

# Integrating Bikes & Transit

October 17, 2011

Rail~Volution



# Overview

- Benefits of integrating cycling with transit
- Strategies:
  - Bikes on Transit
  - Bike Parking
  - Bike Sharing
- Final thoughts



Photo credit: Jim Wilcox

# Benefits from integrating cycling with transit

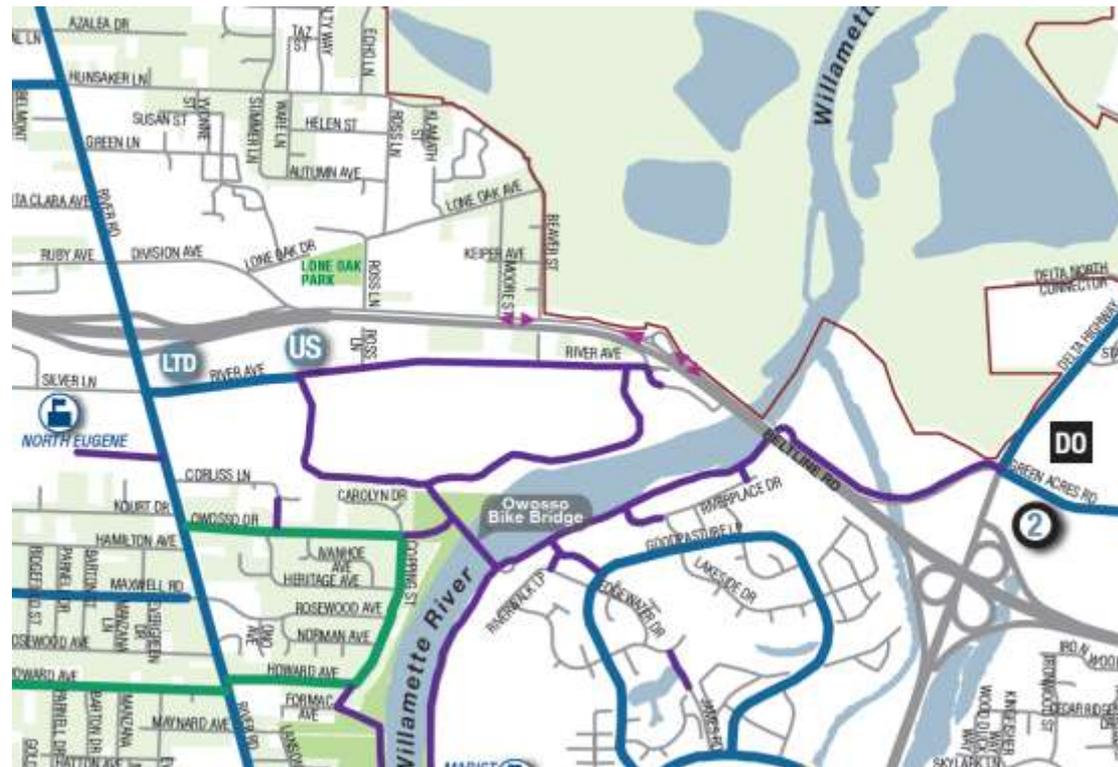
- Increases convenience
- Makes both biking and transit more competitive with driving
- Reduces need for feeder service
- Help people to access transit when routes are cut



Photo credit: DDOT

# Bike to transit

- Transit stations should be considered as key destinations when developing bike route network.



# Bikes on transit - Buses

- Typically:
  - 2 to 3 bikes on rack in front of bus



Photo credit: DDOT

# Bikes on transit – Light Rail and BRT

- Typically:

- 3 to 4 bikes inside light rail and BRT vehicles



Photo credit: Lane Transit District



# Bikes on transit – Folding Bikes



Photo credits: Bike Friday



## Bikes on transit – Tradeoffs

- Limitations in peak hour when the bike capacity is most needed.
- Bicyclists don't know if vehicle will have room
- Makes the most sense when destinations are in suburban areas with few options for accessing housing or employment by foot or transit.
- Also, a good option for people who get on at regular bus stops where it is more challenging to provide secure bike parking.

# Hierarchy of bike parking at transit stations

- Bike racks outside of station
- Bike racks inside station, including where only transit riders can access
- Bike lockers
  - Reserved
  - Dynamic
- Secure, sheltered parking with keycard access
- Bike Station



Photo credits: DDOT

# Bike parking in The Netherlands



Photo credits: Hugh Prichard

## Bike Racks

- Bike racks outside of station
- Bike racks inside station, including where only transit riders can access



# Bike Lockers

- Reserved
- Dynamic



Photo credit: M.V. Jantzen



Photo credit: Luton

# Secure sheltered parking with keycard access

- Ranges from separate building to gated-off area



Photo credit: Bike Station

## Keycard areas versus bike lockers

- Lockers take up more space per bike and can cost more
- Easier to provide climate controlled atmosphere for keycard access space in keycard areas
- Easier to clean keycard areas
- Bike lockers enable you to store more than just bike such as clothing and helmet and there is little chance that any accessories will be stolen
- When one person signs out each bike locker, utilization can be lower and it is more difficult to monitor usage.

# Bike Stations

- Union Station Bike Station provides:
  - Parking for 140 bikes
  - Bicycle Repair
  - Bicycle Rentals
  - Bicycle Accessories
  - Lockers and Changing Room
- Bike Stations have either self serve or valet parking



# Bike Sharing

- Type of transit
- Relieves pressure on transit during peak hour. It's usually much less expensive to add bike sharing for short trips than expand peak hour capacity
- Helps solve last mile problem



Photo credit: DDOT

## Final thoughts

- Providing high quality bike parking at transit stations may be somewhat expensive but it is much less expensive on a per space basis than providing park and ride
- Bike parking facilities at transit stations can potentially provide more off-peak trips than park and ride facilities
- Need more options for people who access transit at regular bus stops because of limited transit vehicle capacity for bikes
- *Complete Streets to Complete Stations*
- Market the bicycle-transit connection

# Final thoughts

- Model bike parking on technologies used for car sharing, bike sharing, and transit:
  - Universal key card that can not only be used for different bike parking facilities, but also bike share, car share, transit and even car parking
  - Ability to reserve a bike parking space in advance
  - Enables agency to easily track usage over time and can inform where facilities should be expanded



Photo credit: Tom Brandt