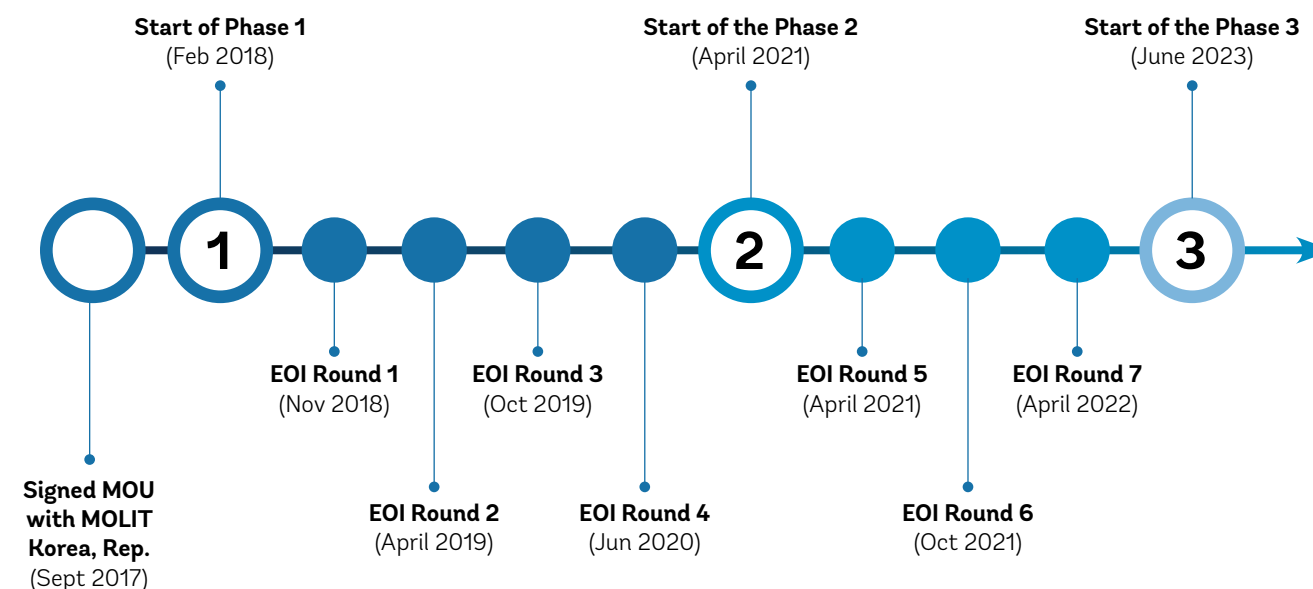
1 INTRODUCTION

The Korea-World Bank Smart City Partnership Program (GSCP) was launched in February 2018 by the World Bank in partnership with the Ministry of Land, Infrastructure, and Transport (MOLIT) of the Republic of Korea. The program responded to a growing interest in smart cities in developing countries and aimed to advance the smart city agenda in the World Bank Group (WBG) client engagement, operations, and investments. The program has been running for five years under two phases, GSCP Phase 1 (GSCP1, 2018–2021) and GSCP Phase 2 (GSCP2, 2021–2023). MOLIT financed the program through an externally funded output of US\$1.45 million and the program size doubled with the co-financing from the Korea-World Bank Partnership Facility (KWPF) of US\$1.75 million in total. For GSCP Phase 2, the program fully disbursed the KRW 1 billion—

approximately US\$ 886,000—received from MOLIT and the KWPF grant of US\$1 million.

Since 2018, the program has provided technical advisory services to various WBG teams and clients on smart city good practices, strategies, and solutions. The program objective was to: (i) support WBG teams and clients to develop selective smart city best practices and smart city solutions as a building block for sustainable urban development and (ii) enhance the capacity of planning and implementing smart city initiatives and investment projects. Both program phases consisted of two components: (i) just-in-time technical assistance (JIT TA) and operational support (OS) and (ii) knowledge sharing and dissemination. Figure 1.1 captures the evolution of the program and its transition to Phase 3.

FIGURE 1.1. GSCP PROGRAM EVOLUTION

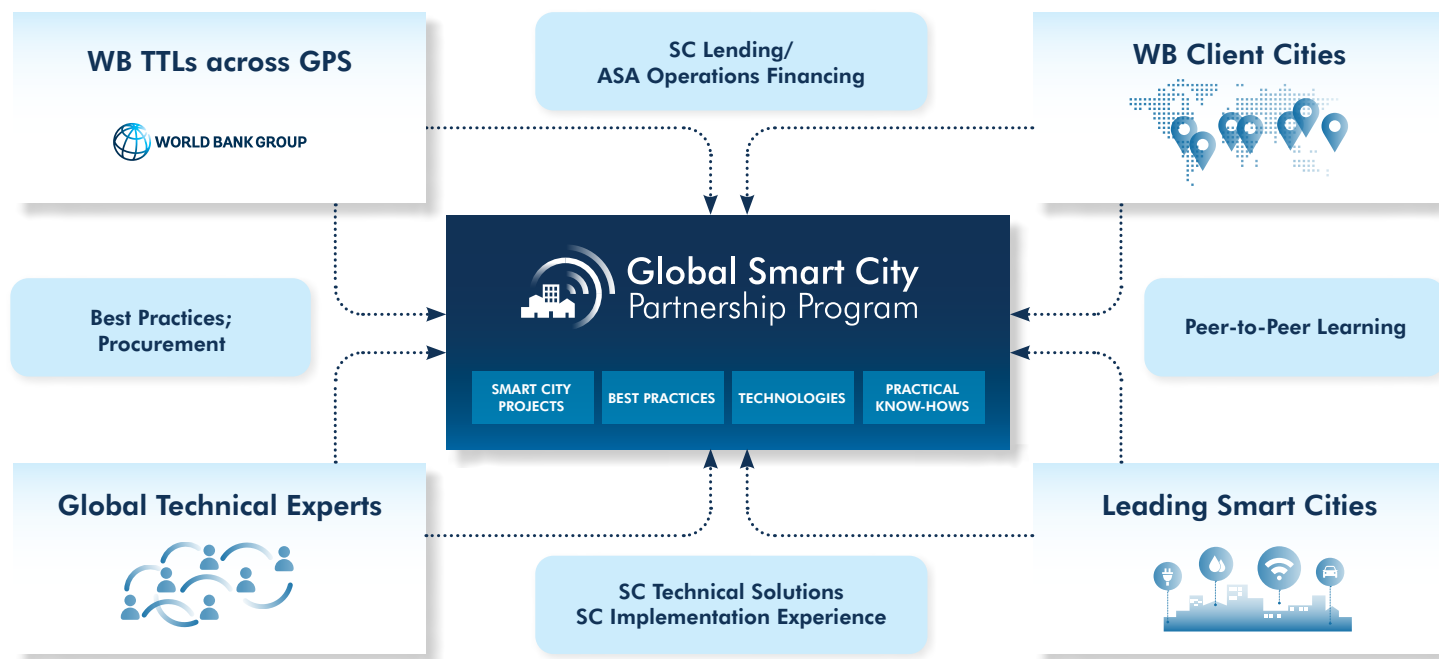


GSCP's demand-driven assistance starts with an open call for expression of interests (EOIs) and the pairing of smart city experts with selected teams. EOIs are open to all related Global Practices (GPs) and the International Finance Corporation (IFC). Submitted EOIs are scored against the evaluation criteria, which include whether a proposal has a clear technical connection to smart city agenda and an existing local or national smart city initiative, and how the program adds value to WBG engagements and vice versa. For selected EOIs, the program deploys relevant global and local smart city experts from various technical areas to work as part of WBG teams. Smart city experts and teams discuss the scope of work, outputs, and logistics of engagement in detail, which goes into the terms of reference (TOR) for each engagement and experts are hired as GSCP consultants to support their designated project's team.

Partnership has been at the center of both components as captured in the program name. GSCP was designed from the outset to nurture and benefit from collaboration with respective client governments, technical experts, and leading smart cities and institutions, in filling knowledge gaps and finding adequate solutions through peer-learning and networking, considering the limited resources available for the program (figure 1.2).

The present report focuses on the second phase of the program (GSCP2), which was launched in April 2021 and closed June 2023. Sections of this report will provide a program overview and key achievements by components, followed by GSCP2 performance evaluation and lessons learned from its implementation. Finally, the report provides some insights on what is coming next for the program.

FIGURE 1.2. GLOBAL SMART CITY PARTNERSHIP PROGRAM NETWORK



Source: Author derived. 2023.



2

KEY ACHIEVEMENTS UNDER GSCP PHASE 2

GSCP2 incorporated key lessons learned from the previous phase and strengthened the program. In particular, GSCP2 increased the support period and scale for technical and operational support under component 1, among other improvements.

- **Just-in-time technical assistance:** Short-term support of a maximum of 30 days of expert time, which includes one mission travel. Teams requesting this option usually require expert support to introduce or review specific elements of smart city development in a time frame of maximum six months.
- **Operational support:** Midterm engagement, which includes a maximum of 60 working days of expert time and one or more mission travels. This type of support is requested by teams in need of assistance in project preparation or implementation for a maximum period of one year.

Subsequently, improved program efficiency enhanced the value addition and overall strength of the program:

- Through an open call for proposals, the program identified diverse smart city demands across WBG regions and sectors, which provides an opportunity for the program to develop a common approach to smart cities.
- GSCP value addition comes from identifying smart city experts to match with demands and with the increased scale and duration of support; the program is making more substantial impacts.
- GSCP support has been agile and cost-efficient, paired with knowledge sharing and networking opportunities, which compensates for the relatively small support size.
- GSCP has been a platform to engage multisector stakeholders within and beyond WBG. This is critical for smart city development and may need more systematic attention.
- GSCP has maintained a flexible approach. The ability of the program to adapt to meet varying needs of task teams has been key for successful implementation.



Component 1. Just-in-time technical assistance and operational support.

GSCP2 announced three calls for EOIs and supported 22 projects in total (table 2.1). The portfolio includes two projects that continued from phase 1—namely technical assistance for 3D cadaster development in Indonesia and the South Africa Buffalo Municipality smart city strategy—and four projects that have continued from round 5 into round 7 in Amman in Jordan, Chennai in India, Egypt and Ghana (National engagements). Fifteen

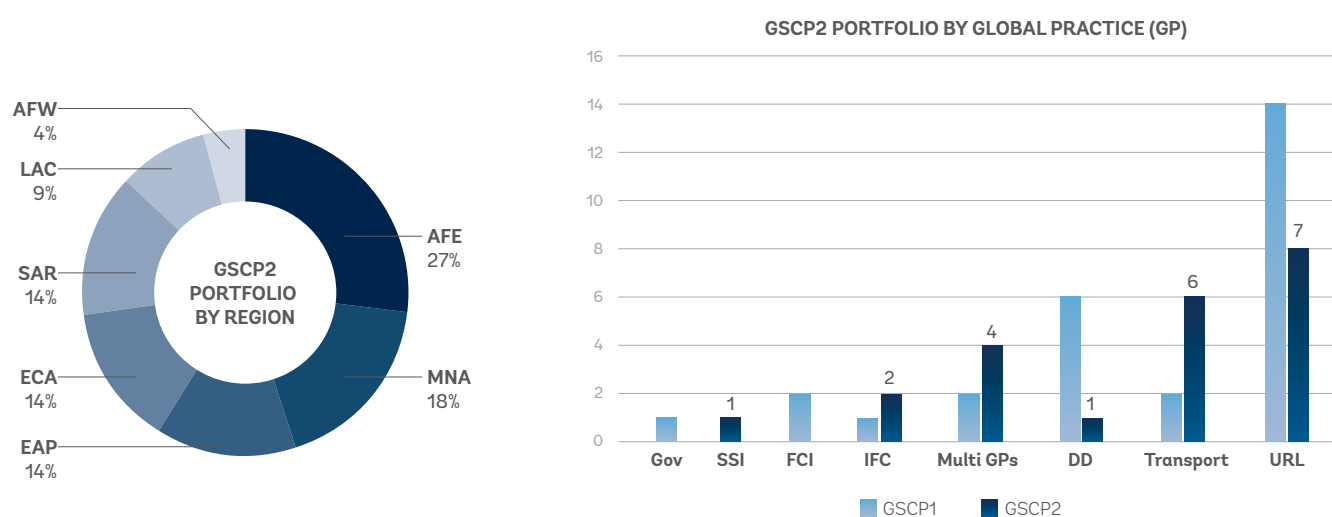
projects completed their implementation by June 2023, and the rest will continue to receive support under GSCP3 until tangible results are achieved. Most of the supported projects are under the sector of Urban and Transport Global Practices. In terms of regions, 32 percent of the portfolio is in Africa (figure 2.1). Detailed information of projects supported under GSCP2 is presented in Appendix A.

TABLE 2.1. GSCP2 EOI AND SUPPORT STATISTICS

ROUND	CALL FOR EOI OUT	#EOIS RECEIVED	#EOIS SELECTED	JIT TA	OS	COMMENT
Round 5	April 2021	19	11	3	8	2 EOIs carried over from GSCP1
Round 6	October 2021	9	4	1	3	
Round 7	April 2022	15	11	3	8	4 continuing projects from Round 5
TOTAL		43	26*			

Note: *Total takes into consideration those carried over from other rounds.
Source: Author derived. 2023.

FIGURE 2.1. GSCP2 PORTFOLIO BY REGION AND GLOBAL PRACTICE (GP)



Note: *AFE = Eastern and Southern Africa; AFW = Western and Central Africa; ECA = Europe and Central Asia; MNA = Middle East and North Africa; GP = Global Practice; DD = Digital Development; IFC = International Finance Corporation; SSI = Social Sustainability and Inclusion; URL = Urban, Disaster Risk Management, Resilience and Land.

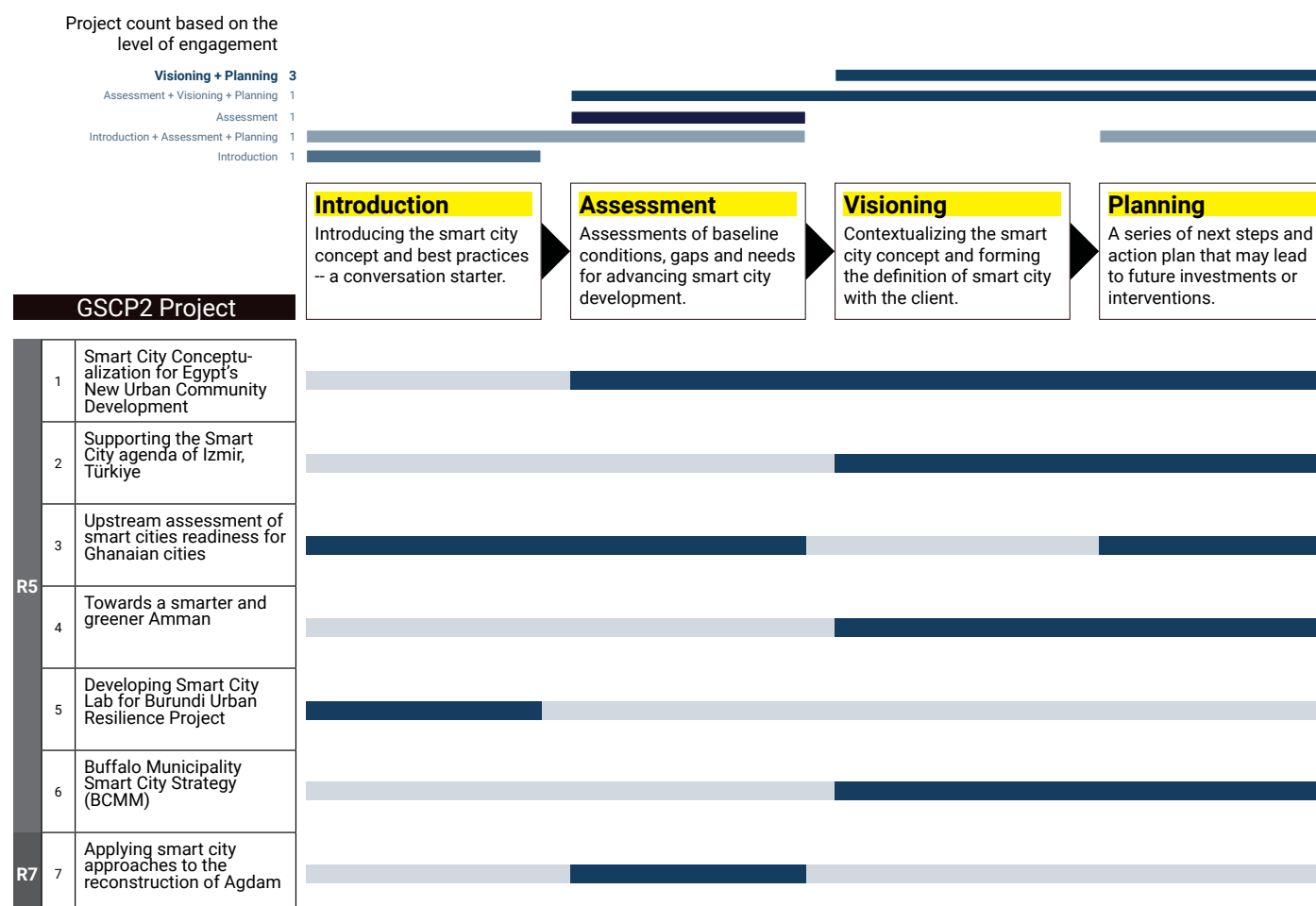
Source: Author derived. 2023

Demand analysis of GSCP2

GSCP2 engagements are categorized into upstream strategic planning and downstream investment design, demonstrating experiences across the smart city development chain. The upstream strategic planning process typically involves: (i) introducing smart city concept and approach and reaching a common understanding among stakeholders; (ii) assessing where a city is in smart city readiness, including smart city related initiatives, ongoing and planned; (iii) developing a smart city vision—where a city wishes to be in short, medium, and long term and strategy to

achieve it; and (iv) having an action plan or implementation roadmap with priority investments. Downstream engagements included designing, developing, or improving digital solutions in the context of World Bank lending. These solutions were mainly sector-specific information systems or data platforms that can help improve the efficiency of city functions—such as traffic management, fare collection, housing market analysis, land administration and management, urban planning and transparency—inclusiveness and innovation of public services such as open data platform, citizen engagement or grievance redress platform, city planning lab.

FIGURE 2.2. SMART CITY STRATEGIC PLANNING ACTIVITIES (NUMBER AND COMBINATION) THAT GSCP2 SUPPORTED



Source: Author derived. 2023

Of the 22 projects GSCP2 supported, seven (41 percent) were upstream engagements. Several engagements were comprehensive in scope for example, Buffalo City and Izmir whereas others covered selected elements of smart city strategic planning (figure 2.2). The upstream engagement with Izmir developed a smart city framework and unit, received a

high-level endorsement from the mayor of Izmir through a workshop in July 2022, and created a momentum to plan for a portfolio of investments and transform a smart city unit into a city transformation unit. The engagement experience with Izmir was also showcased at the Smart City Expo World Congress 2022 in Barcelona, Spain (box 2.1).

BOX 2.1. LEARNING FROM EACH OTHER: AMMAN AND IZMIR'S SMART CITY JOURNEYS

The Smart City Expo World Congress (SCEWC) in Barcelona facilitated a global exchange of ideas on smart cities for 11 years since 2011. GSCP invited delegations from the Greater Amman Municipality and Izmir Metropolitan Municipality to SCEWC 2022 through a knowledge exchange program that took place during November 15-17, 2022. GSCP supported both municipalities to deepen their smart city strategic planning. As both municipalities transition from planning to implementation, gather information on practical solutions, interact with solution providers and international partners, and benchmark other cities at SCEWC 2022 proved to be extremely useful.

The three-day knowledge exchange program consisted of: (i) participation in the SCEWC sessions where both delegations showcased their smart city experiences and learned from others; (ii) a half-day City Solutions Workshop with the WBG teams and experts to move the smart city agenda in both municipalities; and (iii) an exchange with the City of Barcelona including site visits. Moreover, the delegations had the opportunity to tour the expo including the Korea Pavilion and along with the World Bank delegation, met with MOLIT delegation.

Specifically, the delegations of Amman and Izmir enjoyed the City Solutions Workshop fully, finding concrete solutions for the most pressing issues together and moving their smart city agenda forward. The workshop facilitated a dynamic exchange and interaction between the two municipalities, the WBG and other experts through break-out sessions on three topics: smart neighborhood development, digital transformation, and new mobility models. The workshop concluded with each city discussing and presenting action plans, building on key takeaway from breakout sessions.

Given that SCEWC brings many client countries and cities in one place, the WBG team will also consider ways to utilize this as an opportunity to advance client dialogue and relationships in close collaboration with regional teams.

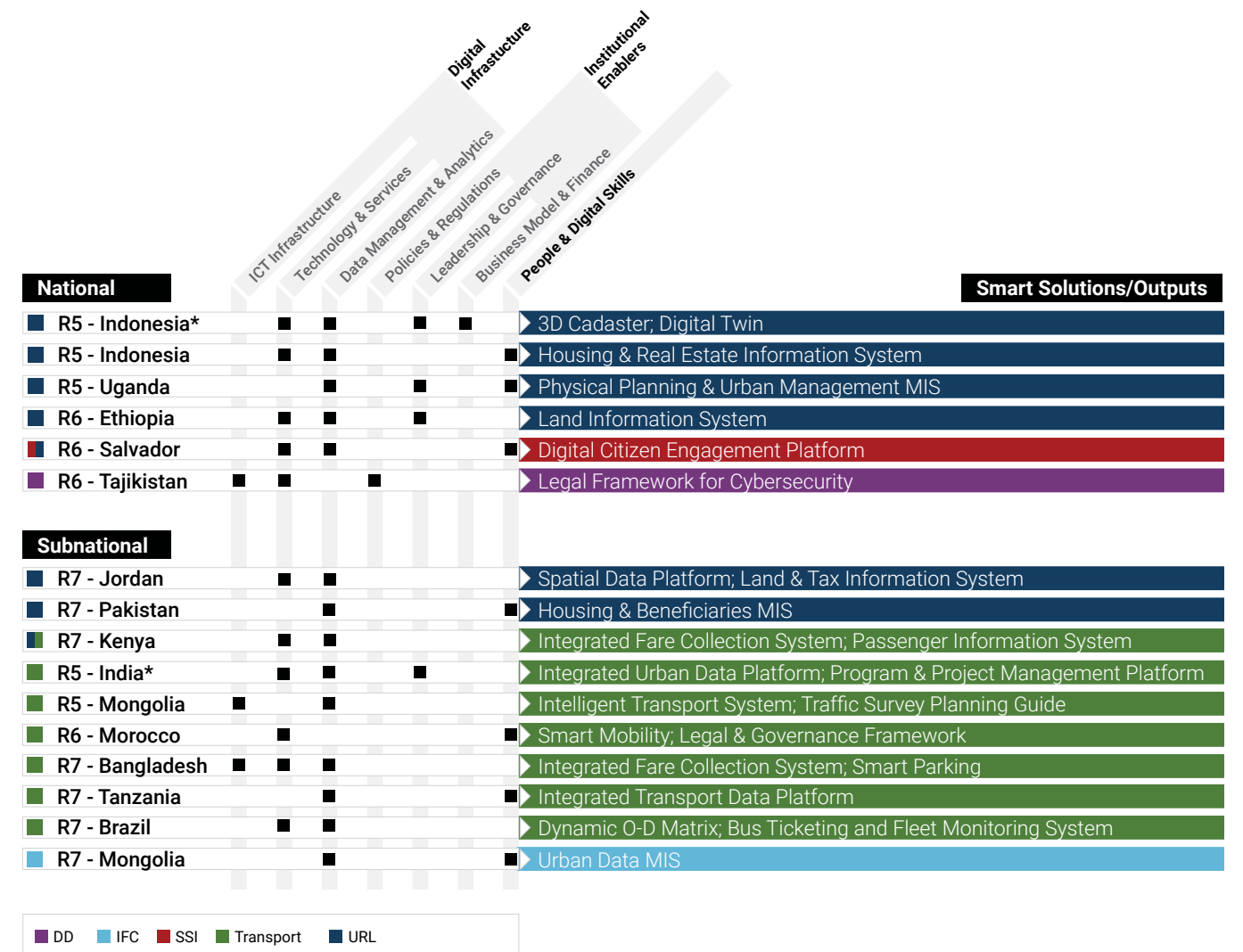


Some national smart city strategic engagements demonstrated a potential for scale-up—Azerbaijan, Egypt, and Ghana. As part of the recovery and peacebuilding project in Azerbaijan, the program supported the application of smart city and village in the reconstruction of Agdam. The GSCP consultants are reviewing the city masterplan to identify entry points to introduce smart solutions in village reconstruction in the liberated area of Karabakh, such as smart poles and bus surveillance systems. This engagement coincides with other smart city initiatives in the country by the Korean International Cooperation Agency (KOICA) and the Korean City Network (KCN) program, which offers an opportunity for deeper collaboration around Korean smart city expertise.

Downstream, GSCP2 supported the strengthening of the capacity to design and implement smart

city projects (figure 2.3). The program supported 11 Investment Project Financing (IPF), one Performance for Results (PforR) and one Development Policy Loan (DPL). GSCP2 supported a multisectoral engagement with Amman, Jordan, on its green, smart city strategy, to which the program provided strategic and technical support. GSCP extended its support under round 7 as the upstream work is fed into the preparation of a new World Bank lending operation. As well, the technical assistance to 3D cadaster development in Indonesia spanned two years—Round 4 and 5—and prepared a robust technical ground for a new World Bank lending operation in Indonesia on 3D cadaster and digital twin, which is under preparation. The same project was recommended to, and selected for, the K-City Network program by MOLIT and was showcased at the World Smart City Expo (WSCE) 2022 in the Republic of Korea.

FIGURE 2.3. ANALYSIS OF GSCP SUPPORT TO INVESTMENT PLANNING: KEY ELEMENTS, SECTORS AND SMART SOLUTIONS SUPPORTED



* Projects that received extended GSCP support beyond one round
Note: MIS = Management Information System

Source: Author derived. 2023

Urban transport projects were prominent in the GSCP2 portfolio. For example, GSCP experts carried out a thorough diagnostic and needs assessment of Ulaanbaatar’s Intelligent Transport Systems in Mongolia. They developed traffic survey implementation guidelines, and shared international good practices including the Advanced Traffic Signal Control System for Realtime Traffic Control and the Freeway Traffic Management System in Korea, Rep. In Dodoma, Tanzania, the consultants consolidated existing transport data, and based on which they will prepare a gap analysis and introduce an adequate model for an integrated smart data platform. This will be foundational for transport planning in a growing capital city like Dodoma. In Kenya, GSCP is supporting the Kenya Urban Mobility Improvement Project to roll out an integrated fare collection system and passenger information system for commuter railways in Nairobi.

This second phase focused more on fundamental building blocks of smart cities such as governance, citizen engagement, and inclusion. For example, in El Salvador, GSCP engagement produced a good example of how smart city solutions contribute to inclusive development, mainly through a universally accessible digital platform for citizen engagement. The GSCP consultants assisted the World Bank team to produce a prototype of a digital citizen engagement platform, which has the potential to be used across the country. In celebration of the International Day of Persons with Disabilities on December 3, this engagement was highlighted in the webinar organized by GSCP: Smart and Inclusive Cities: How digital technologies can help promote disability inclusion in cities?¹

Meeting GSCP2 demand

GSCP2 highlighted the value of supporting projects for multiple rounds to increase the impact of the program. For example, the maximum number of expert days and period of support for each type of engagement were both increased based on the feedback from the teams supported by GSCP1. With

this modification, the program was able to support more substantial engagements and produce concrete outputs. Flexibility was a key part of GSCP2 implementation, allowing the program to meet the task team’s need by supporting in country mission post pandemic, hiring local consultants to compensate for limited travel during the pandemic and providing more just in time support.

GSCP2 also strove to enhance the depth and coverage of technical assistance by deploying a team of experts. As compared to matching one expert with one project under GSCP1, GSCP2 introduced a core team of experts as an overall program support modality and deployed them to projects together with other technical experts as a team. This allowed the program to cover the whole portfolio through the core team of experts and have a deeper understanding of progress, challenges, and results of each, while offering to WBG teams a more comprehensive set of expertise.

Korean experiences and expertise have been central to meeting the increasing demand for smart city development in the WBG client countries. Demand for Korean experiences and supply of Korean expertise remained substantial throughout GSCP2. The program mobilized 26 experts under GSCP2 and 14 Korean experts—13 individual consultants and one firm—account for 54 percent of the total expert roster. Overall, the number of experts under GSCP2 remained at a similar level as that of GSCP1—approximately 26 experts in the pool—but the roster diversified with additional international experts. GSCP Korean experts are involved in most of the GSCP2 portfolio and 12 out of 22 GSCP2 projects (54 percent) requested for Korean smart city experiences as benchmarks or case studies in the EOI submissions. This is an increase from phase 1 under which 21 percent of the projects, or 6 of 28, requested for Korean experiences. Box 2.2 provides two examples of how Korean smart city experience supported WBG clients.

BOX 2.2. SOME SELECTED EXAMPLES OF HOW KOREAN SMART CITY EXPERIENCES ARE ADOPTED IN SUPPORTING THE WBG CLIENTS

Assessing the readiness of Egypt’s New Urban Communities for Smart Technologies–Integrated Land and Urban Management in Egypt technical assistance – round 5 (OS)

GSCP experts harnessed a series of international benchmark cases including a deep dive insight into Korea’s smart city and new town development history and strategy for Egypt’s smart city conceptualization of new Urban Community development. Specific case studies introduced from Korea, Rep. included Anyang, Namyangju, Songdo, and Pangyo. The program also invited the delegation to a knowledge exchange program in Korea, Rep.

Toward Smarter Urban Mobility in Rabat (Morocco Urban Transport Program-for-Results (PforR) / P149653)^a – Round 6 (JIT TA)

GSCP experts introduced government counterparts to international benchmark cases to guide improvements in the Moroccan legal and governance framework, training programs, existing network infrastructure, and the digital ecosystem for urban mobility. Originally, the Morocco project did not request for the Korean cases, but the Korean expert introduced: Seoul Public Transportation Reform in 2004, OpenDataSoft with Waze, and the Seoul Transport Operation and Information Service.

Notes:

a. <https://projects.worldbank.org/en/projects-operations/project-detail/P149653>



Component 2. Knowledge sharing and dissemination

Knowledge Sharing

GSCP2 delivered 17 knowledge sharing activities, including high visibility events at World Smart City Expo (WSCE) 2022 in Korea and SCEWC 2022 in Barcelona. Under this phase the team organized: one workshop, seven webinars, three conference, two knowledge exchange programs, two panels for a forum, one report launch and one virtual knowledge exchange program (figure 2.4). During GSCP2, besides the general smart cities' events, the team organized events on other thematic areas: climate change, data technology, and partnerships at 12 percent each. A list of the events can be found in Appendix B.

Virtual knowledge exchange proved to be an effective way to engage clients from around the world, particularly during the COVID-19 pandemic. The virtual knowledge exchange on Smart Cities for Climate Resilience was held in partnership with the Netherlands on February 23 and 24, 2022. The event involved

44 client representatives from cities in Egypt, Jordan, Mongolia, South Africa, Türkiye, and Uganda who shared their experiences, learned from various Dutch good practices, and networked with Dutch partners. 83 percent of the participants agreed that the knowledge on Dutch best practices in Smart Cities and Climate Resilient Cities were useful. Also, participants agreed that the presentations regarding Dutch technologies, strategic smart city planning and management by and for citizens and traffic and pollution monitoring and management were most interesting. Finally, participants requested for future editions of the knowledge exchange particularly in-person, which will facilitate more interactions with experts and more time for discussion and interaction among participants.

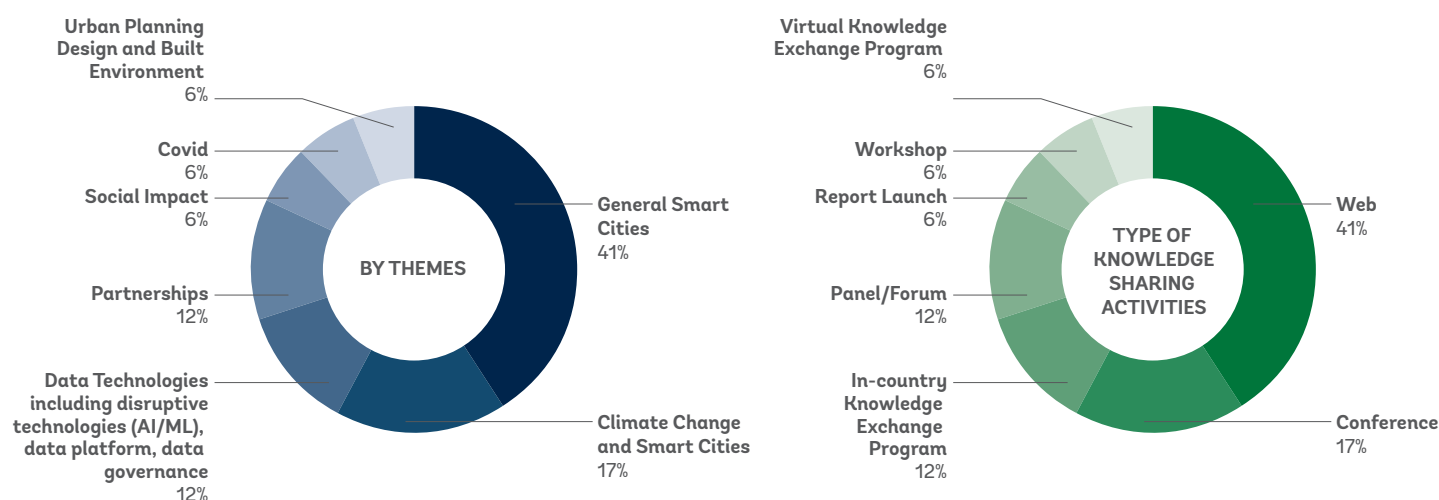
In-person knowledge exchange, tailored to the clients' needs can amplify the impact of technical assistance provided under component 1. For example, during "2022

Smart City Leadership Knowledge Exchange in Korea" from August 30 to September 2, 2022, delegates from Egypt interacted with government agencies such as the Korea Land and Housing Corporation, corporate representatives and technical experts in spatial planning, urban infrastructure and services, data governance, and geospatial technology and system integration (box 2.3). During the knowledge exchange program Smart City Knowledge Exchange Program and SCEWC in Barcelona, from November 15-17, 2022, invited client delegations from Amman, Jordan, and Izmir, Türkiye presented their GSCP-supported smart city journeys and discussed the challenges, success factors, and next steps in advancing their smart city agendas. In-person knowledge exchange programs also served as an opportunity to strengthen key partnerships with both Korea, Rep. and Spain.

GSCP2 collaborated with the key partners in the civil society, academia, and private sector to discuss the intersection between climate resilience, inclusion, and smart cities. For example, the program organized a

joint knowledge sharing event with the City Climate Gap Fund,² another global program at the World Bank, "Understanding the Low-Carbon Smart City Landscape: Practical City Experiences".³ The webinar showcased practical examples from the cities that have pioneered the deployment of smart technologies for carbon mitigation, featuring experts who presented low carbon, smart solutions in from Korea, Rep., Jordan, and the Netherlands. In early 2023, the program invited the National Information Society Agency (NIA) to present Korea's digital government development over time and discuss its application to developing countries. With the private sector, the program organized a webinar to share and discuss the key findings from the report "Insights about smart cities in Brazil for policy makers and public managers: Leveraging technologies for sustainable development", produced by Deloitte and commissioned by NEC Latin America.⁴ This event included task team leads, as discussants, from the Rio de Janeiro Smart, Green and Resilient Urban Mobility project, which had received support under round 7.

FIGURE 2.4. TYPE AND THEME OF KNOWLEDGE ACTIVITIES UNDER GSCP2



Source: Author derived. 2023

BOX 2.3. 2022 SMART CITY LEADERSHIP KNOWLEDGE EXCHANGE IN KOREA

The World Bank organized a knowledge exchange program entitled "2022 Smart City Leadership Knowledge Exchange in Korea" from August 30 to September 2, 2022. This event was jointly organized with the Smart and Green Cities Programmatic ASA (P176974) and in collaboration with the Ministry of Land, Infrastructure and Transport (MOLIT) of the Republic of Korea. The objective of the program was to: (i) facilitate learning on various smart city initiatives for improved urban service delivery, leveraging emerging technologies and solutions; (ii) provide a platform for technical knowledge sharing and peer learning around digital transformation and ecosystem; and (iii) support cities to identify smart city initiatives relevant to their development context.

The knowledge exchange program invited delegations from Cambodia, Egypt, and the Philippines. During the knowledge exchange, delegates from Egypt interacted with government agencies such as the Korea Land and Housing Corporation, corporate representatives and technical experts in spatial planning, urban infrastructure and services, data governance, and geospatial technology, and system integration.

Participation in the WSCE 2022, which took place from August 31 to September 2, 2022, was an integral part of the program. On September 2, the GSCP, the World Bank Korea Office, and MOLIT co-hosted the Korea-World Bank Group Smart City Conference, which was held as part of the World Smart City Expo Korea 2022. The WBG and the Government of the Republic of Korea introduced a wide range of smart city initiatives to help identify common areas of interest and opportunities for deeper collaboration. At the conference, the GSCP team discussed how to reinforce a partnership to make a better future through smart cities with MOLIT and many experts. The team also discussed how Korean experts and companies can secure more effective engagement with WBG smart city teams and clients in developing countries. Many smart city experts and practitioners from the public and private sectors, academia, and industry from around the world attended this conference in person and the whole session was streamed live over the internet.

Knowledge Products

A major achievement of GSCP2 is the development of global knowledge assets, notably the Smart City Engagement Guidance Note and Phase 1 and Phase 2 Case Studies. GSCP's public-facing website⁵ was launched in September 2021 and has been regularly updated with multimedia products such as interviews with partners, client countries, and experts, and serves as a major communication and networking channel for the program. In addition, the program maintains a knowledge repository on the World Bank's Collaboration for Development Platform.⁶ Knowledge products developed during the GSCP2 period include:

- Production of engagement briefs from selected projects under GSCP1 and GSCP2. From GSCP1, 13 projects demonstrated a variety of support experiences across regions and represent both upstream and downstream smart city engagement. Following the production of the first set of engagement briefs, the team produced an additional set of engagement briefs for seven completed projects under GSCP2 (box 2.4). All the engagement briefs went through an internal review process and as soon as they are cleared for publication, they will be posted on the external website.⁵
- The GSCP Smart City Engagement Guidance Note, aimed to help WBG teams in their policy and investment dialogues with the clients on smart cities by introducing the key features, building blocks and development pathways of smart cities, presenting WBG engagement types and challenges, and proposes opportunities for WBG support and priority actions. GSCP Phase 3 is organized to address some of the gaps identified during phase 1 and 2 between smart city strategic planning upstream and investment design downstream and across sectoral investments in digitalization that do not add up to scale impacts.
- The “Smart Cities in the Republic of Korea: A Journey Toward Institutionalization and Innovation”⁷ technical note, was jointly developed with the World Bank Korea office and published in 2022. This note provides a comprehensive overview of the legal, institutional, and technical pathways involved in the development of smart cities in Korea, with a focus on two key success factors—institutionalization and innovation. By highlighting the Republic of Korea's challenges and achievements in these areas, the note aims to offer valuable insights to other countries that seek to harness the potential of smart cities for national and city development. Drawing on an extensive desk review of materials on smart cities and primary data collected through a survey of 13 municipal Korean governments on their smart city initiatives, this note is a valuable resource for anyone interested in the topic.
- Following the WSCE 2022, Bernice K. Van Bronkhorst (GPURL Director) and Narae Choi (Senior Urban Development Specialist, GSCP lead) contributed a paper, “Smart Journeys of Developing Cities” to the journal, TOP Agenda.⁸ This paper presented GSCP's engagements with developing countries in defining, planning for, and realizing their smart city goals. Using several successful engagement cases, the paper demonstrates how both high level strategies and specific solutions contribute to the aspirations of developing cities and draws lessons for better supporting them, mainly by strengthening the link between upstream and downstream engagements (box 3.4).

BOX 2.4. GSCP2 CASE STUDIES

GSCP case studies aim to document how GSCP has met smart city-related demands arising in the context of WBG engagement and to capture the outcomes and lessons from a broad range of experiences supported by the program. The resulting knowledge is intended to inform improved GSCP support to smart city engagement and project development and guide other WBG teams and the public interested in the agenda.

In 2022, the program captured engagement experiences under GSCP Phase 1 through 13 case studies, some of which were turned into engagement briefs for external readers. ^a In June 2023, the program produced case studies on seven engagements during the GSCP Phase 2:

- El Salvador: “Developing a Digitally Accessible Citizen Engagement Platform for El Salvador”
- Indonesia: “Improving the analytical capacity of the Indonesia's Housing and Real Estate Information System”
- Jordan: “From Planning to Implementation: Developing a Roadmap for a Smarter and Greener Amman”
- Mongolia: “Diagnosing Intelligent Transport Systems and Exploring Avenues for Better Transportation Planning in Ulaanbaatar”
- Morocco: “Identifying Opportunities to Promote Smart Mobility in Rabat through Digitalization”
- Türkiye: “People-centric and Technology-enabled Transformation for Izmir”
- Uganda: “Improving the Physical Planning and Urban Management Information System in Uganda”

The GSCP team reviewed a wide range of documents such as the EOI, and GSCP progress and completion reports submitted by the task teams, which captured assignment objectives, components, and lessons, and outputs generated from the GSCP support. The team also interviewed task team leaders and GSCP experts in some cases to better understand the main outcome and takeaway.

Case studies were compiled to enable comparison in a uniform structure with the following sections: context (country and project overview); challenges, approach (including models, frameworks, assessments, and benchmarking performed); results (outputs, outcomes and impact), lessons learned; and moving forward (future plans and opportunities).

Although the type of engagements varied by several factors such as the scale (national government or city government), stage of involvement (strategic planning, investment design, project implementation), or sector (urban development, social inclusion, transport), they all share one common message: strong interest in smart city development and demand for tailored support. As most case studies showcase, the project teams aim to move things forward and request further support from GSCP. The program looks forward to implementing these initiatives and yielding concrete results that can inspire other similar engagements globally.

Notes:

a. <https://www.worldbank.org/en/programs/global-smart-city-partnership-program/case-studies>

Notes:

1. Smart & Inclusive Cities - How digital technologies can help promote disability inclusion in cities <https://www.youtube.com/watch?v=BXwjg-JkRCQ>
2. Turning resilient low carbon ideas into strategies and finance-ready projects <https://www.citygapfund.org/>
3. https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/understanding_the-low-carbonsmartcitylandscape-xAJ3.html
4. NEC - <https://www.nec.com/>
5. <https://www.worldbank.org/en/programs/global-smart-city-partnership-program>
6. <https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities.html>
7. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099501509212220541/idu09bc4586900d9a047080a9de0afa91af324a9>
8. <http://www.kaia.re.kr/portal/bbs/view/B0000023/11557.do?menuNo=200101>

3

PROGRAM EVALUATION AND LESSONS LEARNED

Feedback on program performance

GSCP2 supported a total of 22 engagements from 2021 to 2023 and engaged approximately 500 participants through knowledge sharing activities. The program conducted a survey in June 2022, after completion of round 5 to evaluate the satisfaction of the task team leaders (TTLs), clients, and experts. The same survey was shared to TTLs and clients of rounds 6 and 7 in June 2023. The evaluation also draws from the survey taken after major knowledge sharing events such as the virtual knowledge exchanges with the Netherlands and Barcelona.

The objective of the surveys was to assess the program's performance in a few dimensions, including reasons behind participation in the program, usefulness of the program and support, satisfaction with the support, level of achieving the objectives, likeliness of future engagement with the program, quality of the deliverables, and experts' performance.

The following key messages were distilled from the feedback received from the TTLs:

- **Smart city solutions are on high demand by clients:** Fifty percent of the TTLs noted clients' interest in or request for smart city solutions as the reason for their participation in the program and 50 percent of TTLs saw the smart city approach as relevant to the country or project.
- **The program is adding value to the supported projects:** Program support to the achievement of project objectives was rated at 4.25 points out of 5 on average. When asked in which ways the program was adding value, the TTLs highlighted GSCP support helped define and conceptualize smart city applications within the local context.
- **The program is satisfying TTL needs and expectations:** Overall satisfaction with the program was rated at 5 points out of 5, including coordination and communication

with the GSCP team, timeliness, fit of expertise, clear instructions on processes. Furthermore, all TTLs said they were likely to request support from the program again and to recommend the program to other colleagues.

- **Experts are also fulfilling expectations:** Experts' overall performance scored 4.25 points out of 5 and 4.5 points out of 5 for the level of knowledge and expertise and quality of deliverables, respectively.
- **Despite the very positive feedback, the program might still be able to provide further resources to maximize its impact:** None of the TTLs felt the engagement was too long; 75 percent felt it was about the right length and 25 percent felt it was too short.

Lessons learned from GSCP2 implementation

Lesson on Program Contribution and Management

The multisectoral nature of smart city engagements requires an extended period of support. Smart city engagements include coordination of project teams, experts, and clients through regular online and in-person workshops and meetings. GSCP2 increased duration for many projects, going over two years for several cases. The case of the "Toward a Smarter and Greener Amman" engagement, where multiple stakeholders entailed intensive online and in-person engagement for 14 months to reach meaningful findings demonstrates the need to allocate sufficient time to smart city planning. Going forward, future phases of the program will consider longer engagement windows for successful implementation and optimization of resources and support.

Peer-learning events or tailored knowledge exchange are well appreciated and have proven effective for amplifying the impact of technical assistance. Major in-country knowledge sharing events such as SCWC, in Barcelona, Spain and 2022 Smart City Leadership Knowledge Exchange in Korea served as important platforms to

consolidate engagements with clients and generate momentum and interest to move forward with the smart city agenda and strengthen key partnerships between donors, international experts, and other relevant stakeholders. With targeted invitation of client delegations, both programs could tailor the contents to their needs and lead to higher learning impacts.

Continuous technical support is one of the greatest values of GSCP experts' engagement. Smart city experts regularly engaged with clients through technical meetings and provided an opportunity to governments' technical staff to demonstrate their knowledge and gaps and articulate their concerns. Closely working with the international experts, governments have gained strong agency and ownership of the solutions and GSCP experts have been able to better understand the challenges to be addressed and provide more targeted recommendations for improvement. An example of this is the "Technical Assistance to Uganda: Physical Planning and Urban Management Information System" engagement, during which biweekly technical meetings were organized to advance project activities.

As cities become smarter and digital solutions pervade every part of urban development, promoting digital safeguards and inclusion in smart cities also become more urgent. Project evaluations should address not only how smart solutions may facilitate improvements, but also how they may come with risks of data leakage, potential misuse, system malfunctions, access inequity, and other issues. As a program that promotes smart city development, GSCP will bring these topics into the center of smart city future engagements and collaborate with other global practices within the World Bank that focus on these issues.

Lessons on smart city engagement

Although interest in smart city development is high and can be met cost effectively, translating upstream strategic work into concrete interventions is challenging. The

program observed a missing link between upstream and downstream smart city engagement, with most projects belonging to one of the two streams. This illustrates the challenges of translating smart city strategies into effective country, city and project specific solutions. Strengthening the middle ground between the strategic top-down approach and bottom-up, sector-focused, issue specific approach requires cross-sector collaboration and effective portfolio management.

Institutional capacity building and dedicated technical support are essential to move smart city engagements to the next level. During GSCP2, workshops dedicated to enhancing the knowledge and experience of municipality officials—in Türkiye and Jordan—or provision of specific technical expertise such as housing analytics expertise in Indonesia, urban planning expertise in Uganda and digital accessibility expertise in El Salvador have filled important gaps to advance the dialogue and work toward achieving intended outputs and outcomes. Government officials engaged, appreciated the opportunity, paired with technical support to experiment and acquire new skills, and become acquainted with new technologies, which resulted in smart city development mainstreaming in their work.

Extensive stakeholder engagement and partnerships formation is critical for smart city development. Long standing mutual trust between WBG teams and the governments, further reinforced by regular check-in meetings and mobilization of other partners, has been a critical enabler for the success of smart city engagements, as illustrated by multistakeholder and interunit coordination in Jordan, Mongolia Türkiye, and Uganda. Additionally, involving diverse actors from the civil society, academia, and the private sector has also proven to be critical for successful project implementation. The engagement in El Salvador—where GSCP support was instrumental in increasing client capacity for mainstreaming disability inclusion in citizen engagement and in developing an accessible citizen engagement platform—is good example of engaging local social teams

who know communities where the project will operate, and the citizens who will use the citizen engagement platform.

"Smart city" represents an integrated approach to core urban sectors and offers a wide range of possible solutions beyond digitalization. The use of technology and digitalization should be adopted, when necessary, as the means to an end and not as an output. Toward this objective, the engagement in Amman started examining sectoral opportunities under three pillars—green infrastructure, smart governance, and sustainable finance—before overlaying possible smart city solutions. This broad framework of smart city development enabled the government to identify most suitable proposals for implementation, which incorporate institutional and other aspects beyond technology and digital solutions.

In some cases, sustaining the impact of smart or digital investments over time remains a challenge and should be addressed. GSCP has observed that various information systems and digital services in many cities have been quickly outdated and underutilized. Therefore, they require reassessment and often new investments for major updates or even new development of such systems. This is usually because of the disconnect between sectoral and digital expertise, whereby digital systems are developed without sufficient knowledge of a sector, business flows, institutional arrangements, and user needs and capacities. When proposing effective smart city development, prioritizing the sustainability of the smart or digital investments can help maximize the impact and outreach of the engagements.



4

MOVING FORWARD: GSCP PHASE 3

GSCP Phase 1 started with the objective to meet smart city demands in a rapid, agile manner. The program played a catalytic role to provide additional resources and knowledge by building an extensive network of international experts and by nurturing partnerships with leading smart cities. During the initial phase, partnerships enabled the program to support 28 engagements and undertake extensive knowledge sharing events and capacity building activities.

Careful review of experiences and lessons from Phase 1 led to improvements of the program under its second phase. GSCP Phase 2 consolidated its position from 2021 until 2023, as a key partner within WBG for smart city development, successfully supporting 22 engagements, organizing 17 highly impactful knowledge sharing events, and publishing several major knowledge products.

The program continues under its third phase for 2023–2026. For GSCP Phase 3 (GSCP3), MOLIT became a new partner of the Sustainable Urban and Regional Development Umbrella Program (SURGE) through its new contribution of KRW1.5 billion (approximately USD 1.1 million) from Korea, Rep. SURGE is a multidonor global program¹ that supports governments and local authorities to address challenges stemming from rapid urbanization and unequal regional development processes and to consolidate efforts to build livable, inclusive, competitive, low carbon and resilient cities and regions.

The lessons and recommendations from GSCP2 shaped the strategic direction, organizational setup, and program design of GSCP3, which is structured in three components:

- **Component 1: Technical assistance to smart city strategic and investment planning.** Using the same modality of matching smart city experts with interested WBG teams, this component will support both: (i) upstream smart city strategic planning and (ii) downstream investment design, through a structured menu of options.
- **Component 2: Operational support to smart city foundational projects.** GSCP3 introduces a new component to select and provide grant support to World Bank lending projects with a high potential to build and strengthen foundational layers of smart cities.
- **Component 3: Smart city knowledge and capacity development.** GSCP3 will focus on developing smart city knowledge products that can support smart city planning, investments and institution building and human capacity.

GSCP3 will continue to engage interested WBG teams and clients through a more structured, standardized approach, while maintaining flexibility. Phase 3 will nurture and expand its partnership with key actors within and outside WBG. During the phases of GSCP, partnership with the Republic of Korea has flourished through regular meetings, results reporting, and joint activities around the annual World Smart City Expo. Similarly, partnerships with Barcelona, Spain and the Netherlands have been revived through substantive programs. While continuing the tradition, the program will also reach out to and engage new partners, including those in the private sector and civil society.

Notes:

1. <https://www.worldbank.org/en/programs/surge>

APPENDICES

Appendix A. GSCP2 Project Portfolio

NO	ROUND	TYPE	EOI TITLE	COUNTRY	REGION	GLOBAL PRACTICE	STATUS
1	5	OS	Smart City Conceptualization for Egypt's New Urban Community Development	Egypt	Middle East and North Africa	URL	Continue under Round 7
2	5 (R4 Extension)	OS	Technical assistance for 3D Cadaster Development in Indonesia	Indonesia	East Asia and Pacific	URL	Closed
3	5	OS	Supporting the Smart City agenda of Iğmir, Türkiye	Türkiye	Europe and Central Asia	IFC	Closed
4	5	OS	Chennai Urban Data Platform	India	South Asia	Transport	Continue under Round 7
5	5	JIT	Upstream assessment of smart cities readiness for Ghanaian cities	Ghana	West Africa	URL	Continue under Round 7
6	5	OS	Toward a smarter and greener Amman	Jordan	Middle East and North Africa	Multi GPs	Continue under Round 7
7	5	OS	Technical assistance to Uganda - Physical Planning and Urban Management Information System	Uganda	East Africa	URL	Closed
8	5	OS	Understanding Urban Food Systems in East Africa and the Way Forward	Kenya & Burundi	East Africa	Multi GPs	Closed
9	5 (R4 Extension)	JIT	Buffalo Municipality Smart City Strategy	South Africa	East Africa	Multi GPs	Closed
10	5	OS	Ulaanbaatar Intelligent Transport Systems	Mongolia	East Asia and Pacific	Transport	Closed
11	5	JIT	Indonesia National Affordable Housing Program -Support for the Development of HREIS	Indonesia	East Asia and Pacific	URL	Closed
12	6	OS	Ethiopia: Integration of Land Information Systems	Ethiopia	East Africa	URL	Closed
13	6	OS	Support for Urban Services Subcomponent Design	Tajikistan	Europe and Central Asia	DD	Closed
14	6	JIT	Toward smarter urban mobility in Rabat	Morocco	Middle East and North Africa	Transport	Closed
15	6	OS	El Salvador Citizen Engagement and Grievance Redress Mechanism (GRM) Digital Platform	Salvador	Latin America and the Caribbean	Multi GPs	Closed
16	7	JIT	Applying smart city approaches to the reconstruction of Agdam	Azerbaijan	Europe and Central Asia	SSI	Closed
17	7 (from Round 5)	OS	Support for Digital Chennai: Development of Digital Systems and Standardized Procurement Documents	India	South Asia	Transport	Ongoing under GSCP3
18	7	OS	Smart Mobility and Accessibility for Dhaka	Bangladesh	South Asia	Transport	Closed
19	7	OS	Dodoma Smart and Integrated Data Platform	Tanzania	East Africa	Transport	Ongoing under GSCP3
20	7 (from Round 5)	OS	Smart City Conceptualization for Egypt's New Urban Community Development Phase II	Egypt	Middle East and North Africa	URL	Ongoing under GSCP3
21	7	OS	Smart Mobility Solutions to Improve Urban Mobility in Nairobi Metropolitan Area	Kenya	East Africa	Multi GPs	Ongoing under GSCP3
22	7	OS	Rio de Janeiro Smart, Green and Resilient Mobility	Brazil	Latin America and the Caribbean	Transport	Ongoing under GSCP3
23	7	JIT	Advisory Support to the Municipality of Ulaanbaatar on Open data, data Analytics, and URL Information Management Systems	Mongolia	East Asia and Pacific	IFC	Ongoing under GSCP3
24	7 (from Round 5)	OS	Jordan Sustainable Cities; Smart and Inclusive Urban Mobility Project	Jordan	Middle East and North Africa	URL	Ongoing under GSCP3
25	7 (from Round 5)	JIT	Smart City Capacity Assessment for Ghanaian Cities	Ghana	West Africa	URL	Closed
26	7	OS	Building Smart Systems to Improve Affordable Housing Supply in Punjab, Pakistan	Pakistan	South Asia	URL	Ongoing under GSCP3

Appendix B. Knowledge and Learning Activities

NO	EVENT TITLE	TYPE	DATE	INTERNAL /EXTERNAL
1	Smart Cities Moscow Forum-Sustainable, smart, resilient: how evolution and implementation of modern technologies redefines ideas and concepts of city development	Panel	May 2021	External
2	WeGO Latin America Smart Cities Network Pre-Workshop	Workshop	June 2021	External
3	World Smart City Expo Korea 2021: Dissemination event of GSCP Phase1 Completion Report https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/world_smart_cityexpokorea2021disseminationev-Etnp.html	Conference	Sept. 2021	External
4	10th Asia Smart City Conference: World Bank Session "Low Carbon Solutions in Designing Sustainable Cities" - by Tokyo Development Learning Center https://www.youtube.com/watch?v=TZddvy3vNHc	Conference	Oct. 2021	External
5	Smart City Expo World Congress 2021 Side Event: Reinventing the Future of Cities Emerging from the COVID-19 Pandemic - in collaboration with TDLC https://www.worldbank.org/en/events/2021/11/16/reinventing-the-future-of-cities-emerging-from-the-covid-19-pandemic	Conference	Nov. 2021	External
6	Virtual Knowledge Exchange Program: Smart Cities for Climate Resilience https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/virtual_knowledgeexchangeprogramsmartcitiesf-AsTI.html	Knowledge Exchange (KE)	Feb. 2022	External
7	Global Smart City Partnership Program & 7th Call for EOIs https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/info_session_globalsmartcitypartnershipprogra-5Cff.html	Webinar	May 2022	Internal
8	Understanding the Low-Carbon Smart City Landscape: Practical City Experiences (organized jointly with GAP Fund) https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/understanding_thelow-carbonsmartcitylandscape-xAJ3.html	Webinar	June 2022	Internal
9	LCR Infrastructure Retreat	Panel	June 2022	Internal
10	Korea – World Bank Group Smart City Knowledge Exchange Program https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/korea_world_bankgroupsmartcityconference-9XYD.html	KE	Sept. 2022	External
11	How Smart Technologies Make Cities More Livable? https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/how_smart_technologiesmakeciti esmorelivable-KDvc.html	Webinar	Oct. 2022	Internal
12	Barcelona Smart City Knowledge Exchange Program	KE	Nov. 2022	External

NO	EVENT TITLE	TYPE	DATE	INTERNAL /EXTERNAL
13	Smart and Inclusive Cities: How digital technologies can help promote disability inclusion in cities? https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/smart_and_inclusivecitieshowdigitaltechnologi-nZR0.html	Webinar	Dec. 2022	Internal
14	Smart City Indicators How to make them easy to use and relevant for developing cities? https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/smart_city_indicatorshowtomakethemeasytouse-GFEv.html	Webinar	Dec. 2022	Internal
15	Foundations for Smart Cities: Digital government development experiences of NIA https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/foundations_for_smartcitiesdigitalgovernment-BweB.html	Webinar	Jan. 2023	Internal
16	Smart Cities in the Republic of Korea: A Journey Toward Institutionalization and Innovation Korea Launch Event	Report Launch	May 2023	External
17	Smart City Scenarios for Brazil https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/the-smart-cities/calendar.event.html/smart_city_scenariosforbrazil-OrtJ.html	Webinar	June 2023	Internal

<https://www.worldbank.org/en/programs/global-smart-city-partnership-program>

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