



Green Transport @Taipei City

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Outline

Introduction

- Basic Information
- Green Transport Policy
- Green Transport in Taiepi City
- Policy Goals

Promote Green Transport

- Bicycle-Sharing System (YouBike)
- Bike Network
- The Neighborhood Traffic Improvement Project



Basic Information

(July 2017)

Item	Numbers
Population	2,685,202
Area	271.8 km ²
Population Density	9,879.34 / km ²
Registered Automobiles	808,769
Registered Motorcycles	979,147
Automobile Ownership Rate	301 cars / 1,000 persons
Motorcycle Ownership Rate	353 motorcycles / 1,000 persons



Taipei Metro

(Aug. 2017)

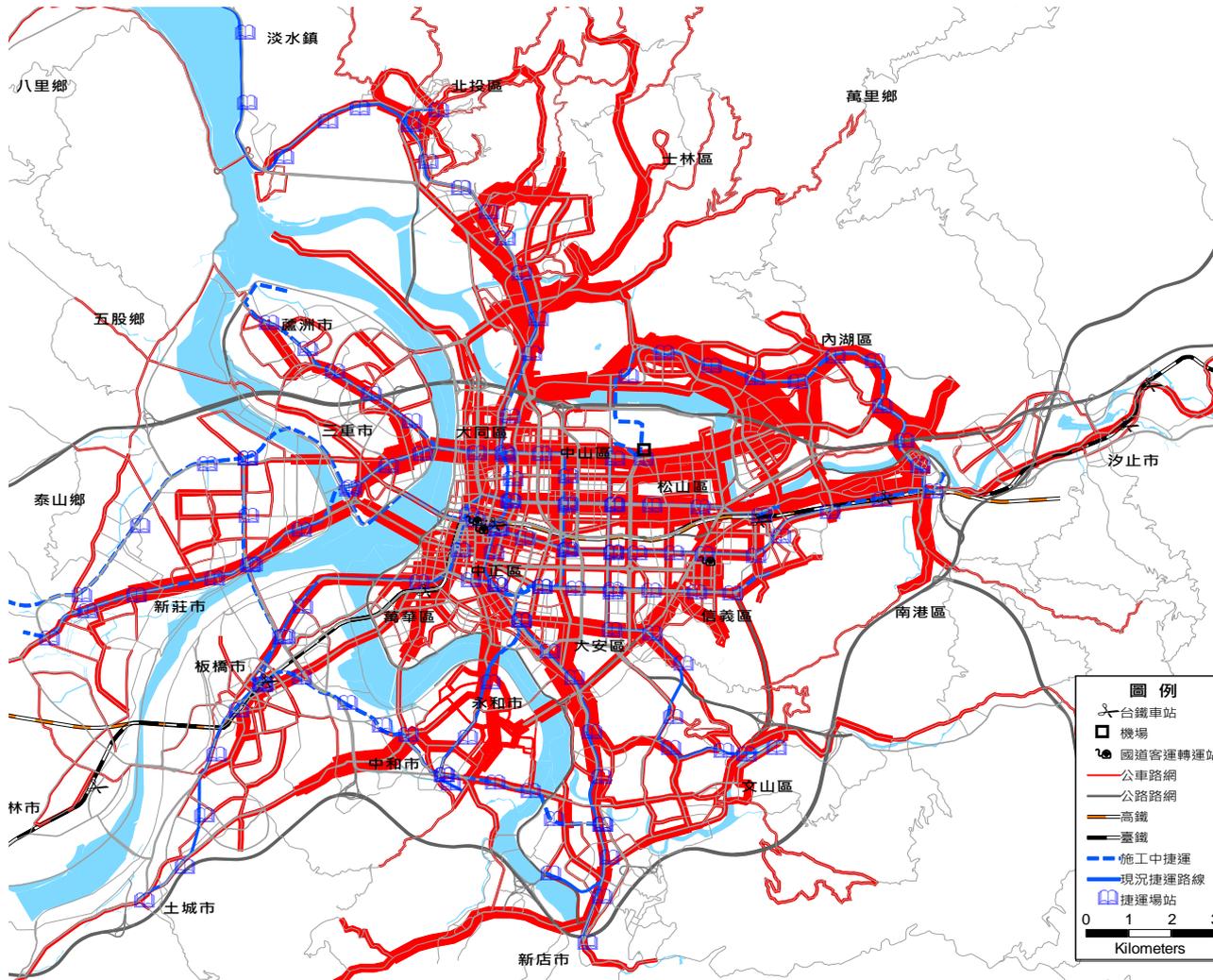
- 5 lines
- 131.1km of revenue track
- 117 stations
- 2.04 million passengers/day





City Bus System

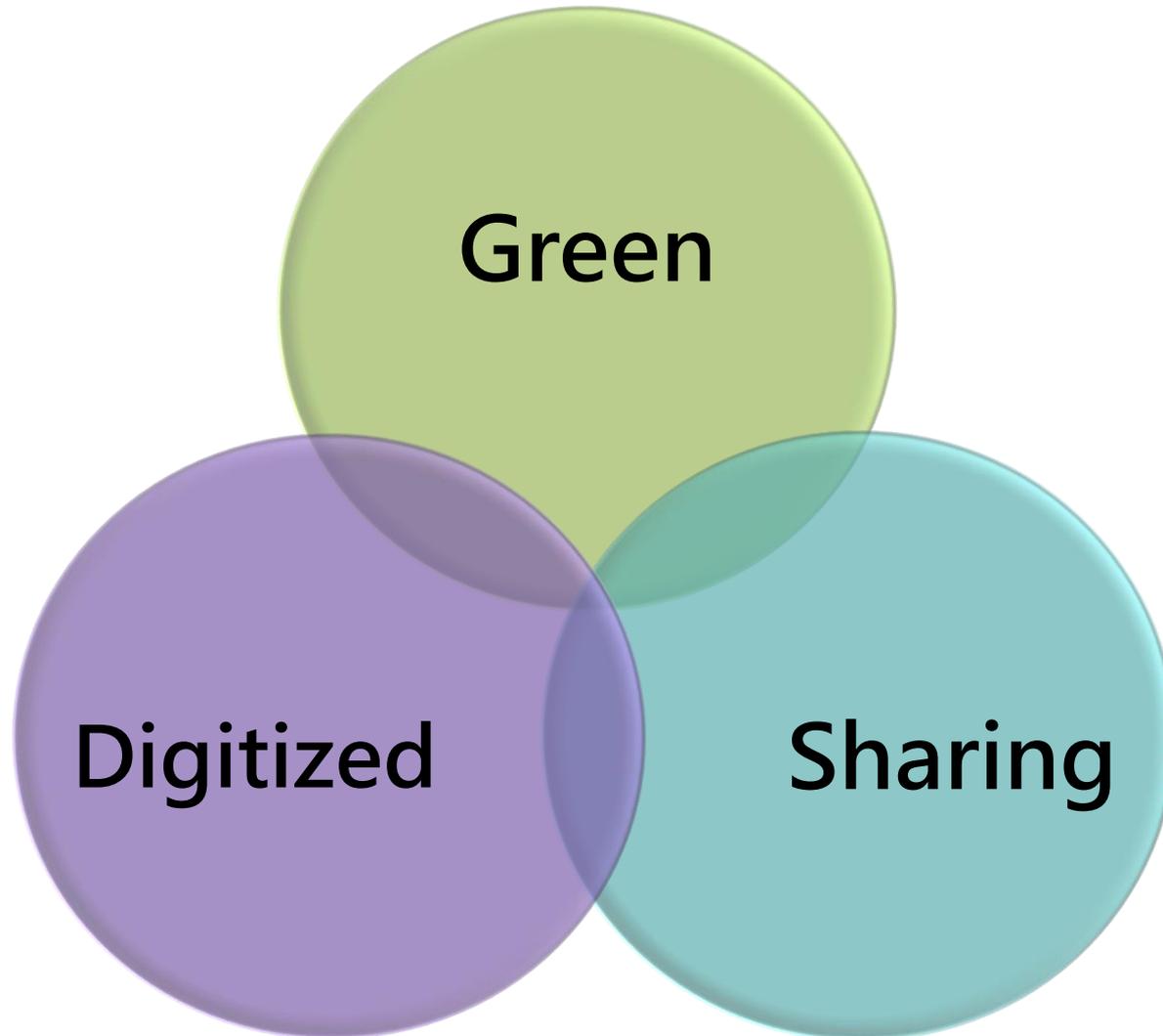
(Aug.2017)



- 14 civil operation bus transports
- 3,507 buses
- 287 routes
- 1.3million trips/day
- 86.89% city residents living within 500 m of bus service coverage



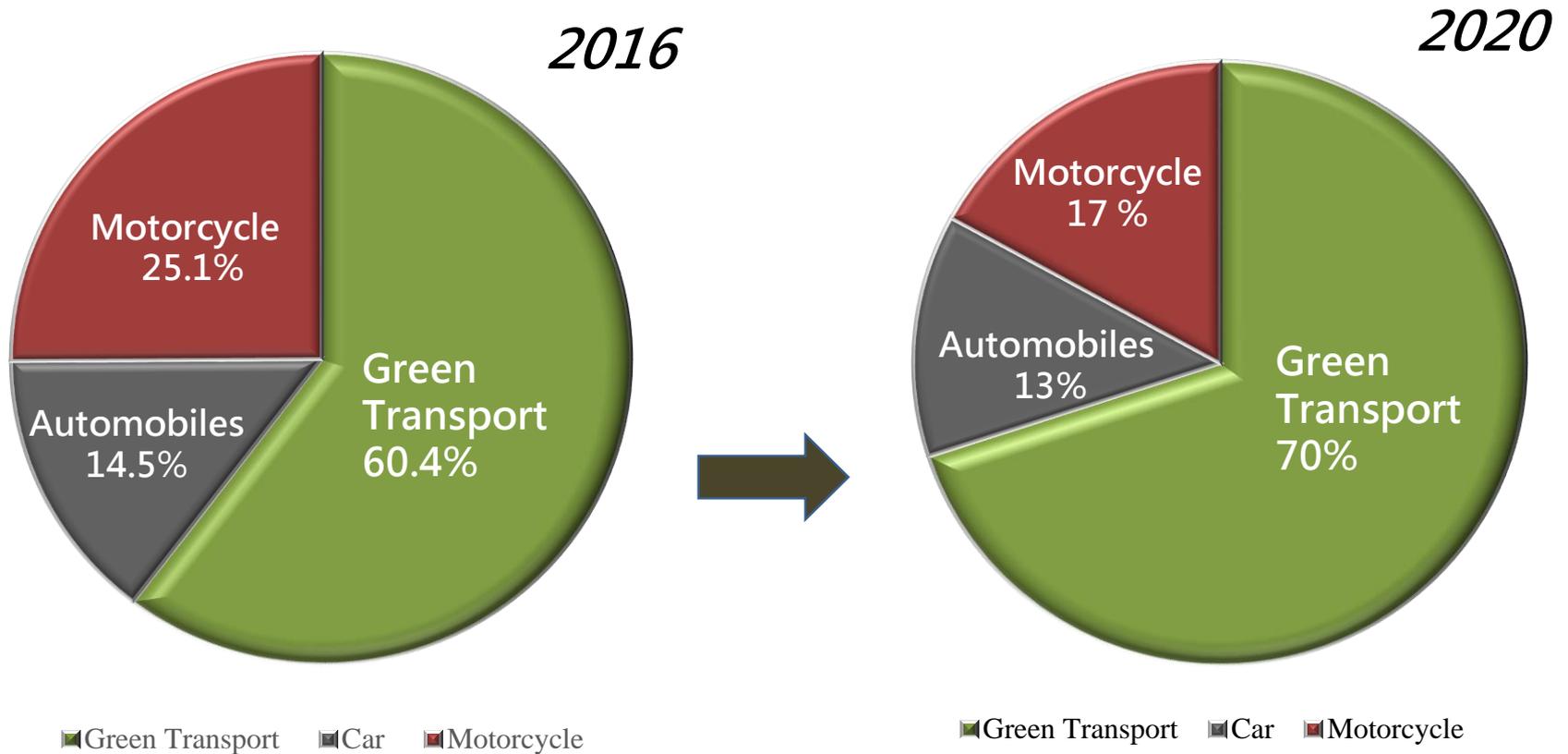
Introduction – Our Strategies





Vision 2020 of Taipei City

Market Share of Green Transport : 70%



*Green Transport = Bus+ Bike+Metro+Walking



The Network of BBMW

Backbone Service

Mass
Rapid
Transit
System

Network Service

Arterial
Bus

Feeder
Bus

Outskirt
Bus

First & Last Mile Service

Taxi

Mini
Bus

YouBike

Walk

Bicycle-Sharing System (YouBike)

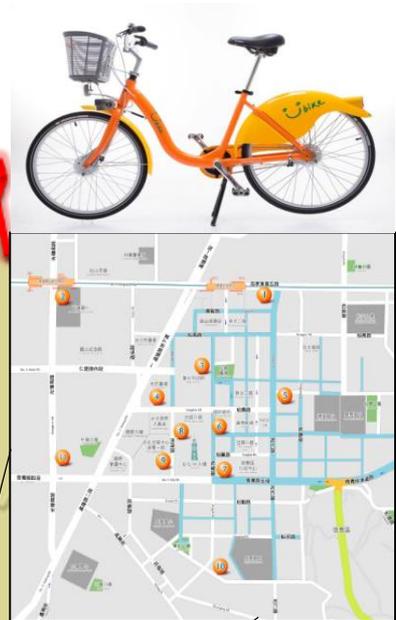




YouBike – Trial Project



Trial project started from March 2009 with 11 stations and 500 bikes in Xinyi district.



XinYi District



YouBike – Trial Project Summary





YouBike - Trial Project Summary

Operation Model & User Reaction Analysis



Limited Coverage



Unfriendly Registration Process



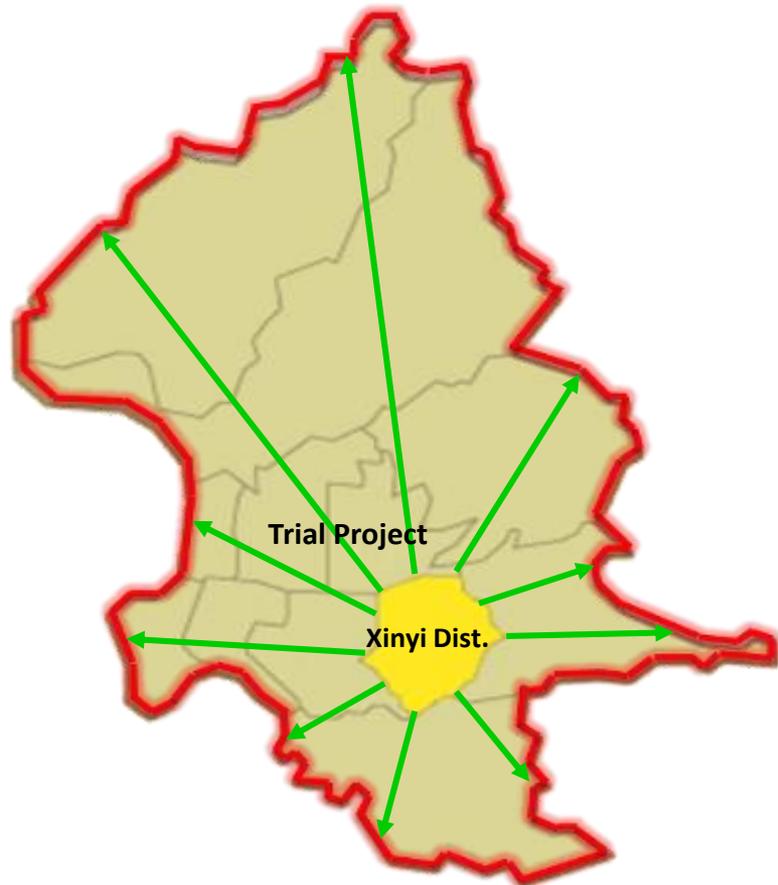
Similar Fare as Other Public
Transport Modes (with Annual Fee)



YouBike - Whole City Project

- Expansion Program since Aug.30, 2012

Bike Services Expand to
The Whole City





YouBike - User-Friendly Registration

1. An EasyCard
2. Deposit: 0
3. Mobile Phone Number (TW)
4. Only 2 Min. to Become a YouBike Member



Easy to Register
in Kiosk, APP, Website



Fare Strategy:
No Annual Fee



Single Rental





YouBike - Progressive Rates

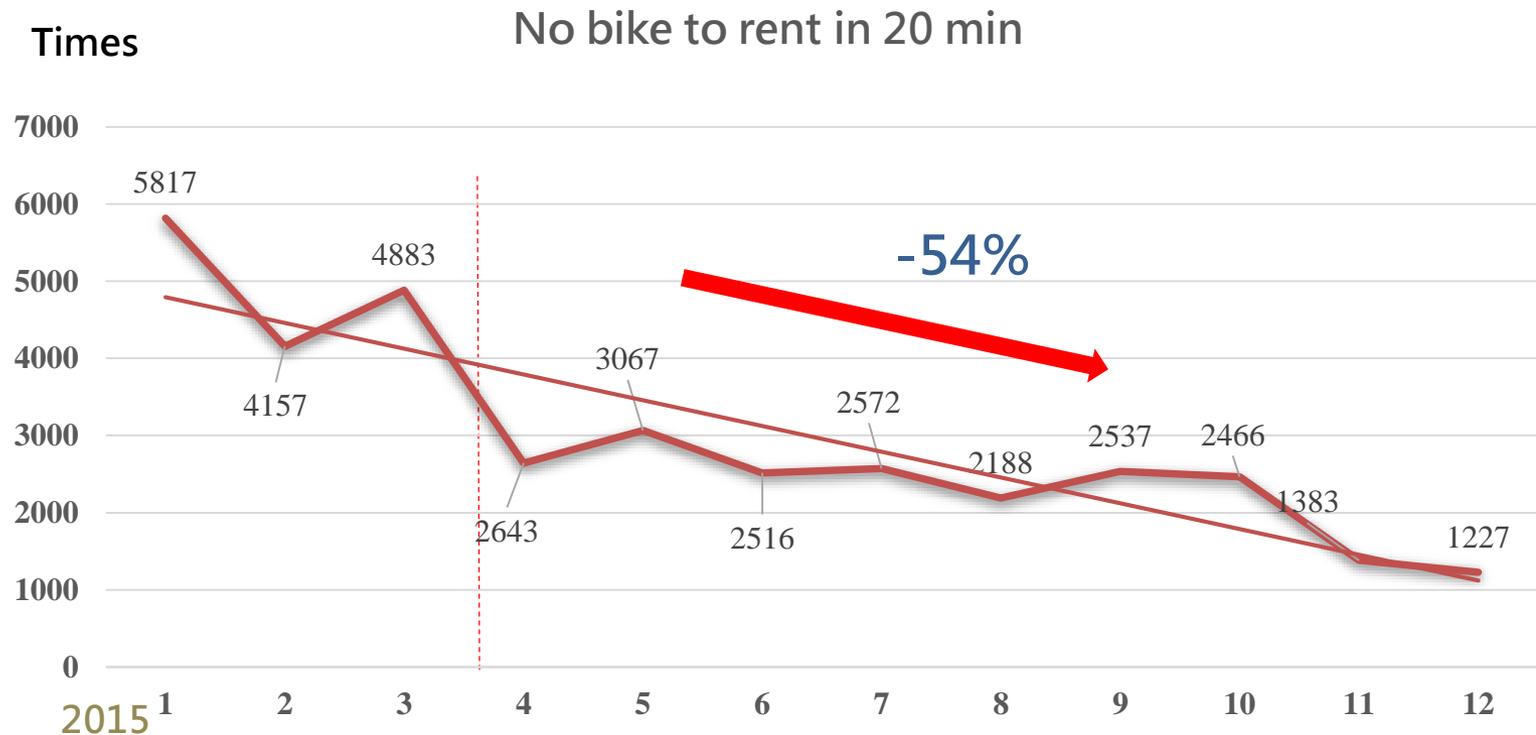
Rent Plans	Single Rental	Member
Target Market	Short-term Users or Tourists	Long-term Users
Payment Method	By Credit Card	EasyCard
Charge Rates	\$10NT per 30min within the first 4 hours. \$20NT per 30min between 4 to 8 hours. \$40NT per 30min exceeding 8 hours.	





YouBike

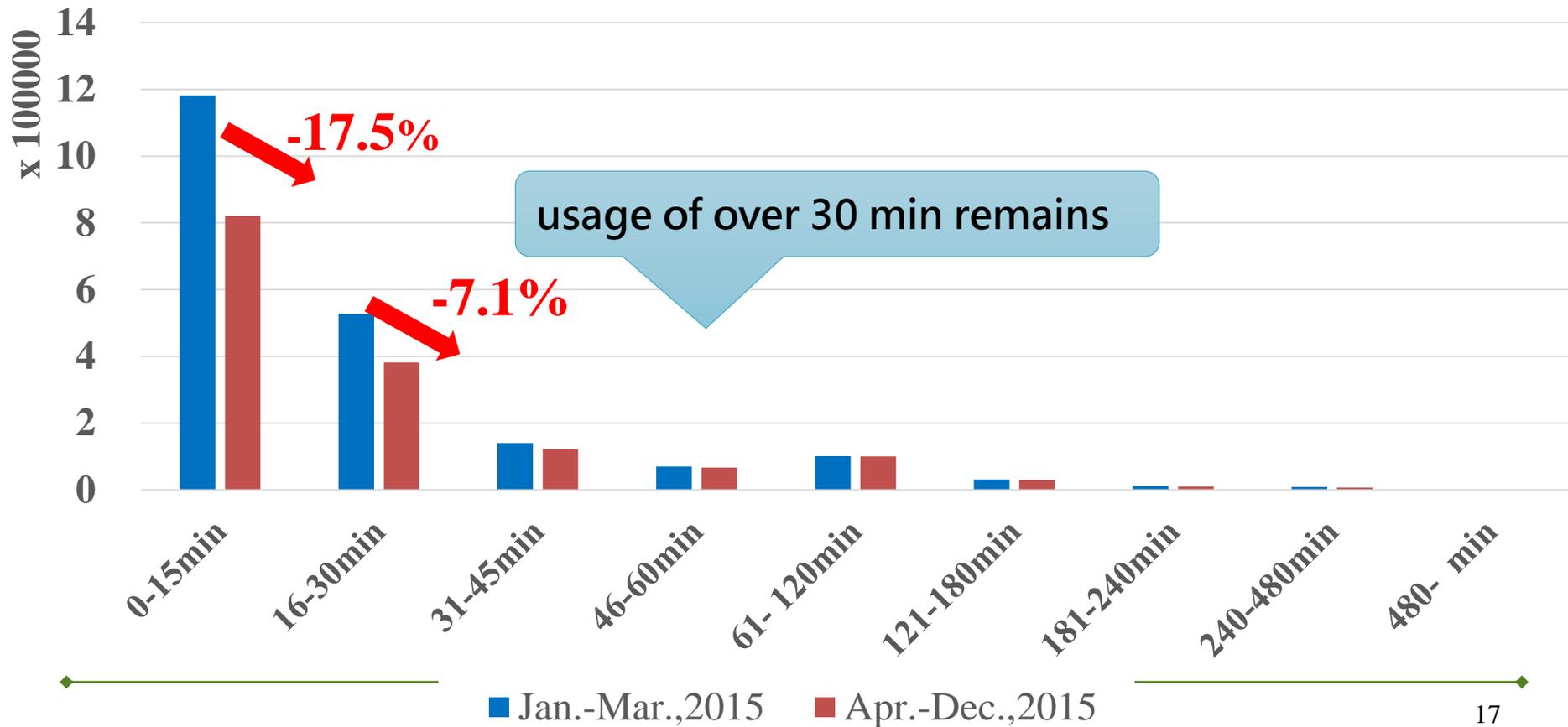
Situation of “no bike to rent” declined by 54% from Apr. to Dec. 2015.





YouBike

The usage in 15 min declined by 17.5%, the 16-30 min declined by 7.1% ; short-distance users decided to go on foot !

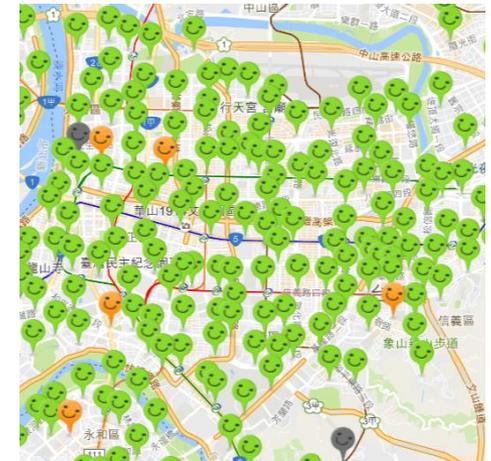




YouBike – Today

- 370 Stations & 12,148 Bikes
- > 50,000 Trips/Day
- Turnover Rate : 5.73 Times/Bike/Day
- 94.7% Customer Satisfaction

(Aug. 2017)





YouBike - Future Expanding Plan

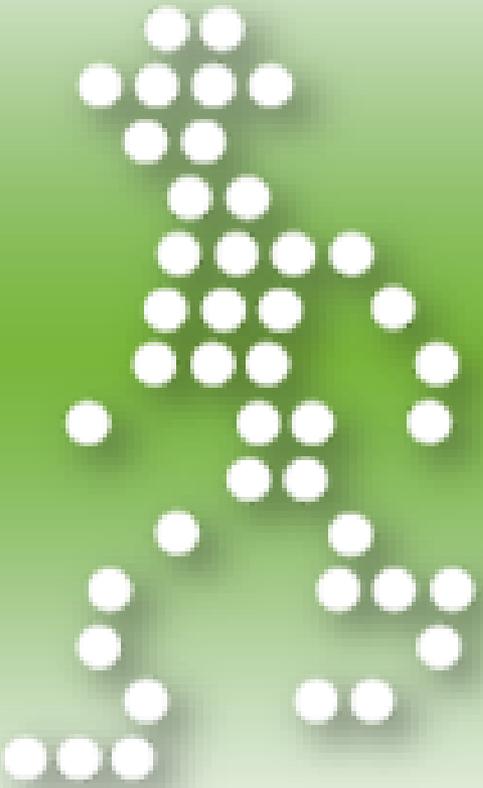
- Goal by 2017: 400 stations and 13,000 bikes
- Users can reach rent station within 5-10 minutes or 350 meter walk

370 stations
(Aug. 2017)

Goal by 2017:
400 stations



Bike Network @Taipei City





Urban Bikeway since 2009

Experience from DunHua and BeiAn Rd. Bikeway

DunHua Bikeway



Type: Lanes on Roadside

BeiAn Bikeway



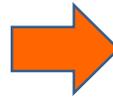
Type: Lanes on
(widening) Sidewalk



Urban Bikeway

Experience from DunHua Bikeway

- Type: Lanes on Roadside.
- City residents' driving habits not easy to change
- Bike Lane shift to Slow Lane with a 30 km/h speed limit in 2012.





Urban Bikeway

Success Cases of Bikeway on Roadside



ChangXing St. Bikeway

Key Factors

1. land use characteristic uncomplicated
2. lower business parking demand



FangLan Rd. Bikeway



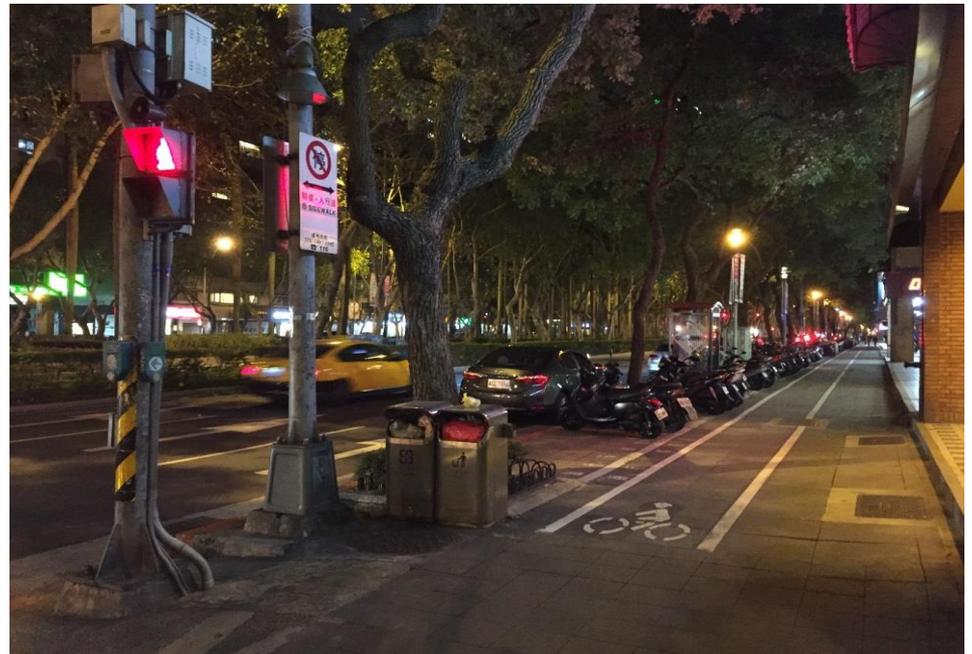
Urban Bikeway

Reallocated Bikeway with Widening Sidewalks



FuXing N. Rd.

Marking Bikeway on Existing Sidewalks



RenAi Rd.



Urban Bikeway

Share-used Path if Sidewalk Wide Enough





Urban Bikeway

Curb Lanes Change into Slow Lanes If Sidewalks not Wide Enough



slow lane with a 30 km/h speed limit



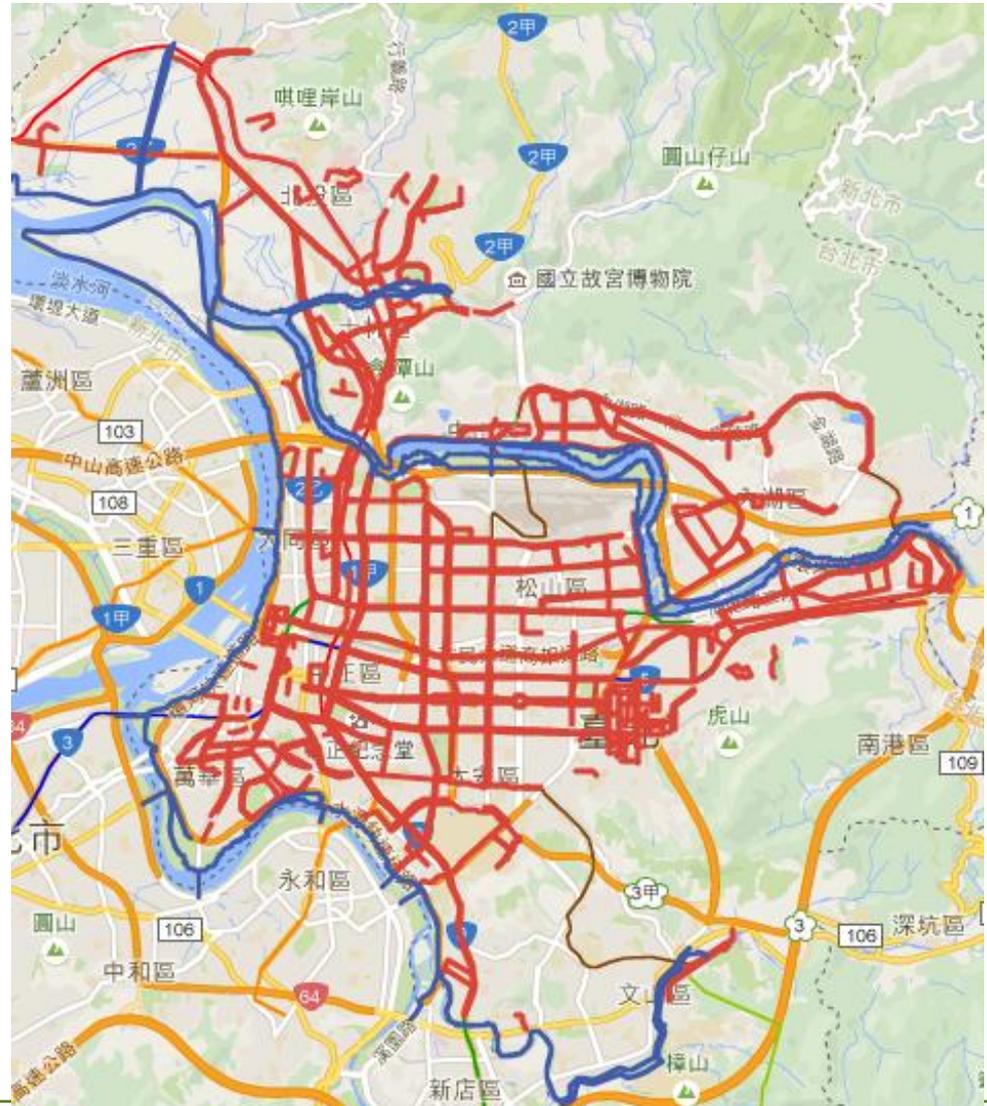
Introduction of Current Bikeway

Separated Bikeway 85.76km

Shared-use Path 304.30km

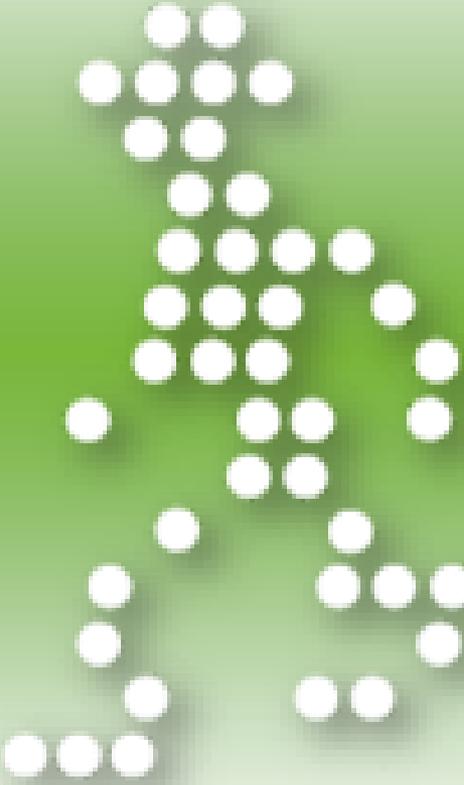
Riverside Bikeway 112km

- completed evaluation of establishment of separated bikeway along arterials over 20 meter width in 2014
- preferred separated bikeway in the future





Neighborhood Traffic Environment Improvement Program





Friendly Space

- Taipei Arcade Pavement Leveling Program (2002~2016)
- Completion : 83.18% ; 183,000 of total 220,000 m



No. 60, Sec. 1, XinSheng S. Rd.



No. 118, Sec. 3, ChengDe Rd.



Friendly Space

- Pedestrian Environment Improvement Project
- Completion : 96.15% ; 2.44 million m² of total 2.50 million m²



Roosevelt Road



SongJiang Road

Friendly Space

- Clearing Arcades & Sidewalks of Motorcycles
- Completion (Aug. 2017) :
 - ✓ 1,215 road sections
 - ✓ 51.02% of total road sections with sidewalk
 - ✓ Implemented Road Sections : 654.53 km in length





Origin

1

Illegal parking hot spots

2

The Conflict of
Pedestrians and Cars

3

Occupied Roads to be
Parking Spaces

4

Difficulty of fire truck to
pass

✓ The origin of this plan is
“10 illegal parking hot
spots raised by people”

✓ Taipei city government
started to implement
“**Neighborhood traffic
environment improvement
program**” in August, 2015.



Purpose & Project Schedule



Year	2015	2016	2017	2018	2019	2020	Total
The number of villages(里)	30	60	100	100	100	66	456
Accumulate villages(里)	30	90	190	290	390	456	456



Method & Strategy

- This plan takes a **village** (里 ; Li) into a unit.
- Mainly use **marked sidewalks** to improve pedestrian's walking environment.
- Adjust red lines and yellow lines
- Adjust parking spaces
- Clear arcades of motorcycles





Participating Departments

- Department of Transportation - convener
- District office 、 Police office
- vice convener
- Village Office
- Police Department
- Traffic Engineering Office
- Parking Management and Development Office
- Consultant Firms
- New Construction Office, Public Works Department
- Construction Management Office
- Department of Environmental Protection
- Fire Department
- Department of Information and Tourism
- Research, Development and Evaluation Commission
- Construction Contractor



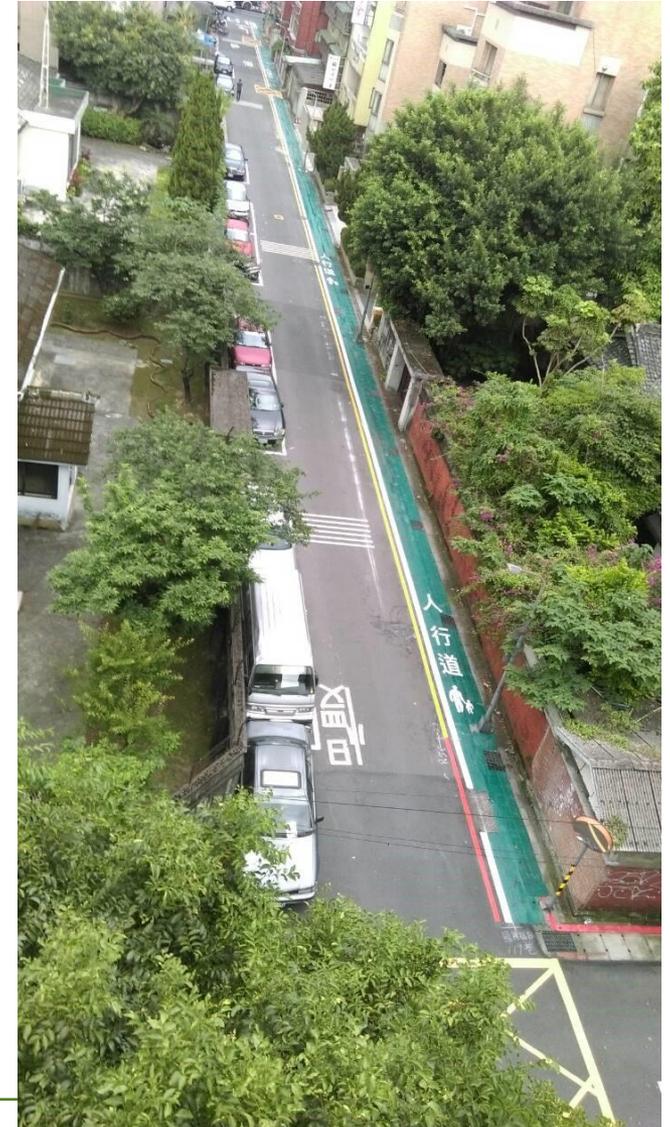
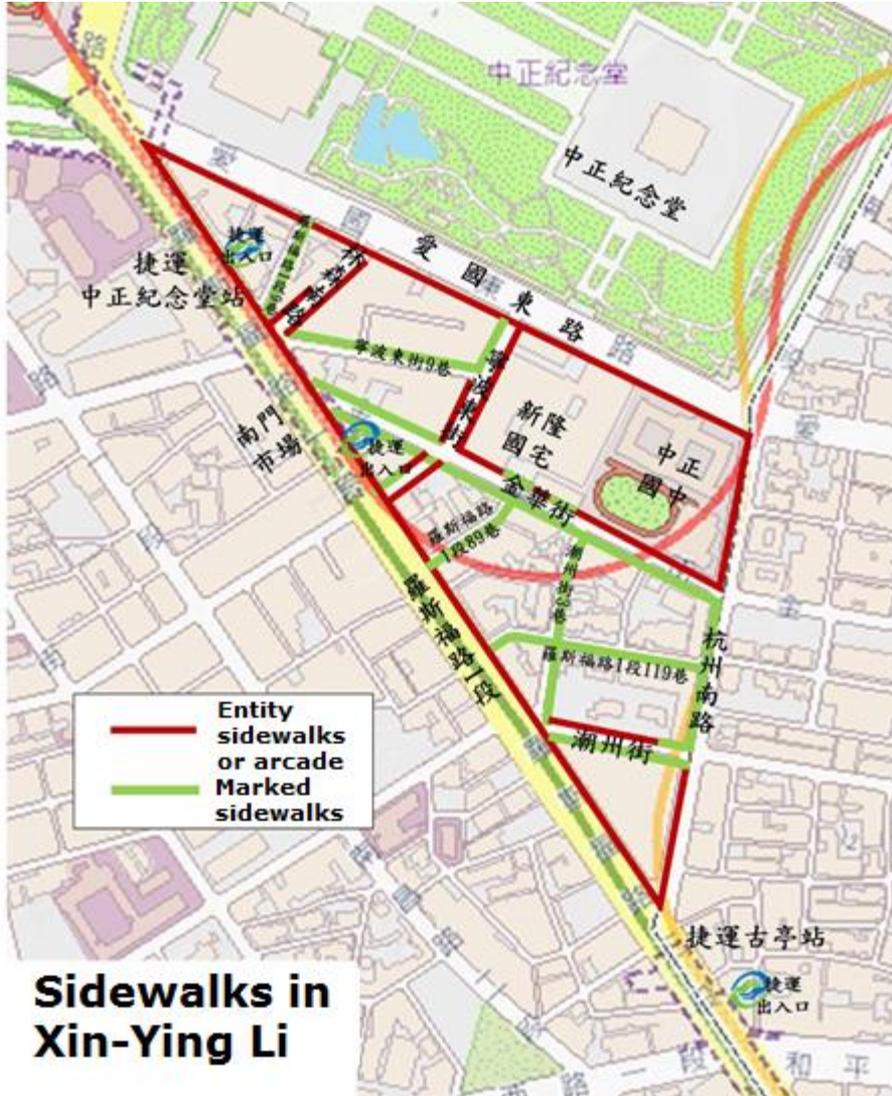
Results & Benefits

2015					
Car parking spaces	Motorcycles parking spaces	Marked sidewalks	Under 8 meters alleys	Accomplished	Completion
+485	+905	+93 (9,000m)	582	251	43%

Level	Completion	Quantity	Name
High	>80%	4	<u>XinYing Li (village)</u> DaSyue Li (village) HuaSheng Li (village) JianAn Li (village)



XinYing Li (village), ZhongZheng District





XinYing Li (village), ZhongZheng District





XinYing Li (village), ZhongZheng District



JinHua Street
(near by NingBo
East Street)



DaSyue Li (village), DaAn District





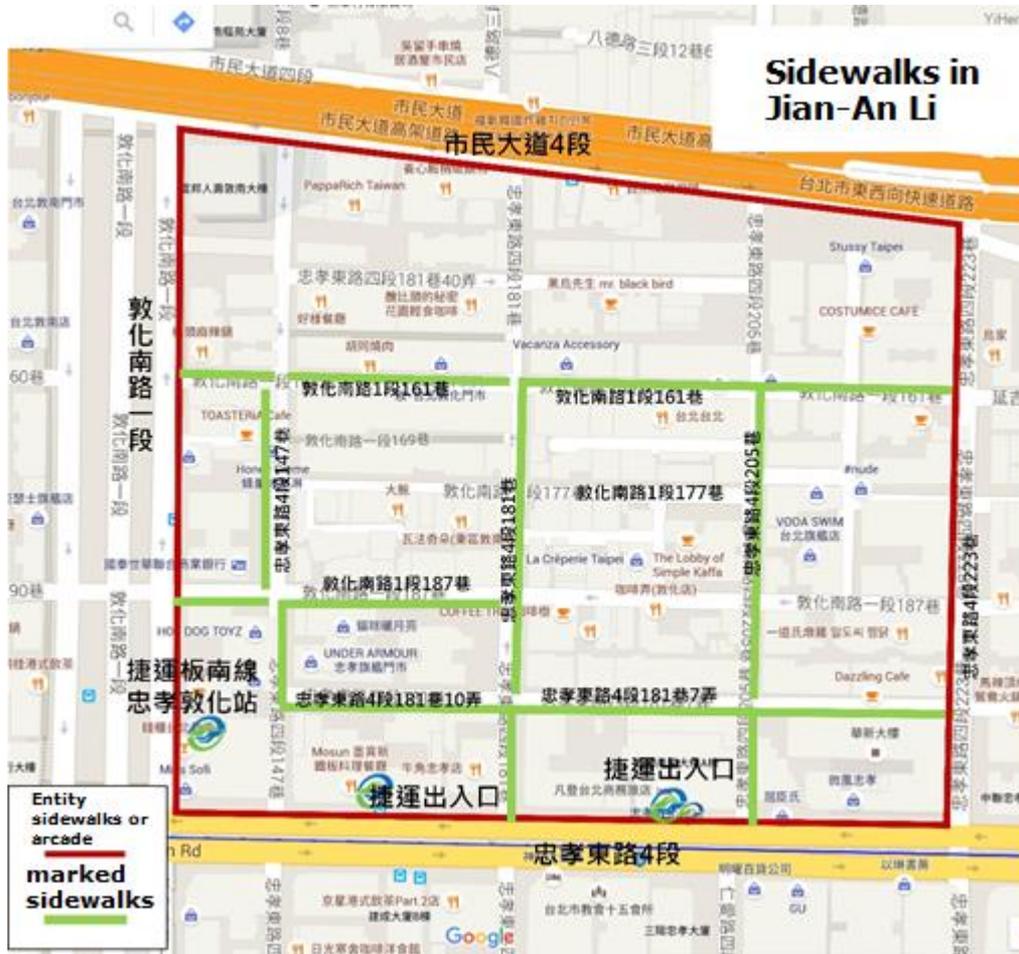
HuaSheng Li(village),DaAn District

Sidewalks in Hua-Sheng Li





JianAn Li (village), DaAn District





Current Implementation

Accidents Analysis

2015	Completion	total number of accidents
HuaSheng Li(village)	100%	52→13 (↓ 75%)
DaSyue Li(village)	96%	33→13 (↓ 61%)
JianAn Li(village)	82%	63→38 (↓ 40%)
XinYing Li(village)	100%	8→1 (↓ 88%)

2016	Completion	total number of accidents
TengYun Li(village)	100%	2→0 (↓ 100%)
DongRong Li(village)	98%	30→4 (↓ 87%)
YuanShan Li(village)	87%	38→22 (↓ 42%)
ZhuYuan Li(village)	85%	36→11 (↓ 69%)

Data Period : the year before implementation & the year after implementation

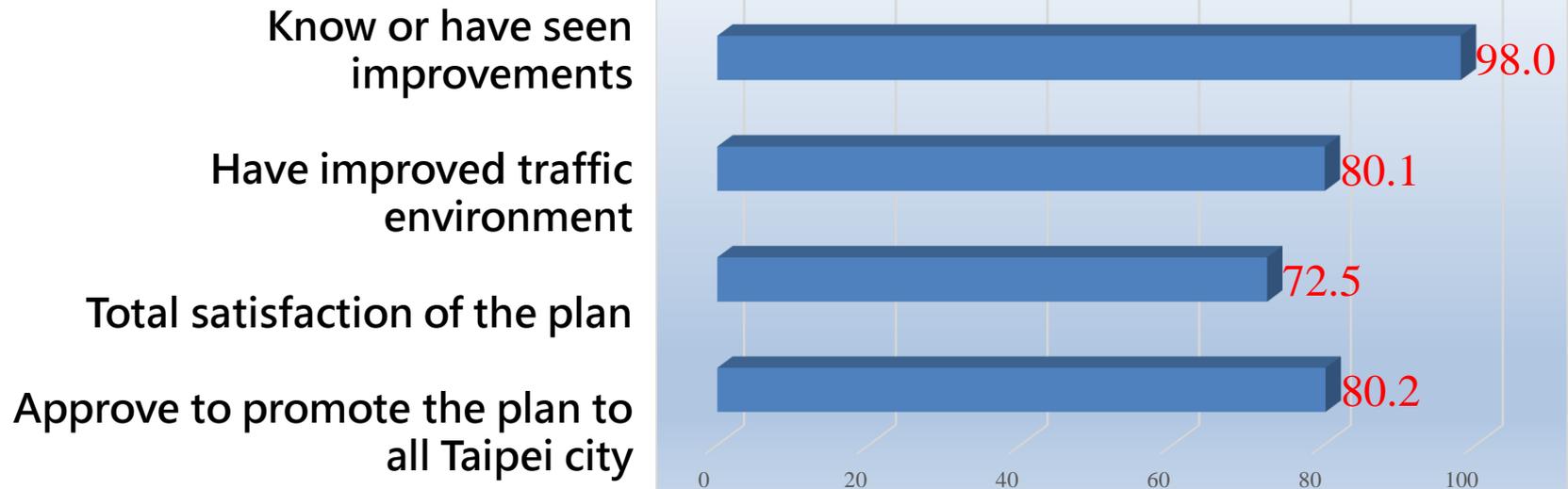


Current Implementation

Satisfaction Survey 2015

- 10 Villages of highest completion in the annual plan 2015
- Face-to-face interview
- Oct. 14 ~ Nov. 1, 2016

Results





Current Implementation

- 2015 : accomplished 30 villages ;
4 villages' completion over 80%
- 2016 : accomplished 53 villages ;
33 villages' completion over 80%
- 2017 : accomplished 175 villages
(predicted) ; currently under
planning or construction



Future Plan

- Total **456** villages in Taipei City accomplished by **2020**
- Strengthen communication between residents and increase completion up to 80%
- Maintain improved traffic environments (Including enforcement and improved facilities)

**Thank You for
Your Listening**

