

## 9 Traffic and Transport Master Plan for Uttaradit Province

As the results of the analysis and planning of traffic and transport system for Uttaradit, including the determination of the principles of functional road hierarchy classification, and from the data collection from both of the primary sources gained from the field survey and the secondary sources gained from collected statistics as well as the public hearing, Uttaradit Traffic and Transportation Master Plan is as follows;

- 1) Traffic and Transportation Improvement Plan
- 2) Traffic Problems Solving Plan
- 3) Logistics and Transportation System Development Plan
- 4) Cultural and Tourism Supported Transportation Plan
- 5) Public Transportation Plan
- 6) Transportation Safety Plan
- 7) Preventing and Eliminating Traffic Accidents
- 8) Sustainable and Livable city Development Plan

Uttaradit Transportation Master Plan can be different in details in accordance with the areas differences; however, it can be categorized into 3 stages as follows;

- 1) Short-term plan 1 – 2 years (2009 – 2010)
- 2) Mid-term plan 3 – 5 years (2011 – 2014)
- 3) Long-term plan 6 – 10 years (2015 – 2019)

From the 56 projects, the total amount of budget needed is approximately 5,895 million Baht as shown in the Table below;

Table 9.1 Uttaradit Transportation Master plan: Short-Term Plans, Mid-Term Plan, and Long-Term Plan

| Plans                                                   | Budget (Million Baht) |          |           | Total   |
|---------------------------------------------------------|-----------------------|----------|-----------|---------|
|                                                         | Short-term            | Mid-term | Long-term |         |
| 1. Traffic and Transportation Improvement Plan          | 774.9                 | 658.5    | 222       | 1655.4  |
| 2. Traffic Problems Solving Plan                        | 25                    | 0        | 0         | 25      |
| 3. Logistics and Transportation System Development Plan | 4050.06               | 28.43    | 0         | 4078.49 |
| 4. Cultural and Tourism Supported Transportation Plan   | 17.88                 | 5.6      | 0         | 23.48   |
| 5. Public Transportation Plan                           | 8.2                   | 0        | 0         | 8.2     |
| 6. Transportation Safety Plan                           | 15.06                 | 12.54    | 0         | 27.6    |
| 7. Preventing and Eliminating Traffic Accidents         | 28.3                  | 13.3     | 0         | 41.6    |
| 8. Sustainable and Livable city Development Plan        | 19.4                  | 16.2     | 0         | 35.6    |
| <b>Total</b>                                            | 4938.8                | 734.57   | 222       | 5895.37 |

Table 9.2 Information regarding to budget for each project

| Project Group | Project Item | Name of Project                                                                          | Administration      | Budget (Million Baht) | Conducting Year |      |      |      |      |      |      |      |      |      |
|---------------|--------------|------------------------------------------------------------------------------------------|---------------------|-----------------------|-----------------|------|------|------|------|------|------|------|------|------|
|               |              |                                                                                          |                     |                       | 2009            | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| 1.            | 1.           | The Road Construction Project connecting Taidlang road and Highway No.1045               | DRR/PAO             | 132.5                 | 70              | 42.5 | 20   |      |      |      |      |      |      |      |
| 1.            | 2.           | The Road Construction Project for new ring road in Medium term                           | UM/ DOH / DRR/PAO   | 237.5                 |                 |      | 87.5 | 100  | 50   |      |      |      |      |      |
| 1.            | 3.           | The Road Construction Project connecting urban road and ring road                        | UM/ DOH / DRR/PAO   | 255                   |                 |      |      |      | 33   | 45   | 39   | 36   | 48   | 54   |
| 1.            | 4.           | The Road Expansion Project for Highway No.11 (Uttaradit-Denchai)                         | DOH/PAO             | 1030.4                | 662.4           |      |      | 368  |      |      |      |      |      |      |
| 2.            | 1.           | Traffic Management at Market area                                                        | UM/P/PAO            | 0.2                   | 0.2             |      |      |      |      |      |      |      |      |      |
| 2.            | 2.           | Traffic Management at Schools                                                            | UM/P/PAO            | 1.5                   | 0.5             | 1    |      |      |      |      |      |      |      |      |
| 2.            | 3.           | Adjusting Traffic Signal at Intersection Project                                         | UM/DOH              | 0.3                   | 0.3             |      |      |      |      |      |      |      |      |      |
| 2.            | 4.           | Traffic Management at Huaypai Intersection Project                                       | DOH/PAO             | 10.7                  | 0.7             | 10   |      |      |      |      |      |      |      |      |
| 2.            | 5.           | Parking Management Project                                                               | UM/PAO              | 0.1                   | 0.1             |      |      |      |      |      |      |      |      |      |
| 2.            | 6.           | On-street Parking Prohibition in peak hour Project                                       | UM/P                | 0.2                   |                 |      |      |      |      |      |      |      |      |      |
| 2.            | 7.           | The Road Surface Improvement at Railway Crossing Project                                 | UM/DOH              | 3                     | 1.5             | 1.5  |      |      |      |      |      |      |      |      |
| 2.            | 8.           | The New Government Office Center Project                                                 | PAO                 | 6                     | 3               | 3    |      |      |      |      |      |      |      |      |
| 2.            | 9.           | Traffic Management at Night Market Project                                               | UM/PAO              | 3.2                   | 1.6             | 1.6  |      |      |      |      |      |      |      |      |
| 3.            | 1.           | The Feasibility Study in Container Yard Development at the Siraard Train Station Project | SRT/TCC             | 3.5                   | 0.7             | 0.7  | 0.7  | 0.7  | 0.7  |      |      |      |      |      |
| 3.            | 2.           | The Development of Freight Transportation at the Siraard Train Station Project           | DOH/DRR/PAO/SAO     | 3800                  | 1900            | 1900 |      |      |      |      |      |      |      |      |
| 3.            | 3.           | Road Improvement at Phudu Project                                                        | PAO/TCC/SAO         | 230                   | 115             | 115  |      |      |      |      |      |      |      |      |
| 3.            | 4.           | Traffic Management at Phudu Project                                                      | DOH/DRR/PAO/TCC/SAO | 11                    | 2.2             | 2.2  | 2.2  | 2.2  | 2.2  |      |      |      |      |      |
| 3.            | 5.           | Fruit Market Project                                                                     | SAO                 | 35                    | 7               | 7    | 7    | 7    | 7    |      |      |      |      |      |
| 3.            | 6.           | The Road Improvement to connect Nan Province and Phudu                                   | PAO                 | 2.5                   | 0.83            | 0.83 | 0.83 |      |      |      |      |      |      |      |
| 4.            | 1.           | Tourism Guiding Sign                                                                     | PAO/UP              | 7.6                   | 3.8             | 3.8  |      |      |      |      |      |      |      |      |
| 4.            | 2.           | Architectural Improvement at Entrance Gate to Uttaradit                                  | DOH                 | 5                     | 1.66            | 1.66 | 1.66 |      |      |      |      |      |      |      |
| 4.            | 3.           | Agricultural Tourism Promotion                                                           | PAO/SAO             | 1.8                   | 0.45            | 0.45 | 0.45 | 0.45 |      |      |      |      |      |      |
| 4.            | 4.           | Tourism between Province                                                                 | DRR/SAO             | 3.5                   | 1.75            | 1.75 |      |      |      |      |      |      |      |      |
| 4.            | 5.           | Cultural Tourism                                                                         | PAO/                | 2.4                   | 0.48            | 0.48 | 0.48 | 0.48 | 0.48 |      |      |      |      |      |
| 4.            | 6.           | Developing Tungyang for Cultural Tourism                                                 | DOH/TAT             | 3.2                   | 0.8             | 0.8  | 0.8  | 0.8  |      |      |      |      |      |      |
| 4.            | 7.           | Tourism Attraction of Phudu                                                              | PAO                 | 4                     | 1.3             | 1.3  | 1.3  |      |      |      |      |      |      |      |

Table 9.2 Information regarding to budget for each project (Cont.)

| Project Group | Project Item | Name of Project                                                                                  | Administration | Budget (Million Baht) | Conducting Year |      |      |      |      |      |      |      |      |      |  |
|---------------|--------------|--------------------------------------------------------------------------------------------------|----------------|-----------------------|-----------------|------|------|------|------|------|------|------|------|------|--|
|               |              |                                                                                                  |                |                       | 2009            | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
| 5.            | 1.           | The Feasibility Study in Developing Public Transportation in Uttaradit                           | C/DLT/PAO      | 2                     | 1               | 1    |      |      |      |      |      |      |      |      |  |
| 5.            | 2.           | The Safety Improvement of Public Transportation in Uttaradit                                     | DLT            | 0.5                   | 0.25            | 0.25 |      |      |      |      |      |      |      |      |  |
| 5.            | 3.           | Public Transportation Encouragement Campaign                                                     | DLT/PAO        | 0.1                   | 0.05            | 0.05 |      |      |      |      |      |      |      |      |  |
| 5.            | 4.           | School Bus Program                                                                               | UP/DLT         | 0.6                   | 0.3             | 0.3  |      |      |      |      |      |      |      |      |  |
| 5.            | 5.           | The Feasibility Study in Multimodal Public Transport                                             | DLT/PAO        | 3                     | 1.5             | 1.5  |      |      |      |      |      |      |      |      |  |
| 5.            | 6.           | Public Transport Parking Development                                                             | SAO            | 2                     | 1               | 1    |      |      |      |      |      |      |      |      |  |
| 6.            | 1.           | Crossing Management in front of Schools                                                          | UM             | 2                     |                 | 0.66 | 0.66 |      |      |      |      |      |      |      |  |
| 6.            | 2.           | Maintenance of Traffic Signs                                                                     | DOH            | 0.2                   | 0.06            | 0.06 |      |      |      |      |      |      |      |      |  |
| 6.            | 3.           | Safety Program for Railway Crossing                                                              | SRT            | 1                     | 0.33            | 0.33 | 0.33 |      |      |      |      |      |      |      |  |
| 6.            | 4.           | The Establishment of Emergency Service for Traffic Accident                                      | THPF           | 5                     |                 | 1.66 | 1.66 |      |      |      |      |      |      |      |  |
| 6.            | 5.           | The Establishment of Over-Speed Monitoring                                                       | P/UM           | 10                    | 3.3             | 3.3  | 3.3  |      |      |      |      |      |      |      |  |
| 6.            | 6.           | The Improvement Programs towards Car Check Ups Project                                           | DLT            | 2                     |                 |      | 0.66 | 0.66 | 0.66 |      |      |      |      |      |  |
| 6.            | 7.           | The Establishment of Traffic Safety Youth Ambassador Project                                     | PAO            | 0.1                   | 0.03            | 0.03 | 0.03 |      |      |      |      |      |      |      |  |
| 6.            | 8.           | Traffic Accidents Awareness Program for Teachers                                                 | PAO            | 0.8                   | 0.2             | 0.2  | 0.2  | 0.2  |      |      |      |      |      |      |  |
| 6.            | 9.           | Traffic Safety Awareness Program for Residents                                                   | PAO/DLT        | 0.6                   | 0.3             | 0.3  |      |      |      |      |      |      |      |      |  |
| 6.            | 10.          | Traffic Safety Awareness Program for Private Organizations                                       | PAO/DLT        | 0.2                   | 0.1             | 0.1  |      |      |      |      |      |      |      |      |  |
| 6.            | 11.          | Traffic Safety Awareness Program for Local Governors                                             | PAO            | 0.2                   | 0.1             | 0.1  |      |      |      |      |      |      |      |      |  |
| 6.            | 12.          | Traffic Safety Training for Safety Officers                                                      | PAO/DLT        | 0.3                   | 0.15            | 0.15 |      |      |      |      |      |      |      |      |  |
| 6.            | 13.          | Accident Unit in Municipality                                                                    | SAO            | 5.4                   | 1.8             | 1.8  | 1.8  |      |      |      |      |      |      |      |  |
| 7.            | 1.           | Improvement of Black Spot in Uttaradit                                                           | UP/PAO         | 24                    | 15              | 3    | 3    | 3    |      |      |      |      |      |      |  |
| 7.            | 2.           | Road Safety Audit                                                                                | PAO            | 2                     | 1               | 1    |      |      |      |      |      |      |      |      |  |
| 7.            | 3.           | Preventing and Solving Accident on Walkway                                                       | UP/PAO         | 2.5                   | 2.5             | 2.5  | 2.5  |      |      |      |      |      |      |      |  |
| 7.            | 4.           | Traffic Rules Enforcement                                                                        | PAO/DLT        | 0.5                   | 0.5             | 0.5  | 0.5  |      |      |      |      |      |      |      |  |
| 7.            | 5.           | Database for Traffic in Uttaradit                                                                | PAO            | 0.5                   | 0.5             | 0.5  | 0.5  |      |      |      |      |      |      |      |  |
| 7.            | 6.           | Traffic Research Unit in Uttaradit                                                               | PAO            | 0.2                   | 0.1             | 0.1  | 0.1  | 0.1  |      |      |      |      |      |      |  |
| 7.            | 7.           | Safety Program with CCTV                                                                         | PAO/P          | 0.5                   | 0.5             |      |      |      |      |      |      |      |      |      |  |
| 7.            | 8.           | The Cultural Heritage Areas Renovations Project for Cultural Conservation and Promotion Purposes | PAO/P          | 3                     | 3               | 3    |      |      |      |      |      |      |      |      |  |

Table 9.2 Information regarding to budget for each project (Cont.)

| Project Group                             | Project Item | Name of Project                            | Administration | Budget (Million Baht) | Conducting Year |      |      |      |      |      |      |      |      |      |
|-------------------------------------------|--------------|--------------------------------------------|----------------|-----------------------|-----------------|------|------|------|------|------|------|------|------|------|
|                                           |              |                                            |                |                       | 2009            | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| 8.                                        | 1.           | Bicycle Lane Network Development           | UP             | 10                    |                 |      |      |      |      |      |      |      |      |      |
| 8.                                        | 2.           | Improvement of Walkway within Municipality | UP/PAO         | 5                     |                 |      |      |      |      |      |      |      |      |      |
| 8.                                        | 3.           | Improvement of Public Tricycle             | UP/PAO         | 3                     |                 |      |      |      |      |      |      |      |      |      |
| Total Budget According to the Master Plan |              |                                            |                |                       |                 |      |      |      |      |      |      |      |      |      |

Remark

- A
- Airport
- C
- Consult
- DLT
- Department of Land Transport
- DOH
- Department of Highways
- DPT
- Department of Public Works and Town & Country Planning
- DRR
- Department of Rural Roads
- P
- Police
- PAO
- Provincial Administration Organization
- PHO
- Provincial Health Office
- SAO
- Sub-district Administration Organization
- SRT
- State Railway of Thailand
- TAT
- Tourism Authority of Thailand
- TCC
- The Thai Chamber of Commerce
- THPF
- Thai Health Promotion Foundation
- OTP
- Office of Transport and Traffic Policy and Planning
- UM
- Uttaradit Municipality