



กระทรวงคมนาคม



กรมทางหลวง



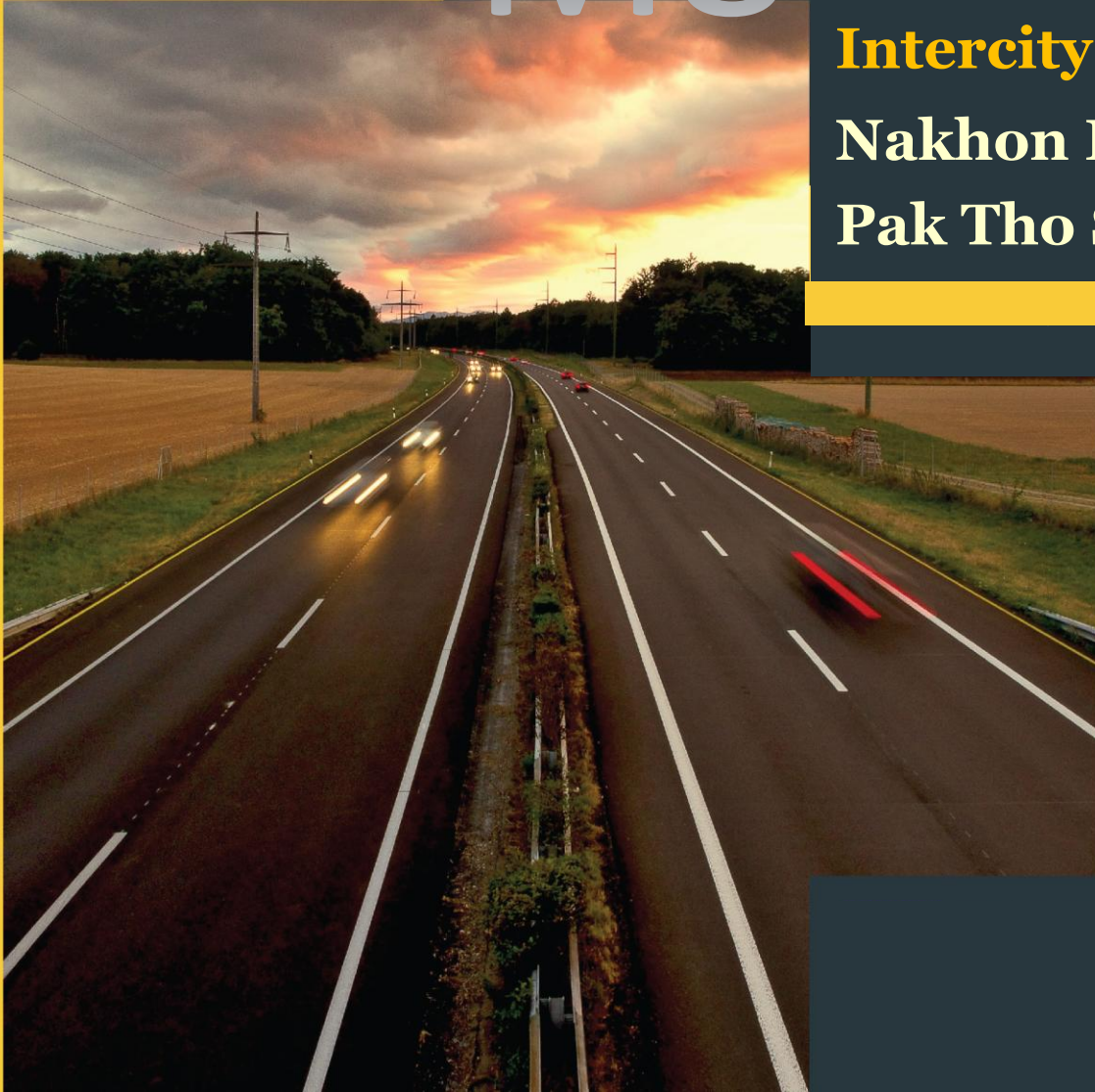
M8

Market Sounding Seminar for **the Nakhon Pathom – Cha Am Intercity Motorway Project :** **Nakhon Pathom - Talat Chinda - Pak Tho Section**

Private Partnership [PPP] Scheme

Market Sounding Seminar

21 July 2026



The content in this document, including any clarifications provided by the Department of Highways or consultants during the market sounding meeting, shall serve solely as preliminary information aimed at incorporating the viewpoints of the private sector into the project. It does not establish any boundaries or conditions pertaining to the selection of private party.

Additionally, the information and explanations mentioned may be subject to modifications or additions in the future. The Department of Highways does not provide certification or guarantees and disclaims responsibility for the completeness and accuracy of the information and explanations provided.

- ❖ **Market Sounding Objective**
- ❖ **Project Overview**
- ❖ **Project Readiness**
- ❖ **Project Feasibility**
- ❖ **Project Risk Analysis**
- ❖ **Readiness of relevant government agencies in formulating and implementing the project**

This document is primarily used for Market Sounding purpose and may be amended or changed afterwards.

Market Sounding Objectives

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Market Sounding Objectives



- ❑ As the private sector has more **expertise, experience, and technology in developing project**, Department of highways would like to maximize the private sector's participation in the project.
- ❑ Essentially, the purpose of the market sounding is **to inform the private sector of this investment opportunity**, and to gather the private sector's **feedbacks**.
 - Project Cost
 - Traffic Demand and Toll Revenue Forecast
 - PPP Model
 - Project Risk
 - Risk Allocation between Government and Private Sectors
 - PPP Promotional Measures and Risk Reducing Measures
 - Project Financial Assumptions
 - Payment Mechanism
 - Private Party's Qualification for Investment



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Market Sounding Seminar



21 July, 2026 08:30 a.m. – 12:00 p.m.



Zoom Meeting



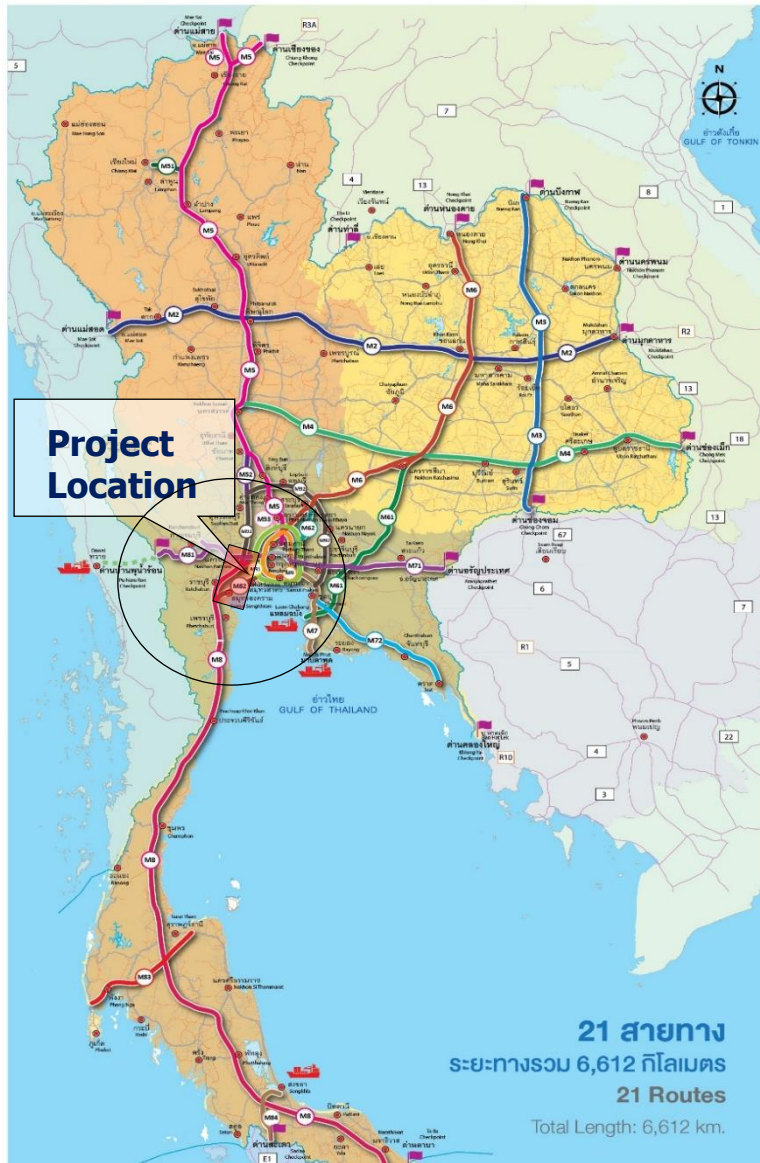
Key objectives :

- To inform the private sector of an investment opportunity
- To provide the private sector with brief project information
- Q&A session – To briefly gather private sector's interest in the project and concerns

Project Overview

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Project Background and Objectives



Background :

- Nakhon Pathom – Pak Toa motorway Project is the part of motorway No.8
- To be the 20-Year Master Plan of the Intercity Motorways (2017-2036)
- To be the Intercity Motorway Development Phase 1
- To be the strategic plan for private investment in state affairs 2015– 2019 prescribed by State Enterprise Policy Office

Objective :

- To develop the Motorway Network to southern region
- To be an alternative route to the southern region
- To facilitate freight transportation and encourage travelling
- To promote Thailand to be the transportation hub of region

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History and Current Status

Nakhon Pathom – Pak Toa (M8) Intercity Motorway Project

1997



Master Plan for
Intercity Motorway
Approved by Cabinet

2009



Technical
and Economic
Feasibility Study
Completed

2012



- Approval of
EIA Report

2014



Detailed
Engineering
Design
Completed

2018 - 2021



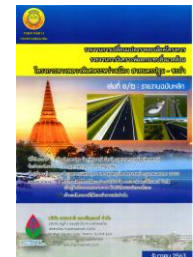
2018

- PPP Board
approved the
project principle

2021

- PPP Board
assigned DOH and
ministry of
transportation to
review the results
of the study and
analyze the
project in
accordance with
the present

2025



- Approval of
Revised EIA
Report

Route Alignment



- **Beginning of project :** connecting from Bang Yai – Kanchanaburi Intercity motorway (M81)
- **End of project :** connecting to – Pak Tho – Cha-Am Intercity motorway (M8)
- **Total Distance :** 61 km. (approx.)

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Typical Section : 4-6 lane elevated with Service Road

4 Lane

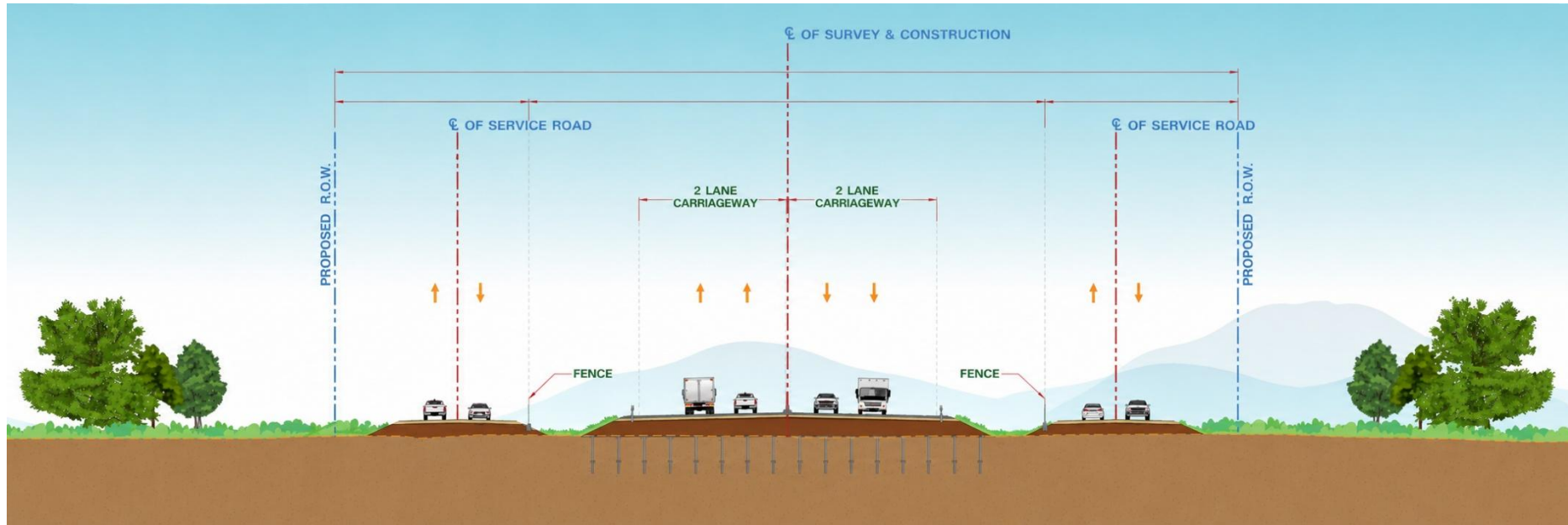


6 Lane



- 4-6 lane highway, width 3.60 meters per lane with outer shoulder and inner shoulder.
- The service road is a 2 lane highway, width 3.00 meters per lane with shoulders on each side.

Typical Section : 4-lane At-grade with Service Road



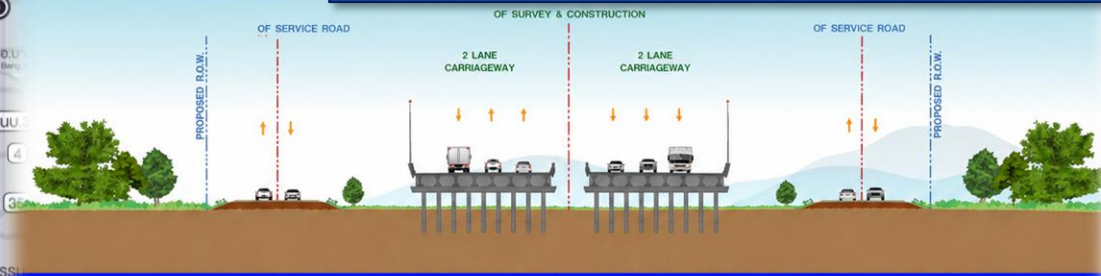
- 4 lane highway, width 3.60 meters per lane with outer shoulder and inner shoulder.
- The service road is a 2 lane highway, width 3.00 meters per lane with shoulders on each side.

Typical Section

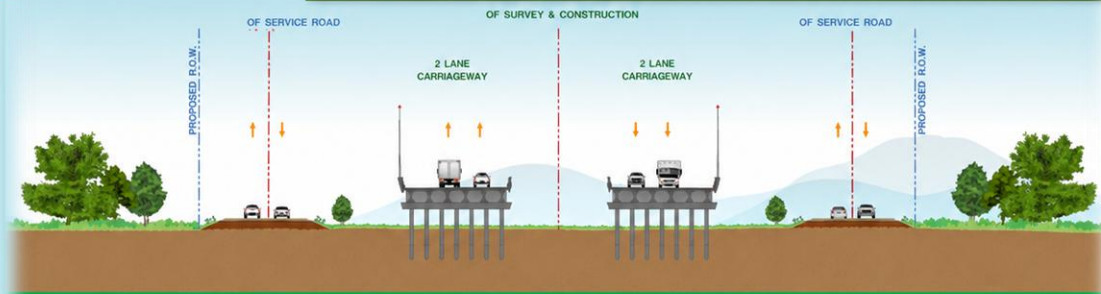


Typical Section

6 lane elevated motorway



4 lane elevated motorway



Spur Line (Nakhon Chai Si / Ratchaburi)



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ended or changed afterwards.

Entrance / Exit Point



6 Entrance / Exit Points

1. Tha Tamnak Interchange
2. Talat Chinda Interchange
3. Bang Phae Interchange
4. Ratchaburi Interchange
5. Wat Phleng Interchange
6. Pak Tho Interchange

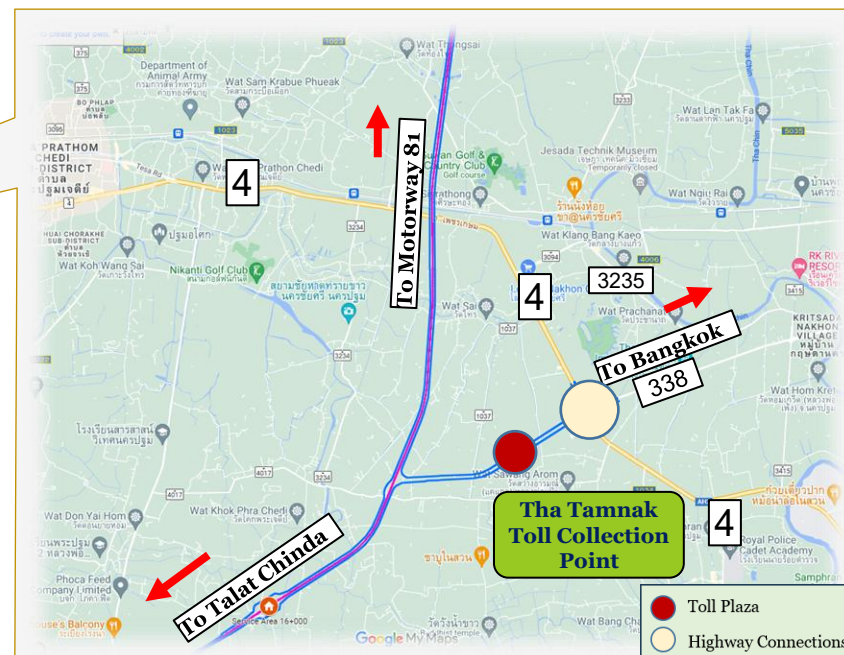
2 Motorway Connections

1. Bang Yai – Kanchanaburi (M81)
2. Pak Tho – Cha-Am (M8)



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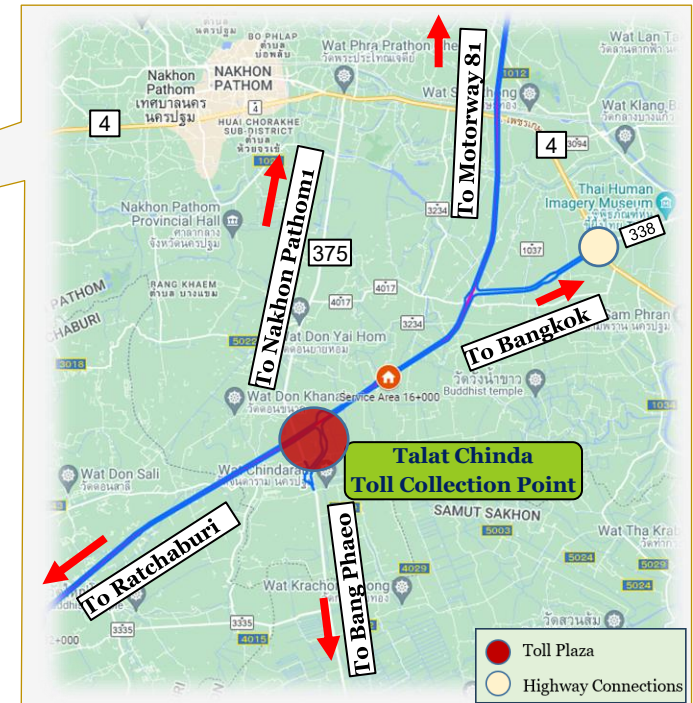
Tha Tamnak Interchange



- This is the interchange connecting to Phet Kasem and Borommaratchachonnani Road (HW.338) by improving of former Nakhon Chai Si intersection.
- Its function is to serve traffic in Nakhon Chai Si, Mueang and Sam Phran districts of Nakhon Pathom province, and also traffic from Bangkok.

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Talat Chinda Interchange



- This is the interchange connecting to Highway No.375.
- Its function is to serve traffic in Mueang and Sam Phran districts of Nakhon Pathom province, and Ban Phaeo districts of Samut Sakhon province.

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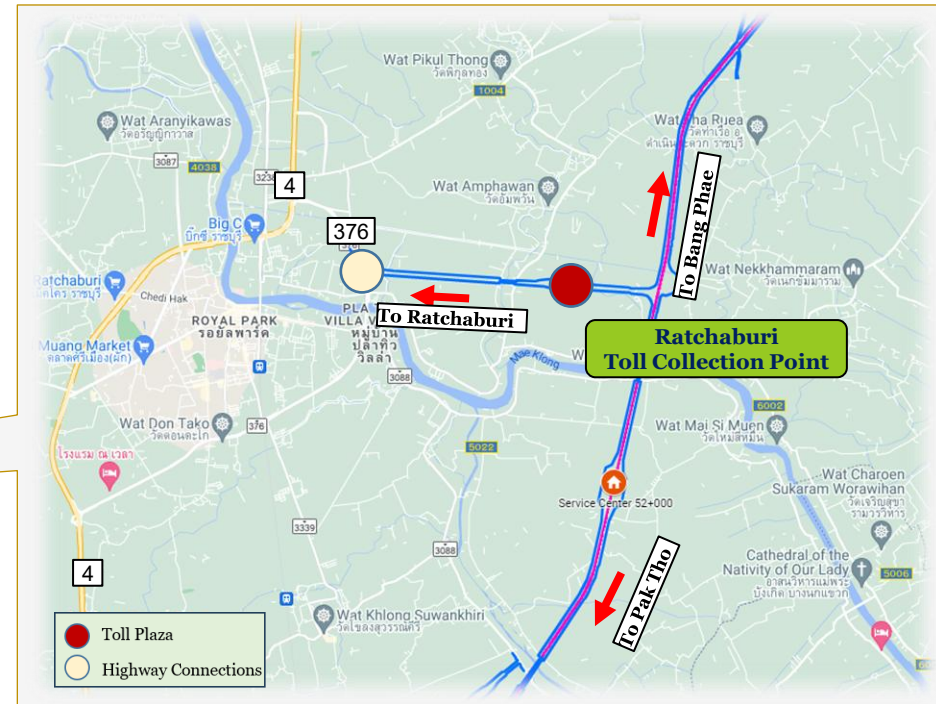
Bang Phae Interchange



- This is the interchange connecting to Highway No.325.
- Its function is to serve traffic in Bang Phae and Damnoen Saduak districts of Ratchaburi province.

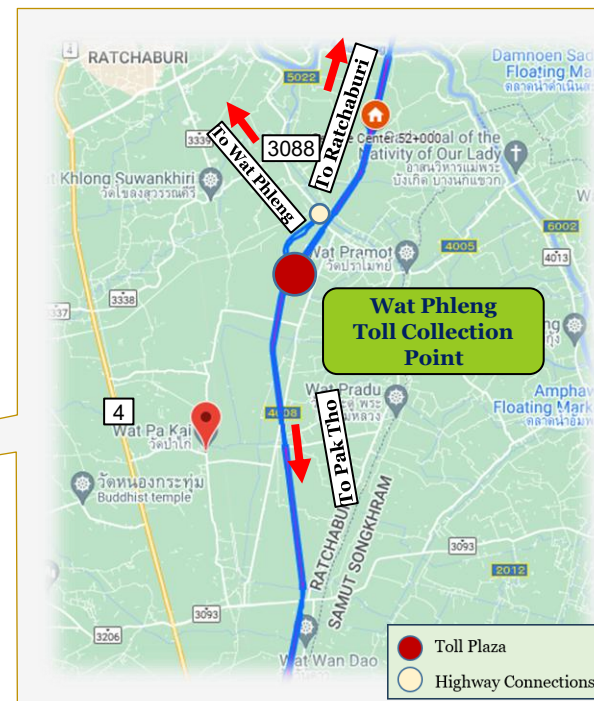
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Ratchaburi Interchange



- This is the interchange connecting to Ratchaburi Bypass Road.
- Its function is to serve traffic in Mueang districts of Ratchaburi province.

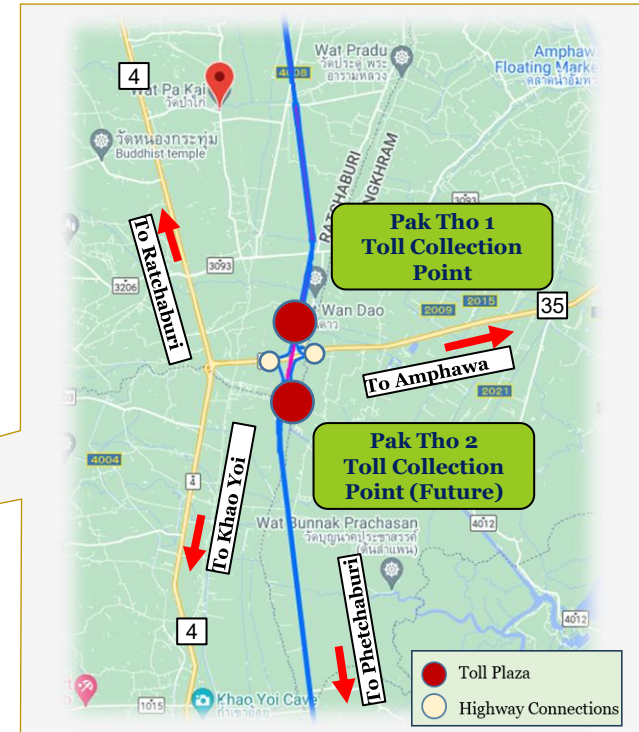
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- This is the interchange connecting to Highway No.3088.
- Its function is to serve traffic in Wat Phleng and Mueang districts of Ratchaburi province.

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Pak Tho Interchange



- This is the interchange connecting to Highway No.35 (Rama 2 Road).
- Its function is to serve traffic in Pak Tho and Mueang districts of Samut Songkhram province.

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Toll Collection System :

- ❑ Distance Base Toll Collection System (Closed System)
- ❑ Type of Toll Collection :
 - Manual Toll Lane (MTC)
 - Multilane Free Flow (M-Flow)



Weighing Station :

- ❑ Weigh in Motion System (WIM)
- ❑ Static Weighing System (SWS)

Rest Area



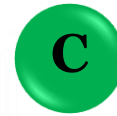
Service Area : Km. 16

- Area size approximately 25 rai.



Rest Stop : Km. 32

- Area size approximately 10 rai.



Service Center : Km. 56

- Area size approximately 40 rai.



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Project Phase and Cost

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Phase 1 : Design and Construction (3-6 years)



Phase 2 : Operation and Maintenance (Maximum of 30 years) 2



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Project Phase and Cost

Phase 1 : Civil work Construction

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Phase 1 : Civil work Construction



- ❑ The project design is a **4-6 lane at-grade and elevated motorway**, with 3.6 meters lane with outer shoulder and inner shoulder, **with 2 lane service roads certain sections of the route** with 3.00 meters lane with shoulders on each side



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Toll collection system



Toll collection system : **Close System**, in which users pay at the exiting ramps and the toll fees are classified based on vehicle types.

- **Manual Toll Lane (MTC)**
- **Multi lane free flow System (M-Flow)**

There are 7 **Toll Collection Points** as follows:

- 1. Tha Krachap
- 2. Tha Tamnak
- 3. Talat Chinda
- 4. Bang Phae
- 5. Ratchaburi
- 6. Wat Phleng
- 7. Pak Tho-1



Traffic Management and Control System

Designed to **ensure efficiency and safety for road users**, which shall include but not limited to the following;

- Traffic Data Collection System
- Radio Communication System
- Emergency Telephone System
- Closed-Circuit Television System (CCTV)
- Variable Message Sign
- Automated Speed Enforcement System



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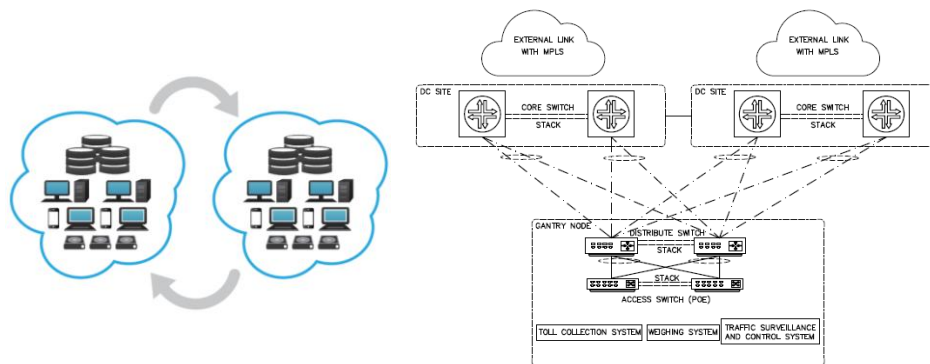
Phase 1 : System Work Construction and Installation



Asset Management System



Communication Network System



Power Distribution System



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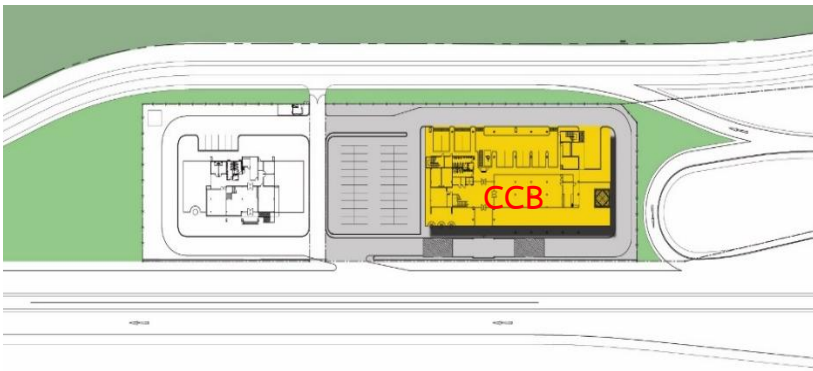
Central Control Building (CCB)



- ❑ The Central Control Building (CCB) shall be **located in Ratchaburi Toll Collection Point.**



- ❑ It will serve as a central traffic control center for **managing traffic flow** and **facilitating motorists** to ensure their safety.



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Operation and Maintenance Center

The **Operation and Maintenance Center** shall be **located in Ratchaburi Interchange**, The Private Sector shall provide for

- **overall management and administration.**
- **for storage** of maintenance and repair materials, equipment, machine, as well as the yard area for stacking or heaping of materials to be used.



Operation And Maintenance Center



Operation And Maintenance Unit

Agency Buildings

The Private Party shall design and construct the Agency Buildings including various buildings as follows:



(a) DOH's Superintendent office at Ratchaburi toll Collection Point



(b) Highway Police Station at Ratchaburi toll Collection Point



(c) Rescue Building at Talat Chinda, Pak Tho-1 and Tha Yang toll Collection Point



(c) Agency Residence at Ratchaburi Interchange

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Rest Area Project

The Private Party shall design and construct the Rest Area in accordance with DOH standards, with the responsibilities split as detailed below:

Private Sector Responsibilities

- Design and construction of all building structures and core infrastructure.
- Full hardscape and extensive softscape (landscaping) within the boundary.
- Design and installation of all primary on-site utility systems (electric, water, drainage) within the Rest Area perimeter.

Government Sector Responsibilities

- Initial clearing, grading, and earthwork preparation.
- Perimeter fencing and secure area definition.
- Provision of necessary off-site Service Roads.
- Extension and connection of main utilities (Electricity, Water, Drainage) from the Public Drainage Canal to the Rest Area boundary.



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Project Phase and Cost

Phase 2 : Operation & Maintenance

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Phase 2 : Operation



Toll Operation & Management

The private sector shall be responsible for toll operation and management using **Closed toll collection system** with a capability of **vehicle classification**, and toll fees will be **collected at the exits**.



Automated Speed Enforcement

the private sector shall **provide and operate automated speed detectors**, as well as facilitate and coordinate with government officers.



Customer Service Center

shall be operated by the private sector to **provide all necessary services of the project**, such as M-Flow registration, providing traveler information, receiving and managing any transaction complaints.



Traffic Surveillance and Detection and Dynamic Traveler Information

The private sector shall perform the action of **observing traffic conditions**, detecting incidents, and assembling information through automated processes for traffic operation efficiency and analysis.

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Traffic Incident Management

The private sector shall **offer traveler assistance service for all incident and emergency cases** to ensure safety and convenience of travelers.



Highway Police Support

The private sector shall provide supporting staffs, vehicles, and related equipment to **support the highway police's operations, as specified.**



Call Center Service

Call Center Services / Emergency Telephone Number shall be **available all the time (24/7)** in order to provide all necessary emergency messages, such as route guidance and traffic information, and to receive any emergency messages from travelers.

Civil Work Maintenance



Highway Maintenance

The private sector shall **maintain all the roadway in a good condition**. A preventive maintenance shall be applied to ensure safety and serviceability of the project.

Super and Sub Structure Maintenance

The private sector shall **maintain both super and sub structure of the project**, aligned with DOH's standards and protocols, to ensure their sufficient and safe conditions.



System Work Maintenance

The private sector shall **consistently implement system work maintenance**, together with a preparation of **maintenance plan** to ensure system work serviceability. The system work **spare parts** shall be sufficiently maintained to the demand for replacement and ensure operation service level.



Rest Area



OPERATION



MANAGEMENT COST

- Property Management Contract
- Maintenance Services
- Security Services
- Cleaning Services
- Gardening Services



DIRECT COST

- Electricity Cost
- Water Cost
- Telephone / Internet Cost
- Waste Collection Cost
- Septic Waste Pumping Cost



INDIRECT COST

- Office Supplies & Consumables
- Project Insurance Cost



MAINTENANCE



ROUTINE MAINTENANCE (ANNUAL)

- General Maintenance Works
- Pavement Maintenance Works
- Fuel Station Maintenance



PERIODIC MAINTENANCE (LIFECYCLE-BASED)



Internal Roads and Parking Area Rehabilitation



Landscape and Softscape Area Rehabilitation



Building Rehabilitation



Fuel Station Rehabilitation



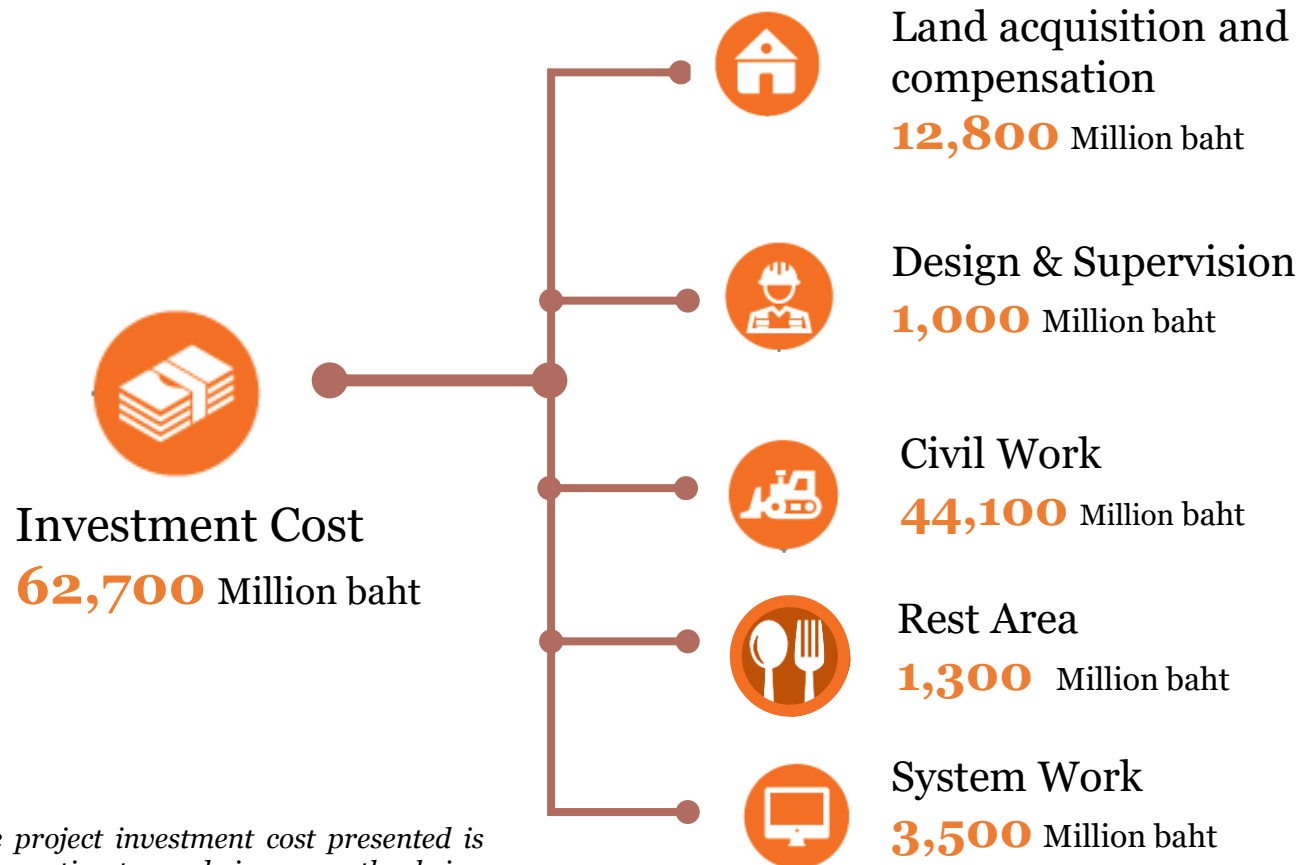
Building Systems and Operational Equipment Rehabilitation



Pedestrian Overpass Rehabilitation



Investment Cost

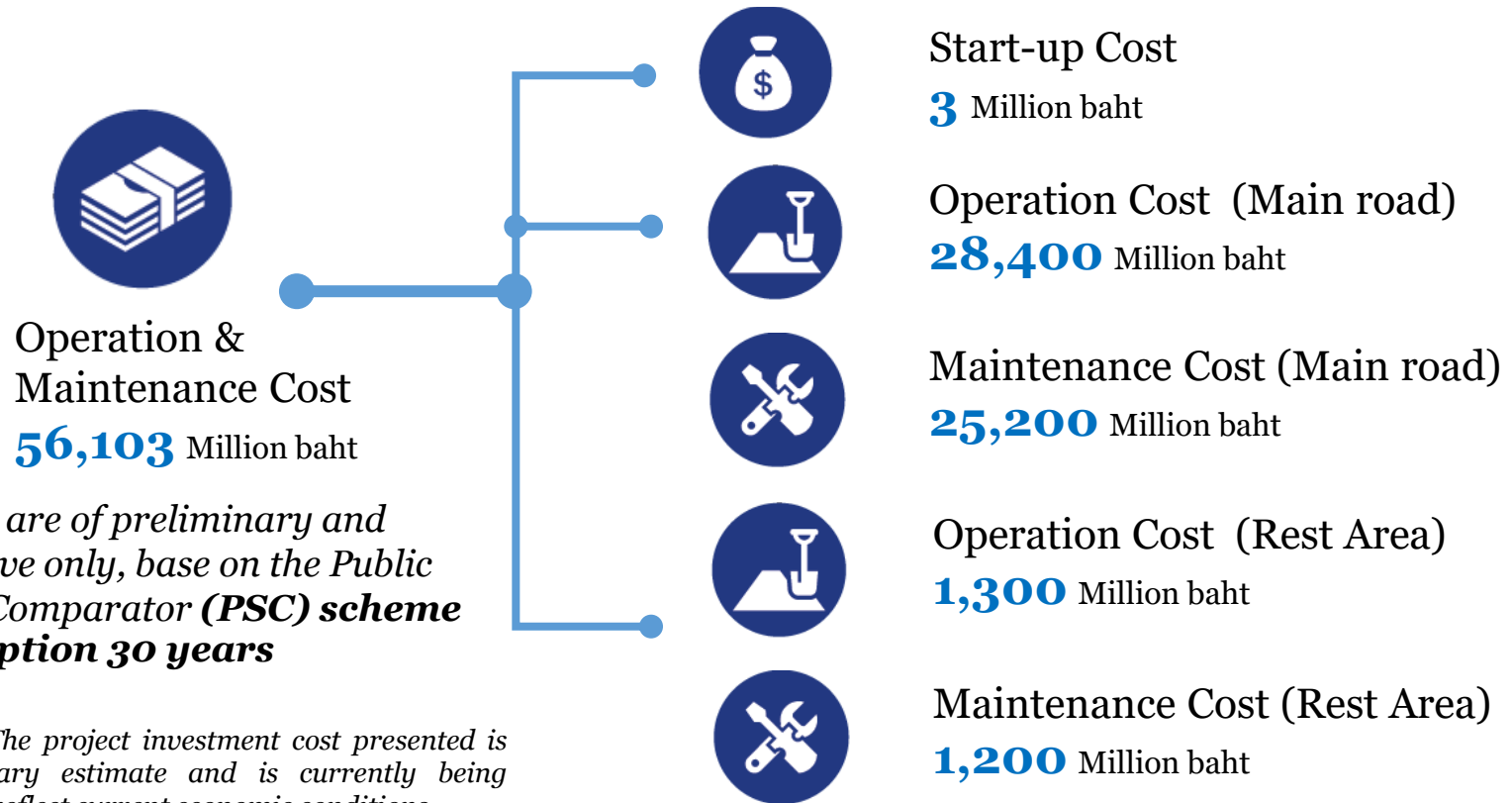


Remark : The project investment cost presented is a preliminary estimate and is currently being updated to reflect current economic conditions.



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Operation & Maintenance Cost



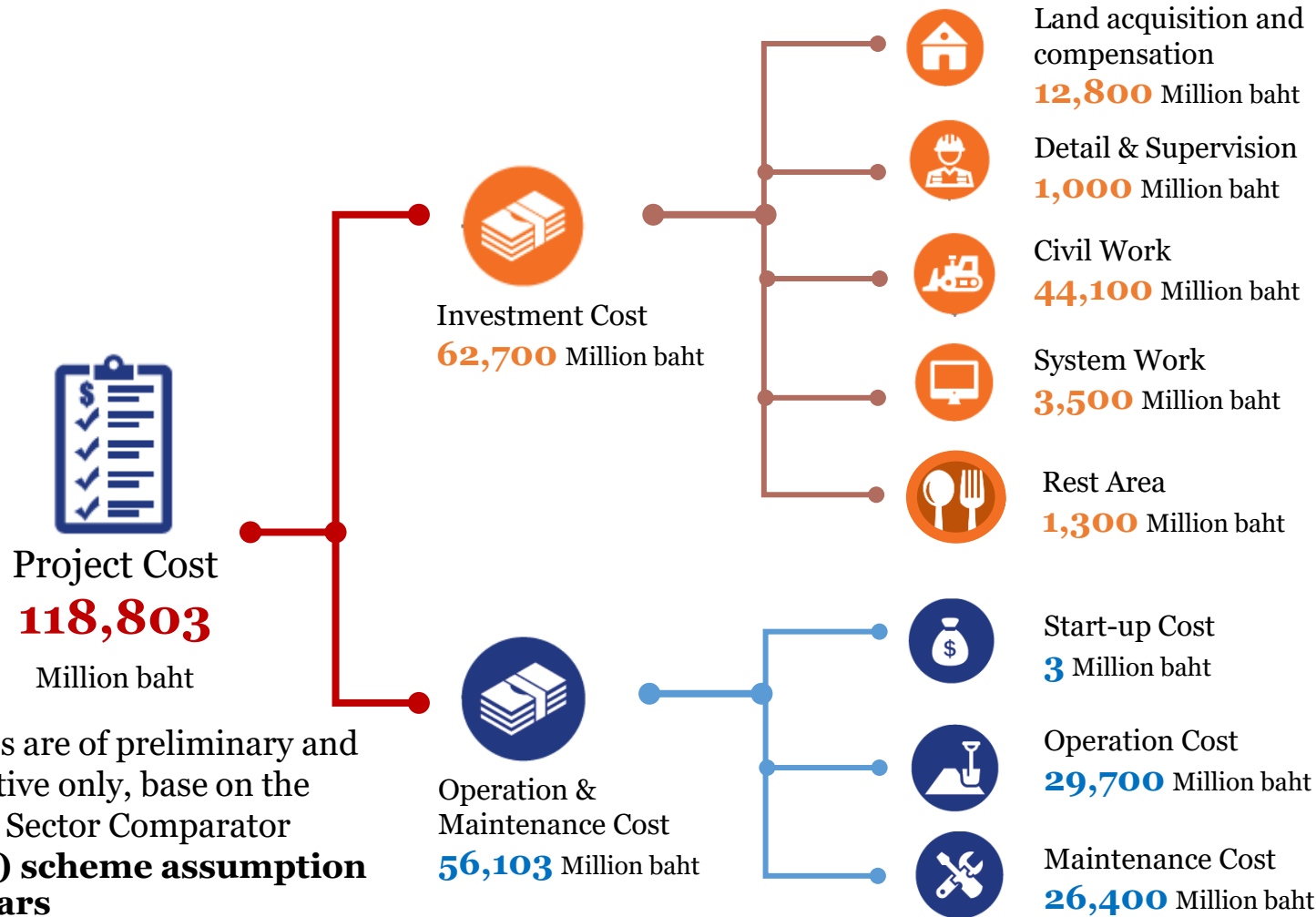
Figures are of preliminary and indicative only, base on the Public Sector Comparator (PSC) scheme assumption 30 years

Remark : The project investment cost presented is a preliminary estimate and is currently being updated to reflect current economic conditions.



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Project Cost



Figures are of preliminary and indicative only, base on the Public Sector Comparator (PSC) scheme assumption 30 years

Remark : The project investment cost presented is a preliminary estimate and is currently being updated to reflect current economic conditions.

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Project Development Timeline

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Project Development Timeline



2026

PPP Appraisal Report
to be completed

2027

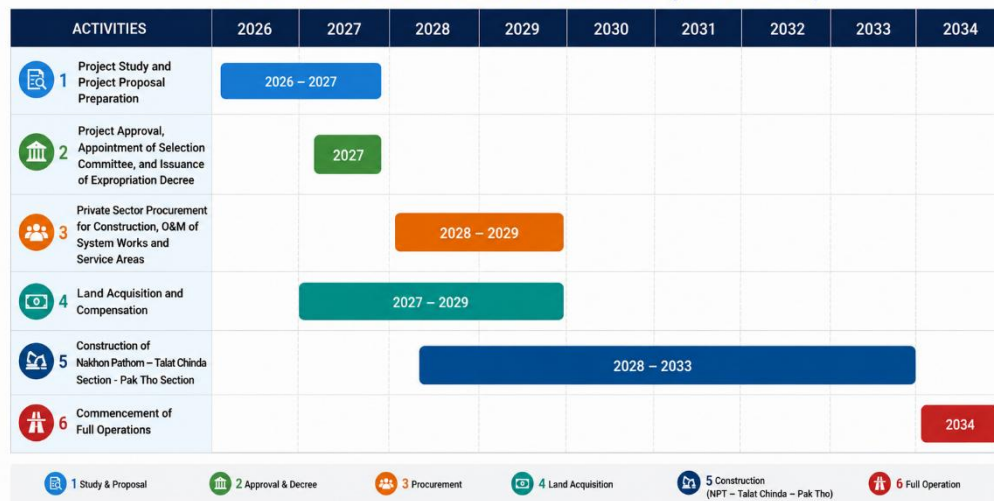
Project Approval
and PPP Selection
Process

2028 - 2033

Construction

- Civil Work : 5 Years
- System Works and
Service Area : 3 Years

PROJECT IMPLEMENTATION SCHEDULE (2026 – 2034)



Note: Years are shown in Gregorian Calendar (2026–2034).

2027 - 2029

Land Acquisition
and Compensation

2034

Operation
Commencement

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Rest Area Development Timeline

The Private Sector shall be entitled to develop and operate each site in phases. The development phasing, including the investment timeline and the area developed in each phase, is currently under consideration and will be determined by the Department of Highways.

The development and subsequent expansion of the Rest Areas shall comply with the requirements of the Department of Highways and all applicable laws, regulations, and rules.

Rest Area Site		Total Area (Approx.)	
 Service Area	Km. 16 + 000 (Approx.)	Outbound	25 rai
		Inbound	25 rai
 Rest Stop	Km. 32 + 000 (Approx.)	Outbound	10 rai
		Inbound	10 rai
 Service Center	Km. 56 + 000 (Approx.)	Outbound	40 rai
		Inbound	40 rai

Project Readiness

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(1) Consistency and Readiness of Other Projects

- Connect to the Bang Yai - Kanchanaburi Intercity Motorway Project (M81)
- Connect to the Cha Am - Chumphon Intercity Motorway Project (M8)

(2) Readiness regarding the acquisition of property rights or land expropriation

- DOH will enact Royal Decree for the expropriation of land required for the development of the Project

(3) Legal Readiness

- Registration of Highways: DOH will register Motorway No.8 as special highways
- Law enactment relating to collection of Toll Fees: DOH will proceed with the enactment of Ministerial Regulations Prescribing fees for Use of Highways by Auto Vehicles on Motorway No. 8, and will issue the Notification of Department of Highway regarding Determination of Toll Fee Payment by Electronic Means on Motorway No. 8
- Standard of Rest Area: DOH has already issued Department of Highways Regulations RE: Standards and Characteristics of Rest Areas in Motorways and Concession Highways B.E. 2566

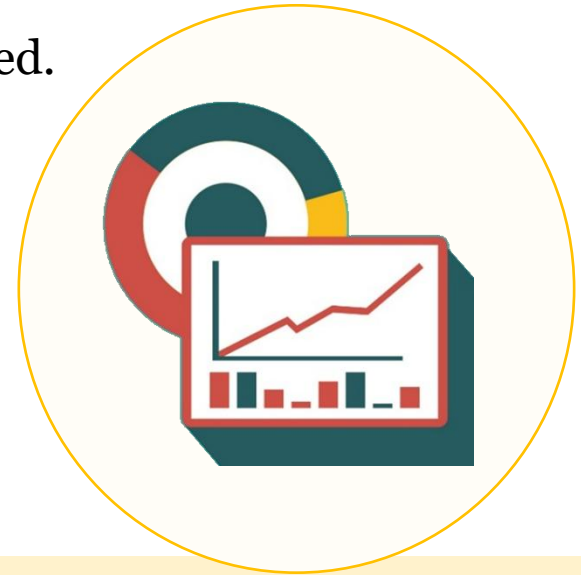
(4) Environmental Readiness

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Project Feasibility

Traffic Demand and Toll Revenue Forecast

- ❑ The base model was prepared to simulate and replicate existing traffic condition along the corridor was used in the **forecast over 2034 to 2063 with the defined assumptions.**
- ❑ Population growth and economic activity of the area such as **GDP growth.**
- ❑ **All future projects in the study area** are included.
- ❑ Traffic forecasts have been **applied for each type of vehicles.**



- ❑ The toll collection system shall be an closed toll system, in which users pay at the exiting and the toll fees is classified based on vehicle types



Remark : Toll Rate at Current Prices

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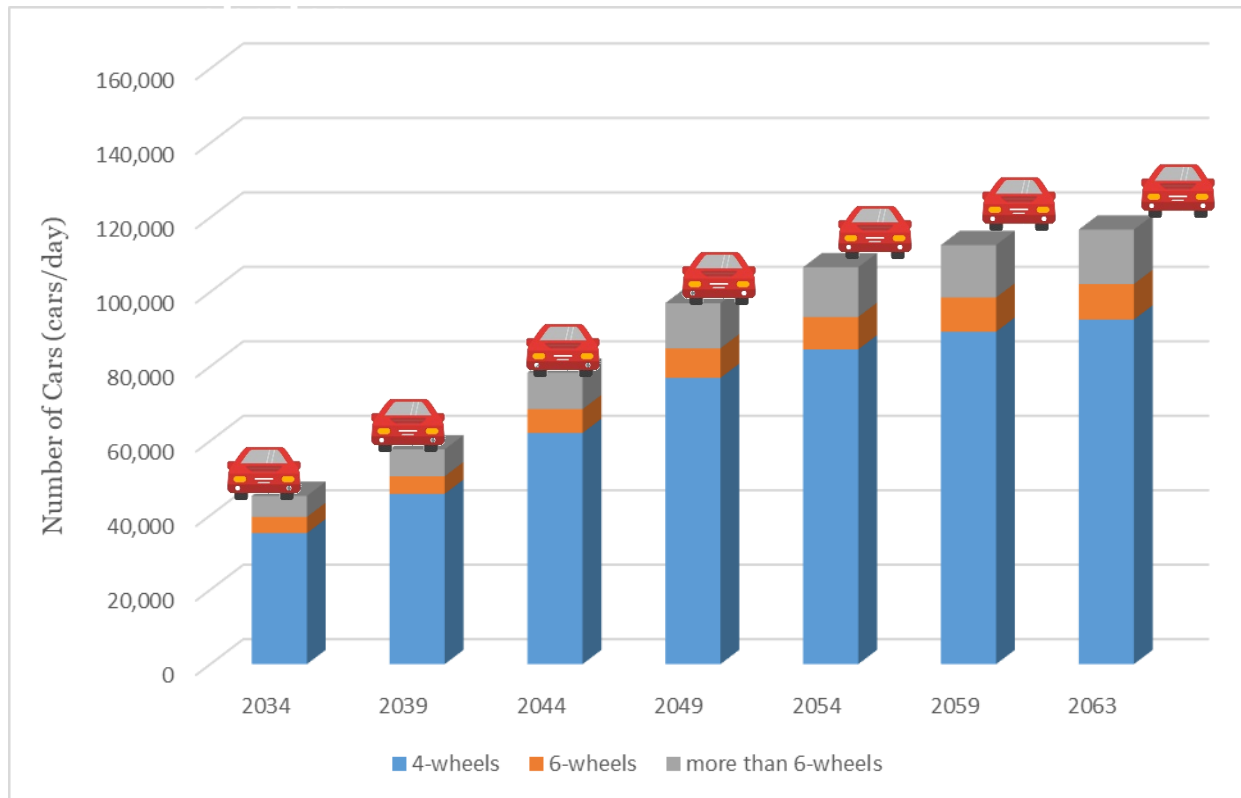
Traffic Demand Forecast



The project is expected to have an average traffic volume of **45,204 vehicles per day** when its operation starts **(in 2034)**. In **2063**, the traffic is predicted to reach approximately **116,726 vehicles per day**

Total Traffic (30 years)

959 million vehicles

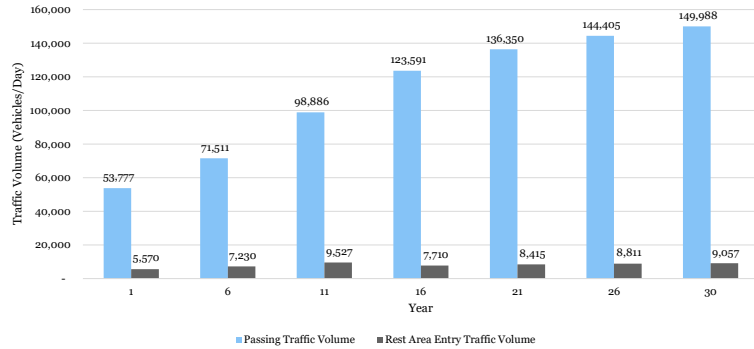


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Traffic Demand Forecast



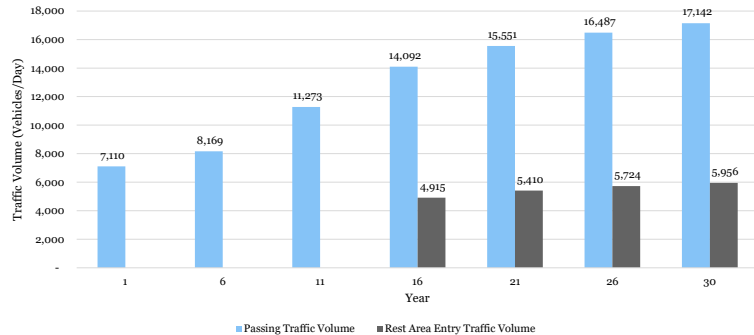
Service Area : Km. 16 + 000



Service Area : Km. 16 + 000

At the start of operation in 2034 (Year 1), the project is expected to have an average passing traffic volume of **53,777 vehicles per day** and an average rest area entry traffic volume of **5,570 vehicles per day**. By 2063 (Year 30), passing traffic is projected to increase to approximately **149,988 vehicles per day**, while rest area entry traffic is expected to reach **9,057 vehicles per day**.

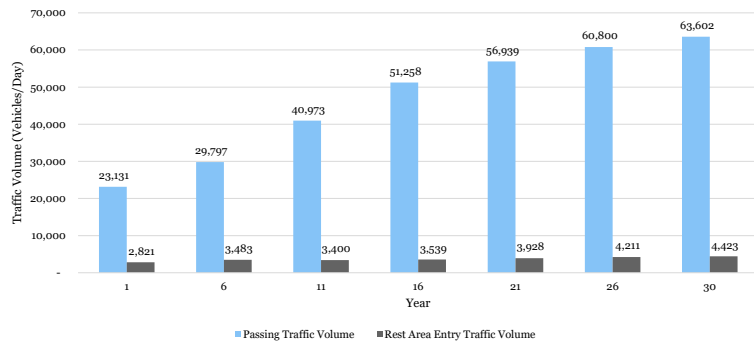
Rest Stop : Km. 32 + 000



Rest Stop : Km. 32 + 000

At the start of operation in 2048 (Year 15), the project is expected to have an average passing traffic volume of **14,092 vehicles per day** and an average rest area entry traffic volume of **4,915 vehicles per day**. By 2063 (Year 30), passing traffic is projected to increase to approximately **17,142 vehicles per day**, while rest area entry traffic is expected to reach **5,956 vehicles per day**.

Service Center : Km. 56 + 000



Service Center : Km. 56 + 000

At the start of operation in 2034 (Year 1), the project is expected to have an average passing traffic volume of **23,131 vehicles per day** and an average rest area entry traffic volume of **2,821 vehicles per day**. By 2063 (Year 30), passing traffic is projected to increase to approximately **63,602 vehicles per day**, while rest area entry traffic is expected to reach **4,423 vehicles per day**.

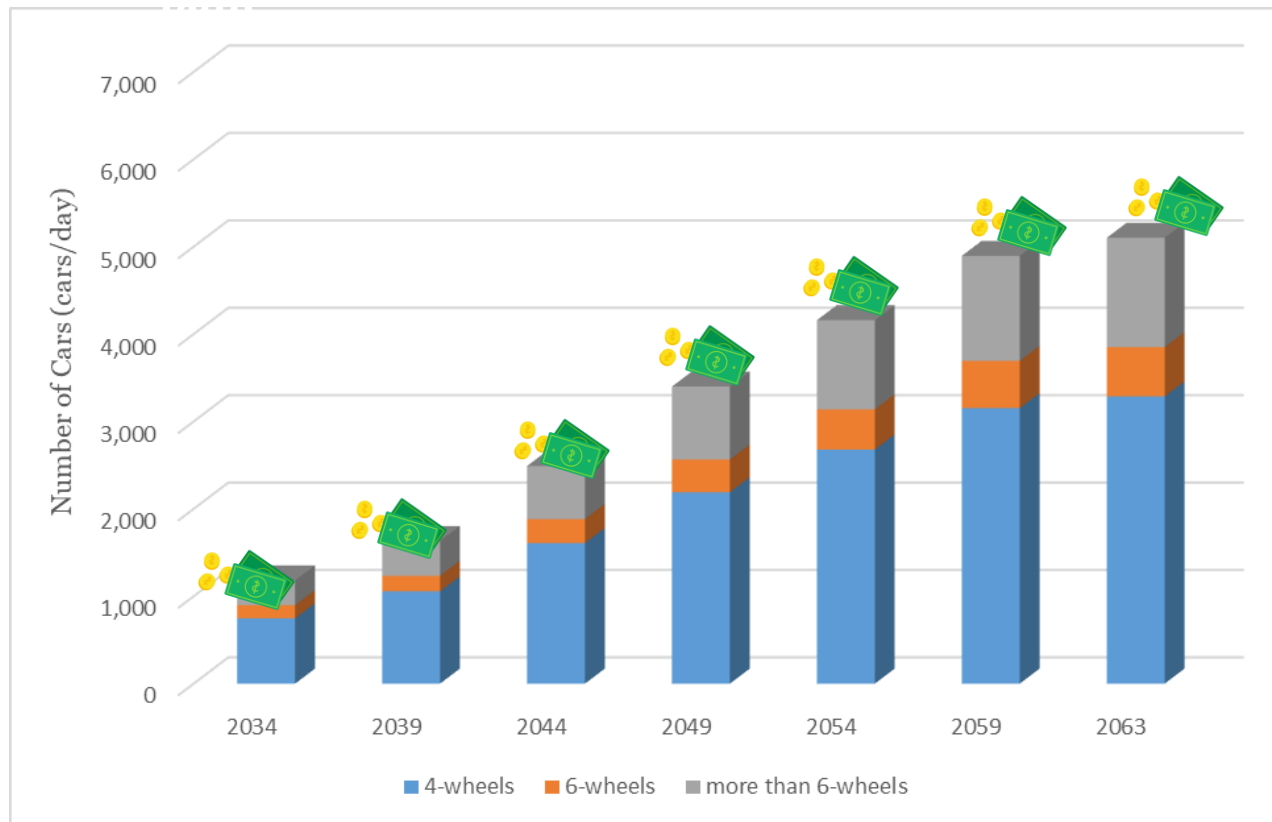
Toll Revenue Forecast



the project is expected to have the toll revenue of approximately **1,181 million baht per year (in 2034)**. In **2063**, the toll revenue of about **5,101 million baht per year**.

Total Revenue (30 years)

93,202 million baht



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Rest Area Project Revenue Assumption



Rental rate

- Rental rate increases by 12% every 3 years during 2034–2042
- From 2043 onwards, rental rate increases by 10% every 3 years

Commercial Revenues

- Includes food and beverage (F&B), drive-thru, convenience stores, and lifestyle shops, such as souvenirs
- Occupancy rate: 75% in Year 1, 80% in Year 2, and 85% from Year 3 onwards

Fuel Station and EV Charging Revenues

- Estimated from rental income of fuel station and EV charging areas

Other Revenues

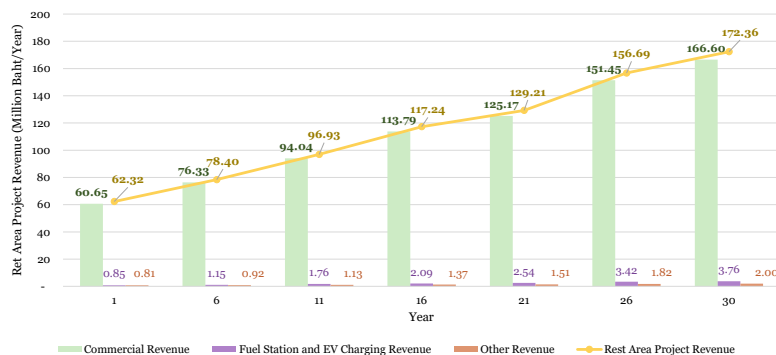
- Advertising space rental revenue
- Revenue from rental of booth areas and event spaces

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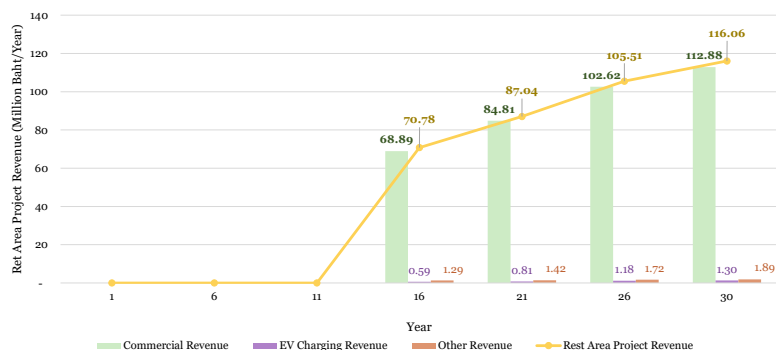
Revenue Forecast



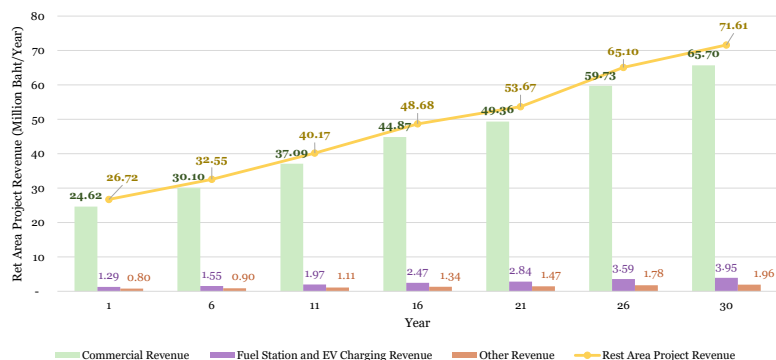
Service Area : Km. 16 + 000



Rest Stop : Km. 32 + 000



Service Center : Km. 56 + 000



Revenue Forecast

Revenue (Million Baht)	Service Area Km. 16+000	Rest Stop Km. 32+000	Service Center Km. 56+000	Total
Commercial Revenue	3,355.20	1,399.77	1,324.21	6,079.18
Fuel Station and EV Charging Revenue	63.16	13.78	73.38	150.31
Other Revenue	40.47	23.64	39.62	103.73
Total	3,458.83	1,437.19	1,437.21	6,333.22

Service area revenue comprises commercial revenue of THB 6,079 million, fuel station and EV charging revenue of THB 150 million, and other revenue of THB 103 million, with total revenue of THB 6,333 million.

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Economic Analysis

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Economic Feasibility analysis

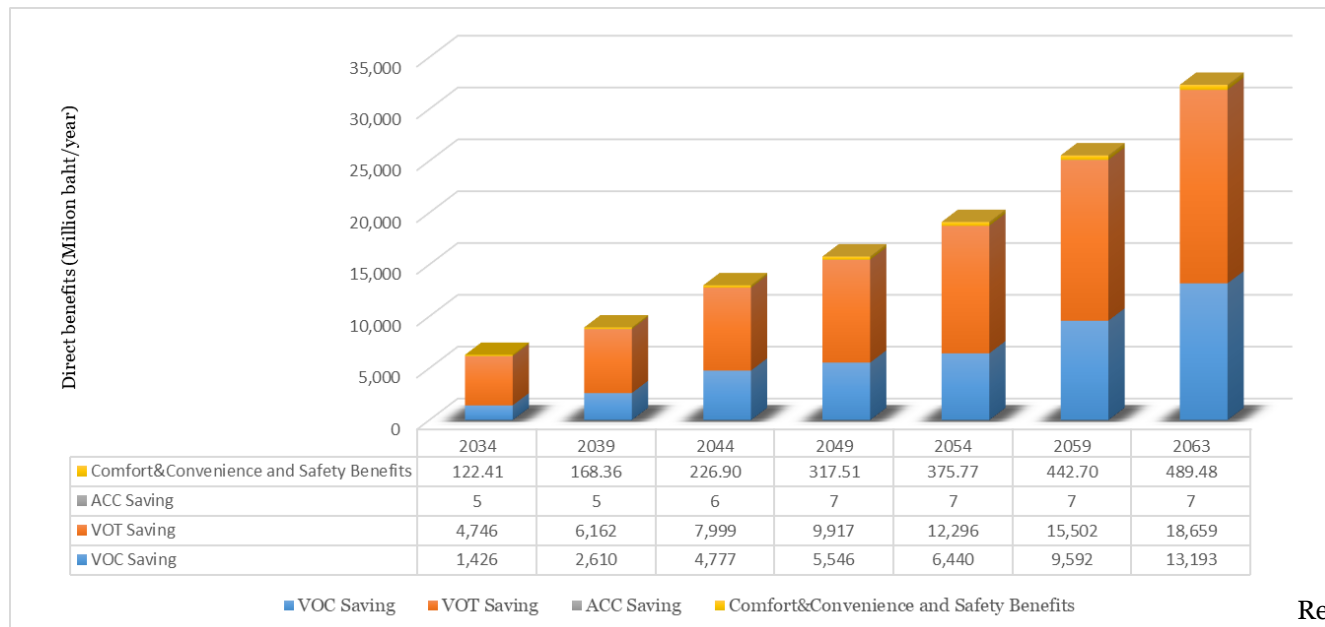


Direct benefits

-  Vehicle Operating Cost Saving
-  Travel Time Saving
-  Accident Cost Saving
-  Safety Benefits
-  Comfort and Convenience Benefits

Economic benefits

- Economic Internal Rate of Return (EIRR) **12%**
- Net Present Value (NPV) **57,000 Million baht***
- Benefit Cost Ratio (B/C ratio) **2.1**



Remark : Discount Rate 7%

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Financial Analysis

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Financial Assumptions

Project development period	37 years (A.D. 2527–2063)
- Construction period (including land acquisition) - Operation and maintenance period	7 years (A.D. 2027–2033) 30 years (A.D. 2034–2063)
Discount rate (Government perspective)	3.00%
Total Cost*	97,142.87 mn
CAPEX (Land acquisition, Civil work, System work)	65,677.14 mn
OPEX	31,465.73 mn
Total Revenue	94,180.27 mn

*Remark : * The project investment cost presented is a preliminary estimate and is currently being updated to reflect current economic conditions.*

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Financial Results	
Project FIRR	(0.20%)
Project NPV at discount rate of 3.00%	(29,277.05)
B/C Ratio at discount rate of 3.00%	0.61x
Project Payback Period	After 30 years

Project Risk Analysis

Project Risk Analysis



1

Construction

- Land expropriation delay
- Protest project construction
- Project Construction Protest Risk
- Construction Cost Overrun Risk
- Construction Delay Risk
- Construction Quality Risk
- Construction Site Health and Safety Risk
- Design and Construction Quality Risk
- Pollution and Safety Hazard Risk during Construction

2

Operation

- Traffic Demand Risk
- Risk of Inability to Increase Toll Rates
- Operating Cost / Maintenance Cost Overrun Risk
- Risk of User Volume Below Projections
- Risk of Insufficient Facilities for User Demand Risk of Commercial Space Leasing Revenue Below Projections
- Management Inefficiency Risk

3

General

- Legal and Regulatory Risk
- Financial Risk (e.g., interest rates, inflation, and exchange rates, where applicable)
- Force Majeure Risk
- Political Risk
- Government Policy Uncertainty Risk
- Macroeconomic Volatility Risk
- Natural Disaster Risk

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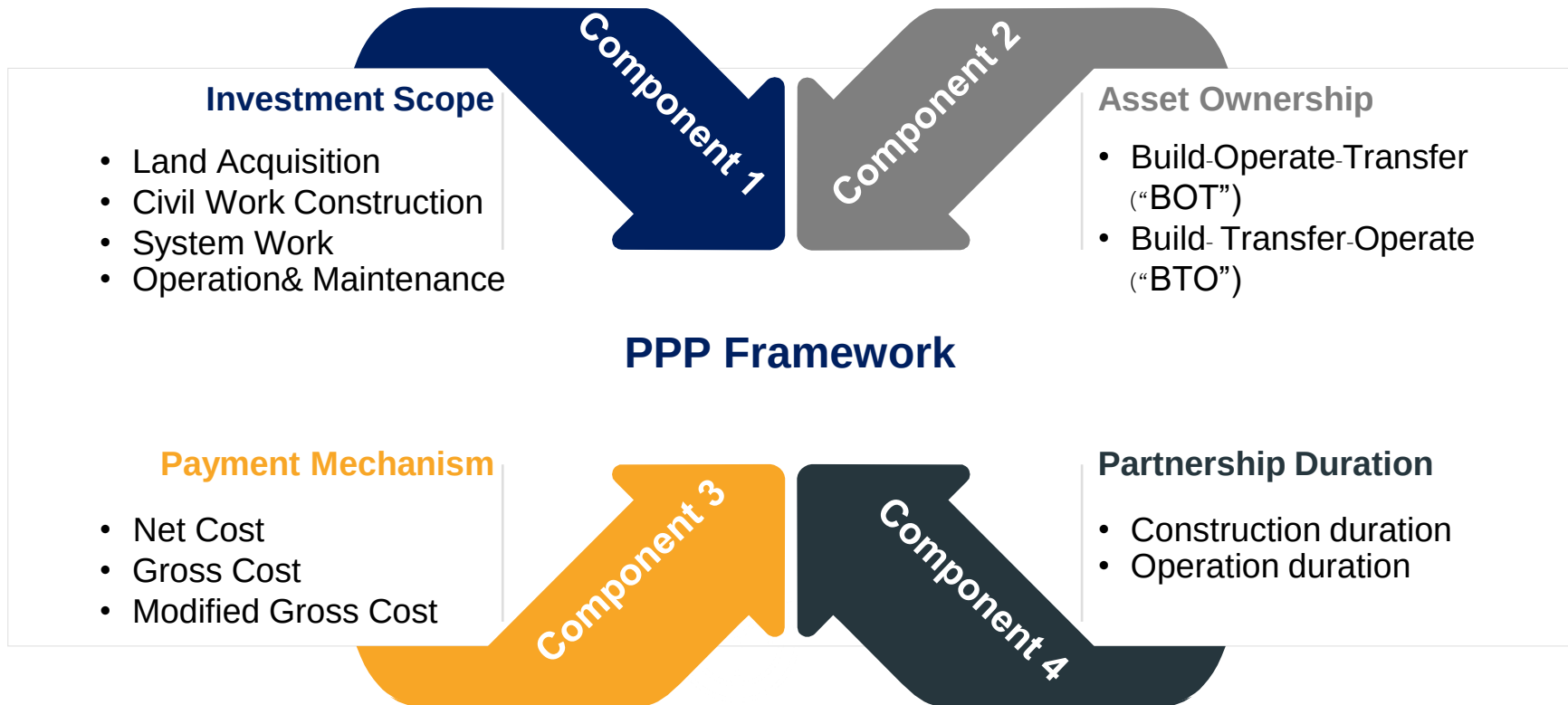
Public-Private Partnership (PPP) Options

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Public-Private Partnership (PPP) Framework

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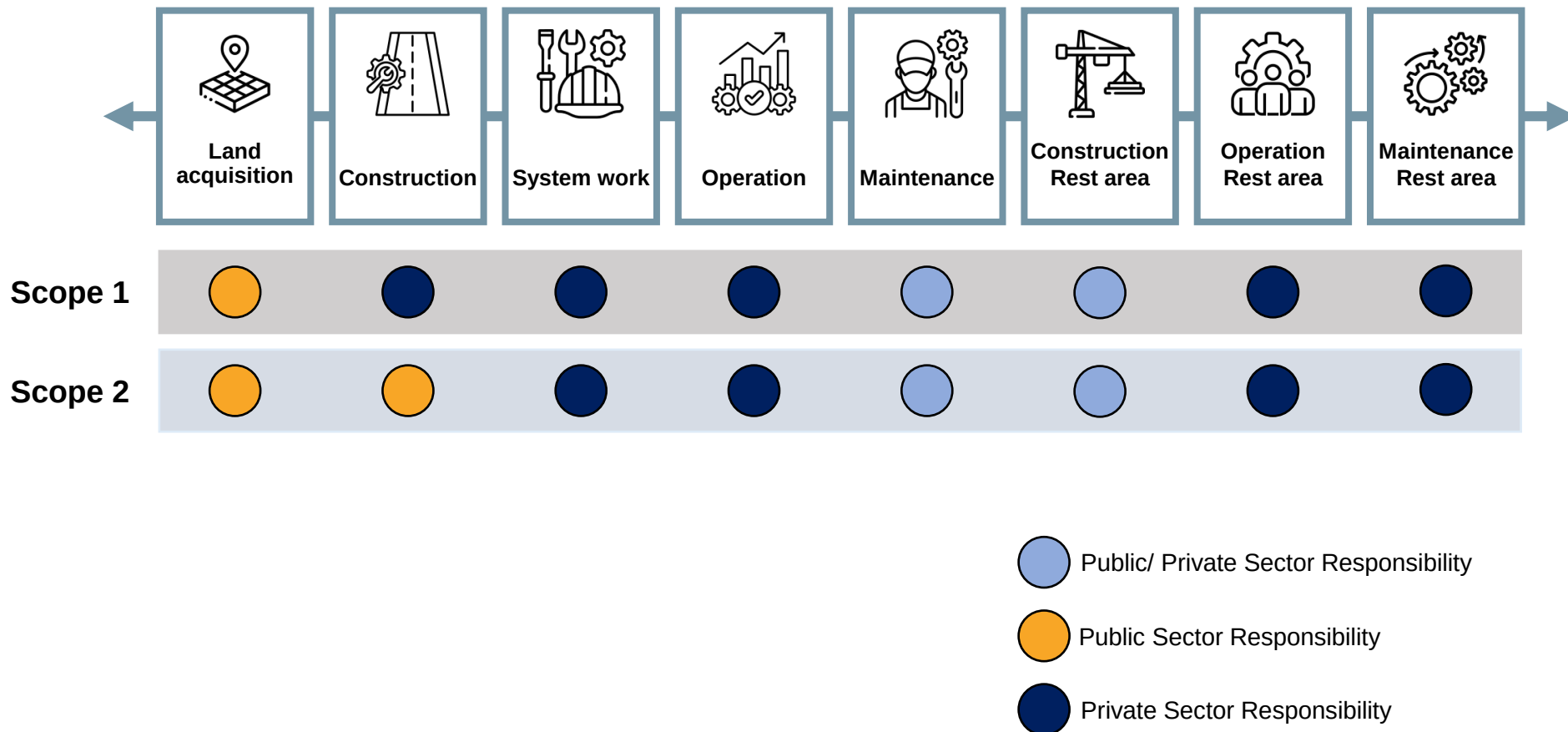
The PPP scheme will depend on the following components



Note: The results presented are preliminary and subject to changes.

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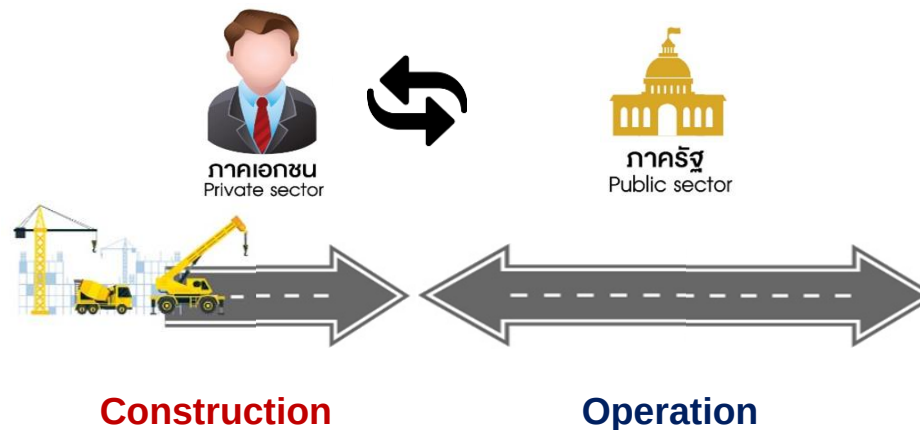
Investment scope



Note: The results presented are preliminary and subject to changes.

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Option 1: Build- Transfer- Operate (“BTO”)

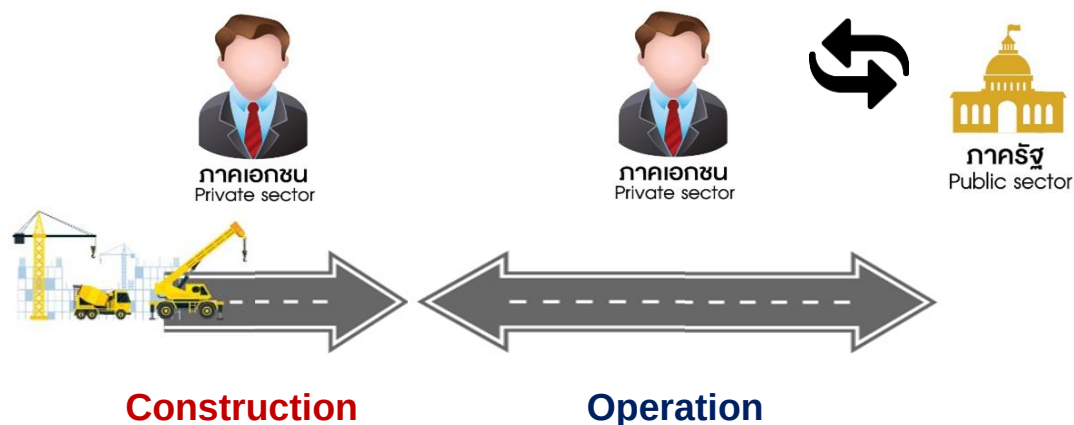


Under the Build-Transfer-Operate (BTO) scheme: The project’s asset will be transferred to the public sector upon construction completion.

Note: The results presented are preliminary and subject to changes.

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Option 2: Build- Operate-Transfer (“BOT”)



Under the **Build-Operate-Transfer (BOT) scheme**: The project's asset will be transferred to the public sector at the end of partnership duration

Note: The results presented are preliminary and subject to changes.

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Option 1: PPP Net Cost

- The private sector collects toll revenue and non-toll revenue.
- The private sector may be entitled to receive co-investment (subsidy) from the government or share project revenue with the government.



Note: The results presented are preliminary and subject to changes.

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Option 2: PPP Gross Cost

- The private sector collects toll revenue on behalf of the government and receives availability payment from the government in return for providing the project.
- The private sector is entitled to non-toll revenue.



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Option 3: PPP Modified Gross Cost

- The private sector collects toll revenue on behalf of the government and receives availability payment from the government in return for providing the project.
- The private sector is entitled to non-toll revenue **and receives additional incentive payments based on toll revenue collected (i.e. 5% of toll revenue).**



Note: The results presented are preliminary and subject to changes.

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PPP Partnership Duration



7 Years



Up to 30 Years



**Construction
(Include land acquisition)**

Operation

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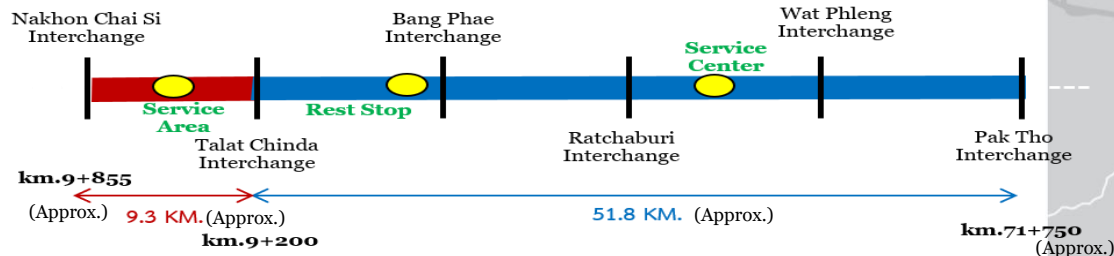
Project Scopes and Contract Period

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Project Scopes and Contract Period



Project Scope of Investment



M8 Nakhon Pathom – Pak Tho

1. Land Acquisition and Compensation	DOH
2. Civil Work Construction	
2.1 Main Road	DOH / Private Sector
2.2 Service Road	DOH / Private Sector
2.3 Rest Area	Private Sector
3. System Work Construction and Installation	DOH / Private Sector
4. Operation and Maintenance	
4.1 Main Road	Private Sector
4.2 Service Road	DOH
4.3 Rest Area	Private Sector



The Contract period is within **30 years** after the commencement of commercial operation date

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Potential PPP Options



Option	Investment scope	Asset Ownership	Payment Mechanism	Partnership Duration
1	Scope 1 (Private sector invests in civil work, system work, and rest area)	Build-Transfer-Operate (BTO)	PPP Net Cost	Fixed 30 years (excluding construction period)
2			PPP Gross Cost	
3			PPP Modified Gross Cost	
1	Scope 2 (Private sector invests in system work and rest area)	Build-Transfer-Operate (BTO)	PPP Net Cost	
2			PPP Gross Cost	
3			PPP Modified Gross Cost	

Note: The results presented are preliminary and subject to changes.

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Financial Assumptions (Excluding Rest Area)

Item	Net Cost	Gross Cost	Modified Gross Cost
Project Development Period Assumptions			
Project development period - Construction period (including land acquisition) - Operation and maintenance period	37 years (A.D. 2527–2063) 7 years (A.D. 2027–2033) 30 years (A.D. 2034–2063)		
Financial Assumptions			
Expected Equity IRR	9.00%	8.00%	8.25%
WACC	5.59%	5.29%	5.29%
Discount rate (Government perspective)	3.00%		
Gearing Ratio	2.50x	3.00x	3.00x
Debt Tenor	20 years		
Interest Rate	5.41%	4.91%	4.91%
Grace Period	Civil Work Phase 1: 2 years Civil Work Phase 2: 1 year System Work: 0 year		
Commitment Fee	0.50% of undisbursed loan amount		
Arrangement Fee	2.00% of total loan amount		

Note: The results presented are preliminary and subject to changes.

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Private Sector Investment in Civil Work & System Work (Excluding Rest Area)

Item	PPP Net Cost		PPP Gross Cost		PPP Modified Gross Cost	
	Public	Private	Public	Private	Public	Private
Financial Assumptions						
Project development period	37 years (A.D. 2527–2063)					
Construction period (include land acquisition)	7 years (A.D. 2027–2033)					
Operation and maintenance period	30 years (A.D. 2034–2063)					
Cost						
CAPEX	13,090.30	46,527.07	13,090.30	13,090.30	60,752.47	46,527.07
OPEX	1,913.44	26,665.31	1,913.44	25,795.93	1,913.44	25,795.93
Revenue	-	87,876.64	87,876.64	-	83,482.81	4,393.83
Financial Results						
Private sector's financial return						
Equity IRR	9.00%		8.00%		8.25%	
Project IRR	7.39%		6.32%		6.42%	
Project NPV	7,788.90		3,974.78		4,432.57	
Project Payback Period	10		10		10	
Project B/C Ratio	1.15		1.08		1.09	

Note: The results presented are preliminary and subject to changes.

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Private Sector Investment in System Work (Excluding Rest Area)

Item	PPP Net Cost		PPP Gross Cost		PPP Modified Gross Cost	
	Public	Private	Public	Private	Public	Private
Financial Assumptions						
Project development period Construction period (include land acquisition) Operation and maintenance period	37 years (A.D. 2527–2063) 7 years (A.D. 2027–2033) 30 years (A.D. 2034–2063)					
Cost						
CAPEX	60,752.47	3,638.10	60,752.47	3,638.10	60,752.47	3,638.10
OPEX	1,913.44	26,665.31	1,913.44	25,795.93	1,913.44	25,795.93
Revenue	-	87,876.64	87,876.64	-	83,482.81	4,393.83
Financial Results						
Private sector's financial return						
Equity IRR	9.00%		8.00%		8.25%	
Project IRR	8.19%		5.74%		5.99%	
Project NPV	1,401.02		85.18		149.27	
Project Payback Period	15		12		12	
Project B/C Ratio	1.06		1.01		1.01	

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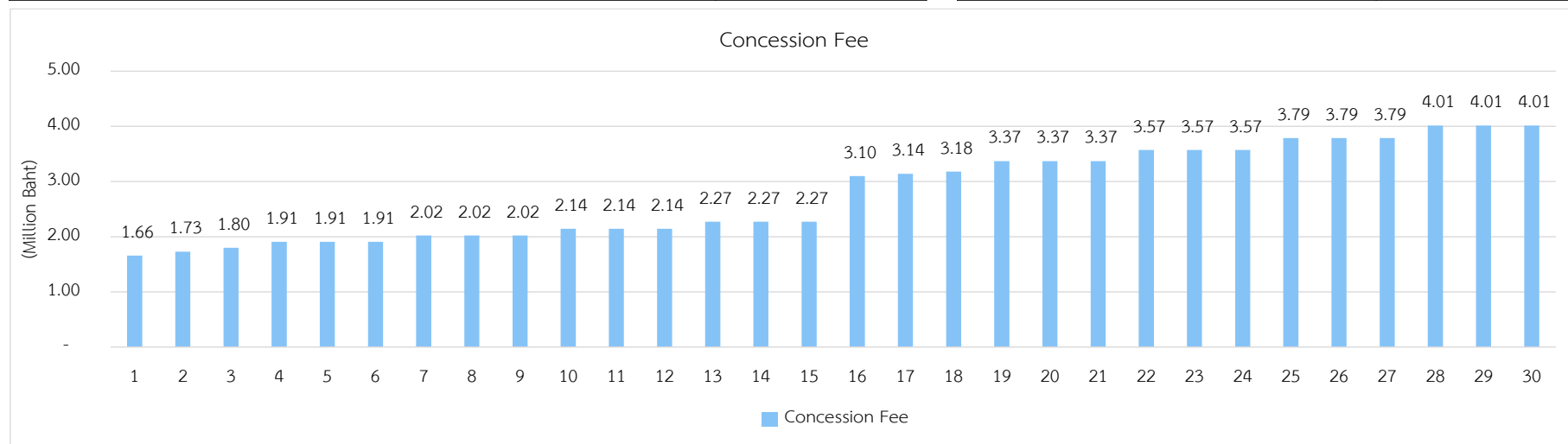
Financial Returns



The private sector's return for **Rest Area** Investment and Operation is as follows

Assumptions	Net Cost
Total Project Costs	3,496.83
- Investment Cost	1,800.24
- O&M Cost	1,612.73
- Concession Fee	83.86
Total Revenue	6,333.22
- Commercial Area Rental Revenue	6,079.18
- Fuel Service Station and EV Charging Station Rental Revenue	150.31
- Other Revenue	103.73

Financial Return	
Project NPV	328.49
Equity NPV	101.86
Project IRR	8.43%
Equity IRR	11.32%
Project Payback Period	13.00
Equity Payback Period	14.00



Note: The rest area will be operated under the PPP Net Cost Model regardless of the main road PPP model.

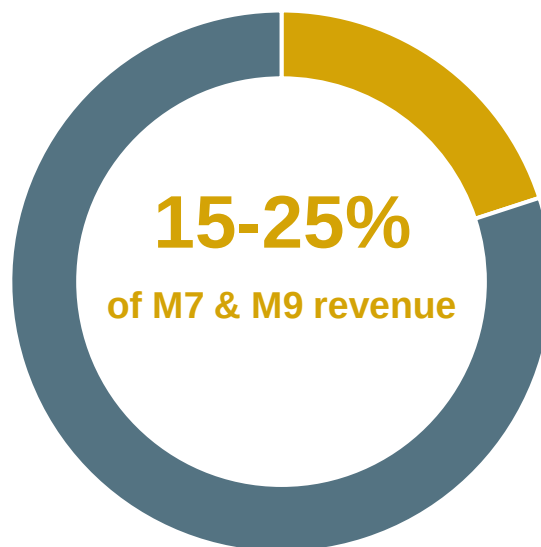
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To reduce the burden on the government budget

Raising fund through

Estimated amount

3 - 4 Billion THB



Readiness of relevant government agencies in formulating and implementing the project

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- ❑ ***The Department of Highways*** has coordinated with relevant utility agencies involved in the project, including the Electricity Generating Authority of Thailand (EGAT), the Provincial Electricity Authority (PEA), the Provincial Waterworks Authority (PWA), and National Telecom Public Company Limited (NT), regarding utility relocation and other project-related matters.

- ❑ ***The Department of Highways*** has also completed the *Environmental Impact Assessment (EIA) study* and has coordinated with relevant local authorities and stakeholders to present the project information and ensure that they are informed of the project.

Q&A session

รับฟังความคิดเห็นและตอบข้อซักถาม