# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td><strong>Chapter 1</strong></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td><strong>Chapter 2</strong></td>
<td></td>
</tr>
<tr>
<td>Guidelines for process Assurance</td>
<td>7</td>
</tr>
<tr>
<td><strong>Chapter 3</strong></td>
<td></td>
</tr>
<tr>
<td>Overview</td>
<td>12</td>
</tr>
<tr>
<td><strong>Chapter 4</strong></td>
<td></td>
</tr>
<tr>
<td>Results of 10-Project assessment</td>
<td>24</td>
</tr>
<tr>
<td><strong>Suggestions</strong></td>
<td></td>
</tr>
<tr>
<td>for CoST Thailand</td>
<td>55</td>
</tr>
<tr>
<td><strong>Appendix</strong></td>
<td></td>
</tr>
</tbody>
</table>

*โครงการความโปร่งใสในการก่อสร้างภาครัฐ for CoST Thailand*
As Transparency International has assessed the level of corruption in each state in order to establish the Corruption Perception Index (CPI), it was found that corruption issues in Thailand are at the critical level, i.e. it lacks transparency. Therefore, in order to ensure that the national budget will be spent effectively and truly beneficial to the country, and in order to strengthen credibility to attract foreign investors to invest in prominent projects in Thailand, the Government came to an agreement to implement certain principles of the Infrastructure Transparency Initiative (CoST) for Thailand’s public procurement, and has entrusted the Comptroller General’s Department, as an organisation that regulates and implement public procurement, to be responsible for the project. The CoST requires responsible parties to disclose information regarding the ongoing project to the public, and such information must be verified by the Assurance Team. Moreover, those parties also need to encourage stakeholders’ participation to get feedback from those affected by construction projects, as it is a crucial goal of CoST.
In this regard, the operation of the CoST officially started in the fiscal year of 2015, with five government construction projects participating in the data disclosure program. Subsequently, the operation was extended to cover all three types of government construction projects, i.e. central official agencies, state enterprises, and local administrative organisations. Currently, there are 254 construction projects selected to participate in the CoST, starting from the fiscal year of 2015 until 2019. The participating project owners have disclosed 40 data items in accordance with the CoST guidelines on the CoST website, and the Assurance Team has already reviewed all the data. The data disclosed can be categorized based on the nature of projects as follows:

1) CoST Thailand data project types

<table>
<thead>
<tr>
<th>Description</th>
<th>Numbers of Projects</th>
<th>Budget (Million Baht)</th>
<th>Data Disclosure Index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Utilities</td>
<td>34</td>
<td>1,945</td>
<td>84.58</td>
</tr>
<tr>
<td>Facilities and attractions</td>
<td>6</td>
<td>208</td>
<td>88.33</td>
</tr>
<tr>
<td>Irrigation</td>
<td>18</td>
<td>6,666</td>
<td>81.73</td>
</tr>
<tr>
<td>Roads and bridges</td>
<td>111</td>
<td>35,510</td>
<td>85.82</td>
</tr>
<tr>
<td>Pier</td>
<td>1</td>
<td>39</td>
<td>70.00</td>
</tr>
<tr>
<td>Airport</td>
<td>3</td>
<td>64,803</td>
<td>89.03</td>
</tr>
<tr>
<td>Hospital</td>
<td>4</td>
<td>3,488</td>
<td>90.83</td>
</tr>
<tr>
<td>Buildings and museums</td>
<td>75</td>
<td>3,907</td>
<td>85.00</td>
</tr>
</tbody>
</table>

2) CoST Thailand data categorized by Ministries

<table>
<thead>
<tr>
<th>Description</th>
<th>Numbers of Projects</th>
<th>Budget (Million Baht)</th>
<th>Data Disclosure Index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of the Prime Minister</td>
<td>3</td>
<td>871</td>
<td>86.22</td>
</tr>
<tr>
<td>Defense</td>
<td>7</td>
<td>534</td>
<td>81.34</td>
</tr>
<tr>
<td>Finance</td>
<td>3</td>
<td>103</td>
<td>90.81</td>
</tr>
<tr>
<td>Social Development and Human Security</td>
<td>4</td>
<td>421</td>
<td>73.64</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>1</td>
<td>2</td>
<td>84.85</td>
</tr>
<tr>
<td>Agricultural and Cooperatives</td>
<td>5</td>
<td>6,060</td>
<td>94.76</td>
</tr>
<tr>
<td>Transport</td>
<td>15</td>
<td>99,946</td>
<td>78.47</td>
</tr>
<tr>
<td>Digital Economy and Society</td>
<td>2</td>
<td>20</td>
<td>66.67</td>
</tr>
<tr>
<td>Natural Resources and Environment</td>
<td>14</td>
<td>295</td>
<td>88.47</td>
</tr>
<tr>
<td>Energy</td>
<td>3</td>
<td>49</td>
<td>66.67</td>
</tr>
<tr>
<td>Interior</td>
<td>190</td>
<td>4,661</td>
<td>85.53</td>
</tr>
<tr>
<td>Public Health</td>
<td>4</td>
<td>3,488</td>
<td>90.83</td>
</tr>
</tbody>
</table>
3) CoST Thailand data categorized by official sectors

<table>
<thead>
<tr>
<th>Description</th>
<th>Numbers of Projects</th>
<th>Budget (Million Baht)</th>
<th>Data Disclosure Index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>55</td>
<td>19,945</td>
<td>85.56</td>
</tr>
<tr>
<td>State Enterprise</td>
<td>15</td>
<td>94,403</td>
<td>69.30</td>
</tr>
<tr>
<td>Northern Locality</td>
<td>16</td>
<td>151</td>
<td>91.65</td>
</tr>
<tr>
<td>Northeastern Locality</td>
<td>48</td>
<td>595</td>
<td>88.26</td>
</tr>
<tr>
<td>Southern Locality</td>
<td>33</td>
<td>502</td>
<td>82.76</td>
</tr>
<tr>
<td>Eastern Locality</td>
<td>23</td>
<td>381</td>
<td>80.89</td>
</tr>
<tr>
<td>Central Locality</td>
<td>61</td>
<td>550</td>
<td>86.58</td>
</tr>
<tr>
<td>Special-Purpose Locality</td>
<td>1</td>
<td>39</td>
<td>70.00</td>
</tr>
</tbody>
</table>

Based on the project information obtained, the trends of price competition and the number of participating bidders can be analyzed. Overall, it was found that in the case of a high number of bidders, the price competition rate will be high accordingly. With in-depth analyses into each dimension, the following results were found:

1) **Project type**: It was found that any project requiring specific qualifications of bidders will attract a low number of bidding participants, while the projects that involve no such specific qualifications will attract a high number of bidders. That said, the price competition rate depends on project types.

2) **Contract length period**: It was found that if the contractual period is short, there will be a high number of bidders participating with high price competition.

3) **Contract value**: It was found that projects that are low in value will attract a high number of bidders and high price competition.

4) **Area**: The analysis based on responsible areas of the Comptroller General’s Department found that within the District Treasury’s Office 3 (lower northeastern part of Thailand), the price competition is relatively high, compared to the District Treasury’s Office 9 (lower southern part of Thailand), which involves a low level of price competition.

In this regard, the application of CoST to Thailand’s public construction projects has been understood as a tool to establish standards for the project owners to disclose information to the public. It is meant to strengthen transparency in every step that relates to government construction projects. Moreover, it also offers opportunities for the public sector to be informed about each specific government construction project, and encourages them to take part in the final inspection, resulting in effective works delivered by the project owners. Furthermore, it will allow the national budget to be spent in a worthy manner, to the greatest extent, in pursuance of the Public Procurement and Supply Administration Act, B.E. 2560 (A.D. 2017).
1.1 Infrastructure Transparency Initiative: CoST

CoST – the Infrastructure Transparency Initiative (CoST) is the leading global initiative improving transparency and accountability in public infrastructure. CoST works with government, industry and civil society to promote the disclosure, validation and interpretation of data from infrastructure projects. This helps to inform and empower citizens and enables them to hold decision-makers to account. Our experience indicates that informed citizens and responsive public institutions help drive reforms that reduce mismanagement, inefficiency, corruption and the risks posed to the public from poor quality infrastructure.

An Initiative by the British Department for International Development (DFID)

We currently work in 14 countries including Afghanistan, El Salvador, Ethiopia, Guatemala, Honduras, Malawi, Botswana, Philippines, Tanzania, Uganda, Ukraine, Zambia, England, and Thailand. Spanning four continents, including five Fragile and Conflict-Affected States.

Benefits of CoST for stakeholders.

<table>
<thead>
<tr>
<th>Government</th>
<th>Business</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committed to improving transparency and accountability in public infrastructure investment and see CoST as being central to that reform effort.</td>
<td>This membership category is aimed at those who are committed to improving transparency and accountability in public infrastructure investment and see CoST as a source of help and advice that can support that reform effort.</td>
<td>Anyone can use the freely available range of tools and resources from the CoST website, without becoming a member, to aid their efforts to improve transparency and accountability in public and public/private infrastructure investment.</td>
</tr>
</tbody>
</table>
CoST core features

- **Disclosure**
  is the publication of data from infrastructure projects. A total of 40 data points are disclosed by procuring entities at key stages throughout the entire project cycle in the CoST Infrastructure Data Standard format.

- **Assurance**
  is an independent review that highlights the accuracy and completeness of the disclosed data and identifies issues of concern for the public.

- **Multi-Stakeholder Working**
  brings together government, industry and civil society in a concerted effort to pursue the common goal of improving transparency and accountability in public infrastructure.

- **Social Accountability**
  refers to efforts made to ensure that the disclosed data and assurance reports are taken up and used by stakeholders, especially civil society and the private sector, to strengthen accountability and deliver practical improvements.

CoST’s components and expected outcomes

**Collaboration of all sectors**
- Public sector
- Government sector
- Business sector

**Workflow**
- Disclosures
- Monitoring data
- Social responsibility

**Impact**
- Transparency and responsibility
- Efficient and effective
- Improve the quality of life of people
Thailand is a member of the Infrastructure Transparency Initiative (CoST), which comes with an objective to encourage disclosure of construction project data, including financial information and non-financial information in an accurate, complete, timely, and transparent manner, through channels that offer easy, equal, and credible accessibility to the information, in line with Cooperate Governance (CG) through public participation mechanism. This is to assure that government construction projects are transparent, while mitigating corruption happening in certain government construction projects to some extent.

In this regard, the data disclosure based on the principles of CoST consists of 40 data point, including provision and presentation of project information, preparation of project information, procurement information, project operational information, and post-project information. Operational guidelines of Thailand’s CoST will be as follows:
Chapter 2: Data assurance guidelines

1. The Comptroller General’s Department selects projects to participate in CoST.

2. Project owners disclose information of the project on the CoST website.

3. Assurance Team assures the completion and accuracy of the disclosed data.

4. Guidelines for site visit selection.

5. Site visit and further information acquisition.

6. Arrange public forum between project owners and the public sector.

7. Analyze data obtained from data disclosure on the website.

8. Suggestions.
Step 1  MSG select projects to participate in CoST

Step 2  Project owners disclose information of the project on the CoST website

http://process3.gprocurement.go.th/eGPCostWeb/detail

40 data points

Step 3  Assurance Team assures the completion and accuracy of the disclosed data

Completeness

Accuracy

Status of Work
Guidelines for site visit selection

Guidelines for Randomisation

Remark: The randomized project must be in the operational phase.

1. Project Type
   - Categorise into various types to cover all areas and consider the types that have extensive effects to the public.

2. Budget and Corporate Image
   - Budget limit by focusing on mega projects that have been carried out by agencies which specially draw people’s attention.

3. Covering All Regions
   - Reassure to cover all project types in each region, which concern roads, public utilities, and others.

1. Select project types of which the gross budget is not less than 80 percent considered from the total budget.
2. Select projects from two types of which the numbers of projects are the first two highest.
3. Select projects of which the competition percentage is higher than 15 percent.
Step 5
Site visit and further information acquisition

Acquire further information
coordination with project owners and acquire more information.

Site visit
site visit for further inspection and assessment.

Step 6
Public forum between project owners and the public sector

Listen to stakeholders
arrangement of meetings for stakeholders to collect complaints, opinions, and other suggestions.

Collect suggestions
suggestions collected by using questionnaires (and online channel) from the public sector to analyze the projects.
Step 7

Obtain data from the website and visits and publish assurance report

Step 8

Suggestions

Examples as follows:

<table>
<thead>
<tr>
<th>Project</th>
<th>Issues</th>
<th>Suggestions</th>
</tr>
</thead>
</table>
| Road    | 1) Road safety  
         | 2) Culvert connections | 1) Install traffic signboards one week in advance  
                                      2) Assist people by taking a responsible  
                                      to request for permission from a responsible agency that is authorised  
                                      to handle culvert works. |
| Irrigation | 1) Drainage of water to surrounding cultivating areas  
               | 2) Transportation issues | 1) Contractors must coordinate with the public to specify appropriate times of water drainage  
                                      2) Build temporary roads and shortcuts. |
| Building | 1) How to better utilise buildings? | 1) Request building education plans from project owners. |
Chapter 3

Overview of CoST Thailand (2015-2019)

CoST operations in Thailand was piloted in the fiscal year of 2015 and officially carried out in the fiscal year of 2017 with five public construction projects participating. All these were mega projects and had a great impact to several areas, including investment, environment, residences, and others.

In the fiscal year of 2018, the operation was extended to cover construction projects in the levels of departments, state enterprises, and local administrative organisations, which were the start of CoST enhancement to the local level with total 141 projects participating. The total budget was 72,061,041,479.72 Baht.

Moreover, the initiative has been consistently carried out. In the fiscal years of 2015 - 2019, there have been 252 projects participating in the CoST, with a total budget of 97,892,816,139.72 Baht. The program requires the project owners to disclose information through the CoST website of the Comptroller General’s Department.
260 Participating projects in CoST during 2015-2019

- **8 Projects**: are canceled due to the budget is denied
- **252 Projects**: have to disclosed data on the CoST website.
- **14 Projects**: are not yet disclosed data on the CoST website
- **238 Projects**: have disclosed data on the CoST website
- **12 Projects**: are in Procurement process
- **226 Projects**: are under contract management
There have been 238 projects participating under the CoST. All projects were selected and added in the process of procurement, as well as disclosed of information in the CoST system as of the fiscal year of 2015-2019, while 14 projects are still pending for procurement.

<table>
<thead>
<tr>
<th>Year</th>
<th>Projects</th>
<th>Budget</th>
<th>Medium price</th>
<th>Contractual value</th>
<th>Difference between the budget limit and the contractual value</th>
<th>Difference between the medium price and the contractual value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3</td>
<td>47,215,904,690.00 Baht</td>
<td>43,788,844,988.15 Baht</td>
<td>39,282,566,788.86 Baht</td>
<td>16.80</td>
<td>10.29</td>
</tr>
<tr>
<td>2016</td>
<td>4</td>
<td>4,830,523,500.00 Baht</td>
<td>4,531,971,856.51 Baht</td>
<td>3,313,194,699.55 Baht</td>
<td>31.41</td>
<td>26.89</td>
</tr>
<tr>
<td>2017</td>
<td>4</td>
<td>1,307,364,100.00 Baht</td>
<td>1,169,236,100.00 Baht</td>
<td>1,049,698,895.00 Baht</td>
<td>19.71</td>
<td>10.22</td>
</tr>
<tr>
<td>2019</td>
<td>99</td>
<td>2,930,973,000.00 Baht</td>
<td>2,950,120,897.48 Baht</td>
<td>2,380,630,129.34 Baht</td>
<td>18.78</td>
<td>19.30</td>
</tr>
<tr>
<td>Totaling-</td>
<td>226</td>
<td>65,937,097,441.72 Baht</td>
<td>61,981,868,175.28 Baht</td>
<td>54,409,949,308.35 Baht</td>
<td>17.48</td>
<td>12.22</td>
</tr>
</tbody>
</table>
CoST Thailand Data disclosure, categorized by project types

**Public utilities**
- 32 projects
- Proportion of disclosed work is 0.80%
- Average of participating bidders is 2.97
- Percentage of pricing competition is 16.55%
- Data disclosure index is 84.58%

**Facilities and attractions**
- 4 projects
- Proportion of disclosed work is 0.14%
- Average of participating bidders is 1.75
- Percentage of pricing competition is 3.67%
- Data disclosure index is 88.33%

**Irrigation**
- 17 projects
- Proportion of disclosed work is 5.77%
- Average of participating bidders is 4.59
- Percentage of pricing competition is 19.86%
- Data disclosure index is 86.54%

**Roads and Bridges**
- 107 projects
- Proportion of disclosed work is 30.79%
- Average of participating bidders is 5.07
- Percentage of pricing competition is 23.60%
- Data disclosure index is 84.17%

**Piers**
- 1 projects
- Proportion of disclosed work is 0.03%
- Average of participating bidders is 1
- Percentage of pricing competition is 1.68%
- Data disclosure index is 70.00%

**Airports**
- 3 projects
- Proportion of disclosed work is 47.78%
- Average of participating bidders is 2
- Percentage of pricing competition is 12.27%
- Data disclosure index is 89.03%

**Hospitals**
- 4 projects
- Proportion of disclosed work is 3.03%
- Average of participating bidders is 8.75
- Percentage of pricing competition is 16.65%
- Data disclosure index is 90.83%

**Buildings and Museums**
- 70 projects
- Proportion of disclosed work is 3.20%
- Average of participating bidders is 2.90
- Percentage of pricing competition is 10.76%
- Data disclosure index is 84.14%

**Public utilities**
- 32 projects
- Proportion of disclosed work is 0.80%
- Average of participating bidders is 2.97
- Percentage of pricing competition is 16.55%
- Data disclosure index is 84.58%

**Facilities and attractions**
- 4 projects
- Proportion of disclosed work is 0.14%
- Average of participating bidders is 1.75
- Percentage of pricing competition is 3.67%
- Data disclosure index is 88.33%

**Irrigation**
- 17 projects
- Proportion of disclosed work is 5.77%
- Average of participating bidders is 4.59
- Percentage of pricing competition is 19.86%
- Data disclosure index is 86.54%

**Roads and Bridges**
- 107 projects
- Proportion of disclosed work is 30.79%
- Average of participating bidders is 5.07
- Percentage of pricing competition is 23.60%
- Data disclosure index is 84.17%

**Piers**
- 1 projects
- Proportion of disclosed work is 0.03%
- Average of participating bidders is 1
- Percentage of pricing competition is 1.68%
- Data disclosure index is 70.00%

**Airports**
- 3 projects
- Proportion of disclosed work is 47.78%
- Average of participating bidders is 2
- Percentage of pricing competition is 12.27%
- Data disclosure index is 89.03%

**Hospitals**
- 4 projects
- Proportion of disclosed work is 3.03%
- Average of participating bidders is 8.75
- Percentage of pricing competition is 16.65%
- Data disclosure index is 90.83%

**Buildings and Museums**
- 70 projects
- Proportion of disclosed work is 3.20%
- Average of participating bidders is 2.90
- Percentage of pricing competition is 10.76%
- Data disclosure index is 84.14%
CoST Thailand Data disclosure, categorised by ministries

Office of the Prime Minister
Disclosure index of 86.22%
3 projects
871,958,800.00 Baht

Ministry of Finance
Disclosure index of 90.81%
3 projects
103,862,200.00 Baht

Ministry of Science and Technology
Disclosure index of 84.85%
1 project
2,550,000.00 Baht

Ministry of Transport
Disclosure index of 78.47%
14 projects
81,180,134,490.00 Baht

Ministry of Natural Resources and Environment
Disclosure index of 88.47%
14 projects
295,522,900.00 Baht

Ministry of Interior
Disclosure index of 85.05%
178 projects
3,510,114,420.08 Baht

Ministry of Defense
Disclosure index of 81.34%
7 projects
534,809,000.00 Baht

Ministry of Social Development and Human Security
Disclosure index of 73.64%
4 projects
421,325,000.00 Baht

Ministry of Agricultural and Cooperatives
Disclosure index of 94.76%
5 projects
6,060,983,500.00 Baht

Ministry of Digital Economy and Society
Disclosure index of 66.67%
2 projects
20,931,500.00 Baht

Ministry of Energy
Disclosure index of 66.67%
3 projects
49,390,629.64 Baht

Ministry of Public Health
Disclosure index of 90.83%
4 projects
3,488,163,500.00 Baht
CoST Thailand Data disclosure, categorised by Regions

Local Government

Northern region
15 projects

Northeastern region
47 projects

Eastern region
20 projects

Southern region
29 projects

State enterprise
13 projects

Department-level official organisation
55 projects

Special-purpose local organisation
1 project

Northern region projects

15

Northeastern region projects

47

Eastern region projects

20

Southern region projects

29

State enterprise projects

13

Department-level official organisation projects

55

Special-purpose local organisation projects

1
Status of projects on the CoST website

Results of information review, categorised by areas
From the first sight, a positive correlation between the number of bidders and the level of price competition was expected. The analysis of the data found that the data are related as shown in the above graph. However, there are some information that do not relate. As a result, other dimensions will be additionally considered.
In terms of type of project, the analysis found that the type of the project has certain effects to the bidding process. Projects with particular qualifications, such as irrigation, piers, or airports, were noticeable attracting a low number of bidders. Conversely, hospital construction, road and bridge construction attracted a high number of bidders, which can be explained by professionalism and experience of Thai construction companies. At the same time, price competition has reflected potential of participants, especially works that relate to irrigation, roads and bridges, of which expenses can be reduced.

This method allows thus to measure in which sectors Thailand’s construction companies have potential. Moreover, appropriate medium prices can be found, which are beneficial for calculation approaches based on each type of work, especially roads and bridges, or irrigation of which the price can be adjusted for better outcomes in the future.

In terms of contract length, it was found that the number of bidders increases with a decrease of the contractual period. In a contractual period of approximately nine months to one operational year, there will be a low number of bidders and the price competition is low in comparison to other periods.
In terms of contract value, it was found that any project of which the value is less than 10 million Baht, there will be a high number of bidders participating with a high rate of price competition. This can reflect that there is a number of small and medium-size construction companies aiming to get the tender, leading to up to 60 percent price competition (in the price competition of less than 3 million Baht). However, when the price was up to 10-100 million Baht, it was found that it is lower in number of bid participants, and the price competition is not that high. Therefore, this gap might require potential enhancement of small companies in terms of professionalism and other potentials in order to be competitive in terms of price. Lastly, in case of contractual values above 100 million Baht, all bidders are large companies, an price competition is moderate.

In terms of area, an analysis of construction projects set within responsible areas of the District Treasury’s Offices of the Comptroller General’s Department assesses the potential of construction companies of each area. It was found that their potentials and price competition rates are relatively high, especially in the areas responsible by the District Treasury’s Office 3 (lower northeastern region). On the other hand, the areas responsible by The District Treasury’s Office 9 (lower southern region) attracted low competition, which was probably due to unrest situations in the area.
An analysis of delayed projects found that there are totally 17 projects that have been operated excessively from the specified project period, including 12 projects of roads and bridges (average delay rate of 16.08 days), one irrigation project (average delay rate of 8 days), three projects of buildings (average delay rate of 34 days), and one basic utilities project (average delay rate of one day). Projects of irrigation, as well as roads and bridges, attracted high competition, leading to resources management, both in terms of personnel and expenses for such construction projects. For projects of buildings and public utilities, the number of participating bidders is less than the average, leading to a low level of price competition and potentially of technical construction issues.

An analysis, categorised by ministries, reflects potentials of construction companies in the way that they are specialised in each work assigned by the Ministry of Agriculture and Cooperatives (construction of irrigation), works of the Ministry of Public Health (construction of hospitals), and local infrastructure, the Ministry of Interior (construction of local roads and bridges, as well as buildings), with a very high competition rate in comparison to other ministries. Conversely, the Ministry of Transport (construction of main roads and airports) attracted a low number of bidders with moderately high competition.
The analysis of types of project and areas found that participating bidders in the local level are subject to a very high price competition rate in all regions of Thailand and a high number of bidders as well, especially in terms of infrastructure, such as roads, bridges, electricity systems, water systems, etc. However, southern provinces are exceptions (District Treasury’s Locality 9).

As building construction projects attracted a comparatively low number of bidders, this reflects expertise of Thailand’s operators in operating infrastructure construction. There was a high number of medium and small-sized local operators participating in the bid with a high competition rate, which can lead to improvement of price standards for infrastructure construction, as there is a important gap between the medium price and contractual value.
An assurance of government construction projects required in-depth studies on 10 projects with similar details. The overall project assurance in the part concerning data disclosure index was in a good level, while data quality was in the level that needed further improvement.

However, there was a significant difference in comparison to the varying surrounding factors. The in-depth data assurance can be summarized as follows:

<table>
<thead>
<tr>
<th>Name of project</th>
<th>Agency</th>
<th>Data disclosure index (percentage)</th>
<th>Data quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project to minimize traffic problem in suburban and regional area by extending Rachapreuk road, phase 2 (section 3)</td>
<td>Department of Rural Roads</td>
<td>100.00</td>
<td>disclosed in multi-channels</td>
</tr>
<tr>
<td>Flyover construction project at Bor Win Industrial Estate intersection/Eastern Seaboard/Amata City and Pak Ruamjunction, Chonburi</td>
<td>Department of Highways</td>
<td>100.00</td>
<td>concise and easily understandable</td>
</tr>
<tr>
<td>Construction project to improve water distribution canal R.1 with additional building</td>
<td>Royal Irrigation Department</td>
<td>94.29</td>
<td>concise and easily understandable</td>
</tr>
<tr>
<td>Suvarnabhumi Airport Development Project, stage 2</td>
<td>Airports of Thailand PLC.</td>
<td>100.00</td>
<td>More information should be added in the section of objectives in order to make them more concise and clearer.</td>
</tr>
<tr>
<td>Reinforced concrete road construction project with water drainage system at the Pratu Klong Road, Phayao</td>
<td>Phayao Municipality</td>
<td>96.67</td>
<td>Project objectives and expected results should be improved to be in line.</td>
</tr>
<tr>
<td>Reinforced concrete retaining dam construction project along Si Wah Phasawat Canal, Samut Sakhon</td>
<td>Samut Sakhon Provincial Administrative Organization</td>
<td>96.67</td>
<td>More descriptive information should be provided.</td>
</tr>
<tr>
<td>Construction project of concrete roads, Village No. 10 Ban Siem – Village No. 9 Ban Wang Or, Local Road Code, AorBor.Thor. 231-03, Ubon Ratchathani</td>
<td>Hua Don Subdistrict Administrative Organization, Ubon Ratchathani</td>
<td>93.94</td>
<td>concise and easily understandable</td>
</tr>
<tr>
<td>Asphaltic concrete road improvement of the Ban Kaeng Ton route - Ban Song Plueai, Na Sam Subdistrict, Petchabun</td>
<td>Phetchabun Provincial Administrative Organization</td>
<td>85.71</td>
<td>Post-project information should be added.</td>
</tr>
<tr>
<td>Para-asphalt concrete road construction, village No. 4-2, Khao Rop Route – 44 Route, Krabi</td>
<td>Administrative Organization, Krabi Khlong Hin</td>
<td>87.88</td>
<td>More descriptive information should be provided.</td>
</tr>
<tr>
<td>Reinforced concrete road construction project to connect between Kham Tao Subdistrict-Kham Teoi Sai Ban Klui - Ban Don Daeng, Ban Kluai, Village No. 7, Kham Tao Subdistrict, Meuang District, Nakhon Phanom</td>
<td>Administrative Organization, Nakhon Phanom Kham Tao</td>
<td>84.85</td>
<td>Data quality with regard to post-project information should be improved.</td>
</tr>
</tbody>
</table>
Project to minimize traffic problem in suburban and regional area by extending Rachapreuk road, phase 2 (section 3)

Ratchaphruek Road is a six-lane road constructed by routing from north to south on the western coast of the Chao Phraya River. It was open for use in 2003; however, at present, usage of surrounding spaces has grown significantly due to housing construction and commercial trading. Both factors have made Ratchaphruek Road unable to support up to 55,000 vehicles per day. Passengers have experienced traffic congestion, especially during rush hours, often leading to loss in many aspects, such as fuel loss, time loss, and indirect effect of accidents.

Quality has been controlled by a consulting company and in line with the Department of Rural Roads’ standards. The major reason was that, connection of water drainage system in the areas carried out by people living on both sides of the road first required water treatment system, which was a requirement set forth in the law.

Currently, the progress achieved 63.66 percent, 0.24 percent faster than the work plan. The work plan had been adjusted to correspond to the progress as there was an addition of water drainage system in order to solve public issues.
1. As public areas are lower than the project’s area, this poses the question whether there is a risk of these areas being flooded and waterlogged.

   The agency has visited the site and solved the problem by changing directions of water in order to drain the water logged as requested.

2. Another challenge consists in the risk of the project causing dusts which affect people who travel and reside in the area of the project?

   Rounds of water-spraying will be increased to reduce particulate matters, from four rounds to six rounds per day.

3. Is it possible for the contractors to coordinate more intensively with the public?

   As the time passed, the agency had coordinated with public representatives consistently. However, as the project was large, the coordination might not cover all areas. In this regard, the agency will improve the process in this aspect.

4. Could the construction of Khun Mahad Thai Canal Bridge be completed as soon as possible as the traffic conditions are increasingly difficult?

   The Department of Rural Roads has asked the contractor to speed up the constructions.

5. When and how can the people connect the water drainage system?

   The Department of Rural Roads granted permission to the locals to connect culverts. However, the size of each pipe must not exceed 40 centimeters and there must be a clarifier in each village.

6. There should be more communications regarding the project to people who live outside the area.

   The agency has consistently communicated with the local organisations.
Summary of project overview

Traffic problems solving project in the perimeter and regional areas, extending Ratchaphruek Road, Stage 2 (Part 3),

Data Disclosure (Percentage)
- Information has been disclosed in multi-channels: 100%

Data Quality
- Information quality: 63.42%

Progress (Percentage)
- Cumulative plans: 63.66%
- Cumulative works: 63.66%

People in the area asked the agency
- "To spray more water to reduce amount of particulate matters"
- "Install traffic signboards"
- "Solve traffic congestion during rush hours"

Confidence rate of the public is 71.2%
*Questionnaires from the public sector

#Traffic problem solving project
#Extending Ratchaphruek Road, Stage 2 (Part 3)
Flyover construction project at Bor Win Industrial Estate intersection/ 
Eastern Seaboard/Amata City and Pak Ruamjunction, Chonburi 

Project owner: Department of Roads

The objective of the project consisted in mitigating traffic situations on the road no. 331, from Maplang Interchange-ChorBor.3009 Interchange. Its indirect result will be promoting tourism areas and encouraging economic activities in the industrial estate of Chon Buri Province.

Nature of work

extension of roads from six lanes to eight to 12 lanes and building of an intersection bridge to enhance effectiveness of road use and support enlargement of the industry section

Project importance

The project aims at increasing the number of traffic lanes to support a higher quantity of cars and reduce accidents caused by travelling trucks. Moreover, this will be supporting the industries conducted in the EEC areas in the future.

Procurement process

There are 4 bidders, the price competition was at 11.05 percent. the successful bidder built manufacturing plants to produce bridge parts in order to support price competition.

Contractual management

No issues found.

Quality

The quality was controlled by the Department of Rural Roads. The key problem is that the connection of water drainage system done by the people who reside in both sides of the road requires a water treatment system, which is a requirement set forth in the law.

Delay

Currently, the progress is at 38.71 percent, which is faster than the work plan at 11.05 percent. At present, potential problems evolve, including dismantling of gas pipes and public utility system.
Public opinions and agency’s responses

**Public sector**

Will people residing in the area of Pak Ruam intersection be highly affected from particulate matters?

The agency is committed to take the responsibilities and strictly remind the contractor to spray water to reduce particulate matters in the morning, at noon, and in the evening.

**Project owner (PE)**

Should the agency install more route recommendation signboards at the Eastern Seaboard intersection and better traffic signs?

The agency will follow the suggestions.

**Project owner (PE)**

Is there a need for more U-turns in the proximity of the area by suggesting at the front of PTT gas station?

The company and project owner are pleased to relocate the U-turn to be as close as possible to the PTT gas station.

**Project owner (PE)**

The agency is required to prepare operation plans to cope with the raining season that may affect the operations.

The agency aims to follow all suggestions above as guidelines for the operations.

**Project owner (PE)**

The installation of high mast electricity posts is required.

The agency is pleased to consider such suggestions. However, the project owner needs to consider based on the budget specified in the contract.
Summary of project overview

Bowin Industrial Estate/Eastern Seaboard/Amata City and Pak Ruam Intersection Bridge construction project, Chon Buri

Data Disclosure (Percentage)

Data Quality

Progress (Percentage)

Concise and easily understandable

Cumulative plans: 27.66%
Cumulative works: 38.71%

People in the area asked the agency:

- "solve problems concerning particulate matters caused by the constructions, especially in the areas of Pak Ruam intersection"
- "provide a U-turn in front of the PTT gas station to reduce traffic congestion. Moreover"
- "they need more communications regarding the project updates"

Confidence rate of the public is 67.6%

*questionnaires from the public sector

CoST Thailand

#Bowin Industrial Intersection Bridge construction project,
#Chon Buri Province
Construction project to improve water distribution canal R.1 with additional building

Project owning agency: The Department of Irrigation

Flood Mitigation Project in Hat Yai District (Stage 2), Songkhla, was provided to solve and mitigate repetitive flood problems in Hat Yai District and its surrounding provinces. In 2010, the rain has been falling for many days, resulting in flood in Hat Yai with the amount of flood of 1,623.50 cubic meters/second, which exceeds potential of the existing drainage canal. As a result, the water flowed out of U-tapao Canal and Rama Canal and flooded the area of Hat Yai Municipality and its surroundings. It took approximately two days to drain all the water and recover the town to the normal condition with 10,490 million Baht damages.

An extension of a drainage canal to have threefold capacity in order to support water quantity caused by weather conditions is needed to mitigate flood problems. Such extension can be compared to statistic principles of water quantity, 10 years back.

Project importance

Quality is controlled by the Department of Irrigation.

Procurement process

There are 4 bidders, the price competition is at 30.57% percent, leading to issues concerning quality and workers.

Contractual management

The project was divided into 4 contracts.

Delay

The progress has achieved 60% percent and one contract exceeded the period specified, while the work is still not complete. Currently, the progress is at only 57% percent and it is in the process of contract termination in order to seek for a new contractor. The other three contracts shall expire in August 2019.
Public opinions and agency’s responses

Is the bridge-neck that was demolished in August 2018 still pending for completion?

The agency has accepted a response letter from the contractor stating that it will solve the problem immediately within March 10, 2019. However, no actions have been taken up until now.

A high quantity of particulate matters affects people’s health.

The agency has contacted the contractor to solve the problem. However, no actions have been taken up until now.

There were ten-wheel trucks with exceeding loads, leading to road damage and breakdown.

The agency has already proceeded to issue a notice to inform the contractor to take actions.

When will the construction of bridge-neck be completed?

If the contractor immediately constructs the bridge-neck, it will take approximately four months.

What actions can the Department of Irrigation take to offer opportunities to the people residing at the downstream river to have occupations for their living?

During the dry season, the water will be released for the people to use it for agriculture. Moreover, the agency has proceeded with a plan for the fiscal year of 2020 to build a fisherman pier.
**Summary of project overview**

Project of Rama I drainage canal improvement together with building assembling under the project of flood mitigation, Hat Yai District (Stage 2), Songkhla

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**Data disclosure (percentage)**

94.29%

**Data quality**

concise and easily understandable

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**Progression (percentage)**

<table>
<thead>
<tr>
<th>Contract</th>
<th>Cumulative Plans</th>
<th>Cumulative Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100.00</td>
<td>69.54</td>
</tr>
<tr>
<td>2</td>
<td>97.56</td>
<td>63.53</td>
</tr>
<tr>
<td>3</td>
<td>94.87</td>
<td>77.35</td>
</tr>
<tr>
<td>4</td>
<td>44.33</td>
<td>34.43</td>
</tr>
</tbody>
</table>

(Information as of September 2019)

---

**People in the area asked the agency**

- Accelerate the construction of the semis in contract 1 for traveling between villages
- Fix a problem: Flooding
- Speed up the process to finish
- to spray more water to reduce amount of particulate matters

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**Confidence rate of the public is**

65.4*

*questionnaires from the public sector

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**CoST Thailand**

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#Rama 1 Drainage Canal Improvement Construction Project
#Songkhla Province
Suvarnabhumi Airport Development Project, Stage 2

According to estimation of increasing air traffic, Suvarnabhumi Airport is likely to be unable to support this number of passengers. On 24 August 2010, the cabinet approved the Suvarnabhumi Airport Development Project, stage 2, with aims to enhance capacity to support passengers. That is, from originally 45 million passengers per year to 60 million passengers per year, and reduce passenger congestion and constant increase of flights each year. The Suvarnabhumi Airport Development Project consists of four working fields, which are 1) minor concourse, 2) passenger terminal, 3) public utilities, 4) hiring of project management consultants.

Project owner: Airports of Thailand PCL

Project Value
- 51,862.00 million Baht
- Medium Price: 62,503.21 million Baht

Nature of work
- Eight constructions of concourse, apron, and installation of electricity systems

Progression is higher than the overall project in the following overview:

<table>
<thead>
<tr>
<th>Contract</th>
<th>Progression</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC1/1</td>
<td>99.84 percent</td>
</tr>
<tr>
<td>CC1/2</td>
<td>41.80 percent</td>
</tr>
<tr>
<td>CC2/1</td>
<td>0.62 percent</td>
</tr>
<tr>
<td>CC3</td>
<td>71.36 percent</td>
</tr>
<tr>
<td>CC4</td>
<td>18.07 percent</td>
</tr>
<tr>
<td>CC5</td>
<td>15.89 percent</td>
</tr>
</tbody>
</table>

Procurement process
In the overall procurement of each contract, there are three to four bidders participating in the bid, which not considered a high number. A reason is the requirement of specific professionalism and the high value. Therefore, this is not regarded as abnormality. The successful bidders of all contracts have key partners that are expert in carrying out the project with experience and financial potential at an acceptable level.

Quality
The quality was controlled by a consulting company and requirements specified in the contract of the Airports of Thailand.

Delay
- CC1/1: 99.84 percent
- CC1/2: 41.80 percent
- CC2/1: 0.62 percent
- CC3: 71.36 percent
- CC4: 18.07 percent
- CC5: 15.89 percent

Project importance
The number of passengers using the airport in 2018 was approximately 62 million people, which was 38 percent higher than the capacity of the airport to support the passengers. Financial contributions were studied by specifying the Internal Rate of Return (IRR) at 9.02 percent, which was higher than the average financial cost of the Airports of Thailand, which was slightly at 8.88. The net value (NPV) was at 645.484 million Baht and the payback period is 10 years and one month without learning on economic outcomes.

Contractual management
It is divided to 6 construction contracts, and 3 consulting contracts.
### Public opinions and agency’s responses

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the reason to combine CC2/a and CC2/2 contracts, which have not yet been commenced, in the fiscal year of the Suvarnabhumi Development Project, stage 2?</td>
<td>Both contracts are plans that are set forth under the Suvarnabhumi Development Project, stage 2, in the fiscal year of 2011-2017.</td>
</tr>
<tr>
<td>2. The EPM Consortium has been hired to manage the project, while the work specified in the two aforementioned contracts has not yet been commenced?</td>
<td>Both contracts are in progress as follows: First, CC2/1 is currently in the stage of bidding, and second, CC2/2 is in the stage of requesting for approval for the change of west-winged passenger building plans.</td>
</tr>
<tr>
<td>3. What is the reason the government sector has to facilitate airlines by increasing office buildings for them? How does it correspond to an increase of potential in supporting passengers?</td>
<td>The airlines need to use spaces within the airport to operate work relating to flight management. Therefore, we need to provide more space to support the operations.</td>
</tr>
<tr>
<td>4. What is the reason that CC4 and CC5 Contracts have already been achieved only seven percent progress?</td>
<td>There were mistakes during the planning stage between the consultants overseeing the project and business operators, leading to delay in equipment delivery.</td>
</tr>
<tr>
<td>5. As the hiring of consultant overseeing the construction under the CSC contract will end on 30 November 2019, does the agency has any further plan?</td>
<td>It is possible to consider the same consultant to oversee the project.</td>
</tr>
<tr>
<td>6. Were there any complaints regarding the construction submitted to the agency?</td>
<td>1. There were no complaints from the public sector. 2. Most of the complaints were from the contractors regarding rights of contractor in each contract.</td>
</tr>
</tbody>
</table>

Note: Not in areas that affect people
Summary of project overview

Suvarnabhumi Airport Development Project, Stage 2

Data disclosure (percent)

100%

Data quality

Further information should be added in the objective part in brief and clearer details.

Progression (percentage)

Contract CC 1/2: 41.80%
Contract CC 1/1: 99.84%
Contract CC 2/1: 0.62%
Contract CC 3: 71.36%
Contract CC 4: 18.07%
Contract CC 5: 59.18%
Contract CSC: 15.89%

(Information as of September 2019)
Originally, the road in this project regularly encountered with flood as the existing drainage pipe is too small to handle the amount of water. In this area, there are many important sites, such as passenger transit station, fresh market, school, and hotel, etc., and the road has been used at all times. Therefore, this construction is held to solve the waterlog problems for the people. Previously, the road was mutually responsible by Phayao Town Municipality and Phayao Provincial Administrative Organization. However, the budget of the Phayao Provincial Administrative Organization was terminated, so, currently, there is only Phayao Town Municipality responsible for the project.

Project importance

It is a construction of concrete road together with culvert improvement project. When considering the objective of aiming to develop urban economy, it is found that this road is the main road of Phayao. However, when considering water drainage system improvement, it was found that there were resolutions to problems of waterlog on the surface of the road caused by weather conditions every year. Therefore, an objective of resolution to waterlog problems should be provided.

Procurement process

There were 19 parties interested and purchasing bidding documents, while there were 5 parties submitting the bidding documents. The competition rate was up to 27.02 percent. When considering the successful bidder, it was found that the bidder was a major company situated in Phayao, which successfully bid several public construction projects in the northern region. Therefore, the successful bidder has possessed extensive experience in construction.

Contractual management

Based on review and 5 installments of work fees, it was found that each installment is subject to a higher cumulative work value than the cumulative hiring fee paid to the contractor. It is deemed that Phayao City Municipality does not disadvantage in any way.

Quality

Another problem caused is that inconvenience in entering and going out from residences and shops, leading to potential complaints in the future. Also, it lacks communications regarding the project and planning for traffic during the construction period.

Delay

The progress is at 36.59 percent. It is 42.31 percent falling behind the plan with only 60 days left.
Public opinions and agency’s responses

When will the agency proceed to dig the road in order to place culverts?

The agency will precede such operation after Songkran festival.

What are approaches for the agency to handle traffic problems during school season?

Use the method of sharing traffic lanes to facilitate the traffic on the road as usual.

Will the project be completed within the period specified in the contract?

Completed by the contract for sure

Is the pattern of the pathways a right angle, or sloping up?

The public can come to an agreement on the pattern for the pathways, and inform the agency to proceed as requested.

The people want the agency to reconstruct the incomplete road.

Phayao Governor suggested the incomplete road be included in the provincial budget in order to precede the construction.
Summary of project overview

Reinforced concrete road construction project together with water drainage system Phayao

People in the area asked the agency

- include building pathways
- taking into account of security as the construction area is adjacent to a school
- communication about operation plans to the public at least one week in advance

Confidence rate of the public is 80*

*questionnaires from the public sector

CoST Thailand

#Reinforced concrete road construction project
#Phayao Province
Reinforced concrete retaining dam construction along Si Wah Phasawat Canal, Village

No. 2 and 6, Nadi Subdistrict, Muang Samut Sakhon District, Samut Sakhon

Project owning agency: Samut Sakhon Provincial Administrative Organization

Originally, such road under the project has been used throughout the day by small cars and larger vehicles that have more than four wheels. The rim of the road that is adjacent to the canal has collapsed, resulting in falling of debris of the subsiding road into the canal. Therefore, the agency has noticed the problem in a way that such debris may obstruct water drainage in the canal. In order to facilitate the water drainage and flows and to prevent deterioration of the riverbank, the agency proceeded to carry out such project.

Project importance

It is a project of retaining dams in order to mitigate the problems of deterioration of soil. An analysis found that there was an observation concerning plans that had not yet been certified by any engineer and did not have any soil quality inspection result. For Si Wah Phasawat Canal, there were complaints concerning the water condition.

Procurement process

The procurement has been delayed due to the problem regarding requests for approval from corresponding agencies, including the Department of Irrigation, Marine Department, and Na Di Subdistrict Municipality. There were 3 bidders participating. The competition rate was not that high as it was at 2.65 percent.

Contractual management

No issues found.

Quality

The quality was controlled by the chief of the project and was reviewed by the Department of Rural Roads. The public concerns about environment and cutting of road side trees.

Delay

The project was delivered in time.
Public opinions and agency’s responses

For the installation of pipelines, when will the contractor start the operations?

The contractor will inform the public representatives in advance if the commencement date is settled.

Will the project demolish the pavilion used for those who wait for the bus?

The pavilion will not be demolished as it was responsible by the Department of Rural Roads.

The areas of Nadi Subdistrict Municipality, Village No. 1, Village No. 2, and Village No. 9 do not have electricity poles adjacent to the canal. May this be dangerous during the night?

The project owner will inform the concerns to the corresponding agency.

The people don’t want the trees at the canal sides to be removed.

The trees are required to be removed in some area to facilitate work of machine.
Summary of project overview

Reinforced concrete retaining dam construction along Si Wah Phasawat Canal, Village Samut Sakhon

Data disclosure (percent)  
96.67%

Data quality  
Descriptive data should be added.

Progress (percent)  
cumulative plans 100.00%  
cumulative works 100.00%

People in the area asked the agency

“
The people do not want the canal side trees to be removed
”

“
Moreover, they demand electricity along the canal to prevent danger
”

“
as well as a solution for unpleasant smell caused by trashes at the starting point of the project
”

Confidence rate of the public is 94.2%

*questionnaires from the public sector

CoST Thailand

#Reinforced concrete retaining dam construction  
#Samut Sakhon Province
Originally, the road was a dirt road. There were holes and gravels throughout the road with dusts, as well as waterlog during the raining season. These problems caused difficulties to people travelling through the road. After meeting, it was found that the people in the area wished to have this road improved. Then, the agency added this project to the list of four-year development plan of Hua Don Subdistrict Administrative Organization as requested by the public (2018-2021).

### Nature of work
- Construction of the road with a width of four meters, length of 4,500 meters, thickness of 0.15 meters, and each side way of 0.30 meters

### Project importance
The project of concrete road construction facilitates travelling and reduces accidents. An analysis found there are no large trucks travelling through the road in question of which the width is only four meters. As a result, construction of reinforced concrete road may require a higher budget and may be more than necessary. It would be better to use asphaltic concrete instead to partially reduce the budget, while the benefits of use are still complete as provided in the objectives and fulfil the needs of people in the area.

### Procurement process
The competition rate was up to 29.49 percent. There were 7 bidders participating. It was found that the price proposed of almost of the bidders was considerably lower than the medium price. However, no irregularities were found in the documents of any of the bidder. The successful bidder is confident to be able to complete the project, even though the price proposed was considerably different from the medium price.

### Contractual management
The construction period was determined for 90 days. It was rather short comparatively to the amount of work, which actually can be extended to up to 120 to 150 days in order for the contractor to have appropriate and flexible period for the operations.

### Quality
The quality was controlled by the chief of the project and was reviewed by the Department of the Rural Roads with concerns about sidewalks, which may subside after being used for a period of time. This explains the time pressure during the last two weeks.

### Delay
The project was delivered in time.
Public sector

There is the demand to level the road to connect the agricultural fields at the two sides of the roads to facilitate cultivating vehicles.

The agency will take actions as requested by the people.

Project owner (PE)

The public demands the agency to handle the water drainage system that flows across the road.

People in the area must come into an agreement whether to which direction they want the water to flow.

Project owner (PE)

What are guidelines to prevent the roads for long-term use?

Vehicles with more than 10 wheels are not allowed to travel through the route.

Project owner (PE)

There is concern about accidents as there are no traffic signboards.

It is important for the public to be more careful, especially during the night, and to help install temporary signboards before the project completes in order to prevent accidents. After the completion of the project, the agency will immediately install permanent traffic signboards.

Project owner (PE)
Summary of project overview

Construction project of concrete roads, Village No. 10 Ban Siem – Village No. 9 Ban Wang Or,

Data disclosure (percent)
93.94%

Data quality
concise and easily understandable

Progress (percent)
The work has been delivered within the period specified in the contract.

People in the area asked the agency

“The public demands traffic signboards to prevent dangers during the night”

“The management of the direction of water drainage system”

“levelling the road in order to connect with the slope to agricultural fields at two sides of the road in order to facilitate the agriculturalists”

confidence rate of the public is 96*

*questionnaires from the public sector

CoST Thailand

#Construction project of concrete roads, Ban Siem – Ban Wang Or, #Ubon Ratchathani Province
The conduction of road improvement project to pave rubber on an asphaltic concrete road of the Ban Kaeng Tone route-Ban Song Plueai, Na Sam Subdistrict, Sila District, Lom Kao District, Petchabun Province has identified the dirt road as a problem, which lead to waterlog during the raining season. Therefore, the agency came to solve such problem. The area of the project cuts through four villages as follows: Ban Kaeng Ton, Na Sam Subdistrict, Lom Kao District, Petchabun Province, Ban Huai Phai, I-pum Subdistrict, Dan Sai District, Loei Province, Ban Pong Sam Kha, Sila Subdistrict, Lom Kao District, Petchabun Province, and Ban Nong Khiao, Sila Subdistrict, Lom Kao District Petchabun Province.

It is a project of concrete road construction which supports people in more than 4,000 households to reduce travelling time, accidents, and contribute benefits to the people in a wide range. Moreover, it was beneficial for goods transport as this road is a route for agricultural products and other goods transport by connecting between the land highway no. 12 and the land highway no. 21 through the highway 2216.

The competition rate was at 13.20 percent. It was found that there were 73 parties purchasing bidding documents, while there were only 4 parties participating in this bid. However, as there were many parties interested in purchasing documents, it may be another reason that the 4 bidders had tried to purpose price that was considerably lower than the medium price.

The project value has shifted from 16,679,997.32 Baht to 16,596,269.96 Baht. The agency was informed that for the road construction, Sila Subdistrict Administrative Organization has conducted two overlapping reinforced concrete road construction projects. The two routes aforementioned are KM. at 17+840 to KM. at 17+882, the distance of 42 meters, and KM. at 18+209 to KM. at 18+212, the distance of 3 meters. The constructions have been completed. Therefore, these constructions must be removed from the project and the construction amount must be reduced.

The quality was controlled by the chief of the project and was reviewed by the Petchabun Office of Public Works. There were concerns about asphaltic concrete surfaces as it was the beginning of raining season, the work might be delayed. Rainfall during the process of asphaltic concrete construction may cause waterlog on the road service and lead to quality problems of the road surface.

The work was delivered 14 days later than the timeframe specified in the contract.
### Public opinions and agency’s responses

<table>
<thead>
<tr>
<th>Public sector</th>
<th>Project owner (PE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is the starting and ending point?</td>
<td>Highway No. 21 through Kaeng Ton village and end at Ban Song Plueai village.</td>
</tr>
<tr>
<td>There is the demand that the agency improves the road in the range of KM 0+000 to KM 14-727 most, as it was most damaged.</td>
<td>The agency prioritised the concerns of dust reduction and required the contractor to manage the problem.</td>
</tr>
<tr>
<td>Currently, the route is in the process of being open for contractors, and such process will last in not exceeding five months.</td>
<td>There are three connecting routes that the agency is working on to connect to the construction project.</td>
</tr>
<tr>
<td>Will the project be complete as specified in the contract on 14 June 2019?</td>
<td>The project owner requests the people to agree on the direction of the water flow.</td>
</tr>
<tr>
<td>There is concern about dust resulting from the works.</td>
<td>The public sector demands the agency to additionally provide water drainage groove.</td>
</tr>
<tr>
<td>Will it be a route connecting between the road and village entrances?</td>
<td>The agency will speed up the work to complete the project within 30 June 2019.</td>
</tr>
</tbody>
</table>

Currently, the route is in the process of being open for contractors, and such process will last in not exceeding five months. There is the demand that the agency improves the road in the range of KM 0+000 to KM 14-727 most, as it was most damaged.
**Summary of project overview**

Road improvement projects to pave rubber on an asphaltic concrete road of the Ban Kaeng Ton route - Ban Song Plueai, Petchabun

**Data disclosure (percentage)**

85.71%

Information should be elaborated more descriptively.

**People in the area asked the agency**

"more water-spraying to reduce particulate"

"matters, more culverts, the improvement of the road"

"between KM. 0+000 to KM. 14+727, which is the area that has the highest problems"

"the construction of ways to connect between the village and the road of the project"

**Progress (percent)**

14-day delayed deliver.

**Confidence rate of the public is**

68.8*

*questionnaires from the public sector

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#Road improvement projects to pave rubber on an asphaltic concrete road
#Petchabun Province
The road was made of asphalt. As there are many vehicles travelling through, there are a lot of damage occurred, resulting in holes and obstructing travels of people, especially after sunsets. Accidents happen often during the night. Moreover, there are always waterlog in road holes during the rainy season. In order to reduce such grievance, the Klong Hin Subdistrict Administrative Organization has initiated the project.

**Nature of work**

construction a road of which the width of six meters, length of 2,140 meters, thickness of 0.04 meters; the area is not less than 14,980 square meters with two roadsides, with 0.50 meters each

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**Project owner:** Klong Hin Subdistrict Administrative Organization

**Khao Rop Route – 44 Route, Khlong Hin Subdistrict, Ao Luek District, Krabi**

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**Project importance**

*It is the first construction of a road that contains rubber in Krabi Province* in order to help agriculturists in utilizing rubber latex sold to the government sector. There are approximately 500 households benefited from the construction.

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**Procurement Process**

The competition rate was at **38 percent**. There were **5 bidders** participating in the bid. The successful bidder was confident to complete the project despite the price proposed was significantly different from the medium price. This can be explained by the long-time extensive experience in construction of the contractor, which is a major contractor in Krabi Province with.

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**Contractual management**

The public was involved in final inspection. However, the key problem was that people participating in the final inspection were not equipped with sufficient knowledge for qualitative inspection. Therefore, it should have been basic training before conducting the inspection.

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**Quality**

The quality was controlled by the chief of the project and was reviewed by the Department of Provincial Public Works. Moreover, there are concerns in terms of road quality assurance, as it is a new type of road. Officers need to be trained of quality assurance in details and need further information regarding quality of rubber base mixed in the concrete asphalt.

---

**Delay**

Delayed **26 days**

---

**Project value**

Medium price **9,990,651.00 Baht**

Project value **6,194,000.00 Baht**

(Information as of September 2019)
Has the agency communicated with people in the area and informed them five months prior to the operation?

The project owner will the public of every construction carried out under the Subdistrict Administrative Organization.

Will the removal of electricity poles affect the public?

The public will not be affected by the project as the removal will be conducted only partially.

The public has never noticed of details concerning mixture of construction that contains rubber as a component.

The construction and the quality of this road are not different from general road construction.

For how long can this road be used?

The road has a useful life based on a contract of two years.

Have the date and time been set for water pipe installation?

The installation was planned for May 27, 2019.

There is concern about problems stemming from particulates.

Assign the water transporting trucks to spray water on the road to reduce particulate matters at the same time.
Projects of para-asphalt concrete road construction, Khao Rop Route – 44 Route, Khlong Hin, Krabi

Data disclosure (percent)

87.88

Data quality

more descriptive information should be provided.

Progress (percentage)

Delayed 26 days

People in the area asked the agency

“Include the prioritisation of complete waterpipes

“Regular water-spraying to reduce particulate matter issues

confidence rate of the public is 77.6 *

*questionnaires from the public sector

CoST Thailand

#projects of para-asphalt concrete road construction #Krabi Province
10 Reinforced concrete road construction project to connect between Kham Tao Subdistrict

**Subdistrict-Kham Teoi Sai Ban Kluai - Ban Don Daeng, Ban Kluai, Village No. 7, Kham Tao Subdistrict, Meuang District, Nakhon Phanom**

Despite the fact that the conditions of the road routing between Sai Ban Kluai, Kham Tao Subdistrict - Ban Don Daeng, Kham Toei Subdistrict were originally not good, local people and those living in its proximity have used it for travelling between subdistricts and transport agricultural products for a long time. However, as the current conditions of the road have fallen apart and highly damaged, resulting in several holes, especially in the raining season, it is difficult to travel. Therefore, this project was initiated.

**Project owner: Kham Tao Subdistrict Administrative Organization**

![Project value](image)

<table>
<thead>
<tr>
<th>Project value</th>
<th>Medium price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6,190,000.00 Baht</strong></td>
<td><strong>9,000,506.11 Baht</strong></td>
</tr>
</tbody>
</table>

(Information as of September 2019)

**Nature of work**

construction of traffic service at the width of five meters, length of 3,100.00 meters, thickness of 0.15 meters, with two roadsides, 0.5 meters each, or concrete-made area of which the area is not less than 15,500.00 square meters.

**Project importance**

A benefit from this project is that people in the area of Kham Tao Subdistrict will be convenient in travelling as the road is in a good condition and is ready for use. It is a solution to problems and mitigation of grievance. There are 11 villages, accounting for 8,849 people residing in the area of Kham Tao Subdistrict, or 2,627 households. Moreover, this road connects Na Kae District to the city of Nakhon Phanom, Nakhon Phanom University, and Nakhon Phanom Prison, as well as That Phanom District and Mukdahan Province. There are high numbers of people residing outside the area using this road.

**Procurement process**

The medium price of the project is in line with the requirements, and mistakes or unusual issues have not been noticed. And in the bidding process, there were 7 bidders In the bidding process, the party offering the lowest price was disqualified, while the party offering the second lowest price submitted incomplete documents, making the third lowest price offering bidder to be the successful bidder (who proposed lower than 31.23 percent of the medium value). The review found that the successful bidder is the owner of a sand pond, so that it can offer a high discount.

**Contractual management**

The public sector was involved in final inspection. Basically, the people participating must have knowledge regarding road construction and must be leaders of a community.

**Quality**

The quality has been controlled by the chief of the project. There is concern that the surface of this road is reinforced concrete with the width of 15 centimeters. It was found that it can handle loads of not more than 25 tons at maximum (240 ksc.). Therefore, it can technically not support weights of trucks with large loads.

**Delay**

The project has been completed before the date specified in the contract.
Public opinions and agency’s responses

Has the agency informed the public prior to the construction?

Public sector: Generally, there is a meeting at the end of every month to inform the public of each project to be carried out.

Project owner (PE):

There is a demand towards the agency to construct quality roads.

Public sector: The responsible agency should be immediately informed in case of road breakdown. The agency will take urgent action to solve the problem.

Project owner (PE):

There is concern about quality of cement used for road construction. The people suggest the agency to use concrete vibrators for better quality of concrete.

Public sector: The agency has standardized tests for concrete quality assurance. Concrete vibrators will increase the operational costs.

Project owner (PE):

Are there many soil loading vehicles or cars traveling through this road?

Public sector: There are consistent travels of trucks on such road.

Project owner (PE):

Are there any traffic signs to guide the direction?

Public sector: There are no traffic signs. The agency can install such signs if desired by the public.

Project owner (PE):
Summary of Project Overview

Reinforced concrete road construction project to connect between Kham Tao Subdistrict-Kham Teoi Sai Ban Kluai - Ban Don Daeng, Ban Kluai, Village No. 7, Kham Tao Subdistrict, Meuang District, Nakhon Phanom

Data disclosure (percentage)

84.85%

Data quality

Information regarding post-project concerns should be added.

Progression (percentage)

The work has been delivered.

People in the area asked the agency

“included the Installation of traffic signboards in the same way as it was before the road underwent construction”

“as well as the installation of Additional culverts to prevent waterlog”

confidence rate of the public is 77.6%

*questionnaires from the public sector

CoST Thailand

#Reinforced concrete road construction project
#Nakhon Phanom Province
Suggestions for CoST Thailand

The Comptroller General’s Department:

- should have a complete data disclosure mechanism (40 data items) in terms of both quantity and quality
- should provide a mechanism for improving the medium price standards based on analysis of the overview of CoST participating projects
- should provide a mechanism for analysing interesting characteristics and important issues of the project and request for further information
- Fundamental construction knowledge should be strengthened, including CoST’s data analysis process in order to enhance personnel potential. CoST information to develop personnel capability
- There is already an enhancement of platform of the operations. CoST projects
- should establish a participation mechanism of the people by implementing digital technologies

Project Owner:

- should develop personnel to disclose the construction project information completely with quality
- should prioritise public participation and immediately respond to complaints
- should use the CoST platform to promote the organisation’s image

The public:

- should be offered opportunities for participation through the CoST platform and transparent and neutral tracking of results
- should benefit from knowledge enhancement in relevant aspects, such as fundamental information concerning constructions, for instance the Public Procurement and Supply Administration Act, B.E. 2560 (A.D. 2017)
Appendix

Proactive Disclosure is determined by CoST Thailand regarding to Infrastructure Data Standard (IDS), in which the project owner needs to disclose information throughout the construction period, starting from the project provision and presentation process, project preparation, procurement, operation period, and post-project with details of project to be delivered until the completion of the project. The 40 data points required are:

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Disclosed data</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Project Identification</strong></td>
<td>1) Project owner</td>
</tr>
<tr>
<td>(6 item)</td>
<td>2) Budget</td>
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<tr>
<td></td>
<td>3) Project name</td>
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<td></td>
<td>4) Project Location</td>
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<td></td>
<td>5) Purpose</td>
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<td></td>
<td>6) Project description</td>
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<tr>
<td><strong>2. Project Preparation</strong></td>
<td>7) Project Scope (main output)</td>
</tr>
<tr>
<td>(7 item)</td>
<td>8) Environment impact</td>
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<td></td>
<td>9) land and settlement impact</td>
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<td></td>
<td>10) Contact details</td>
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<td></td>
<td>11) Funding sources</td>
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<td></td>
<td>12) Project Budget</td>
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<td>13) Project budget approval date</td>
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<tr>
<td></td>
<td>14) Procuring entity</td>
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<td></td>
<td>15) Procuring entity contact details</td>
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<td>16) (TOR)</td>
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<td></td>
<td>17) Procurement process</td>
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<td>18) Contract type</td>
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<td>19) Contract status</td>
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<td>20) Numbers of firms tendering</td>
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<td>21) Cost estimate</td>
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<td>22) Contract administrative entity</td>
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<td></td>
<td>23) Contract title</td>
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<td>24) Contract firm(s)</td>
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<td>25) Contract price</td>
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<td>26) Contract scope of work</td>
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<td>27) Contract start date Contract duration</td>
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<td>28) Escalation of contract price</td>
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<td>29) Variation to contract price</td>
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<td>30) Variation to contract duration</td>
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<td>31) Variation to contract scope</td>
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<td></td>
<td>32) Reasons for price changes</td>
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<td>33) Reasons for duration changes reasons for scope changes</td>
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<tr>
<td><strong>3. Procurement</strong></td>
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<td>(14 Item)</td>
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<td><strong>4. Implementation</strong></td>
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<td>(6 item)</td>
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<tr>
<td><strong>5. Project Completion</strong></td>
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<tr>
<td>(7 Item)</td>
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</tbody>
</table>
Responsible Areas under of Regional Office of the Comptroller General

Regional Office of the Comptroller General 1
(Chainat, Nonthaburi, Pathum Thani, Ayutthaya Lop Buri, Sara Buri, Sing Buri, and Ang Thong)

Regional Office of the Comptroller General 2
(Chanthaburi, Chachoengsao, Chon Buri, Trat, Nakhon Nayok, Prachin Buri, Rayong, Samut Prakan, and Sa Kaeo)

Regional Office of the Comptroller General 3
(Chaiyaphumi, Nakhon Ratchasima, Buri Ram, Yasothon, Si Saket, Surin, Amnat Charoen, and Ubon Ratchathani)

Regional Office of the Comptroller General 4
(Kala Sin, Khon Kaen, Nakhon Phanom, Bueng Kan, Maha Sarakham, Mukdahan, Roi Et, Loei, Sakon Nakhon, Nong Khai, Nong Bua Lamphu, and Udon Thani)

Regional Office of the Comptroller General 5
(Chiang Rai, Chiang Mai, Nan, Phayao, Phrae, Mae Hong Son, Lampang, and Lamphun)

Regional Office of the Comptroller General 6
(Kamphaeng Petch, Tak, Nakhon Sawan, Pichit, Phitsanulok, Phetchabun, Sukhothai, Uttaradit, and Uthai Thani)

Regional Office of the Comptroller General 7
(Kanchanaburi, Nakhon Pathom, Prachuap Khiri Khan, Phetchaburi, Ratchaburi, Samut Songkhram, Samut Sakhon, and Suphanburi)

Regional Office of the Comptroller General 8
(Krabi, Chumphon, Nakhon Si Thammarat, Phang Nga, Phuket, Ranong, and Surat Thani)

Regional Office of the Comptroller General 9
(Trang, Narathiwat, Pattani, Phatthalung, Yala, Songkhla, and Satun)
The activity was held on 23 January 2019 in front of Krung Thai Bank, Building B, Government Complex, Chaeng Wattana Road. The activity was organised from 10.00 to 14.00 hrs. with about 500 visitors.
Contact Information

http://process3.gprocurement.go.th/eGPCostWeb/home
http://www.cgd.go.th
0-2127-7431-2

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