“Thailand's Railway Development Plan”

Jerawun HONGSAKUL, Director of Rail Transport Regulation Division, Department of Rail Transport
Develops railway transportation infrastructure to connect with other modes of transportation cover all of Thailand.

- Build High-Speed Rail (HSR) lines connecting major cities.
- Electrifies the meter gauge rail track
- Promotes Transit-Oriented Development (TOD)
- Provides incentives to operators and related industries.
- Connects the railway to tourist attractions.
Railway track in Thailand in 2022
4,043 km. (covers 47 provinces)

- Single Track: 2.64% (107 km.)
- Double Track: 13.43% (543 km.)
- Triple Track: 83.93% (3,393 km.)

- Northern: 781 km
- Southern: 1,570 km
- East: 534 km
- North-East: 1,094 km
- Maeklong: 65 km
Total 4,043 Km
Single 3,763 Km
Double 173 Km
Triple 107 Km

Total 4,721 Km
Single 1,287 Km
Double 3,327 Km
Triple 107 Km

Existing Railway Network

Future Railway Network
### Double-Track Project

<table>
<thead>
<tr>
<th>No</th>
<th>Line</th>
<th>Route</th>
<th>Distance (km)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Northeastern</td>
<td>Thanon Chira – Khon Kaen</td>
<td>187</td>
<td>Completed</td>
</tr>
<tr>
<td>2</td>
<td>Eastern</td>
<td>Chacheongsao – Kaeng Khoi</td>
<td>106</td>
<td>Completed</td>
</tr>
<tr>
<td>3</td>
<td>Northern</td>
<td>Lopburi – Pak Nam Pho</td>
<td>148</td>
<td>Under Construction</td>
</tr>
<tr>
<td>4</td>
<td>Northeastern</td>
<td>Map Kabao – Thanon Chira</td>
<td>132</td>
<td>Under Construction</td>
</tr>
<tr>
<td>5</td>
<td>Southern</td>
<td>Nakhon Pathom – Chumphon</td>
<td>420</td>
<td>Under Construction</td>
</tr>
</tbody>
</table>
Thailand's high-speed train plan aims to connect every region of the country.

**High-Speed Rail**

- **Northern Line**
  - Bangkok – Phitsanulok (Phase 1)
  - Phitsanulok – Sukhothai – Chiang Mai (Phase 2)

- **Northwestern Line**
  - Songkhla – Nakhon Pathom (Phase 1)
  - Nakhon Pathom – Nong Khai (Phase 2)

- **Central Line**
  - Don Muang – Suvarnabhumi – U-Tapao (Phase 1)
  - U-Tapao – Trat (Phase 2)

- **Southern Line**
  - Bangkok – Hua Hin (Phase 1)
  - Hua Hin – Suratthani – Padang Besar (Phase 2)
Railway Connectivity

• Asean
• GMS
• Belt and Road
• Indo-Pacific
• CPTPP
• etc.
SKRL membership comprise of 10 ASEAN countries

Thailand proposed new railway lines in the SKRL Railway Network Map:

a. Bangkok - Nong Khai (Thailand) - Vientiane - Boten (Lao PDR) connecting to Kunming (China) as “SKRL Central Line”.
HSR NE Project

Scheme : Thailand-China cooperation
Section : Bangkok–Nakhon Ratchasima-Nong Khai
Status : Under construction
Speed : 250 km/h
Operator : New Agency
Opening : 1st Phrase 2026
2nd Phrase 2028
Length : 1st Phrase 253 km
2nd Phrase 355 km
Railway between Thailand-Laos PDR

Vientiane Logistics Park

Natha

Nong Khai

New bridge

Thanaleng

Thanaleng Dry port

6 km.
1 m. railway

1 m. railway

3.5 km.

7.5 km. Under construction

1 m. railway

1.435 m railway

Laos-China railway

Vientiane South

Cargo station

Passenger Station

Vientian

Khamsvad

Source: DRT
Construction of new bridge

30 meters from the original bridge, with 1 meter and 1.435 meter railway gauge.
Nong Khai Station

Develop CY to serve the Laos-China railway as urgent development

80 Rai (12 Hectares)
Natha Transshipment yard

Develop the area as an international station, with a customs checkpoint included.
HSR Linking 3 Airports Project

The project will link 3 international Airport (Don Mueang – Suvarnabhumi - U-Tapao)
“An extension route of ARL”
HSR Linking 3 Airports Project

Status: Preparing for construction
Speed: 250km/h
Operator: Asia Era One Co. Ltd.
Planned opening: 2026
Length: 220 km
Rayong - Trat extension line connecting tourist attractions and agricultural locations
HSR Northern Line

Thailand-Japan signed MOC in 2015 to develop High-Speed Rail between Bangkok and Chiang Mai using the Japanese HSR system (Shinkansen)
Phase 1:
Bangkok-Phitsanulok
380 km.
7 stations 8 Provinces
HSR Southern Line

Bangkok - Huahin 211 KM

Huahin - Surat Thani 424 KM
Surat Thani - Padang Besar 335 KM
Railway Connectivity between Thailand and Malaysia

- Tumpat
- Sungai Kolok
- Rantau Panjang
- Pasir Mas
- Padang Besar

Legend:
- Mileage
- HSR (High-Speed Rail)
- Metric gauge

No service.
## HSR project comparison

<table>
<thead>
<tr>
<th></th>
<th>North Eastern Line</th>
<th>Linking 3 Airports</th>
<th>Northern Line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section</strong></td>
<td>Bangkok–Nakhon Ratchasima</td>
<td>Don Mueang–Suvarnabhumi–U-Tapao</td>
<td>Bangkok-Phitsanulok</td>
</tr>
<tr>
<td><strong>Distance</strong></td>
<td>253 km</td>
<td>220 km</td>
<td>380 km</td>
</tr>
<tr>
<td><strong>Max speed</strong></td>
<td>250 km/h</td>
<td>160 km/h (BKK)</td>
<td>300 km/h</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 km/h (Inter City)</td>
<td></td>
</tr>
<tr>
<td><strong>Project Cost</strong></td>
<td>179,412 M.THB (4,700 M.USD)</td>
<td>168,718 M.THB (4,419 M.USD)</td>
<td>261,754 M.THB (6,858 M.USD)</td>
</tr>
<tr>
<td><strong>Investment</strong></td>
<td>Loan/gov’t budget</td>
<td>PPP</td>
<td>Loan/gov’t budget</td>
</tr>
</tbody>
</table>

Remark: According to the 20-year railway master plan, 3 HSR lines have shared an investment with percentage of 22%
Krung Thep Aphiwat Central Station

- New National Railway Terminal
- Replace Hua Lamphong
- The largest railway station in Thailand
Red Line is serviced on the 2nd floor of Krung Thep Aphiwat Station
The 3rd floor of Bang Sue station will be reserved for HSR platform.
Thank you