

# Healthy Space Network Manual

PA MASTERPLAN







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## PA MASTERPLAN

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# PREFACE

Good well-being is an important factor for good quality of life. The Healthy Space Network is one mechanism or measure to foster good social and physical environment, leading to the 4 dimensions of people's good health: physical well-being, mental well-being, social well-being, and moral and intellectual well-being.

This Masterplan is part of the study of guidelines for "Healthy Space Network to Promote Physical Activity Masterplan Development Project: Case Studies of Phuket and Chiang Rai." The project, a collaboration between Thai Health Promotion Foundation and Healthy Space Forum, aims to study and promote sufficient physical activity for everybody, as well as create active environments with the help of this Urban Healthy Space Network to Promote Physical Activity Masterplan. The Masterplan has also undergone onsite pilot testing with engagement from all sectors.

The Working Group sincerely hopes that this Masterplan will help build knowledge and understanding of the network and space to promote physical activity, providing all involved parties with tools and guidelines to develop a healthy space network in their locality by themselves.

Panit Pujinda  
and the Working Group



## FOREWORDS

Thai Health Promotion Foundation's vision is to ensure that "all Thais enjoy the way of life, society, and the environment conducive to maintaining well-being" by pursuing the strategic goals that align with the Determinants of Health. One of the seven strategic goals is to increase physical activity to a sufficient level as the insufficiency thereof or a sedentary lifestyle constitutes a key factor in the development of noncommunicable diseases (NCDs). NCDs are the primary cause of the loss of disability-adjusted life years (DALYs) and ultimately lead to over 75% of premature deaths among Thais.

Physical activity may be an individual behavior which can be enhanced with knowledge and activities that influence one's attitudes towards health. Nevertheless, to ensure everyone maintains sufficient physical activity in their "lifestyle," through 3 primary acts—commuting, working, and recreation, an environment conducive to physical activity is essential. As such, Thai Health Promotion Foundation and its associates are committed to driving forward environments that connect to primary acts, promoting an active life and other healthy activities. Such environments are called "healthy space."

"The Healthy Space Network Manual" provides guidelines on how to promote a comprehensive healthy space network, which integrates over a







decade of experience in healthy space operations by Thai Health Promotion Foundation and its partners. The manual aims to utilize space as a contributing factor to a healthy lifestyle of people in the community and to expand the network to the city level. The manual provides “concise and easy-to-understand” steps to creating a healthy space network, ranging from ways to locate healthy space in a city, assessment of the potential of the space, and guidelines on user-centered area designs and design standards. Mechanisms to implement the space with consideration to the roles of stakeholders and the steps to do so are also explained. Finally, there are case studies to provide a clear, concrete picture of city-level healthy space network operations for those interested.

As a primary agency whose roles and responsibilities are to support operations that promote well-being of the people, Thai Health Promotion Foundation sincerely hopes that “the Healthy Space Network Manual” will contribute important knowledge to the systematic expansion of healthy space network. Thai Health would like to thank Healthy Space Forum and the healthy space network partners for their collaborative efforts in producing this top-quality work to help drive well-being in Thailand in the future.

Ms. Niramol Rasri

Director of Healthy Lifestyle Promotion Section,  
Thai Health Promotion Foundation





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# HOW TO USE THE MANUAL?

“Healthy Space Network” Masterplan is an urban planning tool to help solve urban problems by promoting physical activity through an improvement of green space, public space, and potential areas in the city, as well as connecting them together. The improvement is to be jointly designed with the public, with the goal of having healthy space within a radius of 500-800 meters or 15 minutes of the neighborhood, thus increasing physical activity in the city.

Having low physical activity or insufficient exercise has led to increased death and disabilities worldwide. It also causes a financial burden of health-related expenses and loss of professional efficiency within a city. Therefore, increasing physical activity has become one of the goals of many cities since it is the city’s physical environments that directly impact how people exercise. As such, if the city does not foster physical activity due to limitations, be it difficulty to access public space, lack of safety, or transportation that hinders walking, the people will naturally have a low rate of physical activity.

Hence, the development of healthy space is of great importance. However, good development needs knowledge and understanding. This manual presents guidelines on how to create a healthy space network in 3 steps: locating healthy space in the city, determining the design of the area, and creating mechanisms to implement the healthy space network.

## STEP 1

### LOCATING HEALTHY SPACE IN THE CITY

Understanding each type of healthy space which has different characteristics and functionalities and knowing how to assess space for analysis and improvement



TOOL 1



TOOL 2



## STEP 2

### SPACE DESIGN GUIDELINES

Designing the space for equal benefits and use of the people in the area



TOOL 3



TOOL 4



# 3 STEPS

## HOW TO USE THE TOOLS

## STEP 3

### CREATING MECHANISMS TO IMPLEMENT HEALTHY SPACE NETWORK

Identifying the components and steps to implement the Healthy Space Network



TOOL 5



TOOL 6

# LOCATING HEALTHY SPACE IN THE CITY

Locating healthy space is a default step for space owners or interested individuals to familiarize themselves with and understand the characteristics of existing healthy space, so that they can develop the space to suit its potential and facilitate the promotion of formal and healthy activities. This step involves 2 tools: tools to classify healthy space and tools to assess the potential of existing space. The objective is to locate a suitable area with potential to promote physical activity and well-being in the locality before planning, development, and design can be done in the future.

## STEP

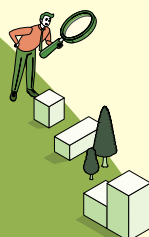






## TOOL 1

### CLASSIFYING HEALTHY SPACE



## TOOL 2

### ASSESSING THE POTENTIAL OF HEALTHY SPACE

# TOOL 1

## CLASSIFYING HEALTHY SPACE



The first tool helps you understand and locate healthy space in your city. In the Thai context, healthy space can be grouped based on its usage into 10 groups of public and semi-public space.

These healthy spaces can develop into ones that encourage more physical activity, reduce NCDs (Non-Communicable Diseases), and exist within a walking distance of 500-800 meters.





# TOOL 2

## ASSESSING THE POTENTIAL OF HEALTHY SPACE

Tool 2 refers to tools that help you assess the potential, as well as problems and limitations, of a public space, so that developers can improve the quality and efficiency of the healthy space in an accurate manner. There are 5 standard criteria, namely:



### ACTIVITY AND USAGE:

This includes opening-closing hours, number of activities, continuity of activities, diversity of activities, and flexibility.



### USER GROUPS:

User groups vary by area. This data can be obtained from area surveys. The study shows that there are 5 main user groups, namely children (5-12 years old), teenagers (13-19 years old), adults (20-59 years old), elderly (60+ years old), and vulnerable groups.



### ACCESS TO SPACE:

Access to public space is promoted through pedestrian and biking networks that accommodate both pedestrians and bikers, as well as those with disabilities. This takes into consideration method of transportation, opening for users, distance from communities, user fees, and occupation of space.



### SAFETY:

Designing a healthy space to be safe to users includes lighting, monitoring, activity zoning, crime prevention, and risk support, which will make the users feel safe both physically and mentally when using and joining activities.








### CONVENIENCE:

This refers to improvement and addition of facilities in healthy space, as well as design of surface materials and green elements to create aesthetics of use, including shades, restrooms, reduction of obstacles, cleanliness.

# ASSESSMENT CRITERIA FOR THE POTENTIAL OF HEALTHY SPACE

The scores run from the lowest to the highest based on the indicators for further analysis and improvement.

INDICATOR		SCORE			
		0	1	2	3
 <b>ACTIVITY AND USAGE</b>	OPENING-CLOSING HOURS	Closed	Opens on some days or no clear opening-closing hours	Opens on some days or opens every day with clear opening-closing hours	Opens every day and all day
	NUMBER OF ACTIVITIES	No activity	1-2 activities	3-5 activities	More than 5 activities
	CONTINUITY OF ACTIVITIES	No activity	Seldom	Continued activities every day	Continued activities every day
	DIVERSITY OF ACTIVITIES	No activity	Passive or active activities	Passive and active activities	Passive and active activities at many levels
	FLEXIBILITY	No adjustment of use	-	Adjustment of use available but not diverse	Adjustable for diverse use
 <b>ACCESS TO SPACE</b>	METHOD OF TRANSPORTATION	-	Accessible by private cars only	Accessible by walking and biking	Accessible by walking and biking conveniently
	OPENING	-	Fenced on all sides or has only one entry-exit	Surrounded by natural fence or has multiple entries-exits	No fencing with multiple points of entry/exit
	DISTANCE FROM COMMUNITIES	Far from communities (over 1.5 km.)	Far from communities (800-1,500 m.)	Near communities (500-800 m.)	Very near communities (300 m.)
	USER FEES	Fees applied	-	-	Free
	OCCUPATION OF SPACE	All space occupied by regular users	Some space occupied, e.g., associations, clubs	Space available for all but has no area management	Space available for all with area management
 <b>USERS</b>	CHILDREN (2-12 YEARS OLD)	N/A	-	-	Yes
	TEENAGERS (13-24 YEARS OLD)	N/A	-	-	Yes
	ADULTS (25-59 YEARS OLD)	N/A	-	-	Yes
	ELDERLY (60+)	N/A	-	-	Yes
	VULNERABLE	N/A	-	-	Yes

INDICATOR		SCORE			
		0	1	2	3
 <b>SAFETY</b>	LIGHTING	N/A	Available in some areas	Available but not for the entire space	Available in the entire space
	MONITORING	N/A	Available in some areas	Available but not for the entire space	Available in the entire space
	ACTIVITY ZONING	N/A	Zoning available but unclear and often disrupting each other	Zoning available but unclear and sometimes disrupting each other	Clear zoning available and not disrupting each other
	CRIME	Yes	-	-	N/A
	RISK SUPPORT	Cannot support risks	Can support risks to some extent	Has good space for risk support but without signage	Has good space for risk support with clear signage
 <b>CONVE- NIENCE</b>	SHADES	N/A	In some areas (<50%)	Available but not for the entire space (>50%)	Available for the entire space (>80%)
	RESTROOMS	N/A	Available but not opened	Available but poorly maintained	Available and well maintained
	PARKING SPACE	N/A	Available but insufficient	Sufficient but lacks management	Sufficient with good management
	OBSTRUCTIONS	Many obstructions that are difficult to handle	Obstructions in some areas but difficult to handle	Obstructions in some areas but easy to handle	No obstructions
	CLEANLINESS	Not clean and no waste management	Clean in some areas and no waste management	Clean in some areas with occasional waste management	Clean in all areas with regular waste management

## ASSESSMENT CRITERIA FOR THE POTENTIAL OF HEALTHY SPACE

The highest score of this assessment is 75, divided into levels according to the following scale:

**0-25** : The space needs a complete overhaul in the physical aspects and in the number of activities.

**26-50** : The space needs moderate improvement in the physical aspects and in the number of activities. Prioritizing the improvement in these aspects will make the space more user-friendly and give it more potential.

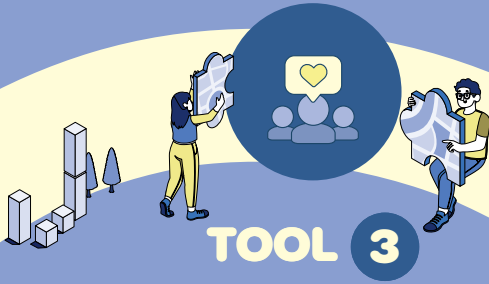
**51-75** : The space already has good potential but may benefit from small addition in terms of activities to add value and efficiency of use in the future.

# SPACE DESIGN GUIDELINES

Once the locals or interested parties are aware of the potential and limitations of the healthy space in their community, the next step is to design the space to create benefits and meet the needs of the people in the area equally. Designers need to consider all groups of people and study their needs and the use behavior of the target group. Tools 3 and 4 will help determine the types of activities, space that fosters wellbeing in all dimensions, and design standards.

## 2 STEP





### TOOL 3

CREATING HEALTH  
AND WELL-BEING  
FOR USERS



### TOOL 4

URBAN DESIGN  
STANDARDS

# TOOL 3

## CREATING WELL-BEING AND WELLNESS FOR USERS



Tool 3 is an integration between the well-being and wellness dimension and the needs of users in each age group. The goal is for the designers to have the tools to design the space and activities while designing public space to promote comprehensive well-being.

As such, target users should be clearly surveyed and identified. Discussions should be held with the people in the community so that the appropriate space and activities that promote various aspects of well-being can be selected or created.

### WELL-BEING



#### PHYSICAL WELL-BEING

Healthy food consumption, quality sleep, and exercise or movement for physical fitness away from illness, especially non-communicable diseases (NCDs), and stress or physical fatigue relief.



#### MENTAL WELL-BEING

Ability to manage emotions and handle stress, leading to stress-free living and satisfaction in life; mental well-being also affects effective learning and working.



#### SOCIAL WELL-BEING

Ability to communicate with others, maintenance and development of harmonious relationships; social well-being directly affects emotions, hormones, stress, blood pressure, and heart rate.



#### INTELLECTUAL WELL-BEING

Activities that stimulate creativity and new skills, as well as analytical and problem-solving skills, to foster intellect; those with high intellectual well-being are enthusiastic to learn and develop their skills and committed to lifelong learning.

### USERS

**CHILDREN**  
(5-12 YEARS OLD)



**TEENAGERS**  
(13-19 YEARS OLD)



**ADULTS**  
(20-59 YEARS OLD)












**ELDERLY**  
(60+ YEARS OLD)













# PHYSICAL



PHYSICAL	 <b>CHILDREN</b> (5-12 YEARS OLD)	 <b>TEENAGERS</b> (13-19 YEARS OLD)	 <b>ADULTS</b> (20-59 YEARS OLD)	 <b>ELDERLY</b> (60+ YEARS OLD)
 <b>CARDIO EXERCISE</b>	<ul style="list-style-type: none"><li>- Activities to promote movement, e.g., line-running, strolling</li></ul>	<ul style="list-style-type: none"><li>- Aerobics at least 60 minutes per day, e.g., running track, swimming, dancing, skateboarding</li></ul>	<ul style="list-style-type: none"><li>- Moderate aerobics at least 150 minutes per week, e.g., brisk walking, marathon, biking</li></ul>	<ul style="list-style-type: none"><li>- Light and moderate aerobics, e.g., walking, gardening</li></ul>
 <b>STRENGTH TRAINING</b>	<ul style="list-style-type: none"><li>- Movement of large muscles (gross motor skills) and strength from running, jumping, or activities using force, e.g., climbing, ball tossing, long jumping</li></ul>	<ul style="list-style-type: none"><li>- Motor skills development activities that influence growth, e.g., running, sports, body weight training, pull-up bar</li></ul>	<ul style="list-style-type: none"><li>- Activities increasing strength of muscles and bones, e.g., weightlifting, pull-up, sports</li></ul>	<ul style="list-style-type: none"><li>- Activities increasing strength of muscles and bones, e.g., arm swinging, light sports</li></ul>
 <b>BALANCE EXERCISE</b>	<ul style="list-style-type: none"><li>- Balancing and controlling the body, e.g., see-saw, balance walking, trampoline jumping</li></ul>	<ul style="list-style-type: none"><li>- Balancing and controlling the body, e.g., balance walking, trampoline jumping</li></ul>	<ul style="list-style-type: none"><li>- Balancing and controlling the body, e.g., balance walking, jumping</li></ul>	<ul style="list-style-type: none"><li>- Activities increasing balance and reducing risk of falling, e.g., balance walking, tai chi, reflexology path</li></ul>
 <b>FLEXIBILITY EXERCISE</b>	<ul style="list-style-type: none"><li>- Muscle exercises involving stretching and contracting, e.g., shoulder rolling, arm swinging</li></ul>	<ul style="list-style-type: none"><li>- Activities developing muscle movement skills, e.g., yoga</li></ul>	<ul style="list-style-type: none"><li>- Activities developing muscle movement skills, e.g., yoga, Pilates</li></ul>	<ul style="list-style-type: none"><li>- Muscle exercises with resistance, involving stretching and contracting of muscles and joint movements, e.g., yoga, stretching</li></ul>
 <b>TRAINING OF THE SENSES</b>	<ul style="list-style-type: none"><li>- Movement of fine motor skills muscles from touching or picking up objects, e.g., playdough, sensory walls, sandbox</li></ul>	<ul style="list-style-type: none"><li>- Movement of fine motor skills muscles, e.g., hand grip strength</li></ul>	<ul style="list-style-type: none"><li>- Testing muscle reflexes</li><li>- Walking on different materials</li></ul>	<ul style="list-style-type: none"><li>- Movement of fine motor skills muscles, e.g., hand grip strength</li><li>- Walking on different material</li></ul>








# MENTAL

<p><b>MENTAL</b></p>	 <p><b>CHILDREN</b> (5-12 YEARS OLD)</p>	 <p><b>TEENAGERS</b> (13-19 YEARS OLD)</p>	 <p><b>ADULTS</b> (20-59 YEARS OLD)</p>	 <p><b>ELDERLY</b> (60+ YEARS OLD)</p>
 <p><b>CONNECTIVITY</b></p>	<ul style="list-style-type: none"> <li>- Warm, friendly, and colorful environment</li> <li>- Space to express and listen to opinions</li> <li>- Child-friendly public space</li> <li>- Group games for children</li> </ul>	<ul style="list-style-type: none"> <li>- Relaxing, recreational activities</li> <li>- Space to express and listen to opinions</li> <li>- Space to express political opinions</li> <li>- Dating locations for lovers</li> <li>- Space to hang out with friends</li> </ul>	<ul style="list-style-type: none"> <li>- Relaxing activities, encouraging hobbies or creativity</li> <li>- Space for family to get together</li> <li>- Dating locations for lovers</li> <li>- Space to hang out with friends</li> </ul>	<ul style="list-style-type: none"> <li>- Family space, e.g., walking with children/grand-children</li> <li>- Space to meet with friends</li> </ul>
 <p><b>CONTINUOUS LEARNING</b></p>	<ul style="list-style-type: none"> <li>- Colorful, clean, and suitable play space and equipment, conducive to independent playing</li> <li>- Space for self-discovery</li> <li>- Learning space</li> </ul>	<ul style="list-style-type: none"> <li>- Expression of talents, encouraging one's identity and boosting confidence</li> <li>- Space for self-discovery</li> <li>- Space to show skills, knowledge, and talents</li> <li>- Hobbies, e.g., artwork, crafts, reading</li> </ul>	<ul style="list-style-type: none"> <li>- Learning space, e.g., human library</li> <li>- Hobbies, e.g., artwork, crafts, reading</li> </ul>	<ul style="list-style-type: none"> <li>- Hobbies, e.g., artwork, crafts, reading</li> <li>- Learning space, e.g., learning how to use technology</li> </ul>
 <p><b>GIVING</b></p>	<ul style="list-style-type: none"> <li>- Community's volunteer activities</li> <li>- Play space that promotes co-sharing</li> </ul>	<ul style="list-style-type: none"> <li>- Having a positive attitude towards oneself</li> <li>- Community's volunteer activities</li> <li>- Space to share experiences</li> </ul>	<ul style="list-style-type: none"> <li>- Having a positive attitude towards oneself</li> <li>- Community's volunteer activities</li> <li>- Space to share experiences</li> </ul>	<ul style="list-style-type: none"> <li>- Having a positive attitude towards oneself</li> <li>- Community's volunteer activities</li> <li>- Space to share experiences</li> </ul>
 <p><b>MINDFULNESS</b></p>	<ul style="list-style-type: none"> <li>- Knowing how to manage risk and estimate danger from playing</li> <li>- Being close to nature brings comfort</li> <li>- Space where one feels safe</li> </ul>	<ul style="list-style-type: none"> <li>- Encouraging perception and understanding about mental health problems</li> <li>- Privacy</li> <li>- Space where one feels safe</li> <li>- Being close to nature</li> </ul>	<ul style="list-style-type: none"> <li>- Encouraging perception and understanding about mental health problems</li> <li>- Privacy</li> <li>- Space where one feels safe</li> <li>- Being close to nature</li> </ul>	<ul style="list-style-type: none"> <li>- Space where one feels safe</li> <li>- Peaceful space for meditation or religious activities</li> <li>- Being close to nature</li> <li>- Being in familiar environments</li> </ul>











# SOCIAL



SOCIAL	 CHILDREN (5-12 YEARS OLD)	 TEENAGERS (13-19 YEARS OLD)	 ADULTS (20-59 YEARS OLD)	 ELDERLY (60+ YEARS OLD)
	<ul style="list-style-type: none"><li>- Being with friends to encourage adapting to others and being with others in harmony</li><li>- Space to promote group interaction</li><li>Space to show talents</li><li>Space to express opinions</li></ul>	<ul style="list-style-type: none"><li>- Promote good relationship with peers and family members</li><li>- Activities relating to community services and volunteering, promoting social well-being and responsibility</li><li>- Develop leadership skills and interact with people from different backgrounds</li><li>- Space to show talents, e.g., musical performance</li><li>- Space to express opinions or games played in groups, e.g., board games</li><li>- Joining festivals and traditions</li></ul>	<ul style="list-style-type: none"><li>- Promote good relationship with peers and family members</li><li>- Activities relating to community services and society</li><li>- Develop leadership skills, taking responsibility, problem solving, communication, and interaction with people from different backgrounds</li><li>- Promote cultural understanding and acceptance of diversity</li><li>- Games played in groups, e.g., board games</li><li>- Joining festivals and traditions, sports clubs</li><li>- Space for group activities, e.g., creative space</li><li>- Watching performances and music</li><li>- Volunteering activities</li></ul>	<ul style="list-style-type: none"><li>- Support for network and social activities</li><li>- Interaction with neighbors, which affect mental well-being</li><li>- Regular communication with family, friends, and members of the community, reducing loneliness and creating a sense of being part of society</li><li>- Seniors' clubs</li><li>- Coffeeshouse forums</li><li>- Volunteering activities</li><li>- Games played in groups, e.g., board games</li><li>- Traveling</li><li>- Religious activities</li><li>- Joining festivals and traditions</li></ul>



# INTELLECTUAL

INTELLECTUAL	 <b>CHILDREN</b> (5-12 YEARS OLD)	 <b>TEENAGERS</b> (13-19 YEARS OLD)	 <b>ADULTS</b> (20-59 YEARS OLD)	 <b>ELDERLY</b> (60+ YEARS OLD)
 <b>INTERPERSONAL INTELLECT</b>	<ul style="list-style-type: none"> <li>- Expressing opinions, learning languages through meeting people</li> </ul>	<ul style="list-style-type: none"> <li>- Expressing opinions, learning languages through meeting people</li> </ul>	<ul style="list-style-type: none"> <li>- Learning new skills or knowledge</li> <li>- Promoting lifelong learning</li> <li>- Trainings and seminars</li> </ul>	<ul style="list-style-type: none"> <li>- Learning new skills or knowledge</li> <li>- Promoting lifelong learning</li> <li>- Expressing opinions</li> </ul>
 <b>RELATIONAL DIMENSIONS</b>	<ul style="list-style-type: none"> <li>- Promoting creativity and imagination through making artwork</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting creativity and imagination</li> <li>- Seeing art exhibitions, visiting museums</li> <li>- Workshops of interest</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting creativity and imagination</li> <li>- Seeing art exhibitions, visiting museums</li> <li>- Workshops of interest</li> </ul>	<ul style="list-style-type: none"> <li>- Expressing opinions, learning languages through meeting people</li> <li>- Making artwork and crafts</li> </ul>
 <b>LINGUISTIC INTELLECT</b>	<ul style="list-style-type: none"> <li>- Language use development, e.g., reading, listening to tales</li> </ul>	<ul style="list-style-type: none"> <li>- Having access to good quality education and opportunities for diverse learning</li> </ul>	<ul style="list-style-type: none"> <li>- Language use development</li> <li>- Space to meet and interact with foreigners</li> <li>- Reading and listening</li> </ul>	<ul style="list-style-type: none"> <li>- Language use development</li> <li>- Space to meet and interact with foreigners</li> <li>- Reading and listening</li> </ul>
 <b>LOGICAL INTELLECT</b>	<ul style="list-style-type: none"> <li>- Activities using critical thinking</li> <li>- Solving puzzles</li> <li>- Playing games that promote creativity, e.g., logos</li> </ul>	<ul style="list-style-type: none"> <li>- Activities using critical thinking</li> <li>- Board games</li> <li>- Mathematical problems</li> </ul>	<ul style="list-style-type: none"> <li>- Activities using critical thinking</li> <li>- Board games</li> <li>- Mathematical problems</li> </ul>	<ul style="list-style-type: none"> <li>- Activities using critical thinking</li> <li>- Board games</li> <li>- Mathematical problems</li> </ul>
 <b>INTELLECT ABOUT NATURE</b>	<ul style="list-style-type: none"> <li>- Experimenting and learning new things, e.g., experimenting with natural materials</li> </ul>	<ul style="list-style-type: none"> <li>- Experimenting and learning new things, e.g., experimenting with natural materials</li> </ul>	<ul style="list-style-type: none"> <li>- Experimenting and learning new things, e.g., experimenting with natural materials</li> </ul>	<ul style="list-style-type: none"> <li>- Experimenting and learning new things, e.g., experimenting with natural materials</li> </ul>
 <b>MUSICAL INTELLECT</b>	<ul style="list-style-type: none"> <li>- Promoting creative expression through activities, e.g., music</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting creative expression through activities, e.g., music</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting creative expression through activities, e.g., music</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting creative expression through activities, e.g., music</li> </ul>



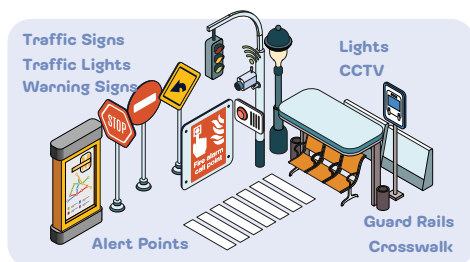
# **TOOL 4** **URBAN DESIGN** **STANDARDS**

Tool 4 is developed to guide and control the design of space in urban development by determining the goals or control the process of building a city or structures, informing the space owners on what should be improved in the activity space in their community or how to enhance the design standards.

## **EXAMPLES OF URBAN DESIGN ELEMENTS**

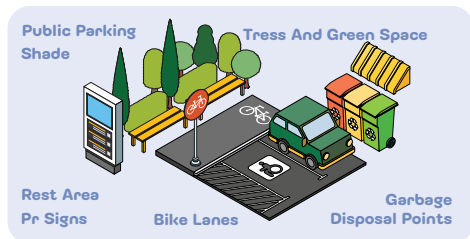
### **● SAFETY**

Public space needs to be safe for users, give users physical and mental comfort when using the space and joining in activities.



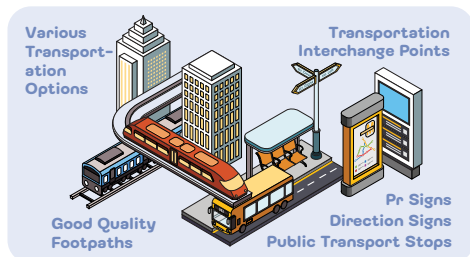
### **● CONVENIENCE**

This refers to improvement and addition of facilities in public space, as well as the design of surface, materials, and green elements to create aesthetics when using.



### **● ACCESSIBILITY**

Access to public space should be promoted through connecting a network of pedestrian and bike paths to the space, thus accommodating pedestrians, bikers, and those with disabilities.



# CREATING MECHANISMS TO IMPLEMENT HEALTHY SPACE NETWORK

The previous 2 steps have shown what types of physical activities can be promoted by the local community or city with healthy space, what strengths and weaknesses do these spaces have, and what types of guidelines can designers look for to help design the space. The last step then refers to the components and steps to drive the healthy space network to promote physical activities and implement knowledge in practical ways.

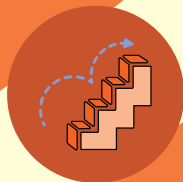
## 3 STEP





## TOOL 5

### COMPONENTS OF IMPLEMENTATION



## TOOL 6

### STEPS OF IMPLEMENTATION



# TOOL 5

## COMPONENTS OF IMPLEMENTATION

The components to implement a healthy space network comprise 3 things that the implementers need to understand: development of capability, joint planning and management, and roles and

### 1. DEVELOPMENT OF CAPABILITY:

This is the important foundation to enable the local community to learn and understand how to implement the healthy space network master plan, involving managing knowledge, publicizing knowledge, providing counseling, making an accessible database, and training interested parties on how to apply the concepts and principles in tangible ways.

### 2. JOINT PLANNING AND MANAGEMENT:

This refers to a collaboration between all stakeholders in the area. A meeting is held to allow all stakeholders to participate in the planning and share their opinions on the plans and mechanisms, maintenance and management of the space, and short-term and long-term finances. It also covers the identification of the roles and responsibilities of those in charge of each project. Another is a discussion held to stimulate understanding and awareness of health among the urban population.

### 3. ROLES AND RESPONSIBILITIES OF STAKEHOLDERS:

Stakeholders are people whose role is to provide support from the master plan stage to the local implementation stage.

#### ADVOCACY

Publicize knowledge and provide budget to drive healthy space to promote physical activity. Stakeholders include:

- Thai Health
- SAT
- Healthy Lifestyle
- TAT
- Promotion Section
- etc.
- Department of Physical Education

#### PROVISION AND FINANCIAL MANAGEMENT

Facilitate the use of public space, manage reserve funding, and raise funds for the project. Stakeholders include:

- Municipalities
- PPHO
- PAO
- etc.

#### ACTIVATE

Organize activities or festivals and provide financial support or equipment for comprehensive space development. Stakeholders include:

- Private sector organizations
- Urban development companies
- Chambers of commerce in cities
- Local merchants
- Etc.

#### RESEARCH AND PLANNING

Research and follow up on results to share information and knowledge

- Healthy Space Forum
- Thai Health network
- Educational institutions
- etc.

CENTRAL GOVERNMENT

LOCAL COMMUNITIES

PRIVATE SECTOR

ROLES AND RESPONSIBILITIES OF STAKEHOLDERS

PARTNERS

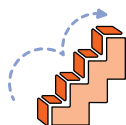
PUBLIC

#### PROTECTION

Participate in giving suggestions on public space development to implementers of the city. Stakeholders include:

- The public
- Clubs
- Communities
- etc. w
- Associations

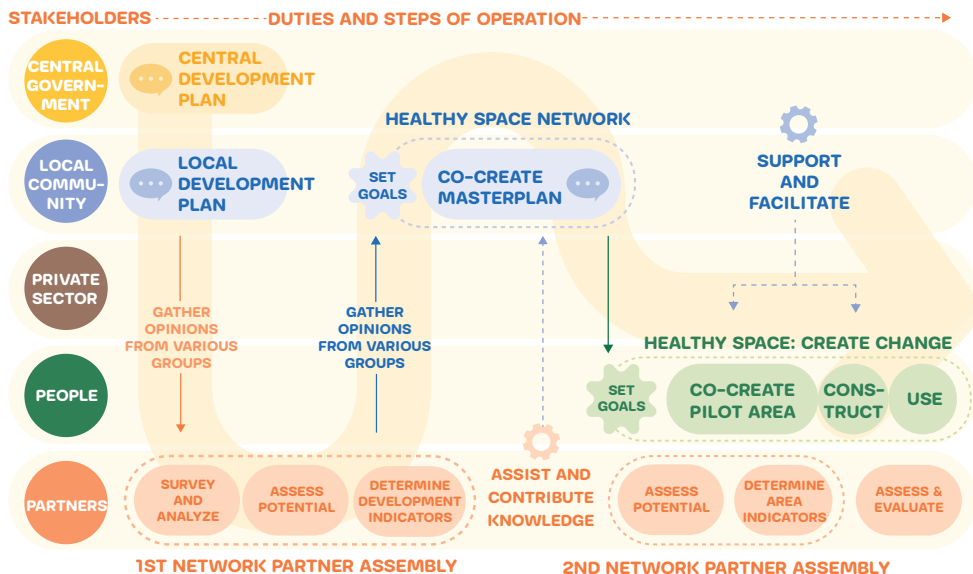




# **TOOL 6**

## **STEPS OF IMPLEMENTATION**

The flow of implementation of a healthy space network is a tool that allows the local communities to sustainably manage the plans and the space by themselves.



Cities or local communities that want to seriously drive the healthy space network can study the flow of implementation in this flowchart. As shown, in order to achieve a complete healthy space network, roles and responsibilities need to be defined, and cooperation is needed from all sectors, including the central and local government sector, the private sector, the people's sector, and related partners. However, operations may involve more complex steps, or some local communities may not be able to follow said steps, for whom adjustments may be made accordingly. The implementation flow originated from network partners with a common goal. These partners,

despite their sector, are the main driving force behind the project after a successful assembly of partners or working group. The next step is compiling related data for analysis, objective setting, and co-planning of the healthy space network. This is to be followed by development and operation, during which the network could be combined or expanded because the diversity of urban healthy space means various groups of owners or occupants of the areas. At the end of the flow are the assessment and evaluation of the pilot use of the designed healthy space for the purpose of further development of the space.

# URBAN DESIGN MODEL

The project has applied every step of how to create the healthy space network in the previous chapters on case study areas of Phuket and Chiang Rai. The strategies of developing public space are 1) proposing additional activities in existing public space for more diverse activities and usage, 2) improving the physical aspects and activities of existing public space to meet the standards, and 3) increasing public space in areas that are still lacking.





# HEALTHY SPACE NETWORK FOR PHUKET MUNICIPALITY

The Healthy Space Network for Physical Activity Promotion Masterplan for Phuket Municipality is the result of a study and review of relevant development plans, a survey of physical areas based on the healthy space locating tool, including a study of social, environmental, and economic features, and an engagement with every sector. The objective is to create a healthy space network, allowing all groups of people access to healthy space and increasing physical activity in daily life. There are 2 networks in the strategy to develop the Phuket Municipality area, which are 1) the Khlong Bang Yai green space development network, which is a natural canal route connecting urban space and activities, and 2) the commercial and tourism districts route, which connects various forms of commercial space in Phuket.

Data collection and engagement with stakeholders from all sectors have led to the identification of 56 potential locations to be developed into new healthy spaces in the future, creating healthy space in the access radius of 500-800 meters. Said spaces will cover 22 communities and healthy space network routes throughout Phuket Municipality.



# HEALTHY SPACE NETWORK MAP

## PHUKET MUNICIPALITY



### BORDERS AND ACCESS RADIUS TO HEALTHY SPACE

- 500 m. radius
- 800 m. radius
- Phuket Municipality borders

### HEALTHY SPACE NETWORK

- Khlong Bang Yai green space development network
- Connecting routes to tourism and commercial districts
- Connecting routes to green space

### POTENTIAL LOCATIONS FOR HEALTHY SPACE

- Natural space
- Public park
- Sports field/Sports court
- Public court/Public parking
- Religious place
- Educational institution
- Museum and library
- Transport station
- Private-owned space/Commercial space



# PILOT HEALTHY SPACE

## PHUKET MUNICIPALITY

“The Bang Niao District” is a potential model location in Phuket with infrastructure ready to be developed as pilot space. The vision for this development is to create an “urban living room in the neighborhood to elevate urban living” by creating a lively atmosphere, with flexible activities, in a friendly design.

### SYMBOLS

-  Bang Niao District Center
-  Public Space for Residential Use
-  Learning Space outside the Classroom
-  Temporary Public Space
-  Canalside Connecting Route
-  District Connecting Route

5 Space in front of Phuket Municipality Library



10 Pho Thong Bus Stop



9 Footpath beside Ban Bang Neaw Municipal School



3 Free space in Soi Rong Lek



There are 12 potential locations to be developed into pilot healthy space in Bang Niao District. The design of areas in Bang Niao District is divided into 5 categories.

8 Footpath in front of Ban Bang Neaw Municipal School



2 Parking lot at Wat Saen Suk



12 Free space in government office areas



1 Bang Niao Shrine



7 Free space in front of Por Tor Shrine



4 Court in front of Fire Station



6 Yard at Saphan Hin Intersection



11 Areas along Khlong Bang Yai



## AREA 1 : District Center

This is the welcome space and the landmark of Bang Niao District for easy recognition.

- Create healthy space with sports field and community exercise spot

## AREA 2 : Learning Space outside the Classroom

This is a public space to promote learning and lifestyle of children and parents, and safety in the district.

- Promote creative space by showcasing children's works and exhibitions
- Build waiting areas for students for before and after school

## AREA 3 : Public Space for Residential use

This refers to public spaces in residential areas that offer friendly activities to build relationships within the community.

- Promote exercise spots and community activities
- Create joyful atmosphere for residential lifestyle

## AREA 4 : Temporary Public Space

This refers to spaces that become temporarily public outside of official hours, with activities to bring liveliness to the district.

- Build recreational space to relax after work
- Promote exercise and stretch spots for adults

## AREA 5 : Canalside Connecting Route

This is a network of public spaces along the canal to connect activities at the city level.

- Create recreational spaces by the water
- Create a network of walking, running, and biking throughout the city
- Allocate spaces for exercise, transport, and parking

BAN BANG NEAW  
MUNICIPAL SCHOOL  
DESIGN OF AREA

**Sidewalk Active Zone :** footpaths designed with 9 jumping game patterns

**Relax Zone :** public furniture and increased rest area and meeting points

**Safe crosswalks**



PHUKET PUBLIC LIBRARY  
(PHUKET KNOWLEDGE PARK)

DESIGN OF AREA

**Game Zone :** Floor decorated with jumping game patterns, mixed with health promotion knowledge

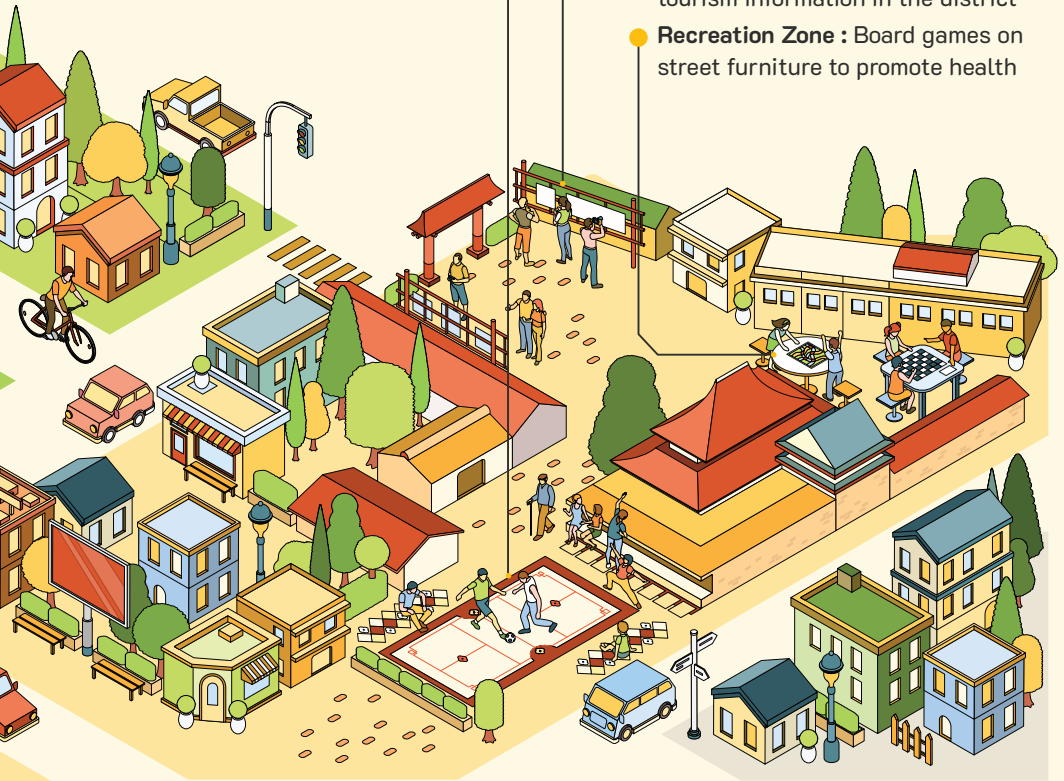
**Learning Zone :** Floor decorated with patterns for placing health promoting furniture



## BANG NIAO SHRINE

### DESIGN OF AREA

- **Activity Zone** : Multi-purpose sports court, stretching space in parking lot
- **Exhibition Zone** : PR signs and tourism information in the district
- **Recreation Zone** : Board games on street furniture to promote health



# HEALTHY SPACE NETWORK FOR CHIANG RAI MUNICIPALITY

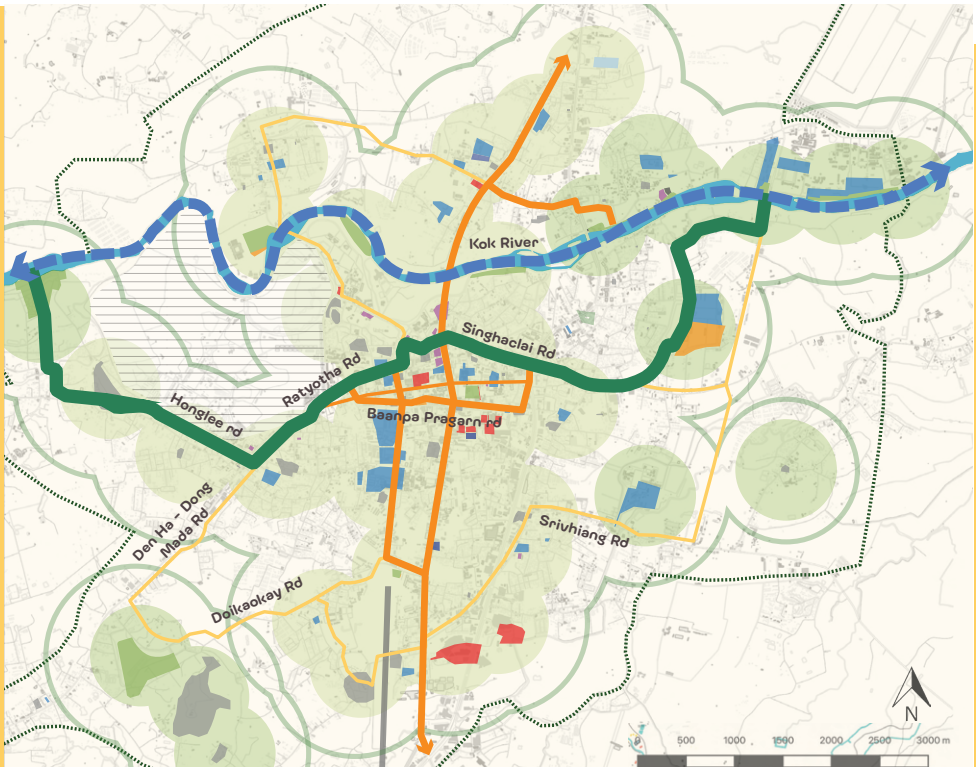
The Healthy Space Network for Physical Activity Promotion Masterplan for Chiang Rai Municipality, also known as the Healthy Space Network, is the result of a study and review of relevant development plans, a survey of physical areas based on the healthy space locating tool, including a study of social, environmental, and economic features, and, most importantly, a collection of opinions through an engagement with stakeholders from every sector in Chiang Rai Municipality. There are 2 main areas of development in the Healthy Space Network Masterplan for Chiang Rai Municipality area, which are the “Core Area,” covering the Chiang Rai Old Town and the adjacent areas that have potential and readiness for development, and the “Secondary Area,” an area to accommodate future expansion of the city and a healthy space for the communities far away from the city center. The area’s design is also proposed to include culture, food and health, sports and recreation, environment, and lifelong learning.

In creating the Healthy Space Network, it can be concluded that Chiang Rai Municipality contains 83 potential healthy spaces to promote physical activity and the making of the network will achieve healthy spaces within the access radius of 500-800 meters in all the communities in the Core Area and the healthy space network routes throughout the Municipality.



# HEALTHY SPACE NETWORK MAP

## CHIANG RAI MUNICIPALITY



### BORDERS AND ACCESS RADIUS TO HEALTHY SPACE

- 500 m. radius
- 800 m. radius
- Chiang Rai Municipality borders
- Military Zone

### HEALTHY SPACE NETWORK

- Connecting routes along Kok River
- Primary connecting routes
- Secondary connecting routes
- Minor connecting routes

### POTENTIAL LOCATIONS FOR HEALTHY SPACE

- Natural space
- Public park
- Sports field/Sports court
- Public court/Public parking
- Religious place
- Educational institution
- Museum and library
- Transport station
- Private-owned space/Commercial space

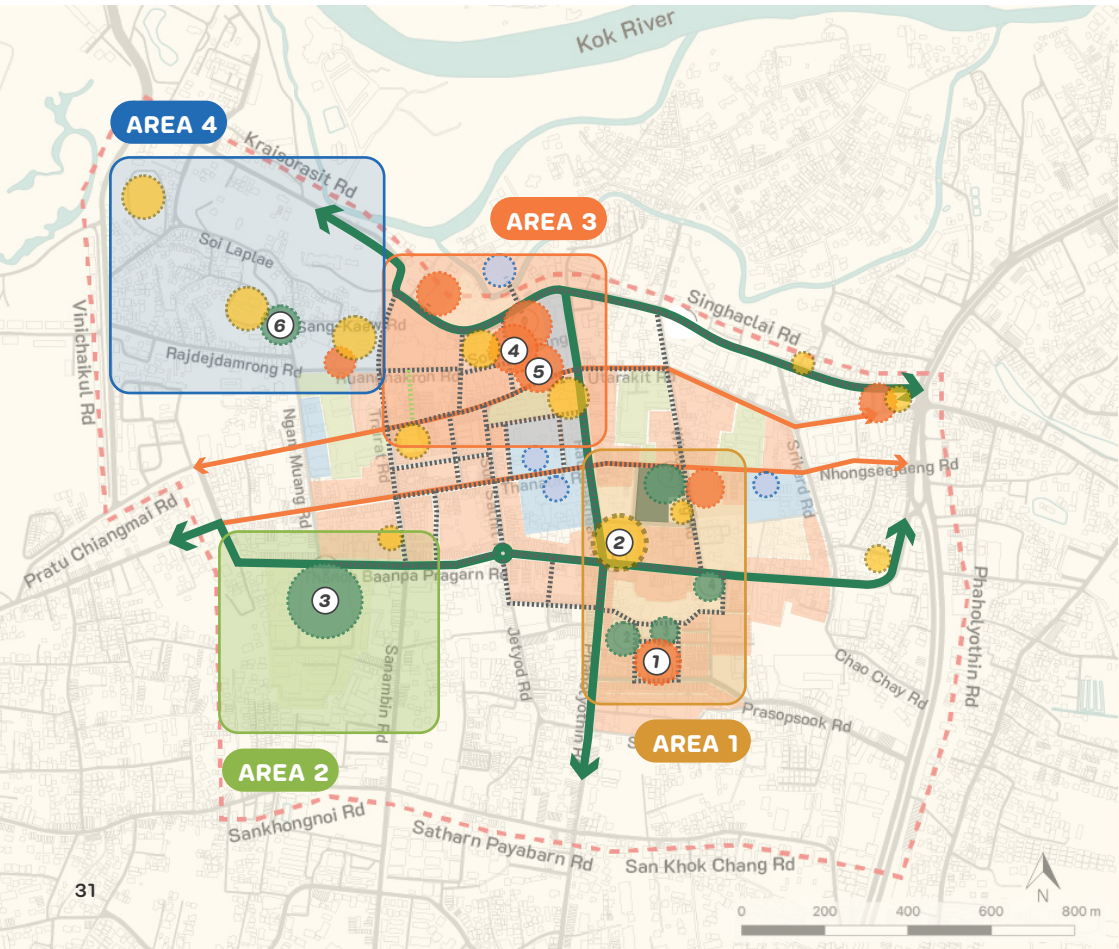


# PILOT HEALTHY SPACE

CHIANG RAI MUNICIPALITY

“Chiang Rai Old Town” is a potential model location with infrastructure ready to be developed as pilot space. The study found that the area still lacks public space that can be accessed on foot from the communities. Therefore, it is proposed that more public space be added by utilizing existing social centers such as religious places, schools, libraries, and the government complex. These healthy spaces are designed to correspond with Chiang Rai’s contexts of lifestyle, culture, and history, as well as the Creative City plan.

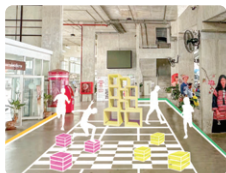
- SYMBOLS
- Creative Learning Space
  - Religious Place
  - Communal Space
  - Government Space
  - ↔ Primary connecting routes to the district
  - ↔ Secondary connecting routes to the communities
  - ⋯ Pedestrian connecting routes



## DESIGN AREAS

An analysis of the potential areas in Chiang Rai Old Town shows 4 districts that can be developed into pilot healthy spaces. The designs of pilot healthy spaces in Chiang Rai Old Town are shown in 6 areas.

① Chiang Rai  
Bus Terminal 1



② Chiang Rai  
First Church



③ Samakkhi Witthayakhom  
School



④ In front of Chiang Rai  
Provincial Youth Center



⑤ In front of Chiang Rai  
Culture Exhibition Center



⑥ Community court  
behind Wat Phra Kaew



### AREA 1

The Chiang Rai Old Town Center is a bustling commercial district. The design concept is to develop the area into activity points for the city's festivals and recreational zone for the surrounding communities and people from other districts.

### AREA 2

The urban community is a densely packed residential area with an urban lifestyle. The design concept is to develop the area for activities and public clubs, as well as for exercise for the surrounding communities.

### AREA 3

The historical and cultural learning area is where Chiang Rai's important historical places are located. The design concept is to develop the area to house activities that promote health and creativity of people of all ages.

### AREA 4

The community behind Wat Phra Kaew is a residential area of mostly transplants from other places, comprising over 100 households. The design concept is to increase communal relaxing space making a significant center for the residents.

## COMMUNITY COURT BEHIND WAT PHRA KAEW

### DESIGN OF AREA

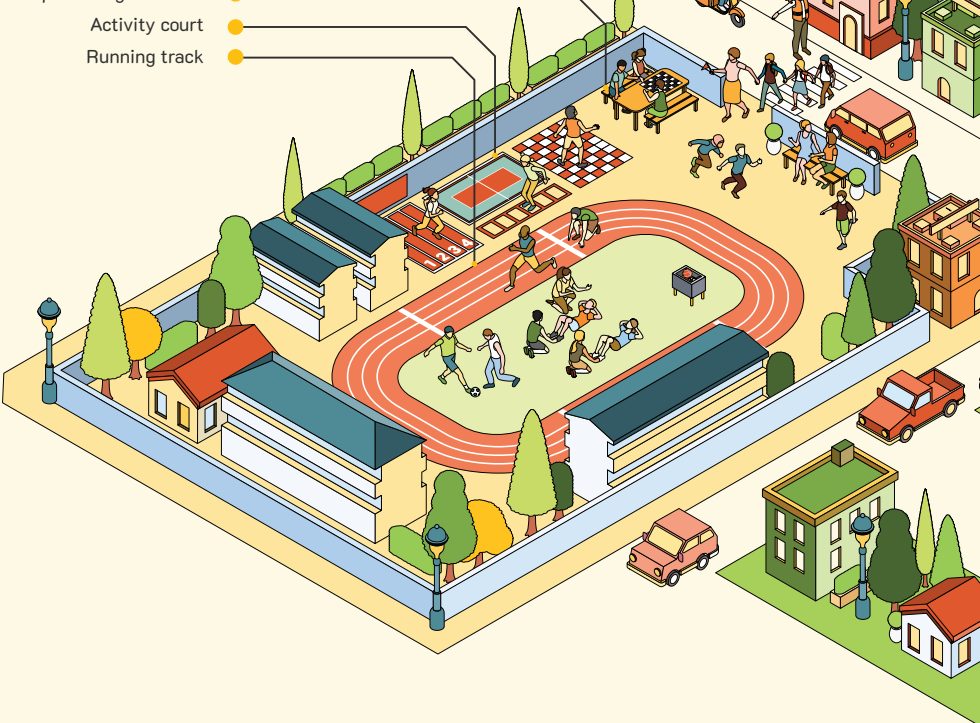
- Playground
- Signs with information and exercise moves
- Rest area



## SAMAKKHI WITTHAYAKHOM SCHOOL

### DESIGN OF AREA

- Health promoting furniture
- Activity court
- Running track



## IN FRONT OF CHIANG RAI PROVINCIAL YOUTH CENTER

### DESIGN OF AREA

- Health promoting sculpture
- Multi-purpose furniture

## IN FRONT OF CHIANG RAI CULTURE EXHIBITION CENTER

### DESIGN OF AREA

- Paths leading to different spots
- Map of Chiang Rai Old Town
- Box to promote learning and health

## CHIANG RAI FIRST CHURCH

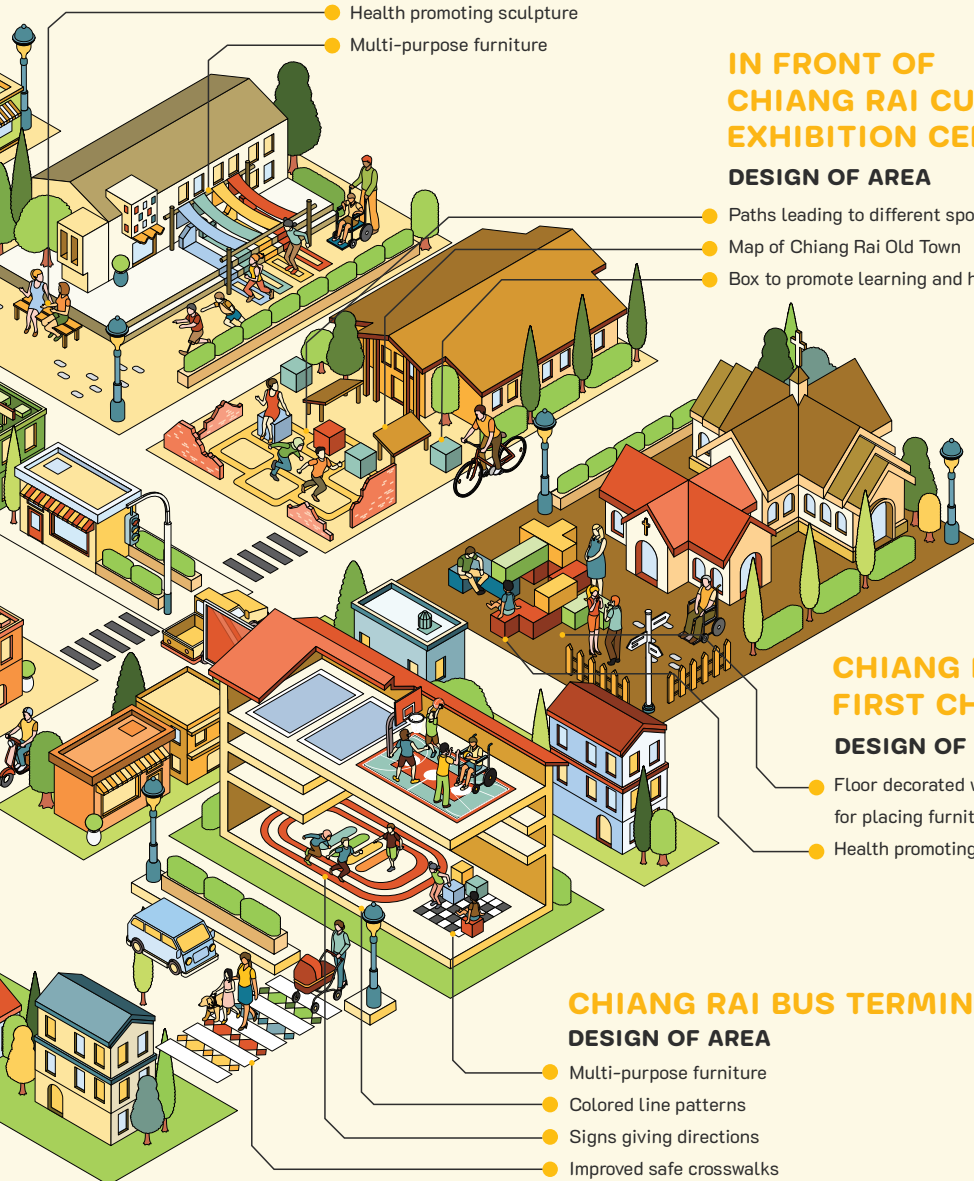
### DESIGN OF AREA

- Floor decorated with patterns for placing furniture
- Health promoting furniture

## CHIANG RAI BUS TERMINAL 1

### DESIGN OF AREA

- Multi-purpose furniture
- Colored line patterns
- Signs giving directions
- Improved safe crosswalks





## SUMMARY

Space for physical activity plays an important role in a city. Studies have shown that designing healthy spaces to promote more physical activity for people in the community involves more than space for exercising and moving, but also accessibility. The development of these areas must then take into account a balance between form and accessibility. If there is space for people to exercise, but the access to this space is inconvenient or has limitations, it is possible that people may choose not to use it. As such, development must consider the creation of an environment that supports both space and well-being networks for the urban population, especially when these spaces have an impact on physical and mental health, as well as positive impact on other aspects, e.g., economy, society, and safety, etc.

However, studies and co-creation of the master-plan with the locals of Phuket and Chiang Rai have revealed some issues regarding development, which could be found in other regions of Thailand as well. One such issue is the development of certain public areas that are inconsistent with the needs of the local population. There is also a lack of communication between the government sector and the general public, the private sector, and other agencies, resulting in ineffective local support plans and other limitations such as financial support for area development, flawed public transport networks, and incomplete access to information on urban well-being, etc.





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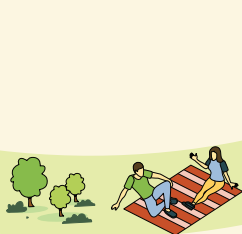
**If you are...**

**A community**

without accessible public space  
or spaces for exercise

**A community**

without play space for children  
or stretching space for the elderly



**A government agency**

without space to develop  
for public use

**A government agency**

that can no longer manage  
public space without help

**The private sector**

that wants to share personal space  
for the city's benefits

**This manual could be your solution.**