# Smart Growth Concept: Transit-oriented Development around a Regional Train Connectivity Hub – A Case Study of Nongkhai Railway station in Nongkhai Province



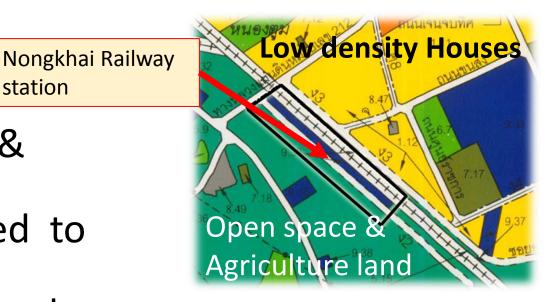


Vice President Thai City Planners Society

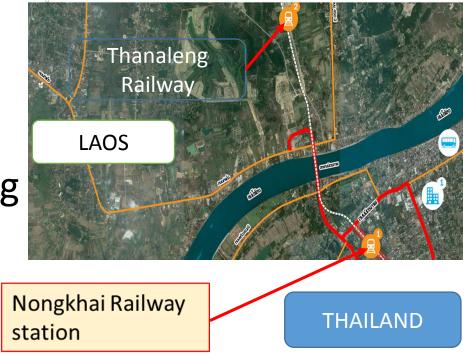
# **Problems & Challenges**

**Problems** 

- Under developed land: Nongkhai & Around Railway Station
- Limited access to roads, connected to town & surrounding area
- Less potential development plot land Challenges: Policy
- High speed train destination
- Special Economy Development Zone
- Bounder town development connecting Laos & Asian Country



station



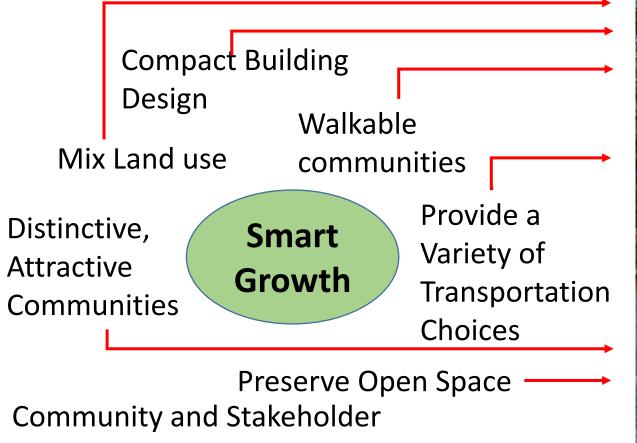
# **Solutions & Policies**

 State railway of Thailand: SRT, In line with government Infrastructure plan, Double Track 6 Lines 12 Stations & High speed train BKK – Nakhon Ratchasima – Nongkhai / BKK - Chiang Mai/BKK – Hua Hin – Songkla

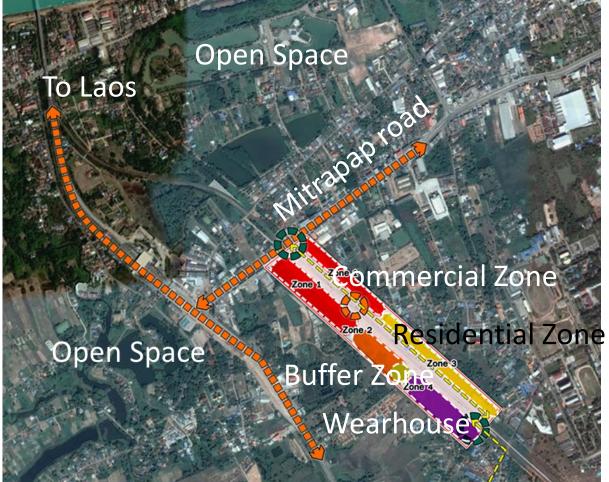


• Public & Private Participation : PPP, SRT 12 Stations/ Thonbury , Sriracha, Nakornsawan, Siraart , Parkchong, Buayai,NONGKAI, Ubonrachathani,Cha Um,Chumpon,Suratthani,Thanui Pangnga.

### Methodology & Activities



Collaboration



Nongkhai railway station : TOD

# Output / Outcome

- Master plan of 12 stations in 6 Lines double track of Infrastructure development Program – Smart Growth Approach
- Encourage Developer investing in potential area of Nongkai Railway Station
- Urban Development around Nongkai Railway Station: more compact
- Sustainable & Livable Community around Nongkai Railway Station
- Reduce Emission Gas: Walking & Cycling distance







New developed Nongkhai Railway Station

## Lesson learnt: 3 Best Practices

### 1 Land use practice

- Mixed land use contributes to Nongkai railway station & community regarding station's job & housing balance
- Cluster developments / compact building design for more open space & green spaces by reducing the size

#### 2 Transportation practice

- Provide networks for pedestrians and bicyclists on site & around community
- Transit-oriented design(TOD)- Rail & Bus connecting route are more useful for high density resident & commercial area
- 3 Environmental practice
  - Establish buffer zone between commercial and warehouse zone retaining natural environment



## Transfer

- Preconditions
  - Understanding "SMART GROWTH CONCEPT"
  - Understanding "Transit-oriented Development (TOD) system approach"

#### • Transfer

1.Analysis characteristic of "Potential area development" especially Land use / transport development ,Environment ,Social life, Economic development etc.

2. Apply Smart Growth Concept to "The Potential Area"

3. Apply together with TOD

4. Master plan TOD with People participation process

5.Action plan TOD