Executive Summary
20-year Development Plan for Bangkok Metropolis

by Strategy and Evaluation Department
Bangkok Metropolitan Administration
and Faculty of Political Sciences, Chulalongkorn University
EXECUTIVE SUMMARY

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TOGETHER WE BUILD
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Together We Build
The Vibrant of Asia
www.bangkok2032.com
Introduction

The 20-year Development Plan for Bangkok Metropolis is the fruit of the cooperation among representatives of Bangkok residents, BMA departments, and academics from Chulalongkorn University. In 2013, BMA’s Strategy and Evaluation Department and Faculty of Political Sciences, Chulalongkorn University, jointly drew up the people’s edition of a vision for the development of Bangkok Metropolis in the next 20 years, known as ‘Bangkok : Vibrant of Asia’. The consulting team and BMA chose the ‘outsider’s views’ approach to include Bangkok residents in the process to shape the future of Bangkok Metropolis, which started by translating the six-dimension Bangkok vision 2032 “Bangkok : Vibrant of Asia” into a clear and tangible development plan. In this regard, the academics, planning officers from various departments, BMA’s technical and planning officers, and representatives from district offices jointly organised altogether 39 workshops to review the Bangkok vision 2032 and map out the 20-year Development Plan for Bangkok Metropolis, the Five-year Development Plan, and the Implementation Plan for 2015.
Moreover, a number of public hearing sessions were held to seek views from Bangkok residents on the 20-year Development Plan for Bangkok Metropolis, Five-year Development Plan, and Implementation Plan for 2015. All parties could, thus, envisage the same picture of what would happen in the next two decades. The approach aimed to encourage participation from the public in the review of the Bangkok vision 2032.

It is hoped that the 20-year Development Plan for Bangkok Metropolis will serve as a key factor to drive Bangkok towards being one of Asia’s leading capitals and a city where our children can raise their families for future development.

Bangkok Metropolitan Administration would like to thank Bangkok residents and all parties involved, including associations, business entities, community organizations, and the academics from Chulalongkorn University, for having participated in the formulation of this 20-year Development Plan for Bangkok Metropolis.
1. Background of the 20-year Development Plan for Bangkok Metropolis

2. Summary of the 20-year Development Plan for Bangkok Metropolis
   - Strategy 1: Bangkok as a safe city
   - Strategy 2: Bangkok as a green and convenient city
   - Strategy 3: Bangkok as a city for all
   - Strategy 4: Bangkok as a compact city
   - Strategy 5: Bangkok as a democratic city
   - Strategy 6: Bangkok as an economic and learning centre
   - Strategy 7: Management strategy

3. Name list of project consultants
Background of the 20-year Development Plan for Bangkok Metropolis
The formulation of BMA strategic plan started from translating the six-dimension Bangkok vision 2032 into an implementation plan with clear objectives and KPIs. The consulting team and academics, as well as planning officers from BMA’s Strategy and Evaluation Department and those from other agencies, together with BMA’s technical and planning officers, and representatives from district offices jointly reviewed the vision’s intention in various aspects before defining the implementation objectives and KPIs of each aspect. In doing so, workshops were held among responsible parties.

In addition to the Bangkok vision 2032, the consulting team, academics, and planning officers from various departments under BMA based the formulation of implementation objectives and KPIs on the concept of the existing 12-year development plan and the city plan for Bangkok and perimeters.

Measures and projects to drive the strategy

In this stage, the consulting team, academics, and BMA’s planning officers joined hands in reviewing the various measures
and projects appeared in the ‘Bangkok vision 2032’ as well as those in BMA’s 12-year development plan. Significant measures and projects were selected and developed into measures and projects in the 20-year strategic plan.

Besides, if the host agency and consulting team found that the existing measures and projects were not sufficient to drive the strategy, some additional measures and projects would be initiated as considered appropriate for each aspect of the strategy. To this end, the consulting team and the various departments held a number of workshops for the public, business groups, and government agencies with direct involvement to take part in drawing up new measures and projects.

Then, the consulting team, academics, and policy and planning analysts from BMA’s various departments agreed to appoint main ‘host agencies’ to take charge of the (selected) measures and projects. The host agencies, together with respective consulting teams for each area of work, were assigned to work out details of measures and projects which are listed below:

1. Host agencies (implementer and budget proposer)
2. Implementation objectives and expected results together with KPIs to assess measures and projects (KPIs must be realistic and aligned with those of the strategy for the respective area of work.)
3. Activities / work process
4. Timeframe (fiscal year)
5. Total budget, investment budget, and implementation budget
Formulation of measures and projects to facilitate administration

In this stage, the consulting teams for organizational structure, legal, accounting and finance, and personnel management would jointly work with a special unit and district offices responsible for organizational development, legal, accounting and finance, and personnel management. Here, measures and projects designed to drive the strategy by the various departments and host agencies in the previous stage would be considered. Measures and projects initiated as a result of the joint effort were meant for driving forward strategies in other aspects to attain their goals.

If the measures and projects initiated by host agencies were found beyond the administration capability, a central consulting team would be set up to hold a workshop to review such measures and projects to make them match with the administration capability.

Budgeting

Even though focus of the project is placed upon the strategic plan, not the implementation plan, BMA’s financial ability would have to be assessed. To this end, BMA’s overall expenditure during the period covered by the plan was compared to BMA’s revenue estimate and its ability to raise fund during the corresponding period. Therefore, financial consultants, with support of the academics, looked into the Finance and Budget Department’s plan before making an overall estimate (revenue and ability to raise fund compared with the expenditure accrued from the strategy and implementation), of which detailed figures are presented in the appendix of the strategic plan.
Documentation of the Implementation Plan for 2015 Fiscal Year, the Five-year Strategic Plan, and the 20-year Strategic Plan

In this stage, the consulting team, academics, and policy and planning analysts from various departments took charge of documenting the Implementation Plan for 2015 Fiscal Year, the Five-year Strategic Plan, and the 20-year Strategic Plan based on details collected from the previous stages. The documentation format was earlier defined in the framework.

Public hearing

In this stage, the consulting team organized a number of public hearing sessions to seek views about the drafts of the strategic plan and implementation plan from BMA executives and the public. Opinions collected from the public hearings were used to improve the plans before submission to BMA, as required by the framework.

Submission of the plans to BMA

The final stage of the process is the submission of the plans to BMA for execution.

Translation of Bangkok vision 2032 into actions (summarised version)

The process starts from turning the six dimensional Bangkok vision 2032 into clear and concrete implementation objectives together with their KPIs. In doing so, participation from BMA staff and the civil sector was sought through 39 sessions of workshop, which was made up of three phases:
Workshop Phase 1 involves structuring the vision and defining KPIs for each aspect of the strategy by the consulting team together with the strategic team, academics / analysts from various departments and districts. Activities in phase 1 included:

1. Checking and improving the strategic structure of the ‘Bangkok vision 2032’
2. Checking / interpreting ‘objectives’ and ‘KPIs’
3. Defining implementation objectives and KPIs for each aspect of the strategy

Workshop Phase 2 involves the formulation of measures and projects to drive the strategy. Activities in this phase are including:

1. Assessing measures and projects appeared in the Bangkok vision 2032 and selecting only measures and projects considered ‘significant’
2. Making improvements to the selected measures and projects by providing sufficient details (main responsible units and other units involved), objectives, KPIs which are linked to the targets of each aspect of the strategy, implementation context (the public, targets, venue, time), activities and implementation process, as well as budget
3. Defining additional measures / projects needed for driving the strategy

Workshop Phase 3 involves seeking opinions from BMA executives and public hearings among Bangkok residents.
Summary of the 20-year Development Plan for Bangkok Metropolis
The 20-year Development Plan for Bangkok Metropolis is the making of a plan derived from people’s vision regarding the development of Bangkok in the next 20 years and translate of the plan into actions, which are expected to spur the growth of Bangkok in view of the integration of ASEAN Community and the various changes in Bangkok’s own circumstances. BMA’s Strategy and Evaluation Department and Faculty of Political Sciences, Chulalongkorn University, had already taken charge of drawing up the people’s edition of the 20-year Development Plan for Bangkok Metropolis (the Bangkok 2032 vision).

In fact, the process to formulate the 20-year Development Plan for Bangkok Metropolis did not start from scratch because BMA had already drawn up its vision for Bangkok in 2032 during the previous year. Besides, ASEAN and Asia, for Bangkok and its perimeters. Therefore, the formulation of the 20-year Development Plan for Bangkok Metropolis was actually based on these existing outlines.
Bangkok residents’ Dream Bangkok in the next 20 years is:

“In the next 20 years, Bangkok is hoped to become ‘the Capital of Asia as Bangkok : Vibrant of Asia’. Bangkok will be regarded as a key driver of the economic and social sectors in ASEAN and Asia. When people around the world think of Asia, they will think of Bangkok as a city with prime service sector, as well as safety, beauty, convenience, and environment-friendliness. Still, Bangkok can maintain its uniqueness as a city with simplicity, charm, and liveliness”.

To make Bangkok the Capital of Asia, the Bangkok vision 2032 can be viewed from both deep and wide perspectives. From the wide perspective, Bangkok 2032 has six dimensions.

From the deep perspective, Bangkok residents divided the measures to drive the strategy into four five-year phases according to their priority, i.e. phase 1: 2013-2027, phase 2: 2018-2022, phase 3: 2023-2017, and phase 4: 2028-2032. In the first five-year phase, Bangkok will be a safe city. Ten years from now, Bangkok will become a city that is convenient, cost-effective, and environment-friendly. It will be a city for all, be it Bangkok’s own residents or visitors, the rich or the poor or even the disadvantage. In the next 15 years, the physical structure of the city will be adjusted. From a capital with a single city centre, Bangkok will be turned into a city with dispersed city centres—both in the old town area and suburbs.
The dispersed city centres will be interlinked by mass transit systems which are efficient and affordable while expansion of the old city centre will be controlled. For in politics, Bangkok is Asia’s leading city in terms of democracy. The political system clean and free from corruption. Striving to be a democratic city. Then in the next 20 years, Bangkok will become an economic hub and a centre for education, investment, transport, commerce, and culture of Asean and Asia.

The six-dimension vision comprises:

1. Bangkok as a safe city
2. Bangkok as a green and convenient city
3. Bangkok as a city for all
4. Bangkok as a compact city
5. Bangkok as a democratic city
6. Bangkok as an economic and learning centre

Another aspect of the vision that has been added to the strategy is Management Strategy, which involves laws, Planning and assessment, human resource management, finance and budget, an information technology.

**Strategy: 1. Bangkok as a safe city**

**Supporting strategy: 1.1 Free from pollution**

2032 targets:

- Waste water from all households will be treated before being released to public water sources.
- Garbage will be properly treated.
- At least 80% of Bangkok residents living in inner-city areas will have fresh air equivalent to at least 200 days per year.
## KPIs

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<tbody>
<tr>
<td>1. Percentage of community’s waste water treated</td>
<td>No less than 40</td>
<td>No less than 50</td>
<td>No less than 55</td>
<td>No less than 60</td>
</tr>
<tr>
<td>2. Number of canal water quality testing points showing dissolved oxygen content of ≥ 2.0 mL/ltr.</td>
<td>No less than 60</td>
<td>No less than 65</td>
<td>No less than 70</td>
<td>No less than 80</td>
</tr>
<tr>
<td>3. Number of canal water quality testing points showing dissolved oxygen content of ≥ 3.0 mL/ltr.</td>
<td>No less than 40</td>
<td>No less than 45</td>
<td>No less than 50</td>
<td>No less than 60</td>
</tr>
</tbody>
</table>

### General waste and hazardous waste management

| 1. Percentage of recyclable waste | base year | No less than 20 | No less than 30 | No less than 40 |

### Air and noise quality

<table>
<thead>
<tr>
<th>1. Percentage of 24-hour average of dust particles in general areas not exceeding 10 microns (PM10)</th>
<th>100</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Percentage of 24-hour average of dust particles at roadside testing points not exceeding 10 microns (PM10)</td>
<td>No less than 95</td>
<td>No less than 95</td>
<td>No less than 98</td>
<td>No less than 98</td>
</tr>
<tr>
<td>3. Percentage of 24-hour average of dust particles not exceeding 2.5 microns (PM2.5)</td>
<td>Base year</td>
<td>5% reduction from base year</td>
<td>10% reduction from base year</td>
<td>15% reduction from base year</td>
</tr>
<tr>
<td>4. Percentage of 8-hour average of ozone (O₃) surpassing standard criteria (compared with all data collected)</td>
<td>-</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>5. Percentage of 1-hour average of nitrogen oxide (NO₂) at roadside testing points surpassing standard criteria</td>
<td>Base year</td>
<td>5% reduction from base year</td>
<td>10% reduction from base year</td>
<td>15% reduction from base year</td>
</tr>
<tr>
<td>6. Percentage of annual average of benzene content at each testing point reducing to within standard criteria</td>
<td>Base year</td>
<td>5% reduction from base year</td>
<td>10% reduction from base year</td>
<td>15% reduction from base year</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
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<td>---------------------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>7. Percentage of noise pollution sources controlled</td>
<td>15%</td>
<td>25%</td>
<td>35%</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Major projects:**

1. Project disseminate knowledge on water use and protect and maintain water resources (on going monthly events throughout the year)
2. The project to build a network of community partners in the preservation of natural water resources
3. Survey attitude requirements and guidelines for the management of natural water sources, people in the community with natural sources
4. Development and reshaping the lifestyle of the people living along the river in the ditches with water conservation and happily project
5. Awareness projects and the importance of natural water resources in all areas of Bangkok
6. Project to cultivate and create positive attitudes to youth in the care and conservation of the environment in schools in Bangkok
7. Project monitoring and restoration of degraded natural sources. (As the case)
8. Development and define a comprehensive solid waste management in the short, medium and long
9. Promote and campaigns projects to reduce segregation and solid waste management, resource management principles with the 3Rs
10. Projects spam / junk shop purchases (government or community organization and self-management)
11. Promotion and partnership with the private sector in the management of solid waste at the source
12. Development and reshaping the lives of people in agricultural areas
13. Project awareness and consciousness in reducing waste and garbage properly in all areas of Bangkok
14. Environmental education projects in target
15. Add a hazardous waste program that is safe to cover the Bangkok area
16. Waste separation project in residential condominium dormitory housing
17. Campaign Reuse project
18. Project “a wonderful young environment” in schools under the Bangkok
19. reduction projects in the garbage

Supporting strategy: 1.2 Free from crimes and drugs
By the year 2032, Bangkok is targeted to be one of the top five capitals in Asia that are safe from crimes.
## Summary of the 20-year Development Plan for Bangkok Metropolis

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<tbody>
<tr>
<td>1. Decreasing rate of all sorts of crime (per a population of 100,000)</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>2. Increasing rate of arrests and prosecutions</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>3. Increasing rate of crime and drugs surveillance points in communities</td>
<td>70%</td>
<td>80%</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>4. Increasing rate of risky areas in communities turned into safe areas</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>5. Increasing rate of CCTVs per each specific area</td>
<td>70%</td>
<td>80%</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>6. Number of crime surveillance networks in communities</td>
<td>No less than 8,216 persons</td>
<td>No less than 16,432 persons</td>
<td>No less than 32,864 persons</td>
<td>No less than 65,728 persons</td>
</tr>
<tr>
<td>7. Increasing rate of satisfaction and confidence in crime suppression</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
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</table>
## KPIs

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<tbody>
<tr>
<td>8. Decreasing rate of communities found with drugs</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>9. Increasing rate of drug addicts receiving drug abuse treatment</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>10. Crime rate</td>
<td>Not exceeding 2 crimes</td>
<td>Not exceeding 1 crime</td>
<td>0 crime</td>
<td></td>
</tr>
<tr>
<td>11. Increasing rate of foreigners’ confidence in Bangkok</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
</tbody>
</table>

### Major projects:

1. Projects lighting fixtures illuminate Bangkok
2. Projects installed CCTV cameras around Bangkok
3. Projects linked to the control room and CCTV
4. The training staff the control room CCTV
5. Projects crime
6. Projects volunteers Surveillance crime and drugs
7. Projects community justice
8. Reviewed and rehearsed plan for prevention and community protests.
9. Projects immune Youth and Family cognizant drugs
10. The expansion of the center to assist the addict voluntary
11. The preparation of the database for drug addiction
Supporting strategy: 1.3 Free from accidents

By the year 2032, Bangkok is targeted to be one of the top five capitals in Asia ensured with road safety.

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<tbody>
<tr>
<td>1. Number of accidents relating to mass transit vehicles</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Number of road accidents reduced (4% per year on average)</td>
<td>26,500</td>
<td>21,600</td>
<td>17,600</td>
<td>14,400</td>
</tr>
<tr>
<td>3. Number of injuries from road accidents reduced (4% per year on average)</td>
<td>12,200</td>
<td>10,000</td>
<td>8,100</td>
<td>6,600</td>
</tr>
<tr>
<td>4. Number of deaths reduced (4% per year on average)</td>
<td>309</td>
<td>239</td>
<td>185</td>
<td>143</td>
</tr>
</tbody>
</table>

Major projects:
1. Examination infrastructure and operating system regularly
2. Creating media to educate the public about the use of rail or through the school curriculum Bangkok
3. Forums Development breakpoints driver sanitizer
4. Choose a city / district Navigation rigorous discipline area traffic control signs, signals the crossing lights
5. Additional courses Traffic as a driver, a pedestrian, all levels of education, and the creation of media
6. Install a traffic light violation detection
7. Install speed camera detector
8. Install cameras to detect vehicles violating traffic light crossing the zebra crossing at the core. (Home, school, hospital)
9. Establishment and improvement of road accident investigation team physical
10. Fixed point problems with road hazard warning signage, lighting, routing updates, clear the slow speed, add sidewalks

Supporting strategy: 1.4 Free from disasters

2032 targets:

1. Rain water can be drained within 30 minutes after the rain for 90% of the total Bangkok area.
2. Total Bangkok area is free from floods.

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<tbody>
<tr>
<td>1. Additional length of flood prevention walls along the Chao Praya River (km.)</td>
<td>1.000</td>
<td>1.500</td>
<td>1.500</td>
<td>-</td>
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### Summary of the 20-year Development Plan for Bangkok Metropolis

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<tbody>
<tr>
<td>2. Additional length of flood prevention walls along Bangkok Noi and Maha Sawat canals (km.)</td>
<td>0.500</td>
<td>0.200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Additional length of dam built on the east side of Bangkok. (KM)</td>
<td>1.500</td>
<td>4.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Time needed for draining rain water on major roads within 90 mins with amount of rain no more than 100 mm/min</td>
<td>120</td>
<td>110</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>5. Additional length of reinforced-concrete canal embankment (km.)</td>
<td>158,800</td>
<td>317,600</td>
<td>476,400</td>
<td>571,674</td>
</tr>
<tr>
<td>6. Additional length of canal unblocking and deepening for releasing and holding water (km.)</td>
<td>158,800</td>
<td>317,600</td>
<td>476,400</td>
<td>571,674</td>
</tr>
<tr>
<td>7. Number of major canals with management of building encroachment</td>
<td>0</td>
<td>10</td>
<td>32</td>
<td>64</td>
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</table>
### KPIs

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<tbody>
<tr>
<td>8. Number of major canals with public area demarcation</td>
<td>0</td>
<td>10</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>9. Number of districts readily equipped with GIS and the forecast system with connection to the main system</td>
<td>20</td>
<td>50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10. Size of land protruding into the sea increased (metre)</td>
<td>50,000</td>
<td>100,000</td>
<td>200,000</td>
<td>300,000</td>
</tr>
<tr>
<td>11. Size of mangrove areas increased (metre)</td>
<td>50.00</td>
<td>100.00</td>
<td>200.00</td>
<td>300.00</td>
</tr>
<tr>
<td>12. Land erosion rate decreased (metre)</td>
<td>3.230</td>
<td>&lt;2.230</td>
<td>&lt;1.230</td>
<td>&lt;0.230</td>
</tr>
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### Major projects:
1. Constructing large drainage tunnel.
2. Organized to strengthen the flood defences along the Chao Phraya River.
3. Improve the main canal.
4. Improve sewers in the main street.
5. Procurement and construction checks.
6. Appropriateness Study and Environmental Impact
   (Under the block and tackle coastal erosion Bang Khun Tien.

Supporting strategy: 1.5 Safe buildings

In 2032, construction of all public buildings in Bangkok must meet safety standards.

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<tbody>
<tr>
<td>1. Percentage of the nine types of public buildings certified under Building Control Act</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>2. Percentage of general buildings, both newly constructed and modified ones, certified after safety tests</td>
<td>70</td>
<td>90</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>3. Percentage of incidents involving infrastructure</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Percentage of incidents at bus stops and piers</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>
**Major projects:**

1. Develop Smart Public Database & Risk Monitoring System for all buildings and infrastructures
2. Initiate a project to monitor high rises, covering inspection, arrest, fine, and suspension of use
3. Initiate the City Infrastructure Insurance project to save lives and assets related to infrastructure under the responsibilities of BMA
4. Install the Structural Health Monitoring system for infrastructure with high impact on the public

**Supporting strategy: 1.6 Free from urban illnesses with availability of safe food**

In 2032, it is targeted that food available for Bangkok residents will be safe, and the city will be free from urban illnesses, i.e. obesity, diabetes, hypertension, heart disease, and stroke, as well as brain diseases and mental illnesses (committing suicide, stress / depression), communicable diseases (dengue, tuberculosis, AIDS, rabies), respiratory diseases (flu), cancer and diseases in elderly.

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<tbody>
<tr>
<td>Non-communicable disease</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. Prevalence of obesity [BMI &gt;25 kg / m²]</td>
<td>Not exceeding 35%</td>
<td>Not exceeding 33%</td>
<td>Not exceeding 31%</td>
<td>Not exceeding 30%</td>
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<tr>
<td>------------------------------------------</td>
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</tr>
<tr>
<td>2. Prevalence of diabetes (DM)</td>
<td>Not exceeding 8%</td>
<td>Not exceeding 8%</td>
<td>Not exceeding 8%</td>
<td>Not exceeding 8%</td>
</tr>
<tr>
<td>3. Prevalence of hypertension (HT)</td>
<td>Not exceeding 24%</td>
<td>Not exceeding 23%</td>
<td>Not exceeding 22%</td>
<td>Not exceeding 22%</td>
</tr>
<tr>
<td>4. Vascular disease and myocardial infarction rate</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>5. Prevalence of breast cancer</td>
<td>Not exceeding 37</td>
<td>Not exceeding 36</td>
<td>Not exceeding 35</td>
<td>Not exceeding 34</td>
</tr>
<tr>
<td>7. Work-related injury or sickness rate</td>
<td>10% reduction</td>
<td>10% reduction</td>
<td>10% reduction</td>
<td>10% reduction</td>
</tr>
<tr>
<td>8. Suicide rate</td>
<td>Suicide rate not exceeding the national average rate</td>
<td>Suicide rate not exceeding the national average rate</td>
<td>Suicide rate not exceeding the national average rate</td>
<td>Suicide rate not exceeding the national average rate</td>
</tr>
<tr>
<td>9. Prevalence of disease in the elderly</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------</td>
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</tr>
<tr>
<td><strong>Communicable disease</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10. Sickness rate from dengue fever</td>
<td>Not exceeding 80&lt;sup&gt;th&lt;/sup&gt; percentile of the past 5-year data</td>
<td>Not exceeding 80&lt;sup&gt;th&lt;/sup&gt; percentile of the past 5-year data</td>
<td>Not exceeding 75&lt;sup&gt;th&lt;/sup&gt; percentile of the past 5-year data</td>
<td>Not exceeding 75&lt;sup&gt;th&lt;/sup&gt; percentile of the past 5-year data</td>
</tr>
<tr>
<td>11. Tuberculosis: success rate of treatment</td>
<td>80%</td>
<td>82%</td>
<td>84%</td>
<td>85%</td>
</tr>
<tr>
<td>12. AIDS: Percentage of pregnant women in Bangkok diagnosed with Aids</td>
<td>Lower than 1%</td>
<td>Lower than 1%</td>
<td>Lower than 1%</td>
<td>Lower than 1%</td>
</tr>
<tr>
<td>13. Sickness rate from rabies</td>
<td>Not exceeding 0.01 per 100,000 persons</td>
<td>Not exceeding 0.01 per 100,000 persons</td>
<td>Not exceeding 0 per 100,000 persons</td>
<td>Not exceeding 0 per 100,000 persons</td>
</tr>
<tr>
<td>14. Respiratory infection (flu) rate</td>
<td>Not exceeding 80&lt;sup&gt;th&lt;/sup&gt; percentile of the past 5-year data</td>
<td>Not exceeding 80&lt;sup&gt;th&lt;/sup&gt; percentile of the past 5-year data</td>
<td>Not exceeding 75&lt;sup&gt;th&lt;/sup&gt; percentile of the past 5-year data</td>
<td>Not exceeding 75&lt;sup&gt;th&lt;/sup&gt; percentile of the past 5-year data</td>
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### Summary of the 20-year Development Plan for Bangkok Metropolis

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<tr>
<td><strong>Others</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Random samples of foods found with no contaminants</td>
<td>65</td>
<td>70</td>
<td>75</td>
<td>80</td>
</tr>
<tr>
<td>16. Random samples of foods found with no poisonous substance</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>17. Food sellers in Bangkok area receiving BMA’s food safety standard certificate</td>
<td>60</td>
<td>65</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>18. Building cleanliness standard and environment</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>70</td>
</tr>
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</table>

**Major projects:**

1. Increase preventive care services, disease control, in cooperation and coordination with a network of health services, private sector and communities

2. Advanced emergency medical services can be obtained within 10 minutes and the basic can be obtained within 15 minutes

3. Expanding urban health care services through a network of community partners, public and private
4. The network surveillance and prevention of communicable diseases in urban areas
5. Vaccine against influenza
6. Projects to promote the health of the city. Provide coverage
7. Disease screening men at least 1 time / year (disease screening, obesity, diabetes, hypertension, heart disease and stroke. Mental health problems and other diseases)
8. Developers or building owners, building caregivers ‘knowledge, understanding and care of buildings to be a minimum standard principles Clean and Green
9. Projects Bangkok: City of the food safety
10. Development department of health and medical information systems
11. Developing a database of medical and health cover, complete and up to date, and is connected to health information by agencies under Bangkok
12. Projects produced for the people of Bangkok. The Active Living Lifestyle
13. The extension of the opening of the Bangkok Metropolitan Sports Center and the Youth Center

strategy: 2. Bangkok as a green and convenient city
Supporting strategy: 2.1 Relocation of overhead electricity and telephone cables to underground

In 2032, Bangkok is targeted to have a pleasant streetscape providing more convenience and better quality of life by moving overhead electricity and telephone cables to underground conduits.
## Summary of the 20-year Development Plan for Bangkok Metropolis

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<tbody>
<tr>
<td>1. Length of underground cables in phase 1 with the target of 25.2 km. (km.)</td>
<td>100.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Length of underground cables in phase 2 with the target of 41.1 km. (km.)</td>
<td>-</td>
<td>25.00</td>
<td>50.00</td>
<td>100.00</td>
</tr>
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</table>

**Major projects:** at least three projects are in the plan:
1. Existing routes (16.2 km.) Silom, Chitralada, and Patumwan projects
2. Plan 9 (24.4 km.-underway) Sukhumvit, Pahon-yotin, and Payatai projects
3. Plan 10 (25.2 km.) Extension of Patumwan, Chitralada, and Phayatai projects (6.0 km. in total) Rama III Project (10.9 km.) Nonsi Project (8.3 km.)
Supporting strategy: 2.2 Scattering of public areas and green areas

2032 targets:
- Bangkok must have green areas to absorb air pollution at least 9 sq.m. per person.
- Green areas must be scattered across the city and collectively account for 40% of the total Bangkok area.

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<tbody>
<tr>
<td>1. Percentage of green areas in Bangkok</td>
<td>No less than 13%</td>
<td>No less than 19%</td>
<td>No less than 23%</td>
<td>No less than 28%</td>
</tr>
<tr>
<td>2. Percentage of Bangkok residents able to reach main public parks within five kilometres</td>
<td>No less than 25%</td>
<td>No less than 45%</td>
<td>No less than 70%</td>
<td>No less than 100%</td>
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</table>

Major projects:
1. Projects explore and assess the potential for development of the area to create a green space
2. Projects seeking to develop a green space
3. Development space into green space in the park / theme park
3.1 Development of the empty space in a small garden or a community garden village

3.2 Development Project donations from people in the community garden or park village

4. The conservation and protection of forests, parks, public green space / format orchards

5. Projects to preserve and restore species and ecosystems in the park

6. Projects, conservation and restoration of vegetation and biodiversity in urban areas

7. Projects, protect and conserve green space in urban areas

8. Projects that require design and construction of public utilities and public green space

9. Projects big trees around the city

10. The network associates created a variety of ecological conservation in the area

11. Research project to develop green space

12. Projects and promote partnerships with the private sector to increase green space in the form of vertical gardens both inside and outside buildings such as hotels, shopping malls, offices and so on

13. The collaboration among government agencies, private. And communities in the development of green space in the park permanently

14. Increase green areas in the garden project format support in each community. And managed by the Community
Supporting strategy: 2.3 Complete and affordable mass transit systems with flowing traffic, and commute options, travelling

2032 targets:
- Bangkok residents can choose to travel by boat, on bicycle, or on foot with convenience and safety.
- Bangkok residents are provided with mass transit systems with an estimated travel time of no more than 10 minutes per trip.

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<tbody>
<tr>
<td>1. Percentage of Bangkok residents able to access mass transit systems and reach their destination within 10 minutes</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>2. Percentage of Bangkok residents with no dependence on personal cars in their daily commute</td>
<td>50%</td>
<td>55%</td>
<td>60%</td>
<td>65%</td>
</tr>
<tr>
<td>3. Average traffic speed during rush hours (inner-city area / urban fringe area / suburbs) km./hr.</td>
<td>13/19/26</td>
<td>14/21/28</td>
<td>15/23/30</td>
<td>16/24/33</td>
</tr>
</tbody>
</table>
Major projects:

1. Built BTS Skytrain extension. Or other bodies such as BRT, Monorail
2. Develop a pedestrian link to the station to open / under construction
3. Creating bicycle paths to link the station to open / under construction
4. The shuttle service to the train station to link the open / under construction
5. Planned a bus (with BMTA) / Motorcycle taxi / shuttle service to link the station is open
6. Organized private parking space / fleet / passenger area adjacent to the station to meet the service
7. Space station / bus is adequate security

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<tr>
<td>4. Average traffic speed (inner-city area / urban fringe area / suburbs) km. / hr.</td>
<td>21/32/43</td>
<td>23/35/47</td>
<td>25/38/51</td>
<td>27/41/55</td>
</tr>
<tr>
<td>5. Percentage of Bangkok residents travelling by bicycle</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>6. Percentage of Bangkok residents travelling by boat</td>
<td>2%</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
</tr>
</tbody>
</table>
8. Organize the parking area contractors. (Motorcycle taxi, taxi, tricycle) are hygienic to use
9. Install CCTV cameras in all areas as a bus, and coordination with the Department of Transport in narrowing the driving behavior
10. Install a parking meter charge on Main Street
11. Built bridge/tunnel crossing the intersection or railroad crossing
12. Cutting / increase road network around the Superblock
13. Install traffic signal coordination on Main Street
14. Install CCTV driveway or parking spot is often a barrier to illegal or accident
15. The rapid response units to move the car accident or have parking obstacles
16. Study additional lanes built the boat and cooperate with related agencies for the expansion route
17. Improve the area around the port is linked to a lighting efficiency of map labels the terminal
18. Adding lines to the bike path by linking to transport or destination

**strategy: 3. Bangkok as a city for all**

Supporting strategy: 3.1 Providing facilities for the elderly, the disabled, and the disadvantage

By 2032, the elderly, the disabled, and the disadvantage will be provided with social welfare, utilities, and basic facilities, and can lead their lives with dignity.
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<tr>
<td><strong>Database system</strong></td>
<td></td>
<td></td>
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<tr>
<td>1. Percentage of the elderly requiring assistance and those with no assistance be included in the database</td>
<td>100%</td>
<td></td>
<td></td>
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<tr>
<td>2. Percentage of the disabled included in the database</td>
<td>100%</td>
<td></td>
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<tr>
<td>3. Percentage of the disadvantaged included in the database</td>
<td>100%</td>
<td></td>
<td></td>
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<tr>
<td>4. Percentage of database connection among districts</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Percentage of database annually updated</td>
<td>100%</td>
<td></td>
<td></td>
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<tr>
<td><strong>Public utilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Percentage of basic infrastructure, e.g. public toilets, access to buildings, pedestrian paths, ramps, lifts, overpasses, modified to facilitate the elderly and the disabled</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
<td>100%</td>
</tr>
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</table>
### Executive Summary

#### 20-year Development Plan for Bangkok Metropolis

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<tbody>
<tr>
<td>2. Increasing rate of facilities, e.g. wheelchairs and anti-slip handrails, provided for the elderly and the disabled compared with 2013</td>
<td>50%</td>
<td>70%</td>
<td>100%</td>
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#### Social welfare

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<tr>
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<tbody>
<tr>
<td>1. Percentage of the elderly receiving subsistence allowance equivalent to the poverty line</td>
<td>60%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Percentage of the disabled receiving subsistence allowance equivalent to the poverty line</td>
<td>60%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Percentage of the disadvantaged receiving subsistence allowance equivalent to the poverty line</td>
<td>100%</td>
<td></td>
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## Summary of the 20-year Development Plan for Bangkok Metropolis

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<tbody>
<tr>
<td>4. Percentage of the elderly, the disabled, and the disadvantaged in need of assistance receiving skill development on language, technology, and occupation with discount offered on their expenses / tuition fees</td>
<td>70%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Percentage of the elderly, the disabled, and the disadvantaged receiving fare discount</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Percentage of the elderly, the disabled, and the disadvantaged provided with accommodation assistance for better quality of life</td>
<td>80%</td>
<td>100%</td>
<td></td>
<td></td>
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<tr>
<td>7. Increasing rate of hospitals for the elderly-sufficient for the number of the elderly</td>
<td>100%</td>
<td></td>
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</table>
Major projects:

1. Projects Purchasing suburban bus low.
2. Program established “Welfare fund at the community level” for the elderly, the disabled and the disadvantaged
Supporting strategy: 3.2 City with economic opportunities

By 2032, residents with economic disadvantage and informal workers will be assured of minimum wage and provided with low-interest loans to fund their livelihood.

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<tbody>
<tr>
<td>1. Percentage of people with economic disadvantage and informal workers in Bangkok receiving steady incomes</td>
<td>30%</td>
<td>50%</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>2. Percentage of people with economic disadvantage and informal workers in Bangkok having secure jobs</td>
<td>30%</td>
<td>50%</td>
<td>70%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Major projects:

1. Projects savings to fund the occupation for the economically disadvantaged. And those in the informal sector
2. Projects fund savings to workers
3. Projects savings to fund the occupation for the economically disadvantaged. And those in the informal sector
4. Projects fund savings to workers
5. Projects training for understanding and expertise in the use and development of the database of the disadvantaged economic and labor by the proportion of staff receiving training through an assessment based on the use and database development and economic disadvantaged workers
6. Projects training to the economically disadvantaged in order to understand and optimize the expansion release about their involvement in the development of the database by workers. The number of economically disadvantaged can identify projects, database development, and are involved in database development workers
7. Projects economic networking among economically disadvantaged areas in each district of Bangkok. Measured by the number of economically disadvantaged to join the network in each district of Bangkok increased steadily
8. Projects seminars to exchange data between Bangkok and government agencies involved. Measured by the proportion of the database of Bangkok and government agencies involved have been developed and exchanged increases
9. Projects between Bangkok and government agencies related training to the economically disadvantaged to raise awareness of participating in the development of the database. Measured by the proportion of the database of Bangkok and government agencies involved have been developed and exchanged increases
10. Projects training support and development, training and career development of highly integrated, that is a training, career development and recruitment process in the creation of professional real measure of the proportion of the training, professional development has been. needs work or attend training through professional standards

11. Development Training and professional development provided by the community in each district of Bangkok participation model development, training and career development. Measured by the proportion of participants can apply their knowledge to a real career

12. Development and Training of the market. Creating a marketing tool And supply to the market professional participants in the Training Center of Bangkok and Bangkok OTOP entrepreneurs. Measured by the proportion of participants can create a market. Understand how to use marketing tools

13. Development standards and community service standards related to training. Professional development of vocational training center of Bangkok and Bangkok OTOP entrepreneurs . Measurement of products and services to the participants and to engage with community standards and standards of appropriate services

14. The training and development of knowledge. regulation Laws and regulations related to domestic sales. Product exports Working in the service of the foreign participants of vocational training centers in Bangkok
and Bangkok OTOP operators who are trained with the knowledge, skills, and know the rules, laws and regulations related to domestic sales. Product exports Working in the foreign service

15. The savings to fund the occupation for the economically disadvantaged. And those in the informal sector
16. Projects fund savings to workers.

Supporting strategy: 3.3 Education for all

In 2032, schools under BMA at all districts will be able to provide complete basic education with curricula designed to suit Bangkok context.

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<tbody>
<tr>
<td>1. Children residing in all districts of Bangkok receiving 12-year compulsory education and / or their desired education</td>
<td>30%</td>
<td>30%</td>
<td>50%</td>
<td>75%</td>
</tr>
<tr>
<td>2. Schools under BMA providing education for children with special needs</td>
<td>30%</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Major projects:

1. Established Community Library in Bangkok
2. Development / establishment of formal learning in the Bangkok area
3. Promote individual learning plan (IEP) of students with special needs each category
4. Workshops to educate teachers on education for children with special needs.
5. Organizing Training Coaching and Mentoring for teachers to improve the teaching efficiency to 1 year
6. Development in school classrooms and libraries with technology
7. Provide scholarships to students studying constantly
8. Courses after school For students with Low academic performance
9. Development process, critical thinking and problem-solving skills to students

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<tr>
<td>3. Children in schools under BMA passing the national examination with above average scores in five major subjects, namely Thai language, mathematics, science, social study, and English language</td>
<td>15%</td>
<td>25%</td>
<td>35%</td>
<td>50%</td>
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Supporting strategy: 3.4 Multi-cultural society

In 2032, Bangkok is planned to be Asia’s leading capital where all households learn to appreciate the uniqueness of their family’s way of life and pass their family culture on their descendants with respect to cultural difference and diversity.

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<tr>
<td>1. Percentage of Bangkok residents possessing knowledge and taking part in their family’s or group’s cultural inheritance</td>
<td>40%</td>
<td>60%</td>
<td>70%</td>
<td>75%</td>
</tr>
<tr>
<td>2. Percentage of Bangkok residents respecting other groups’ cultural uniqueness while regarding Bangkok as a multi-cultural city</td>
<td>30%</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
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Major projects:

1. Organized annual event that promotes cultural diversity “Bangkok Cultural Festival” to open the space to the various cultural groups
2. Organize the Bangkok Music (Music competition of Bangkok) to enhance the area’s image as a center for music, Art and performing in ASEAN and internationally.

3. Established Cultural Park are appropriate in Bangkok. And provide a list of the show in the courtyard culture.

4. Establish and develop the Bangkok Cultural Channel and Multimedia.

5. Survey data group / community culture.

6. Prepare a cultural database systems and data centers.

7. Formed a committee to develop cultural activities in Bangkok. Which is made up of experts Representatives of various cultural groups including members of the network culture.

8. Established cultural network field level. To represent the arts and cultural activities. Including the development of cultural database.
strategy: 4. Bangkok as a compact city
Supporting strategy: 4.1 Systematic city growth with efficient use of land and resources

In 2032, Bangkok is designed to be a four dimensional city, with the vertical space as the third dimension and time as the fourth dimension. This is, in other words, to make use of the overhead space with 24-hour public service provided.

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<tbody>
<tr>
<td>1. Average population density in inner-city areas (persons / sq.km.)</td>
<td>25,000</td>
<td>30,000</td>
<td>35,000</td>
<td>40,000</td>
</tr>
<tr>
<td>2. Average travel time between residents and work places reduced from 60 to 30 minutes</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>3. Average distance between community areas and access to major infrastructures with the target of five kilometres</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
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</table>

Major projects:
1. Project to amend the laws and regulations concerning F.A.R and F.A.R. Bonus to suit the population density
2. Project to increase travel efficiency, in which the city’s major travelling means are connected to minor ones.

3. Construction of infrastructure information MAP numerical resolution.

Supporting strategy: 4.2 Bangkok’s sub-centres built and prioritised according to their significance and potential with systematically interconnected.

In 2032, it is targeted that Bangkok residents can commute from their residents to work places in the distance of five kilometres within 30 minutes. Bangkok and its perimeters will comprise at least 20 sub-centres or minor towns, each of which are complete with economic, social, and educational support factors, and can accommodate a population of 15 million.

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<tbody>
<tr>
<td>1. Sub-centres (minor towns) complete with economic, social, and educational support factors</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>2. Ratio of population to major infrastructures and utilities, able to respond to population growth</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
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</table>
Major projects:
1. Projects Master Plan urban development network. (Community Center), a subsidiary
2. Development Center, a small community (not less than 15 centers)
3. Petroleum exploration and evaluation of database applications, infrastructure and population. Utilities by type
4. The city’s infrastructure development plan to accommodate population increases.

Strategy: 5. Bangkok as a democratic city
Supporting strategy: 5.1 An integrated city

In 2032, a special administrative unit will be established to take responsibility for utility management of Bangkok Metropolis (Functional decentralization).
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<tbody>
<tr>
<td>1. BMA having a special administrative unit to take responsibility for utility management (functional decentralization)</td>
<td>(issuing laws concerning the establishment of the special unit)</td>
<td>Starting investment in cable conduits with agencies concerned and the private sector / starting Bangkok’s comprehensive city plan / establishing a company in charge of city development</td>
<td>Starting development of Bangkok clusters-phase 1</td>
<td>Starting development of Bangkok clusters-phase 2 / expanding cluster development beyond Bangkok’s boundary</td>
</tr>
</tbody>
</table>

Major projects:
1. Projects, studies to establish local governing special
2. Initiated development projects conduit. With related agencies and private initiatives
Supporting strategy: 5.2 A city with good governance

In 2032, BMA will be structured with the council of Bangkok residents and district councils (where policies are initiated, where public hearings are organised, and where BMA performance is assessed) / with participation from residents in the city’s budget.

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<tbody>
<tr>
<td>1. Council of Bangkok residents</td>
<td>Holding 10 forums per year</td>
<td>Holding 15 forums per year</td>
<td>Holding 20 forums per year</td>
<td>Holding 30 forums per year</td>
</tr>
<tr>
<td>2. District council</td>
<td>Holding 12 district forums per year at 50 districts</td>
<td>Holding 12 district forums per year at 50 districts</td>
<td>Holding 12 district forums per year at 50 districts</td>
<td>Holding 12 district forums per year at 50 districts</td>
</tr>
<tr>
<td>3. Participatory budgeting system</td>
<td>Using tax system for development of communities and quality of life</td>
<td>Using participatory budgeting system at the district level</td>
<td>Using participatory budgeting system at the metropolitan level</td>
<td></td>
</tr>
</tbody>
</table>
Major projects:
1. The “Council of People’s Bangkok”
2. Projects “county council”
3. Projects receive public comments in preparing the annual budget of the city. In the City of Bangkok and the project research on the use of the tax system for development and participatory budgeting
4. Projects trained to use the tax system to the development and participatory budgeting
5. Projects “participatory budgeting”

Supporting strategy: 5.3 Decentralisation
2032 targets:
1. BMA sets up lower-level administrative units (at municipality level).
2. BMA is fully authorised to administer the city.

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<tbody>
<tr>
<td>1. Establishing city municipalities in Bangkok (percentage of city municipalities as required by law)</td>
<td>Amending laws concerning BMA administration</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Major projects:

1. Projects drafting amendments to laws, administrative regulations governor
2. Projects meeting Hearing Structure and offers Bangkok authorities (Politicians and bureaucrats)
3. Projects meeting Hearing Structure and offers Bangkok authorities (individuals, groups, organizations, communities)

Supporting strategy: 5.4 White politics

2032 targets:
Bangkok residents will have confidence in the honesty of BMA officers and those working on political positions.

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<tbody>
<tr>
<td>1.Confidence in honesty of working units under BMA and BMA officers (% of confidence among the public)</td>
<td>60%</td>
<td>70%</td>
<td>75%</td>
<td>80%</td>
</tr>
<tr>
<td>2.Confidence in honesty of authorities holding political positions (% of confidence among the public)</td>
<td>60%</td>
<td>70%</td>
<td>75%</td>
<td></td>
</tr>
</tbody>
</table>

Major projects:
1. Projects explore the confidence of the public. The honesty of agencies and officials in Bangkok
2. Projects explore the confidence of the public. The honesty of the incumbent political
Supporting strategy: 5.5 Bangkok residents driving Bangkok’s vision

2032 targets:

Bangkok residents, joining hands in the form of a network, monitor the progress of the Bangkok 2032 vision.

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<tbody>
<tr>
<td>Network of Bangkok residents monitoring the progress of vision two times a year</td>
<td>10 performance reports</td>
<td>10 performance reports</td>
<td>10 performance reports</td>
<td>10 performance reports</td>
</tr>
</tbody>
</table>

Major projects:

1. Project to Bangkok residents in 2032 driving Bangkok’s vision

Strategy: 6. Bangkok as an economic and learning centre

Supporting strategy: 6.1 Centre of agriculture, industry an green services

2032 targets:

Bangkok is expected to be one of the top five cities in Asia recognised as a commercial, economic, investment, cultural, and convention centre. The city will gradually transform from an industrial city depending on low-wage labours into a city with focus on the service sector to add value to the city’s economy.
### KPIs

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<tbody>
<tr>
<td>1. Percentage of agriculturalists and agro-industrialists doing trading in Bangkok incorporated in the database</td>
<td>50</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Percentage of operators in Bangkok involving agricultural and agro-industrial trading</td>
<td>15</td>
<td>25</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>3. Percentage of agriculturalists and agro-industrialists joining trade fairs of agricultural and food products at the regional level</td>
<td>15</td>
<td>25</td>
<td>50</td>
<td>70</td>
</tr>
</tbody>
</table>

### Major projects:

1. Program provides training to build knowledge, understanding and expertise in the use and development of a database on agricultural trade. The agricultural industry Food Processing and Green
2. Projects training for operators of agricultural products to raise awareness and increase efficiency. Expansion release about their involvement in the development of database on on exchange trading of agricultural products. The agricultural industry And processed food
3. Projects economic networking among entrepreneurs in the agricultural products in each area of Bangkok
4. The project monitoring and evaluation, preparation and development of database products
5. Projects seminars to exchange data between Bangkok and government agencies involved
6. Program supports coordination gather basic data and information necessary for a database of Bangkok and a database of government agencies involved
7. Projects training skills. Necessary to use the tool manufacturing, finance, marketing and packaging entirely
8. Projects networking enterprise development with regard to the environment and society
9. seminar program for cooperation between the public sector, including Bangkok. And related agencies as well as private and public communities
10. Projects promoting agricultural technology
11. Projects under development and agriculture personnel philosophy
12. Projects aimed to improve soil quality in organic farmland
13. The mobile clinic Agricultural Bangkok
15. Projects and technology transfer centers, agriculture and agro-based work
Supporting strategy: 6.2 Commercial economic and investment centre

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<tbody>
<tr>
<td>1. Ranking of the capital market in terms of size among Asean countries</td>
<td>1 in 5</td>
<td>1 in 4</td>
<td>1 in 3</td>
<td>1 in 2</td>
</tr>
<tr>
<td>2. World ranking of the capital market in terms of size</td>
<td>1 in 35</td>
<td>1 in 30</td>
<td>1 in 25</td>
<td>1 in 20</td>
</tr>
</tbody>
</table>

Major projects:

1. Projects explore areas of Bangkok and facilities associated with the investment
2. Program plan development and facilities for financial transactions and investments
3. Outline seminars to coordinate the use and development of space and facilities. As well as support the revised rules and regulations. Related to financial transactions and investment are clear
4. Projects plan to use the space and facilities of Bangkok, to be used for facilitating the provision of areas for investment support
5. Projects prepared Task Force to coordinate with government agencies or private organizations about the use of space to support the investment
6. Projects, education and seminars, to find solutions to the rules and regulations. Related to financial transactions and investment are clear. To facilitate international financial transactions

7. Program supports skills development training. Needed to pursue the career of skilled workers, advanced workers in Bangkok

8. Projects contribute to network and develop skills in an occupation. As well as language skills

9. Projects surveying the area and facilities associated with the establishment of the Bangkok regional office

Supporting strategy: 6.3 World-class tourist destination

2032 targets:

Bangkok is planned to be a tourist attraction drawing tourists from around the world, not only to Bangkok but to other places in Thailand, as well as in ASEAN, and Asia. The tourism industry is expected to create an income of at least 10% of Bangkok’s GDP.

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<tbody>
<tr>
<td>1. Ranking of Bangkok as a tourist destination able to draw tourists from around the world to Bangkok and other places in the provinces in Thailand as well as in ASEAN and Asia</td>
<td>Ranking no. 1-3</td>
<td>Ranking no. 1-3</td>
<td>Ranking no. 1-3</td>
<td>Ranking no. 1-3</td>
</tr>
</tbody>
</table>
Major projects:

1. Project of Bangkok Smile Branding
2. Projects boat ride buses, trams, bicycles and walking the city
3. Projects retrace the cultural city of Bangkok. Back to the City of Culture
4. Mapping project about the cultural heritage of the community
5. Projects promoting the tourism service standards
6. Projects clean bathrooms
7. Projects to promote and develop tourism Packages
8. Development software Bangkok Smile Application
9. Volunteer Bangkok Smile
10. Restructuring tourism organizations and the role of Bangkok

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<tbody>
<tr>
<td>2. Tourism industry providing income for Bangkok residents</td>
<td>No less than 10% of Bangkok’s GPP</td>
<td>No less than 10% of Bangkok’s GPP</td>
<td>No less than 10% of Bangkok’s GPP</td>
<td>No less than 10% of Bangkok’s GPP</td>
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2 Summary of the 20-year Development Plan for Bangkok Metropolis
### Executive Summary

20-year Development Plan for Bangkok Metropolis

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**Supporting strategy: 6.4 Bangkok Cultural Innovation centre**

#### 2032 targets:

Bangkok is one of three cities in the region as an innovative city, Bangkok Cultural Innovation based on cultural or heritage Thailand. Innovation in the performing arts And innovation and design.

#### Major projects:

1. Program plan development exhibits a group-based business innovation base-culture
2. Projects, coordination of activities related to the development of products and services linked to culture,

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<tbody>
<tr>
<td>1. Bangkok recognised as a leading innovation-cultural city in ASEAN, or Bangkok Cultural Innovation</td>
<td>1 in 4</td>
<td>1 in 3</td>
<td>1 in 3</td>
<td>1 in 3</td>
</tr>
<tr>
<td>2. Bangkok recognised as one of the worlds’ leading innovation-cultural cities, or Bangkok Cultural Innovation</td>
<td>1 in 50</td>
<td>1 in 40</td>
<td>1 in 30</td>
<td>1 in 20</td>
</tr>
<tr>
<td>3. Bangkok recognised as one of the world’s cities of international fashion and jewellery</td>
<td>1 in 30</td>
<td>1 in 25</td>
<td>1 in 20</td>
<td>1 in 15</td>
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</table>
Thailand. As well as to educate entrepreneurs and build a network linking the international level, including supply marketing channel for the industry.

3. Projects, coordination of activities related to the development of products and services linked to the clothing industry. The gem and jewelry industry. And to educate entrepreneurs and build a network linking the international level, including supply marketing channel for the industry.

**Supporting strategy: 6.5 Meeting and exhibition centre**

**2032 targets:**

Bangkok is a city of the first exhibitions conferences in the region.

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<tbody>
<tr>
<td>1. Ranking of Bangkok among ASEAN countries as a city for holding conventions and exhibitions</td>
<td>1 in 5</td>
<td>1 in 4</td>
<td>1 in 2</td>
<td>First</td>
</tr>
<tr>
<td>2. World ranking of Bangkok as a city for holding conventions and exhibitions</td>
<td>1 in 40</td>
<td>1 in 30</td>
<td>1 in 25</td>
<td>1 in 20</td>
</tr>
</tbody>
</table>

**Major projects:**

1. Projects explore areas of Bangkok and facilities-related conferences, exhibitions and trade shows.
2. Program planning, development, conferences, exhibitions and trade conference in Bangkok is the center of the country.

3. Projects seminars to coordinate the use and development of space and facilities. As well as support the revised rules and regulations. Associated with conferences, exhibitions and trade shows to be clear.

4. Projects plan to use the space and facilities of Bangkok, to be used for facilitating the provision of space for support meetings, exhibitions and trade shows.

**strategy: 7. Management Strategy**

**Supporting strategy: 7.1 Laws**

Laws regarding BMA administration will be amended to facilitate the two-layer administrative structure. BMA’s roles and authorities will be adjusted to suit its independence in terms of management and arrangement of public services in response to the growth of the city.

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<tbody>
<tr>
<td>1. Laws concerning BMA administration amended in terms of structure, authority and responsibilities, and management independence to enhance administration efficiency (percentage of law enactment)</td>
<td>40</td>
<td>100</td>
<td></td>
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</table>
## Major projects:

1. Preparing draft laws and administrative regulations
   Bangkok hearing
2. Manage Legal Training to understand the present law

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<tr>
<td>2. Transfer of authority and responsibilities of government agencies to BMA under the decentralisation plan and its implementation process (percentage of authority and responsibilities transferred)</td>
<td>80</td>
<td>100</td>
<td></td>
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</table>
Supporting strategy: 7.2 Planning and assessment

2032 targets:

The strategic plan 20 years is standard, and a report on the performance of official duties, including the use of assessment information to improve strategy.

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<tbody>
<tr>
<td>1. performance report on the 20-year Development Plan of Bangkok Metropolis</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2. Percentage of strategies adjusted after evaluation</td>
<td>50</td>
<td>75</td>
<td>90</td>
<td>100</td>
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</table>

**Major projects:**

1. Projects to enhance knowledge and understanding of a new management plan for executives Bangkok
2. Projects to enhance knowledge and understanding of a new management plan for Bangkok councilor
3. Projects to enhance knowledge and understanding of a new management plan for executives Bangkok / Bangkok council / county councilor
4. Projects to enhance knowledge and understanding of the preparation and execution of plans, policies and plans for analysts and those responsible for preparing the plan of the agency

5. Programme Evaluation System of Bangkok

6. Projects prepared and strengthen the understanding of the evaluation system for Bangkok

7. Projects prepare the database for evaluation

8. Development tools to optimize the tracking and reporting

9. Program development, personnel evaluation

10. The restructure of Strategy and Evaluation Department

11. The enhancement in the performance of official reporting of Bangkok.

12. Program evaluation projects

13. The annual evaluation of the Novel (overview)

Supporting strategy: 7.3 Human resources

BMA is planned to be a workplace for good and smart human resources capable for working professionally in response to demand from the public.

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<tbody>
<tr>
<td>MA officers working with professionalism, morals, integrity, and trust from the public</td>
<td></td>
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</tr>
<tr>
<td>1. Percentage of trust in BMA officers</td>
<td>75%</td>
<td>80%</td>
<td>80%</td>
<td>90-95%</td>
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</table>
Executive Summary

20-year Development Plan for Bangkok Metropolis

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<tbody>
<tr>
<td>2. Percentage of confidence in BMA officers’ honesty</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
<td>90-95%</td>
</tr>
</tbody>
</table>

BMA having a strong human resource management system which promotes integrity while creating good work-life balance among BMA officers, thus able to draw talented personnel and motivate staff

3. BMA’s ranking as an employer of choice in the public sector among fresh graduates | Top 30 | Top 25 | Top 20 | Top 10 |

Major projects:

1. The study review and improve the core competencies
2. Feasibility Study Review and improve the performance of the line (All lines)
3. Projects developed by the Group’s core competencies and performance tasks as needed and appropriate
4. The research study to determine the performance of the position
5. Programs provide instruction in power positions
6. Projects to leaders at all levels to raise awareness about the plan’s vision 20 years ago
7. Development courses leading to the metropolis of Asia
8. Projects to develop a pilot training course leading to the City of Asia
9. Investment project to develop a training course leading to the capital city of the Indian leaders at all levels
10. Projects to improve professional standards by comparing each line with international standards in every line of work
11. The professional standard routine preparation guide lines
12. Projects developed by professional standards required in each line
13. The project tested the ability of personnel in accordance with professional standards in the industry (Not less than percent. 70 of each line)
14. Program promotes the learning of the personnel in the language and culture abroad
15. Projects Training for service quality (To the personnel in the work to the public directly)
16. Projects to provide skills training to improve the quality of education, research, practice / service
17. The study analyzes the demand for services from patients who have a variety
18. The preparation of the information contained in the media serving as a foreign language
19. The agency conducts research related to development work. Or improving the quality of services (At least the Office / Unit Volume 1 percent per year)
20. Projects employ temporary foreign countries to increase the range of services consistent with the requirements of the clients
21. The link system to generate knowledge of personnel for all agencies in Bangkok Metropolis
22. The workshop is to gather and prepare the knowledge of the first pilot.
23. The workshop is to gather and prepare all knowledge of applicable agencies
24. The preparation of ethical standards, regulations, ethics and discipline of personnel Bangkok
25. Scheme guidelines Guidelines for Ethical Development. And Ethics in the Professions
26. The Study of performance indicators ethical behavior, ethical standards, regulations and discipline of personnel Bangkok
27. The analysis reviewing rules to minimize vulnerability to delinquency
28. The plan, risk and internal control measures to prevent corruption
29. The Study Reduction of a disciplinary action of personnel
30. The training of personnel Ethical Development, Bangkok
31. The event honored the moral model. And convey the experience of being a teacher / staff are great (Both the And field offices)
32. Programs provide instruction in the administration under the principles of good governance of Bangkok
33. The exchange program to develop ethical practices of public officials with countries in Asia
34. The analysis of the workforce over the last 20 years
35. The analysis procedure, review all procedures to minimize the reduction procedure or the procedure was not necessary
36. The analysis plan manpower to meet the mission. And direction to develop 20 years (taking into account the different missions of each agency. And spatial differences in each category)
37. The preparation of the career progression of the primary line
38. The preparation of the career of every line
39. The Individual Development Plan (Individual Development Plan)
40. Program development, personnel development plans individually
41. The standard establishes a framework for success in the HR area. (BMA-HR-Scorecard)
42. Programs provide instruction in the standard framework for human resource management success
43. The analysis for critical staff shortages are likely in the future
44. The research to develop an approach to extend the retirement age. And planning for succession (Succession Plan)
45. Projects extend the retirement age and a shortage of personnel in key positions
46. Program implementation, monitoring and evaluation of human resource development (Return on Investment: ROI)
47. The database link information on the HR (Human Resource Information System) with all office / agency in Bangkok
48. The system imports the data on human resource management
49. The preparation of professional standards practitioners HR
50. Projects develop e-training / e-learning
51. The approach to recruitment and selection of high potential
52. The project development e-Recruitment
53. The Study prepared for channels career advancement potential
54. The updated regulations and evaluate the performance of personnel Bangkok. (Corresponding to a 360-degree assessment principles and evaluation of applications: performance of the position)
55. Projects developed e-JobEvaluation
56. Programs provide instruction in the management of the performance of personnel Bangkok
57. The preparation of MOU for the exchange of personnel between agencies within the country
58. The preparation of MOU for the exchange of personnel between countries
59. Projects contribute to the development of innovative human resource management with foreign countries
60. The standard defines the physical environment in the work of the city (such as the size of the light area, noise and air quality)
61. The renovation project and the work environment to fit and create a good atmosphere in the workplace
62. The analysis of the need for materials to work (Hardware, Software and other equipment) and allocation of materials available
63. The concept plan developed by health organizations
64. The preparation guide Bangkok : Corporate health
65. The underlying corporate health agencies (the Bureau and county offices)
66. The study forms a flexible working time
67. Projects to improve the running time to more flexible types of various operations
68. The analysis of a communication path within the organization to improve the speed and communicate effectively
69. Program established corporate health promotion center Bangkok (BMA Happy WorkplaceCenter) (counseling centers in both workload and personal issues)
70. The Study to benchmark the compensation and fringe benefits of personnel Bangkok with leading organizations and labor market
71. The provision of flexible benefits to meet a variety of personnel. (Welfare to a diverse and flexible, like a child at work. Gym life insurance Interest-free loan Health monitoring of civil servants Benefits etc. shops By the agency (Office and field offices) have been involved in the welfare of their own)
72. The Study to develop compensation performance and the performance of individuals
Supporting strategy: 7.4 Finance and Budget

BMA will be managed with efficient financial and budgeting systems. It will have a holistic and proactive management approach for finance and budget to support efficient development taking into account both short- and long-term financial discipline and financial governance.

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<tbody>
<tr>
<td>1. Ratio of income from local taxes collected by BMA to BMA's overall income</td>
<td>Over 30%</td>
<td>Over 40%</td>
<td>Over 50%</td>
<td>Over 50%</td>
</tr>
<tr>
<td>2. Ratio of growth of income from local taxes collected by BMA to Bangkok's economic growth (local tax elasticity : Bangkok GPP)</td>
<td>Over 1.0</td>
<td>Over 1.0</td>
<td>Over 1.0</td>
<td>Over 1.0</td>
</tr>
<tr>
<td>3. Percentage of actual payment compared to fiscal budget</td>
<td>Over 80%</td>
<td>Over 85%</td>
<td>Over 90%</td>
<td>Over 95%</td>
</tr>
<tr>
<td>4. Percentage of investment projects/procurement of stationary items processed according to plans (number of projects-items and their monetary value)</td>
<td>Over 80%</td>
<td>Over 90%</td>
<td>Over 95%</td>
<td>Over 95%</td>
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<tr>
<td>5. Ratio of long-term debts to BMA’s overall income</td>
<td>Lower than 50%</td>
<td>Lower than 75%</td>
<td>Lower than 100%</td>
<td>Lower than 125%</td>
</tr>
<tr>
<td>6. Debt service ratio</td>
<td>Lower than 15%</td>
<td>Lower than 15%</td>
<td>Lower than 15%</td>
<td>Lower than 15%</td>
</tr>
<tr>
<td>7. Current ratio</td>
<td>Two- to threefold</td>
<td>Three- to fivefold</td>
<td>Over fivefold</td>
<td>Over fivefold</td>
</tr>
<tr>
<td>8. Ratio of accumulated cash to BMA’s annual expenditure</td>
<td>Over 5%</td>
<td>Over 10%</td>
<td>Over 10%</td>
<td>Over 10%</td>
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</table>

**Major projects:**

1. Surveying and Mapping tax
2. Development of information systems and measures to accelerate the debtor’s tax revenue collection / local taxes
3. Development of information systems contractors / Contractors
4. Develop source of income tax / tax base category
5. Formed a committee to study ways to improve the allocation of tax breaks from the government
6. Development plan / venture capital and exploiting the Bangkok property
7. Development Finance database in Bangkok
8. Developed information system for budget management and financial accounting standards acceptable
9. Establishment of internal audit
10. Development cost data for key public services
11. Development planning and participatory budgeting
12. Development of information systems / information technology, finance, distribution channels, and the cost to the public budget
13. Development policies and practices in debt for investment
14. Assessment capabilities debt of Bangkok
15. Developing database of information about loan financing sources and management agreements.
16. Driving force to use tax measures to promote the development of Bangkok as the city safe and compact city such as environmental taxes. Charges for wastewater treatment Tax for buildings that are environmentally friendly

Supporting strategy: 7.5 Information technology

BMA should be equipped with an information technology system to provide modern and accurate services with increased convenience and shortened process.
1. Applying IT and communication system to efficiently and effectively support information service for the public and others involved

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<tbody>
<tr>
<td>IT system applied for 50% of the public service</td>
<td>IT system applied for 80% of the public service</td>
<td>IT system applied for 100% of the public service</td>
<td>-</td>
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<tr>
<td>1. BMA able to efficiently and effectively apply IT and communication systems in its core duties and in support of management</td>
<td>IT system able to support 30% of administration and operation requirements</td>
<td>IT system able to support 50% of administration and operation requirements</td>
<td>IT system able to support 80% of administration and operation requirements</td>
<td>IT system able to support 100% of administration and operation requirements</td>
</tr>
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</table>

Major projects:

1. Program development, data warehousing, Bangkok
2. Development Information Systems Management support
3. Development of wireless network system
5. Projects One Smart Card System for Every Service
Development Plan of Bangkok 20 years (2013-2032) and a goal. Consultants and representatives from various agencies in Bangkok was conducted jointly in meetings 39 times for a total period of more than 8 months and has plans to convert the vision into practice then be summarized and presented to obtain feedback from managers during Bangkok. And public sectors the strategies and measures to drive long-term development of the city is strong, there is a high possibility. Meet diversity goals are balanced and located on the basis of mutual benefit. Assent through brainstorming participation support the development of leadership and power groups and sectors. The city is widely This helps to Bangkok can manage the issues, challenges. Above even more effectively to bring together all of our Bangkok city to a metropolis of Asia, people around the world think of when they think of Asia, the city is our first priority in another the next 20 years.
Name list of project consultants
Project Promoters
Mr. Sukhumbhand Paribatra Governor of Bangkok
Mr. Amorn Kitchawengkul Deputy Governor of Bangkok
Mrs. Ninnart Chalitanon Permanent Secretary of The BMA
Mr. Pirapong Saicheua Deputy Permanent Secretary of The BMA
Mrs. Rachaneewan Asvathitanon Director General of Strategy and Evaluation Department
Mr. Apisak Purivat Acting Director of Administrative Strategy Division
Ms. Kornsupha Nitvimol Chief of Administrative Strategy Sub-Division, Administrative Strategy Division

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Independent scholars

The team consists of experts in medicine, public health and the environment. environment and

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Team of experts consisting of education, culture and tourism education.

Arts and Culture History and archeology Sports and Recreation And Tourism

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**Team of economic experts and investment. Includes economic and investment**

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Faculty of Economics, Chulalongkorn University

**Management team consists of expert planning and evaluation. Finance and Budget Democracy and good governance. Human resources, legal and information technology and communications.**

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WE BUILD