

Thailand *Smart City* Update

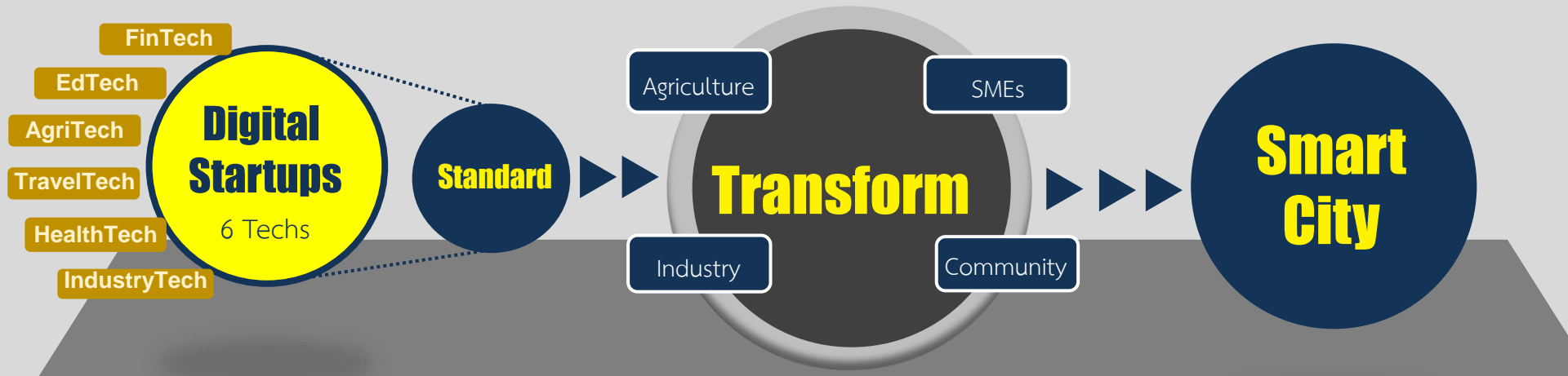
Dr Supakorn Siddhichai
*Group Executive Vice President
Digital Economy Promotion Agency*

30 March 2023
depa

Reinforcement
Promote Digital Industry & Innovation

Transform
Transform Businesses and Create New Growth Engines

Build Ecosystem
Build an Enabling Digital Ecosystem



Manpower



Development & Matching Opportunities

Build Manpower for the Digital Era



Digital Thailand

- ▲ Employment Rate
- ▲ Purchasing Power
- ▲ Quality of Life
- ▲ Strong Community
- ▲ Civil Society
- ▲ Sustainable Economic Growth



Smart City Thailand's Milestone

- Thailand Smart City Steering Committee



- Smart City Masterplan
- Joining ASCN



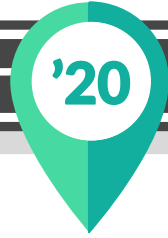
- Smart City Thailand logo
- Hosting 2nd ASCN



- First 15 Smart Cities Thailand
- Smart City Ambassador (SCA#1)



- CDP Framework
- Smart City Primer
- Smart City Leadership Program (SCL#1, SCL#2)
- SCA#2
- SCO#1



- Thailand Smart City Handbook
- Smart City Week 2020

70 Proposals in 37 Provinces 'Smart City Promotional Zone'

63 Smart Livable Cities

7 new Cities

21

Provincial Level

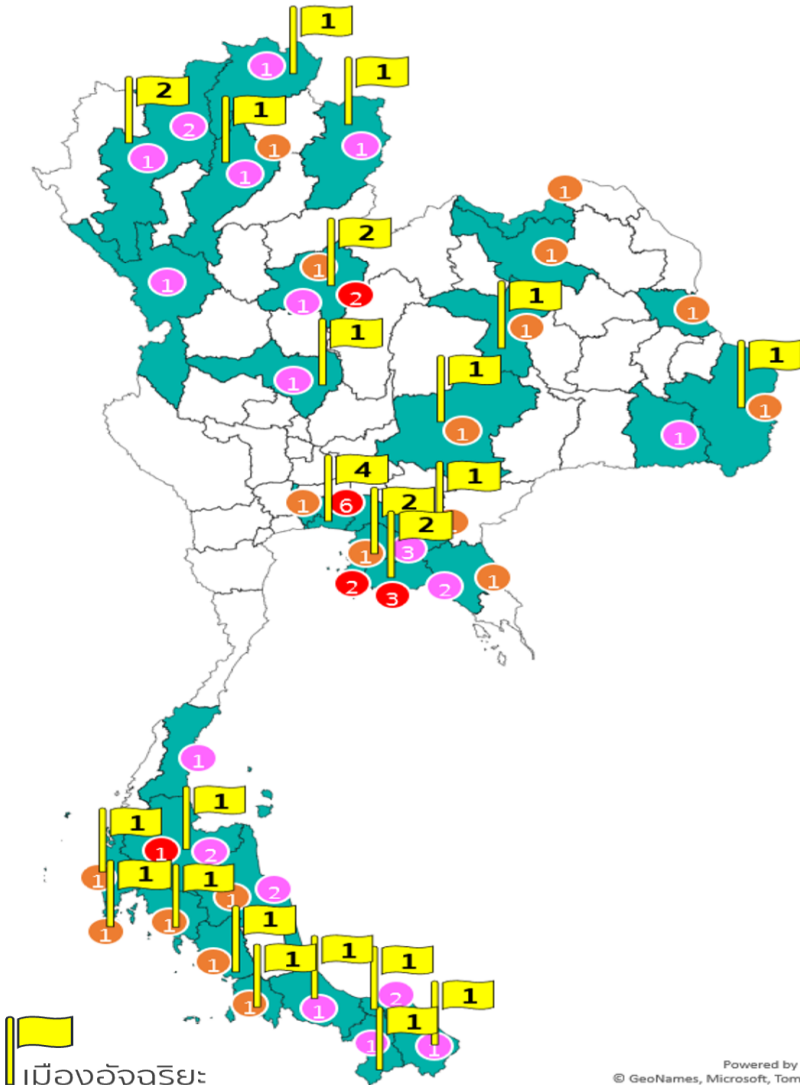
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Municipal Level

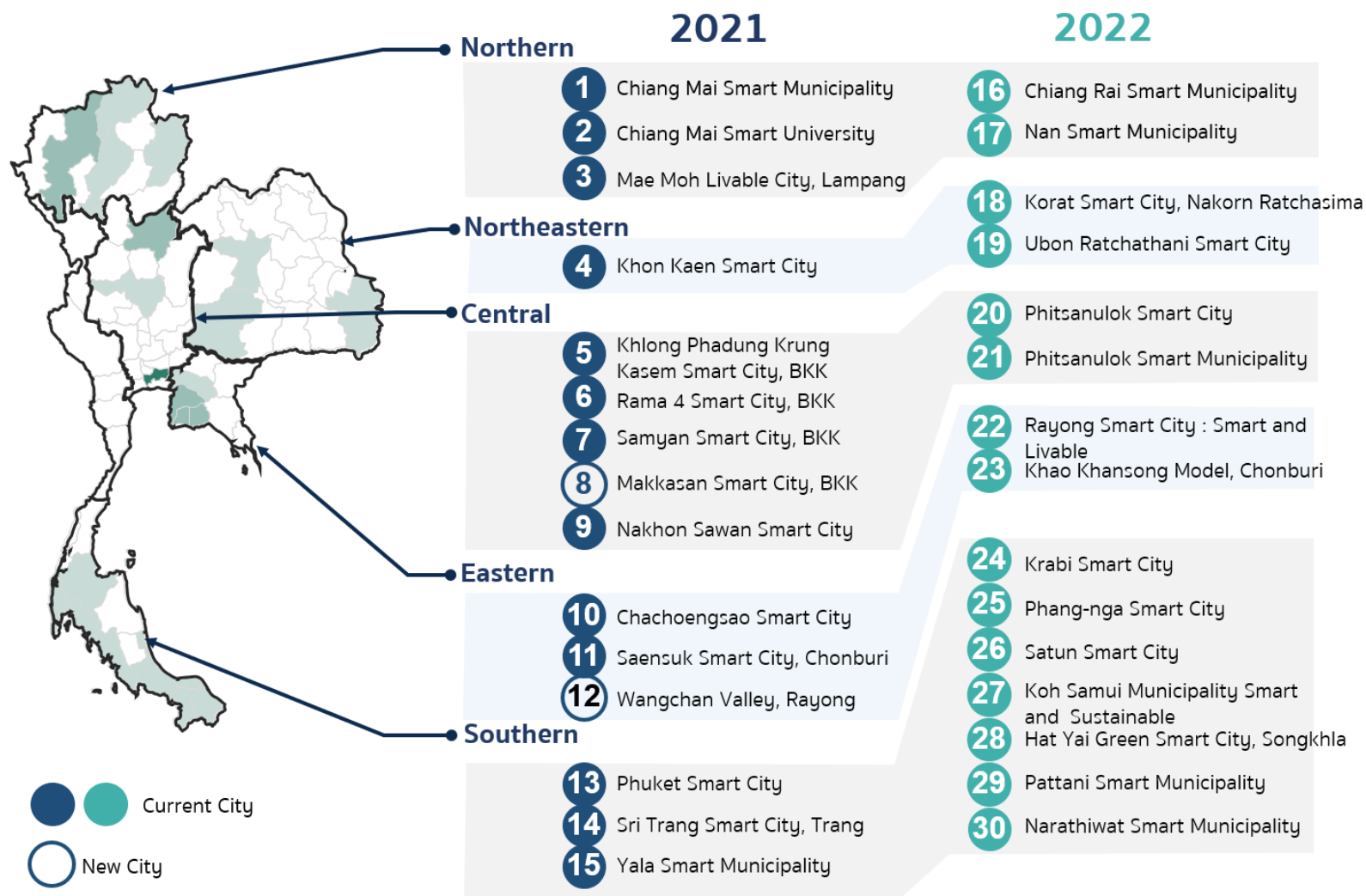
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Area-Based Level

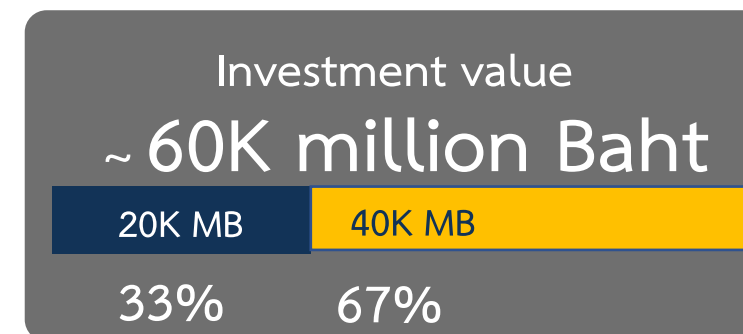
- New proposals are coming in monthly from all regions of Thailand; and,
- ASEAN Smart Cities Network (ASCN) considers adding 3 more cities from Thailand as proposed by and interest submitted to the Smart City Thailand Office (i.e., Chiang Mai, Rayong, Khon Kaen, Chacheongsao, Nakhon Ratchasima, Nakhon Si Thammarat)



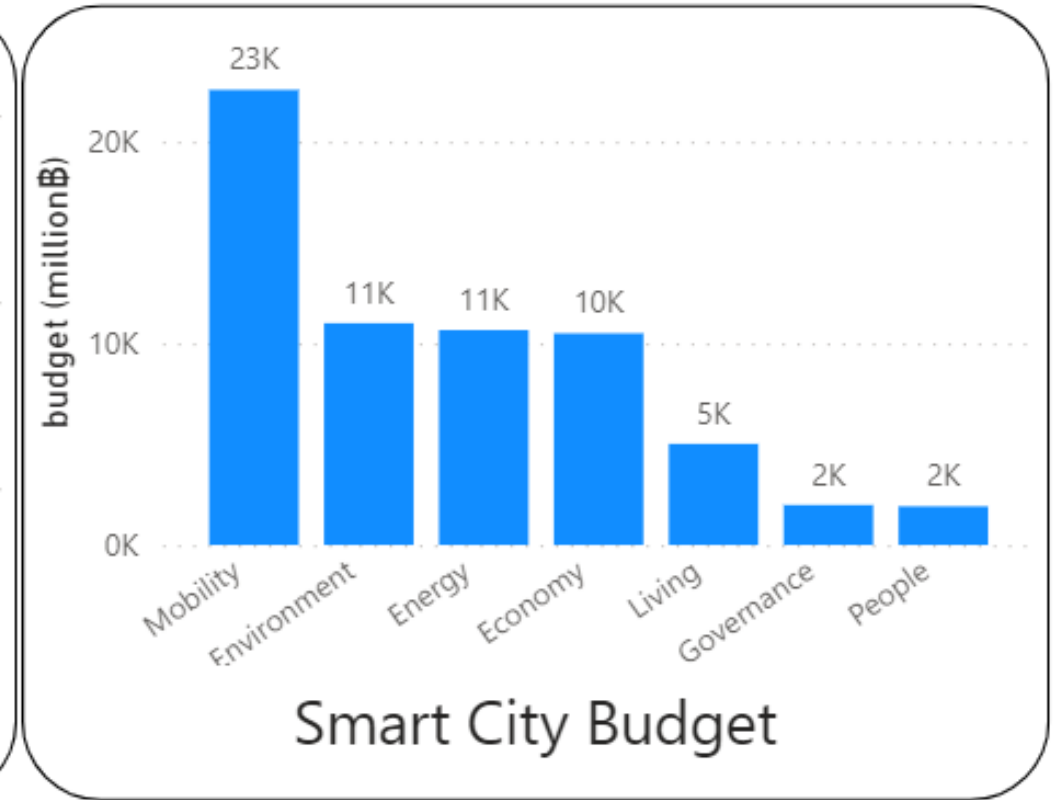
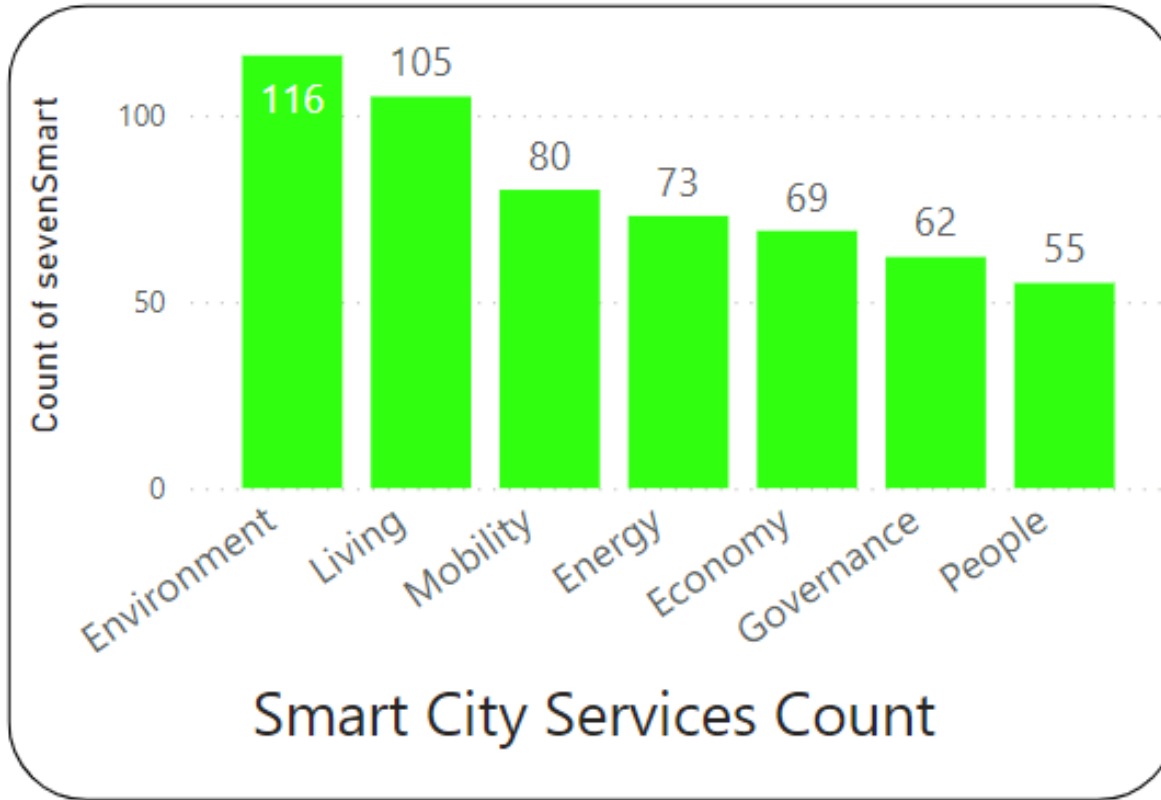
30 Smart Cities in Thailand (as of January 2023)



Data as in August 2022



Data Analytics Based on 30 Smart City Proposals



Workforce Development Activities in Smart City Development

Executive Level

Smart City Leadership Program: SCL



Operation Level

The Smart City Ambassadors (SCA)

The Fundamentals of Smart City (Online)

Smart City Officers Program (SCO)



General Public

City at the Next Level with SCB Academy

Webinar: PDPA and Smart City

Smart City Explorers (Smart City X)



Policy & Promoting



Funding



Standard & Regulation



Smart City Landscape

as of July 2022

Solution Providers



R&D, Creative, Innovation



Global Partners



City Management



Academic



2020 - 2021 K-City Global Collaboration Program: Khon Kaen Smart Mobility Master Planning



◆ Data collection (relevant authorities)

☑ Link traffic information with competent authorities



☑ Traffic information (real-time, statistics)



☑ Real-time video information



☑ Various event information



◆ Operation (processing / analysis)



Traffic management operation board

Process, analyze and create statistical data



Accident Management Traffic Management History / Statistics

Processed data

Processed data



Smart transportation center in Khon Kaen

Raw data

Processed data



Administrator

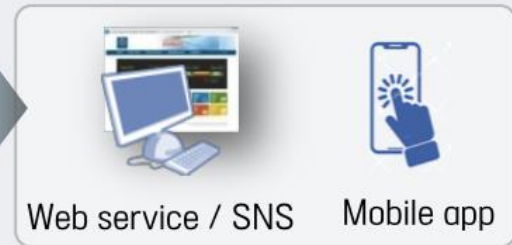
◆ New ATMS system



◆ Information service



User



Web service / SNS Mobile app

◆ Relevant organizations (related organizations)

Road management authority, central government, local government, police traffic policy making authority, research institutes, private institutions

2022 Smart City supported by Japan ASEAN Mutual Partnership

MaaS Application development future plan

1. Integration with first-and-last-mile mobility

- Help public transportations fulfill the distance to destinations.



Example of Bike Sharing

2. Integration with taxi hailing service

- Taxi hailing feature will help the user in picking up the taxi and feeling more comfortable about price transparency.
- Integrate with them helps travelers to use taxi with peace of mind.



Example of Taxi Hailing Service

3. Integration with public transportation packages

- Allows users to hop-on hop-off the bus unlimited times.
- Compatible with various public transportation modes.



Packages hop-on/hop-off for all public transportation

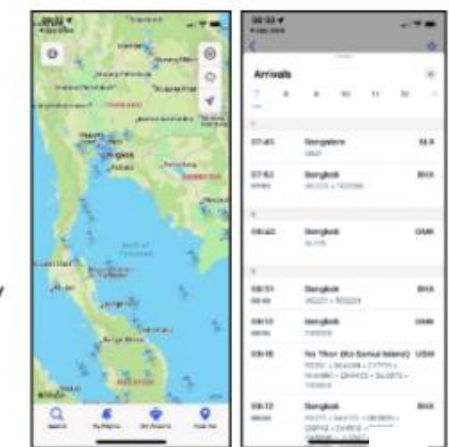
4. Integration with Piers

- Integration of pier information (for example: the ferry's schedule) helps travelers perform trip planning



5. Integration with airline flight schedule information

- Connect the whole customer's journey by integrating departing and arriving flights time.



Example of airline flight schedule

2022 Image Visualization Using Fujitsu A.I. Technologies

Congestion image



increased traffic in the roundabout



congestion caused by roundabouts



unreasonable lane changes and interruptions

↑↑↑↑↑ heretofore investigation of the cause of congestion ↑↑↑↑↑

[hypothesis] By using image analysis technology, it will be possible to understand what needs to be improved and to draw up accurate improvement plans.

New technology

Measure

Detect speed by direction by Image analysis -> Understanding Roundabout Traffic Conditions by Direction

Detect Roundabout Entry and Exit Speeds by image analysis -> Detecting congestion by direction outside of roundabout

Detect Traveling Trajectory between Lanes by Image Analysis -> Detection of frequent lane change points and speed of surrounding vehicles

Analysis result

Traffic volume data

Improvement plan

Understanding Traffic volume in Roundabouts

Analysis result

Identify head of the congestion

Improvement plan

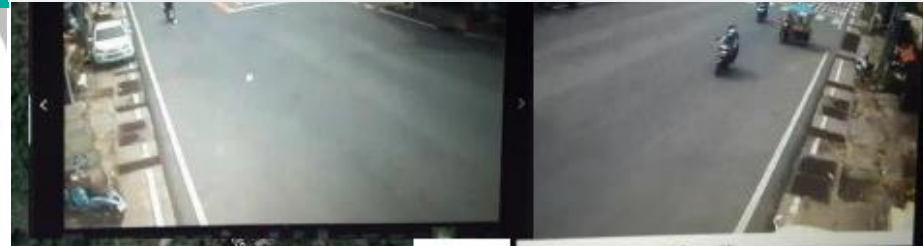
Optimal operation according to traffic capacity by improving traffic signals and infrastructure

Analysis result

Understanding where interruption occur

Improvement plan

Install Directional guidance in front where lane change frequently occur



Area of Kata Beach many hotels and restaurants



2023 USTDA Supported Technical Assistance Project for Phuket

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Thailand: Phuket Smart Cities Technical Assistance

BUSINESS OPPORTUNITY OVERSEAS

Thailand's Digital Economy and Promotion Agency (DEPA) invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms that are qualified on the basis of experience and capability to execute a Technical Assistance ("TA") for the proposed Phuket Smart City Project. **The Proposal submission deadline is Friday, March 10, 2023 at 5:00 PM Bangkok, Thailand Time (UTC+7).** The U.S. firm selected will be paid in U.S. dollars from a US\$839,420 grant to DEPA from the U.S. Trade and Development Agency. Source: <https://th.usembassy.gov/ustda-helps-thailand-design-smart-cities/>

Source: https://ustda.gov/business_opp_oversea/thailand-phuket-smart-cities-technical-assistance/



SMART CITY Thailand



DIGITALTHAILAND



OFFICIAL PARTICIPANT - THAILAND



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