

Velo-city Global 2016



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Velo-cityとは

- 1980年にBremenで開催
- ECF(European Cyclists' Federation) が主催
- 現在では世界最大の自転車に関する国際会議
- 当初は2年毎にヨーロッパで開催(奇数年)
- 2010年のCopenhagenからVelo-city Globalが偶数年に開催
- 2009 Charter of Brussels
 - 2020年までに自転車のモーダルシェアを15%に
 - 2020年までに自転車の死亡事故を50%削減
 - 60都市が署名

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Velo-cityの開催地

1. 1980 Bremen, Germany
2. 1984 London, United Kingdom
3. 1987 Groningen, The Netherlands
4. 1989 Copenhagen, Denmark
5. 1991 Milano, Italy
6. 1993 Nottingham, United Kingdom
7. 1995 Basel, Switzerland
8. 1996 Perth, Australia
9. 1997 Barcelona, Spain
10. 1999 Graz, Austria / Maribor, Slovenia
11. 2001 Glasgow, Scotland / Edinburgh, United Kingdom
12. 2003 Paris, France
13. 2005 Dublin, Ireland
14. 2007 Munich, Germany
15. 2009 Brussels, Belgium
16. 2010 Copenhagen, Denmark
17. 2011 Sevilla, Spain
18. 2012 Vancouver, Canada
19. 2013 Vienna, Austria
20. 2014 Adelaide, Australia
21. 2015 Nantes, France
22. 2016 Taipei, Taiwan
23. (2017 Arnheim /Nijmegen, The Netherlands)
24. (2018 Rio de Janeiro, Brazil)

(2000 Velo Mondial in Amsterdam)

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Velo-city Global 2016 in Taipei

- アジアで初の開催
- 43か国から1000人参加、160編の発表
- 日本からは3人の市長を含む70人以上が参加
- バイクパレードには5000人参加
- 台北市長は380kmを21時間で走破
- 2020年の日本招致に向けてECF会長と折衝
- Giantの全面的な協力 (YouBikeのアピール)
- Giantの劉会長が5月に宇都宮で講演
- コペンハーゲン市長が5月に来日

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YouBike (公共共用自転車)

- 2009年に開始(11ポートに500台)
- 214ポートに7000台
- 最初の30分は無料
- 回転率 8.06回/日 (世界一高い)



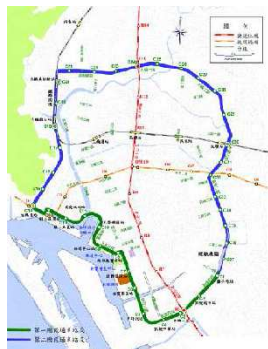
Velocity 2016 の自転車パレード

5000人が高速道路を含む17kmを走破



高雄で建設中のLRT

- 世界で初めてのキャパシターによる全線架線レス
- 充電は駅で停車中の20~25秒間に行なう
- 全線22kmで現在約9kmが試験供用(2019年完成予定)
- 80%が芝生軌道



Utsunomiya Cycle City Promotion Plan (2011-2020)



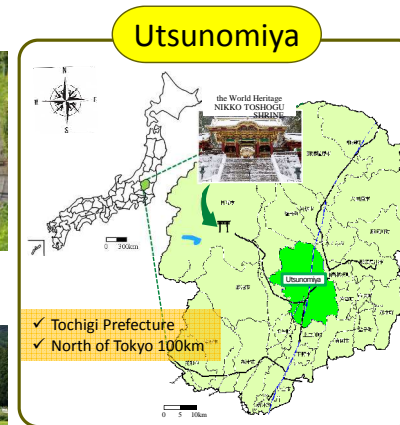
Poster No. 1063



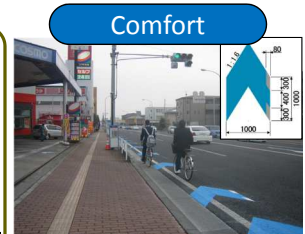
Bike helmets for safety



Cycling in Nature for Health



- A regional capital with half a million population
- Flat terrain and sunny climate
- High bicycle usage (20% for school and work)
- First New LRT system in Japan by 2020
- Campaign to improve city image by bicycles

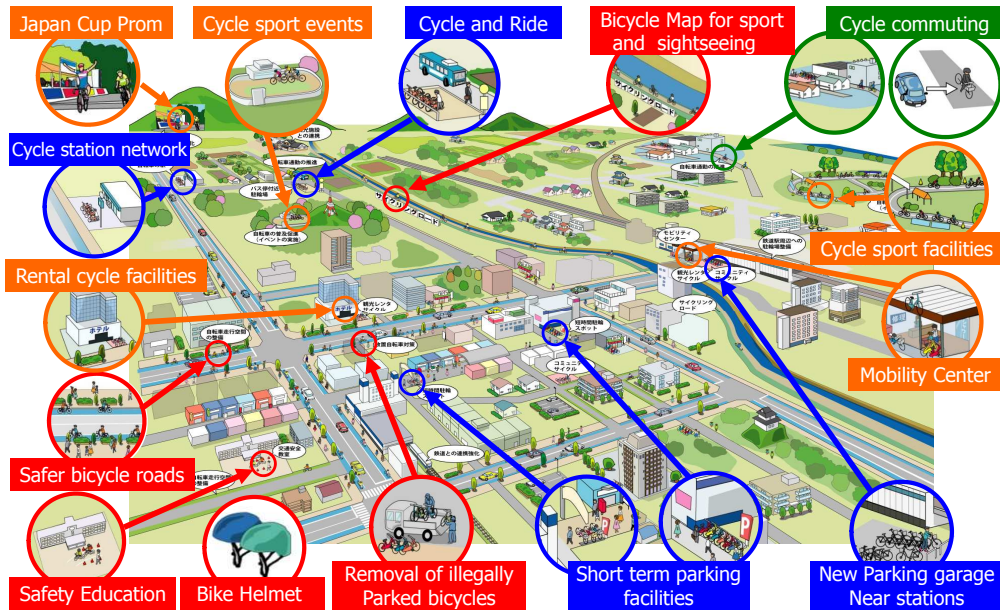


Extensive Bike Lanes



First Criterium in Japan

Various Measures toward Cycle City Utsunomiya



Achievements:

- Longest Bike Lanes in Japan (21.7km -> 50km in 2020)
- High Bike Helmet Usage for elderly and children
- Cycle Accident Reduction (41% in 5 years)

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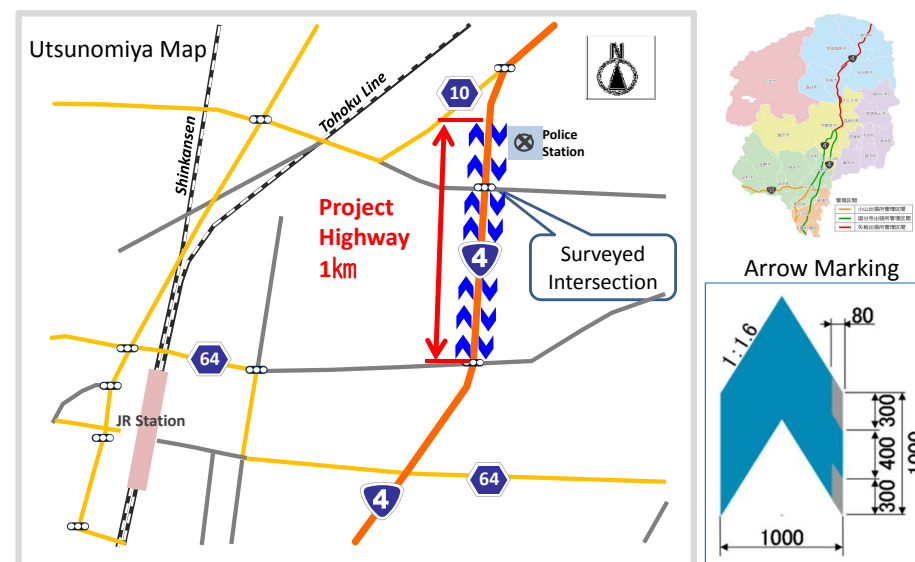
A Study on the Shift of Bicycles from Sidewalk to Roadway

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Background

- Sharp increase of traffic accidents between bicycles and pedestrian on sidewalk.
- "Bicycle Usage Environment Creation Guidelines for Comfort and Safety" in November, 2012 (MLIT and NPA, 2012).
- In February 2013, Experimental implementation of the new guideline on one of the busiest highways, the National Highway Route No. 4 in Utsunomiya.
- This is the **first attempt** in Japan to implement the new guideline on the major national highway, and drew much attention nationwide.

Study Site and Arrow Marking



Shift of bicycles from Sidewalk to Roadway (From share with pedestrian to share with automobile)

Before



After

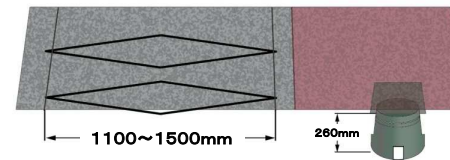


Overview of Eco-Counter

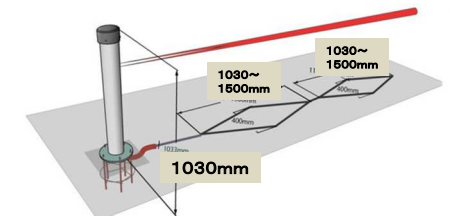
System Configuration

	Sensors	Counting
Roadside Section	Loop sensor	Direction, speed and volume of bicycles
Sidewalk Section	Loop sensor Infrared sensor	Volume and direction of bicycles and pedestrian

<Roadside Section>



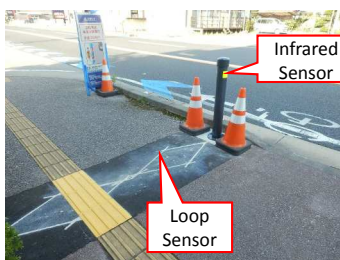
<Sidewalk Section>



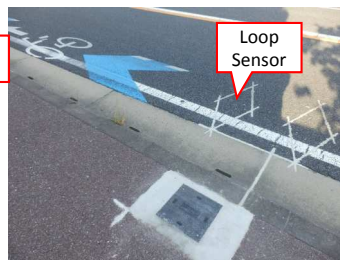
Four Locations of Eco-Counters



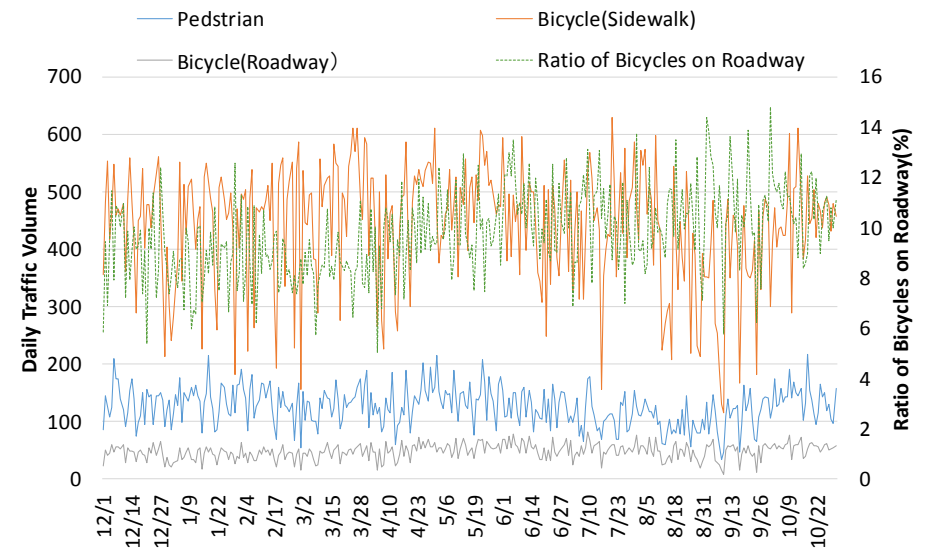
Sidewalk Section



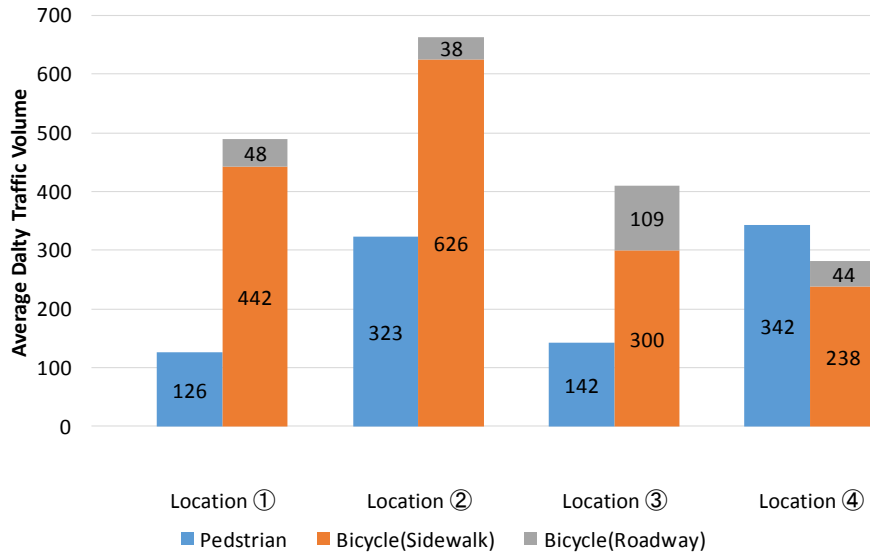
Roadside Section



Daily Traffic Volume for Location No. 1

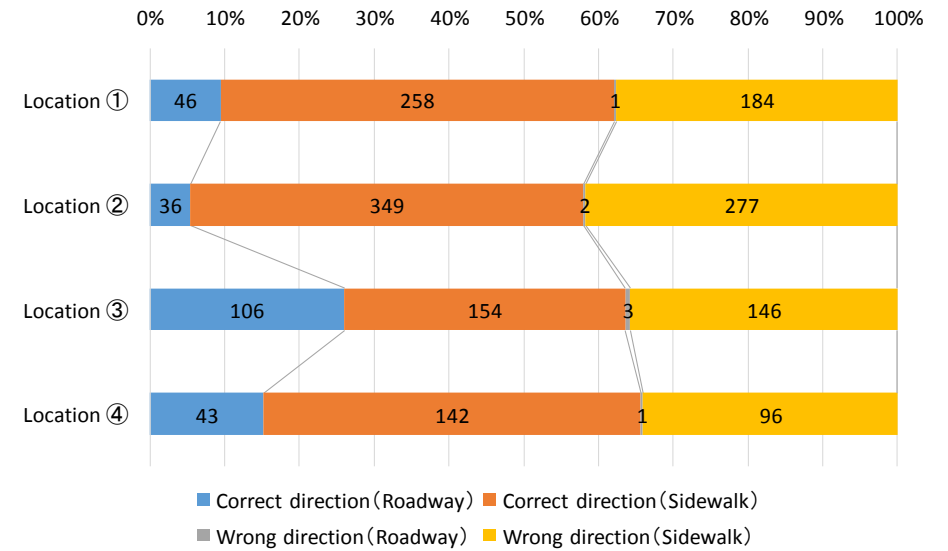


Average Daily Traffic Volume by Location



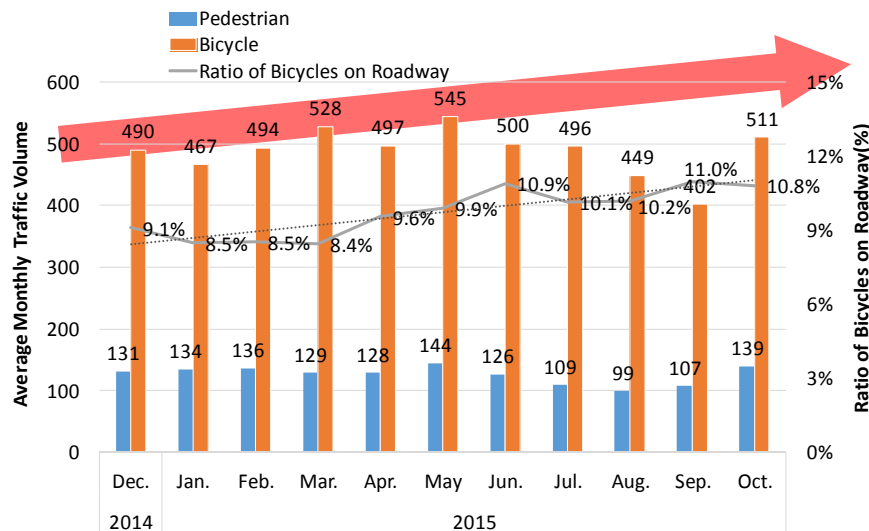
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Ratio of bicycles by direction



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Ratio of Bicycles on Roadway for Location No. 1



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Thank You for your attention !



(It is fun to ride in Utsunomiya)

(It is fun to live in Utsunomiya)

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