Bike/Ped Subcommittee 11/23/2010 Item #9

## ThinkBike Washington, DC/Final Session

Kingdom of the Netherlands | Kingdom of the N





## **Program**

Welcome by Pex Langenberg, Transport Counselor, Dutch Embassy

Remarks from Congressmen Earl Blumentauer, Tom Petry

Remarks from Gabe Klein, DDOT

Summary of the teams by

- Team Orange
- Team Blue
- General remarks

#### Q&A

Closing words by Pex Langenberg and Jim Sebastian, DDOT

# 10 Episodes on 2-Disc Set Team Orange -The Complete Series-

Politics from the inside out.

## ThinkBike



## U.S. vs. Netherlands

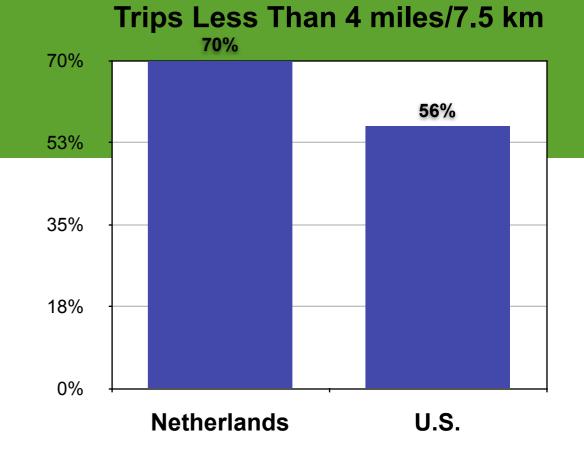
American trip patterns are not dramatically longer than the Dutch

Most trips are less than 4 miles long

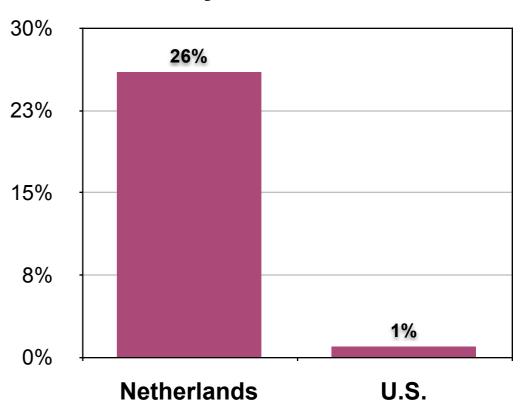
20 minutes by bike!

But bike use in the U.S. is *much* less











## Policy Differences between DC and Netherlands

Cost of getting a drivers license

Price of gasoline

Price/availability of parking

Excise taxes on automobile purchases

Lack of buses to school



## Goals/recommendations for the workshop

- Apply Dutch principles of bicycle facility design to Downtown Washington, DC
- Design high quality bikeway for the downtown
  - Continuous
  - Signature "marquee" facility
  - Bi-directional
- Bikeway as a transportation connection
- Focus on bikeway design for L and M Streets NW, between Metropolitan Branch Trail and Georgetown
- Extend livability principles beyond bikeways linking neighborhoods, retail, and economic development



# Project: Creating the Crosstown Bikeway as a Regional Transportation Connection

- L and M Streets
- From Met Branch trail to Georgetown





## Workshop process

Presentations by Dutch experts

Surveyed L & M Streets

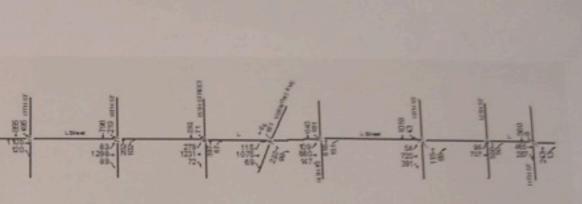
Reviewed maps

Brainstormed

Created design treatments









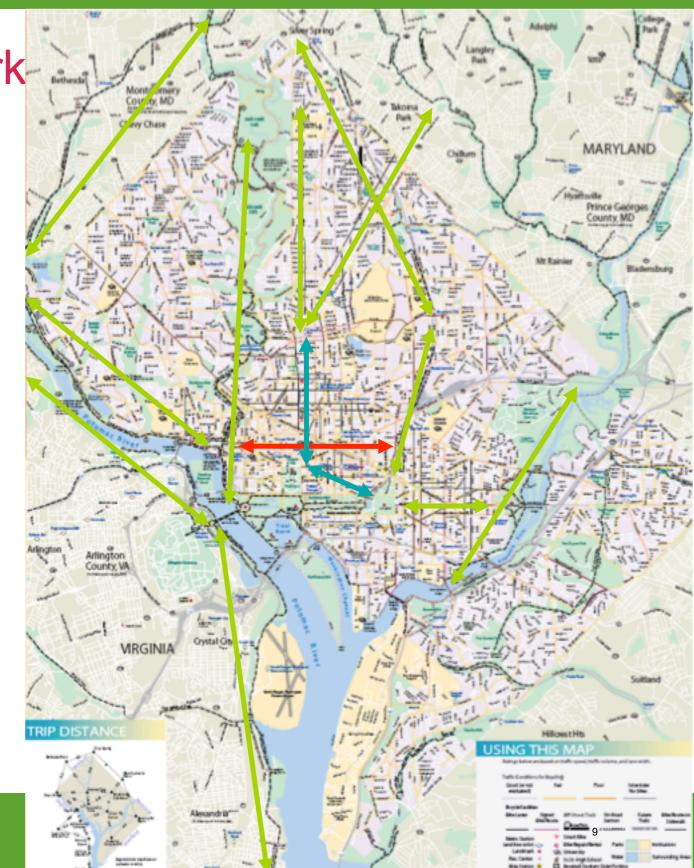
## Integrated Downtown Network

- Design focuses on L & M Street
- Key piece to create an integrated network:

North-Souths

Diagonals (e.g., Mass. Ave., Connecticut Ave.)

- L & M should be part of an overall bikeway network throughout city
- L&M can be pilot projects Create a larger network, Set robust design precedents

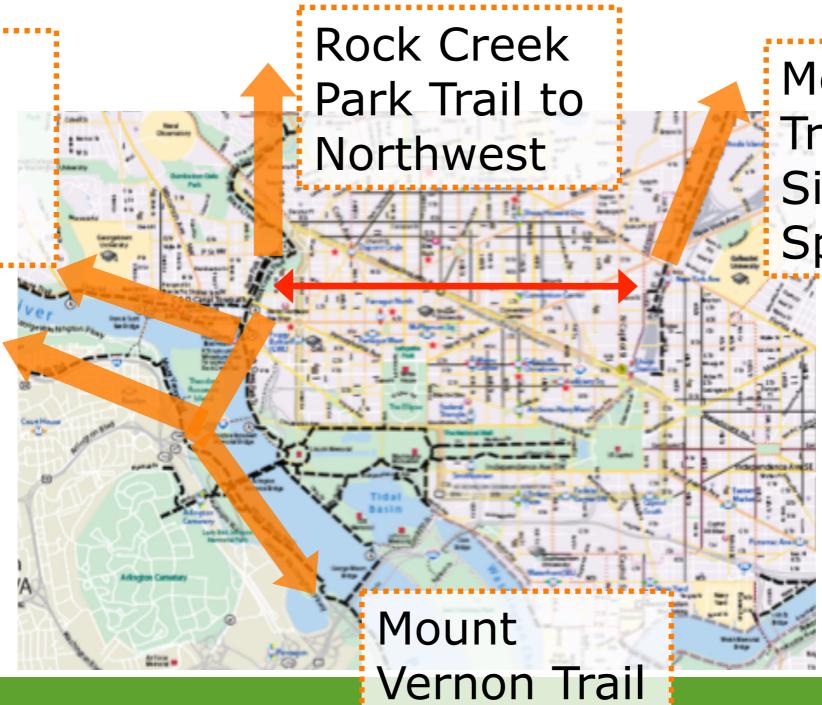




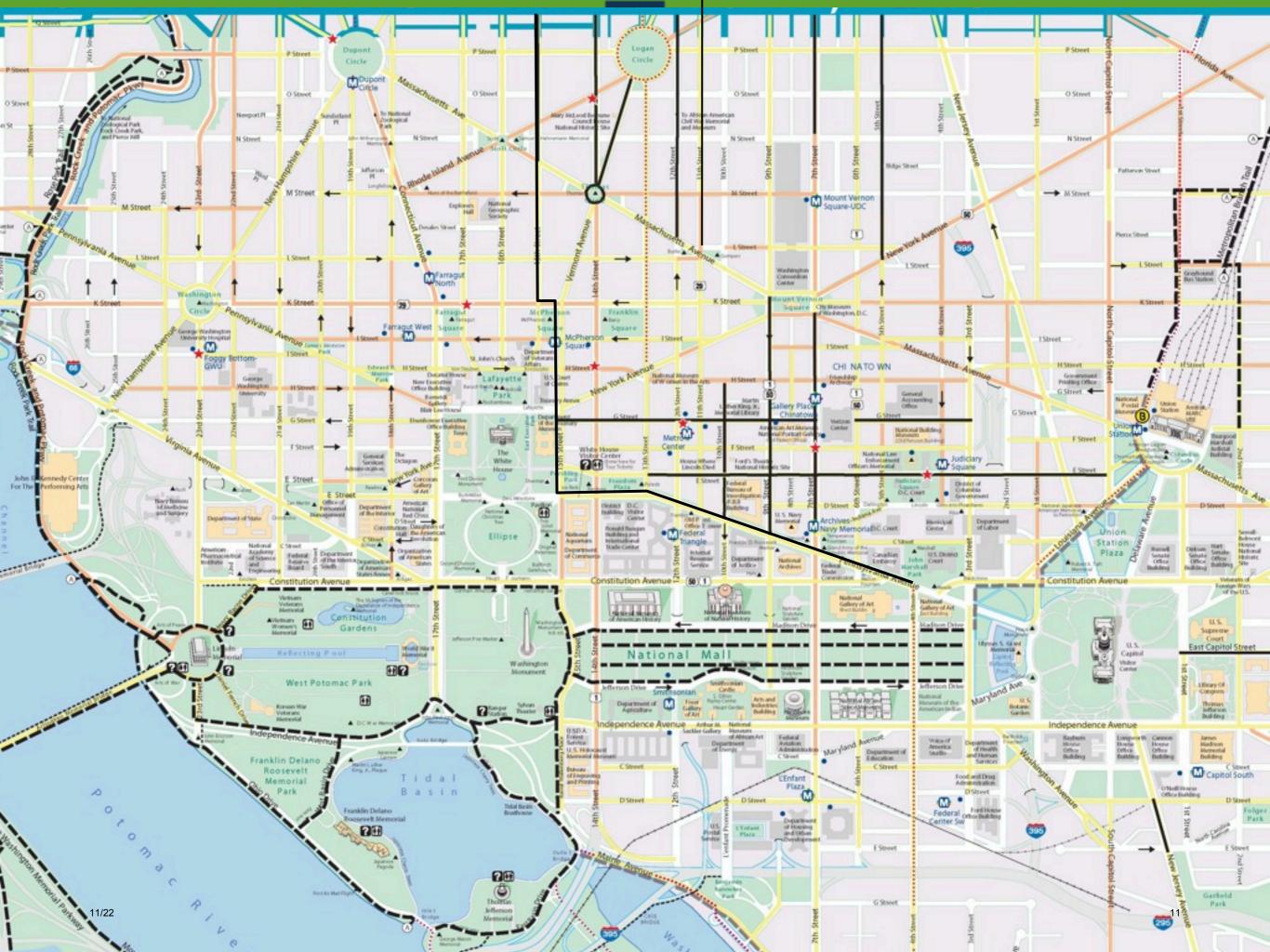
## Key Connections to Regional Trail Network

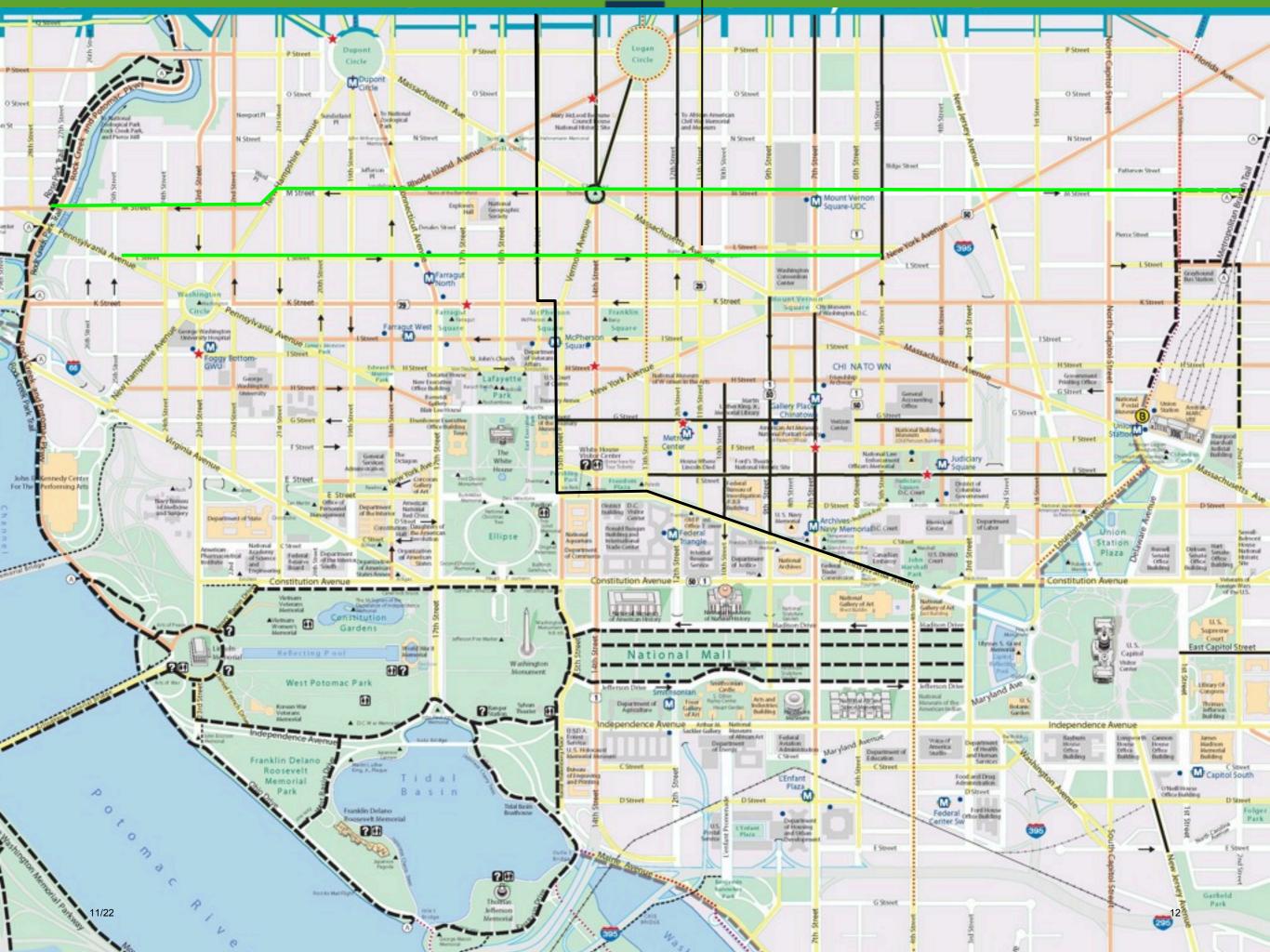
Capital
Crescent
and
C&O Trails

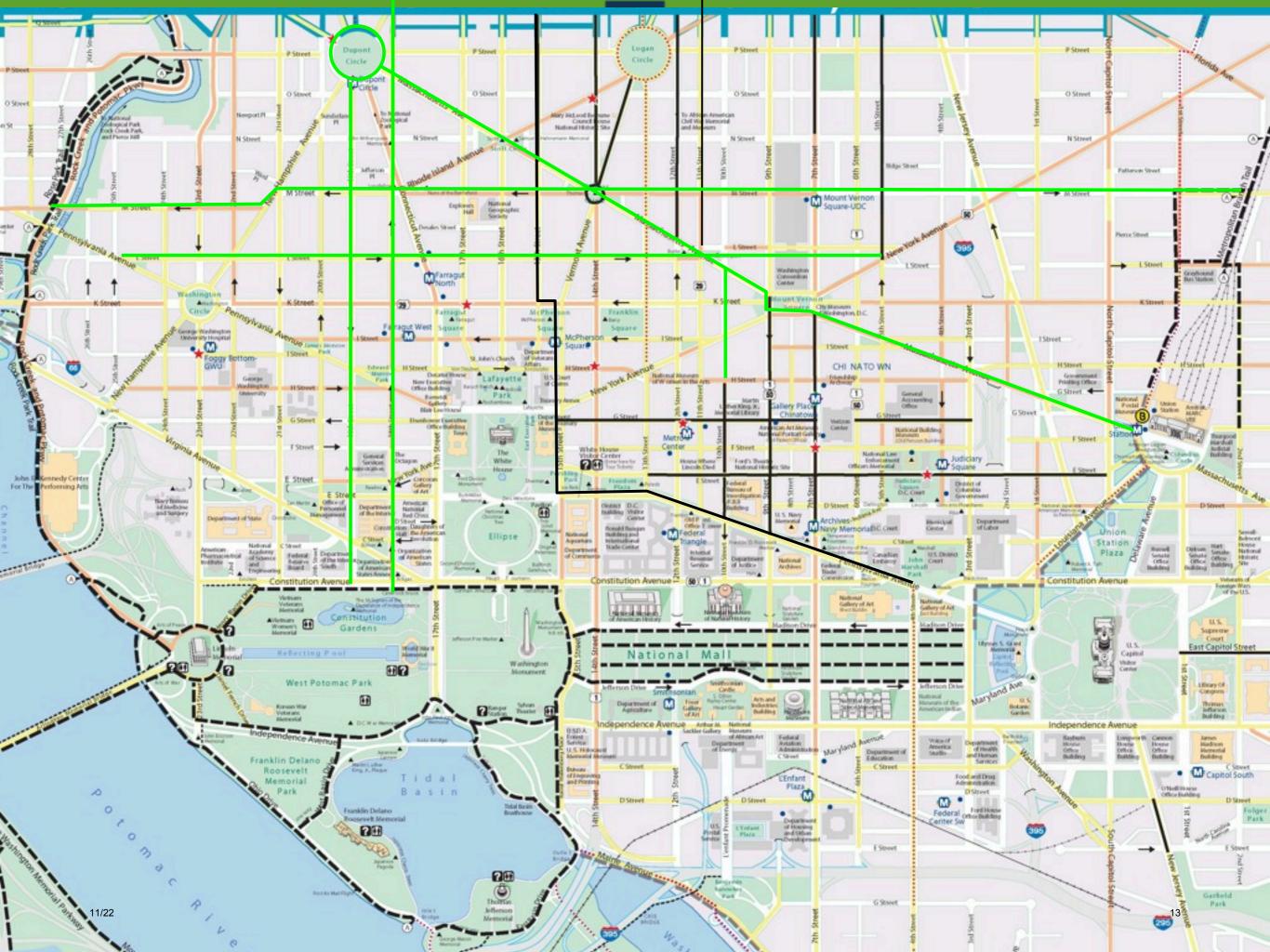
Custis Trail



Met Branch
Trail to
Silver
Spring







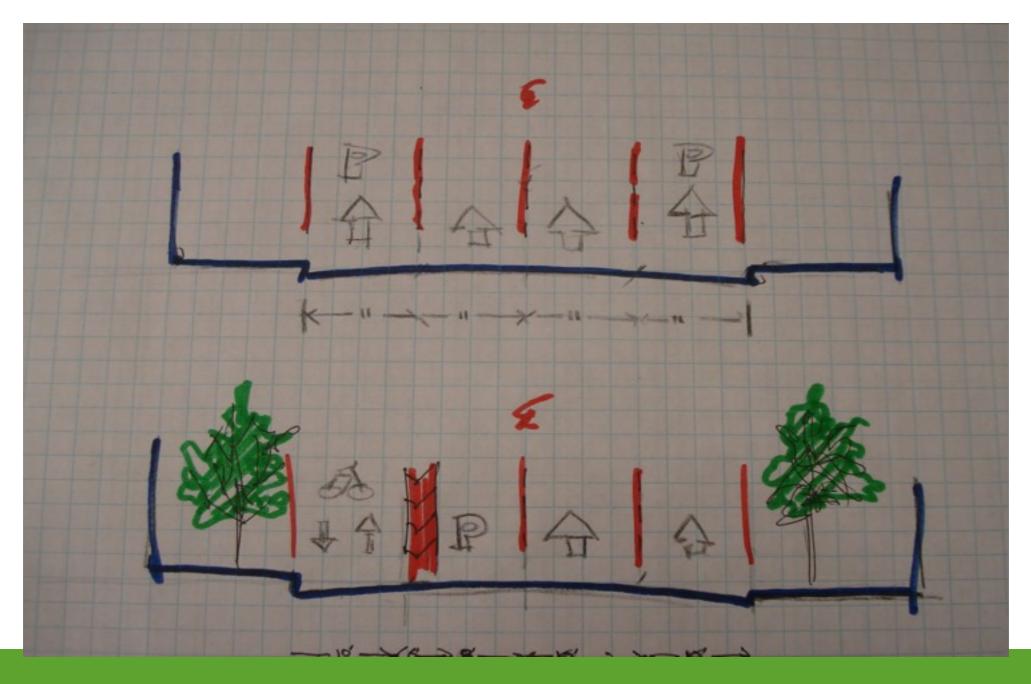


## Diagonal intersection crossing (L Street @ Mass. Ave.)



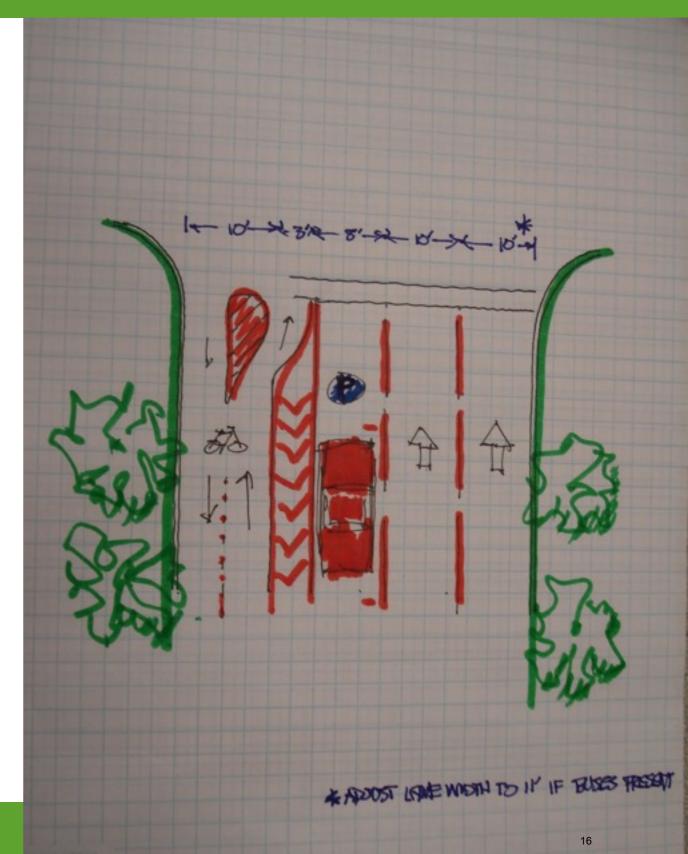


## L Street cross section





## L Street Intersection treatment





## L Street/15<sup>th</sup> Street – Cycle Track to Cycle Track



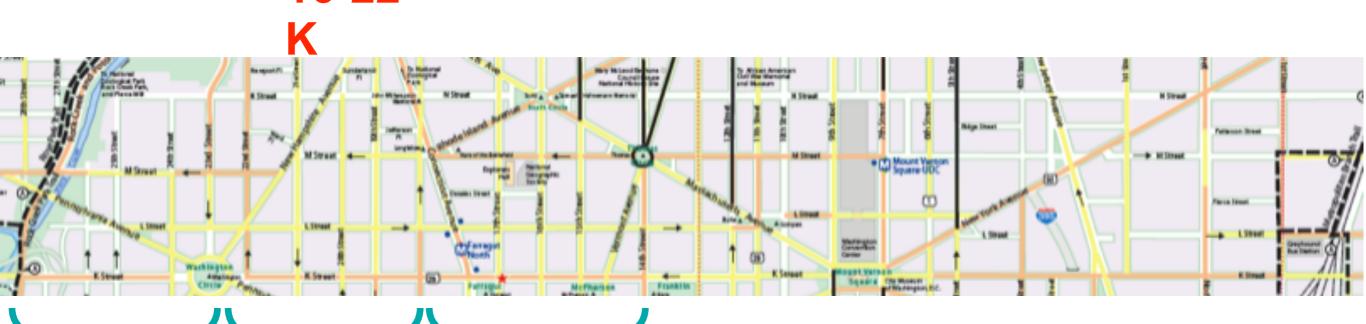


## M Street





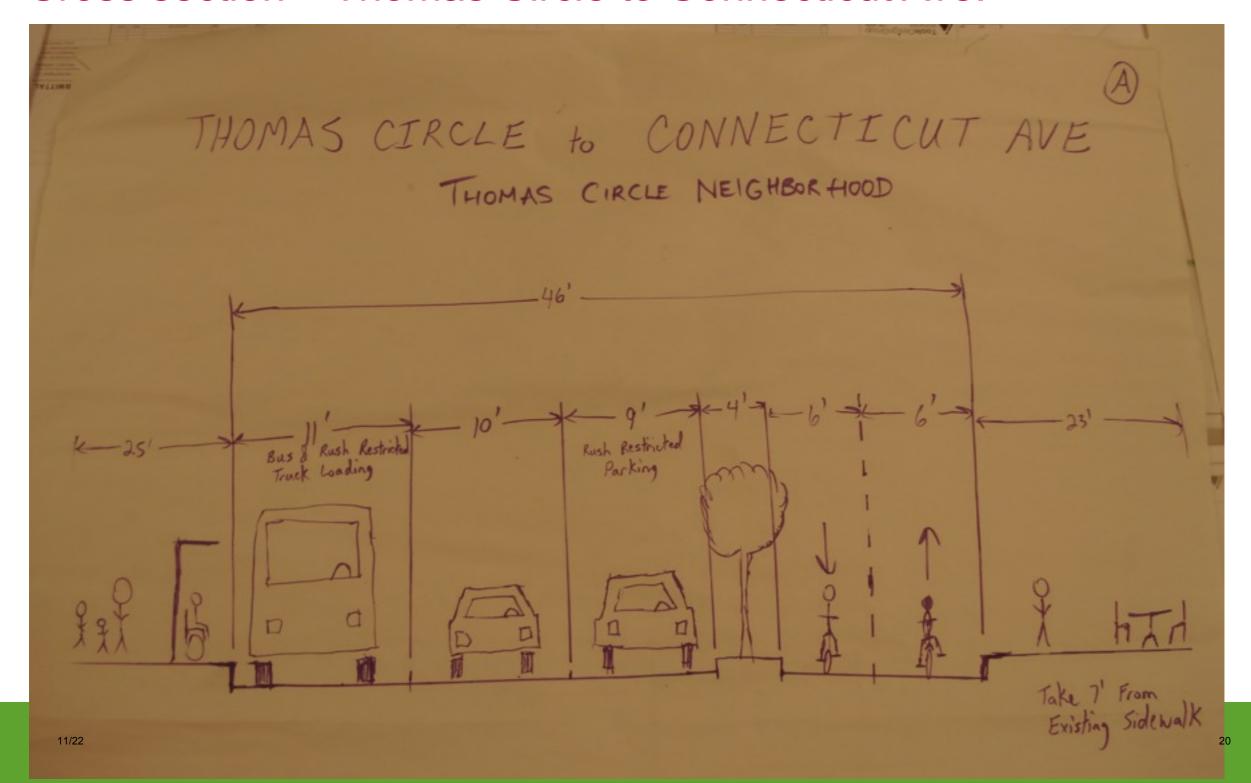
## Treat M Street as sub-sections of like blocks 16-22



# West End Golden Thoma Triangle s Circle

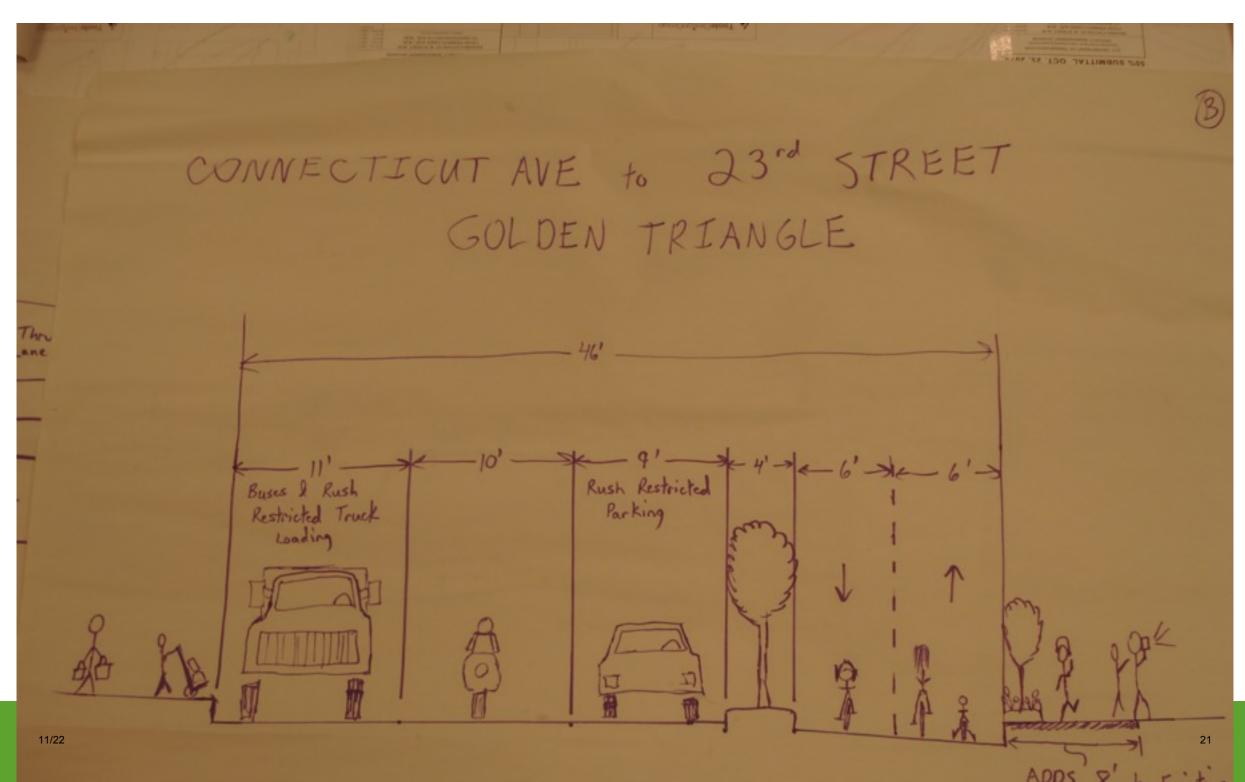


## Cross section – Thomas Circle to Connecticut Ave.



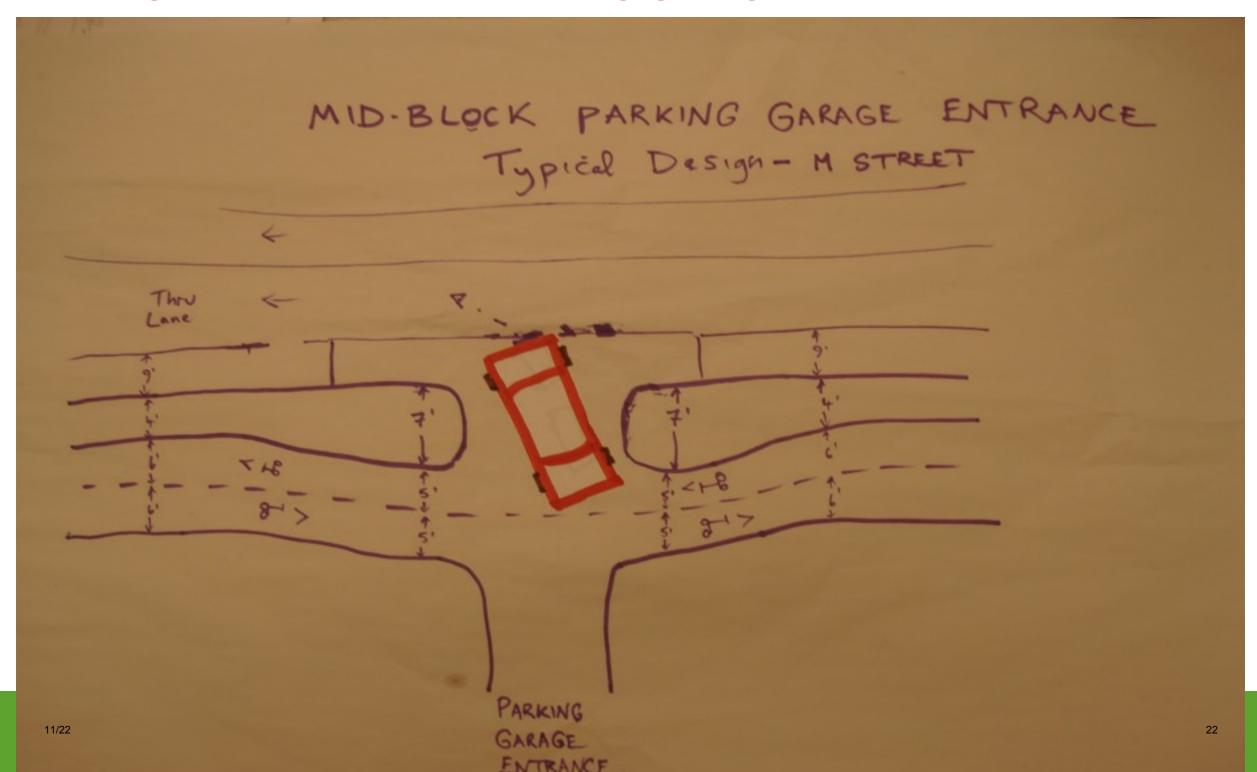


### Cross section – Connecticut Ave. to 23<sup>rd</sup> Street





## Dealing with conflicts – parking garages





## Issues/Areas of concern

- Snow clearance/maintenance of way
- Turning movements
- Coordinating freight/delivery to manage traffic/bike conflicts
- Accommodating parking garage entrances
- Signalization/timing to manage oncoming traffic for contraflows



## Qualities of the facility (meta-lessons)

- Dutch wisdom: "bikes flow like water" Even in a one way facility, bicyclists will go in both directions in a separated facility
- Located on side where outer bikes travel with direction of auto traffic
- Be consistent with, and improve 15<sup>th</sup> St. cycletrack



Montreal cycle track with different treatment



## Materials and treatments

Use materials and colors to differentiate bike space









## Extend Dutch home zone concepts to Downtown

Emphasize 25 mph speed limit

Enhance public space/quality of life at key intersections with the Avenues

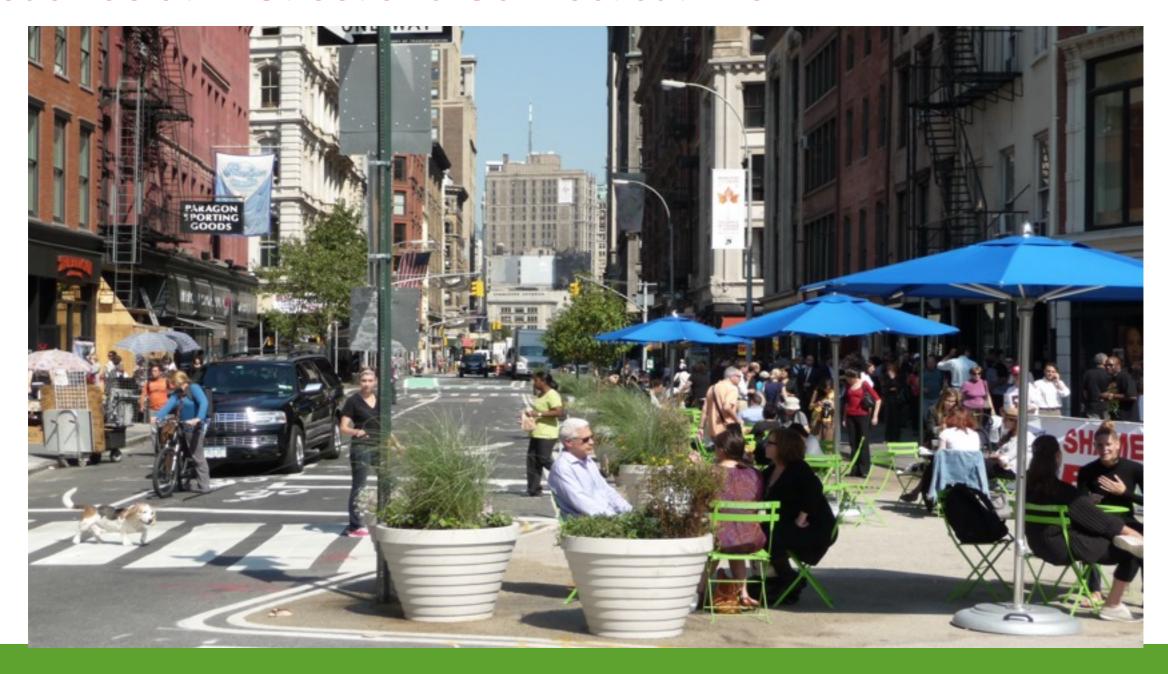
Create a neighborhood zone along M Street between

New Hampshire Avenue and Georgetown





Extend the amount and quality of the public space such as at M Street and Connecticut Ave.





## Implementation – Begin Small

Short term

Long term

**Paint** 

Hard core physical treatments

Plastic bollards

Medians

Lane markings

Curb and sidewalk changes



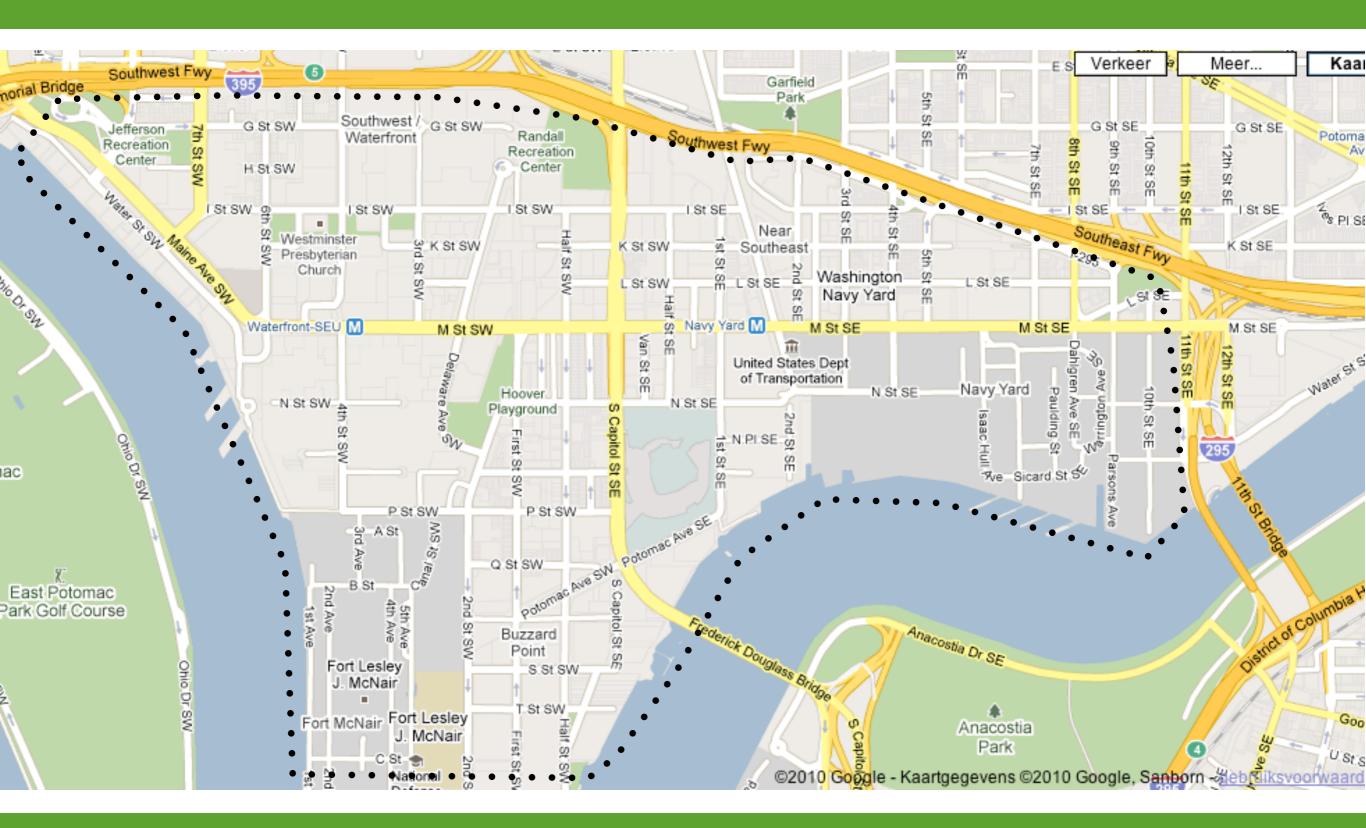
## ThinkBike Washington, DC/Team Blue

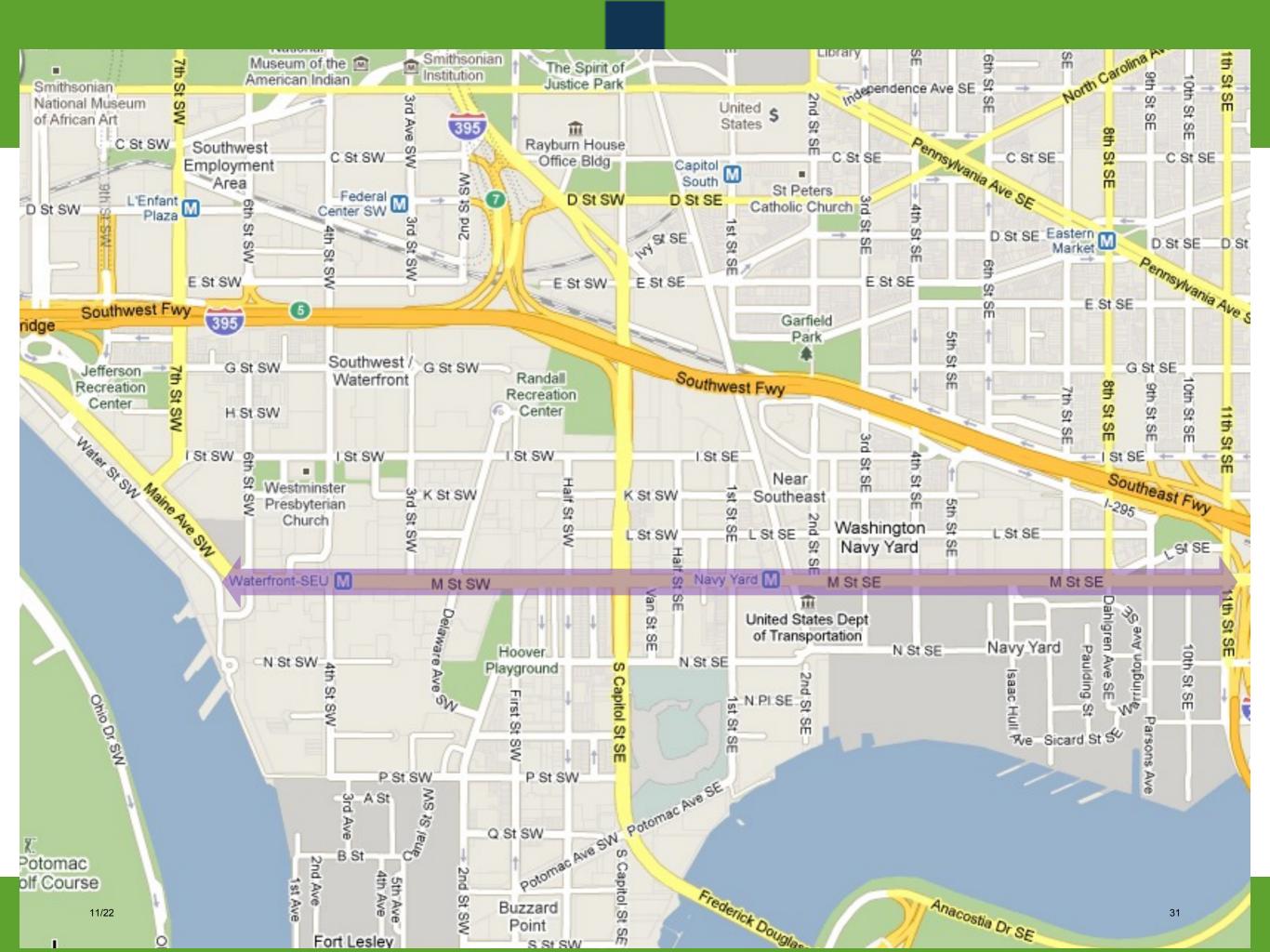
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Energy & Climate

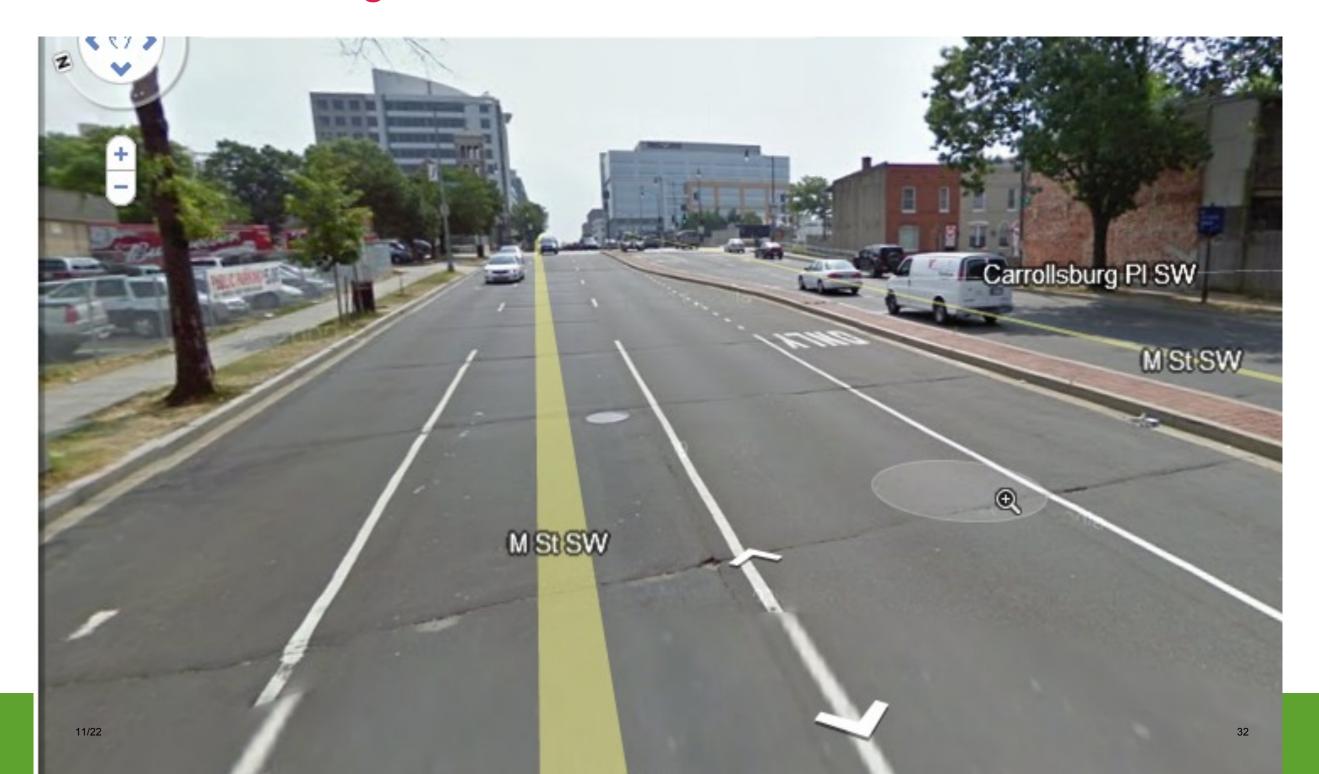








## M Street Existing Conditions





## M Street Recommendations

- One-way cycle track on both sides of the street
- Cycle tracks buffered by a landscape strip with street trees
- Bicycle signals at intersections with high right turn volumes
- Unique right-turn configuration
- Streetcar and stations on a median alignment

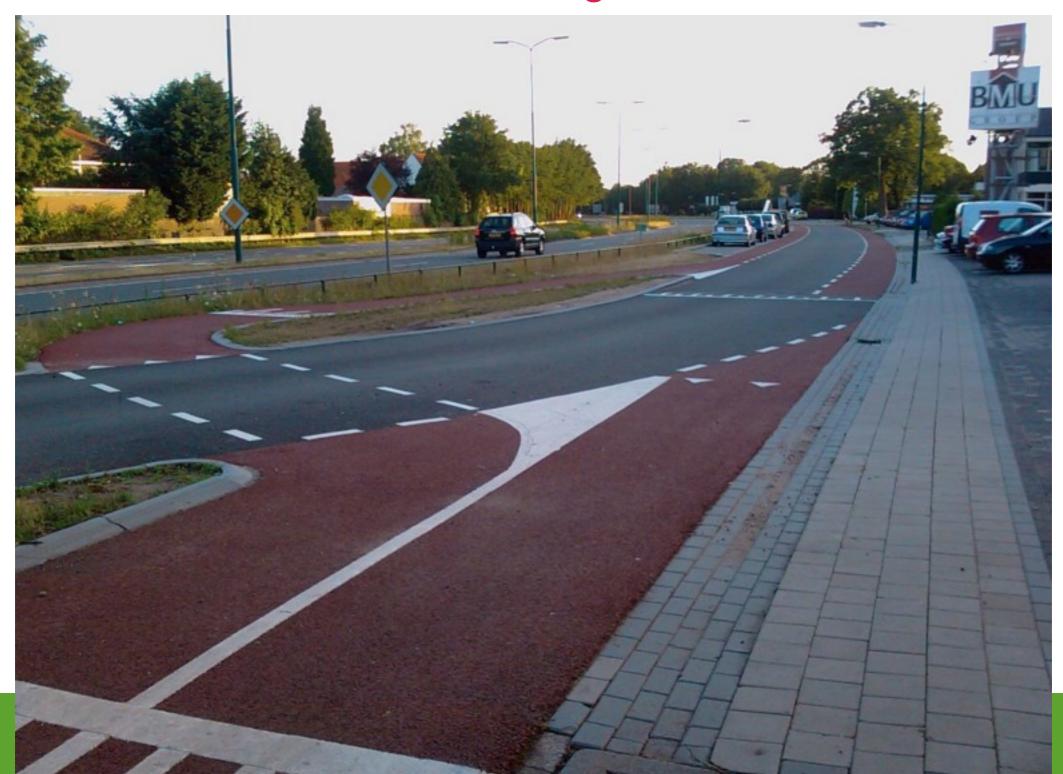


## M Street Cross Section

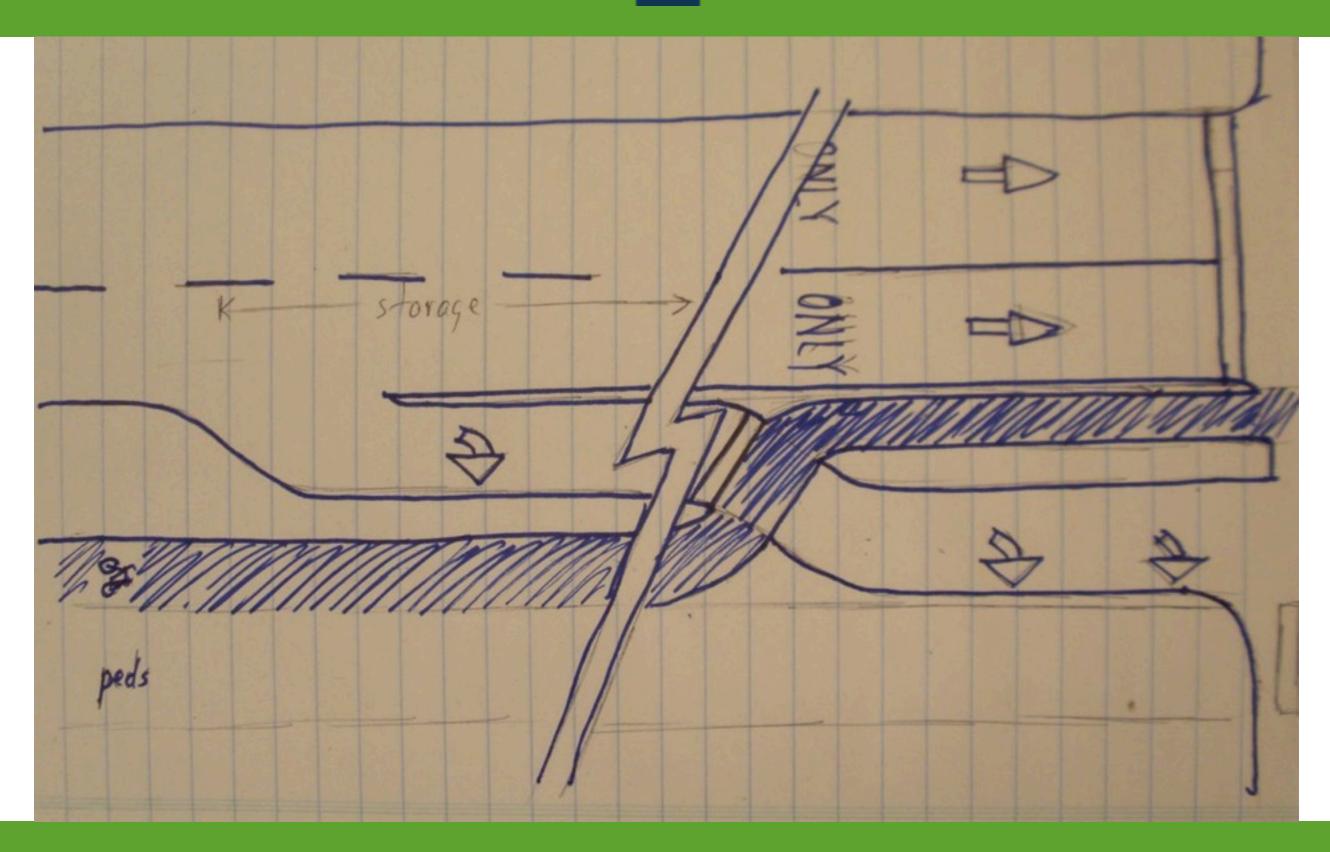




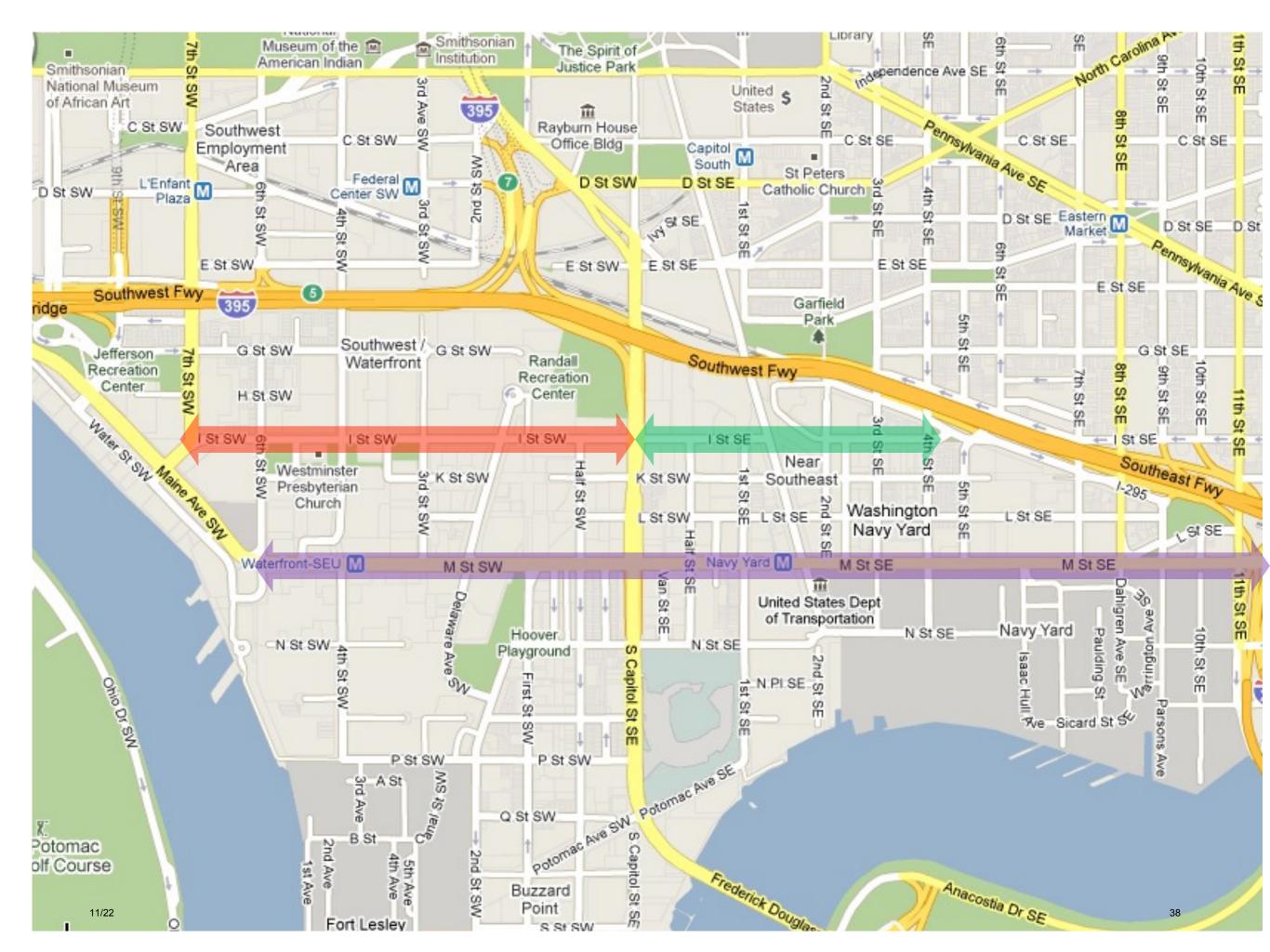
## Amsterdam – Bike Lane Crossing



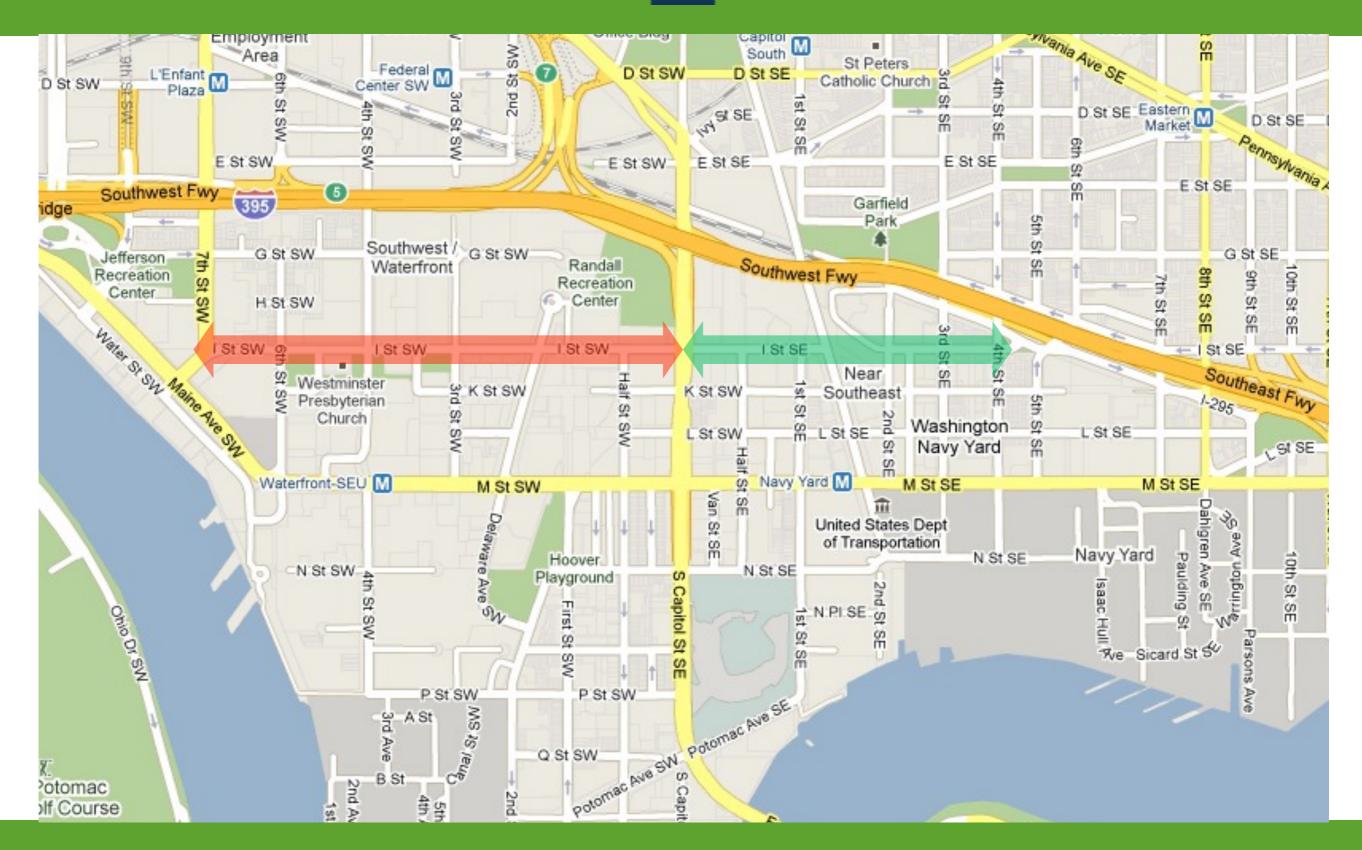












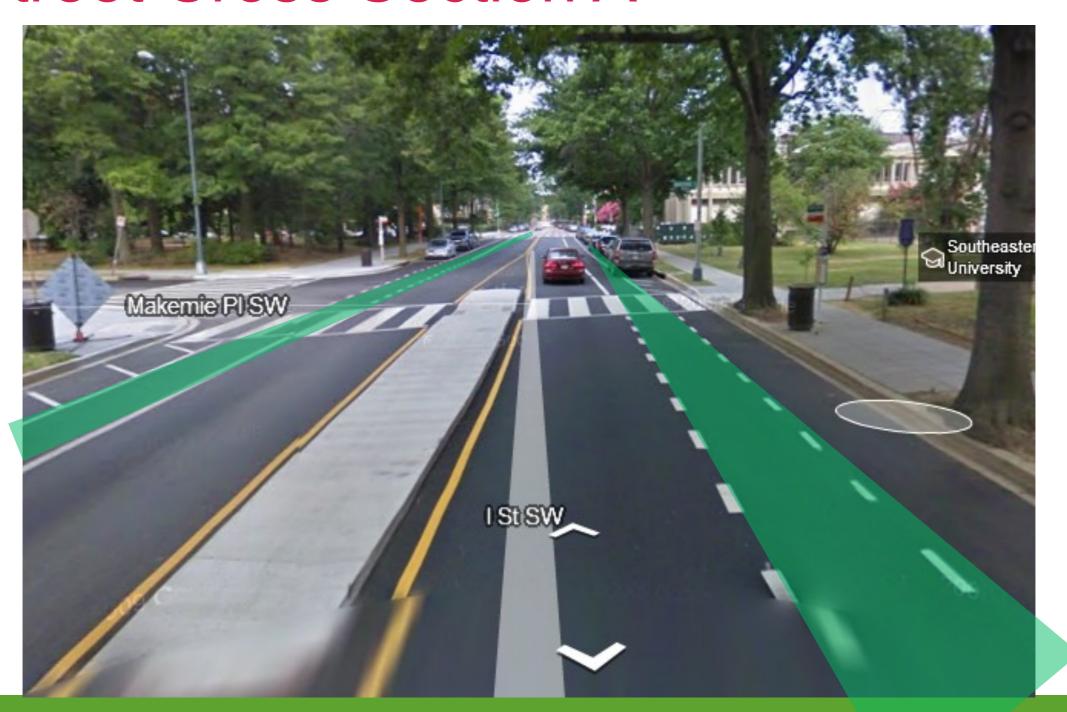


#### I Street Recommendations

- Bicycle boulevard principles
- Possibly limit through-volumes by restricting traffic every 2-3 blocks
- Traffic calming measures, for example pedestrian refuge islands
- Green wave configuration
- Option for bicycle tunnel configuration on I Street and South Capitol Street
- Colored bicycle lanes



## I Street Cross Section A





## I Street Existing Conditions



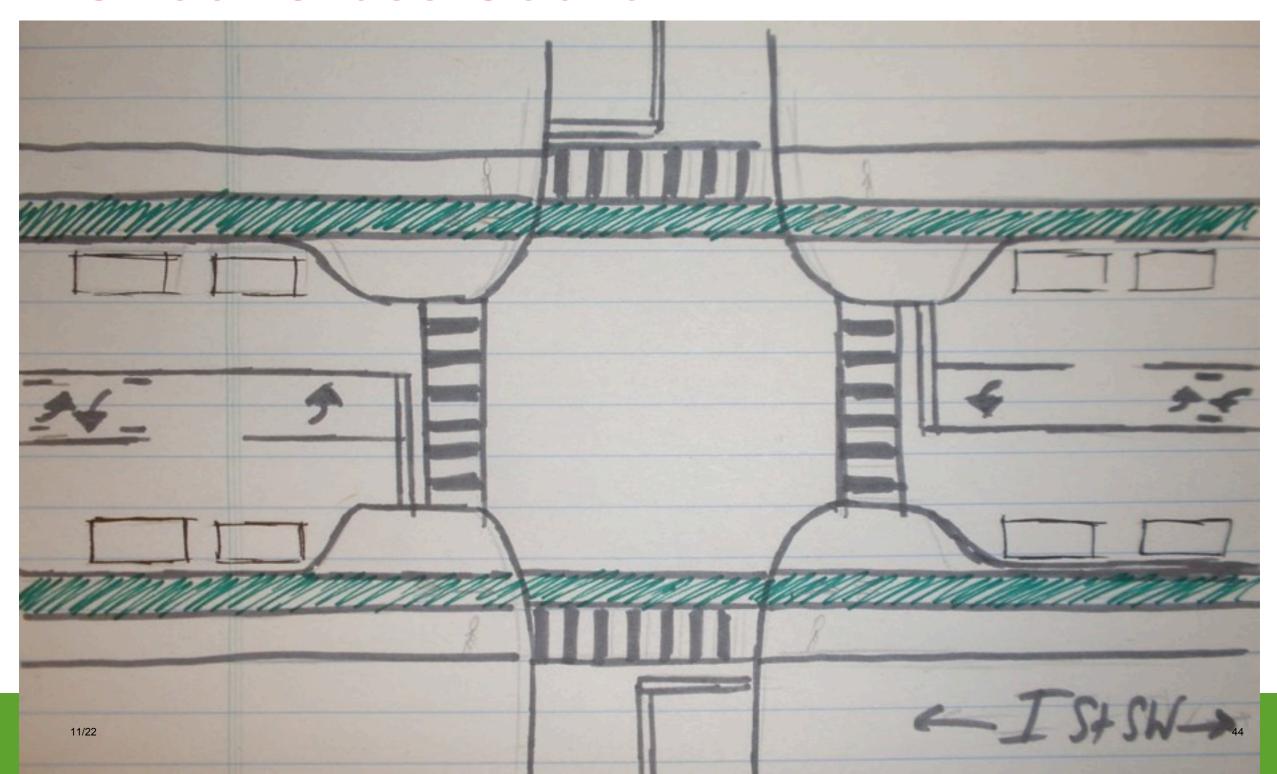


### I Street SW Intersection Revision





#### I Street Cross Section B





I Street SE Missing Connection





## I Street Connection



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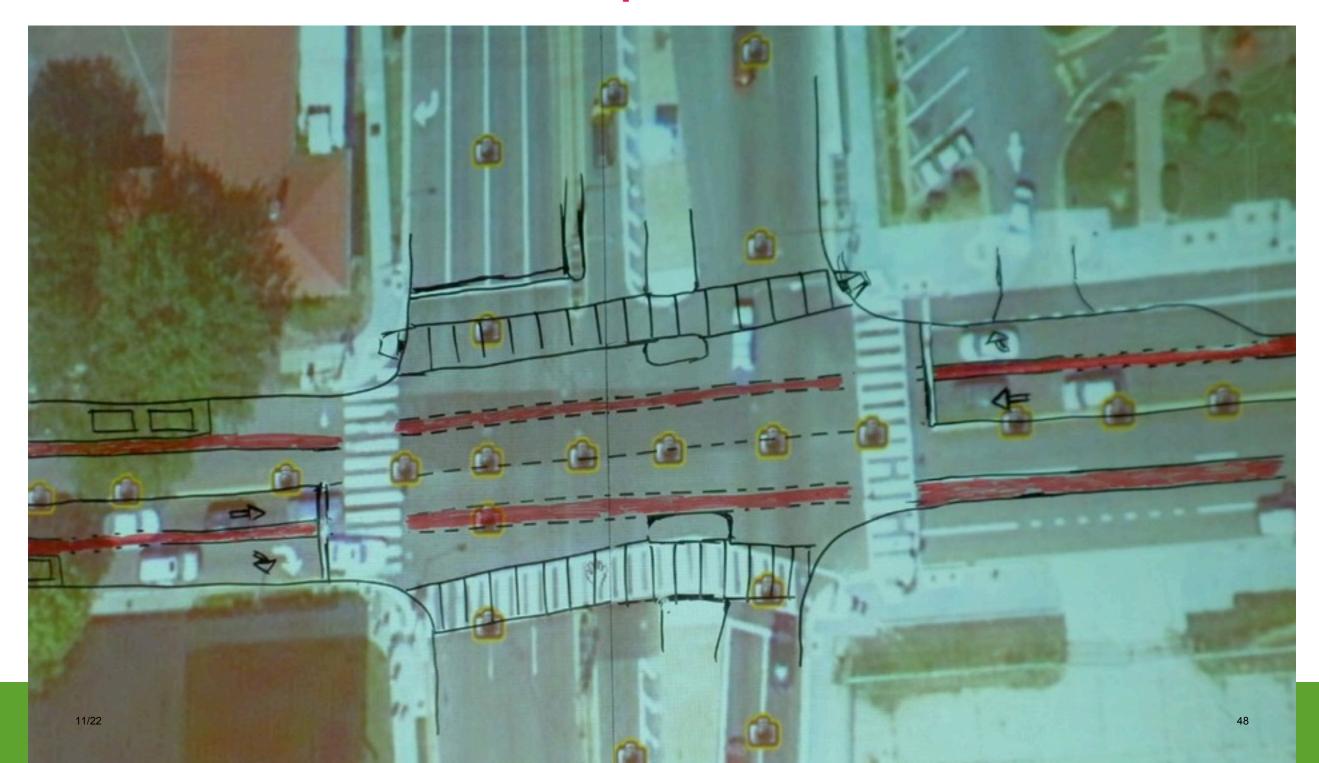


## I Street & South Capitol Street





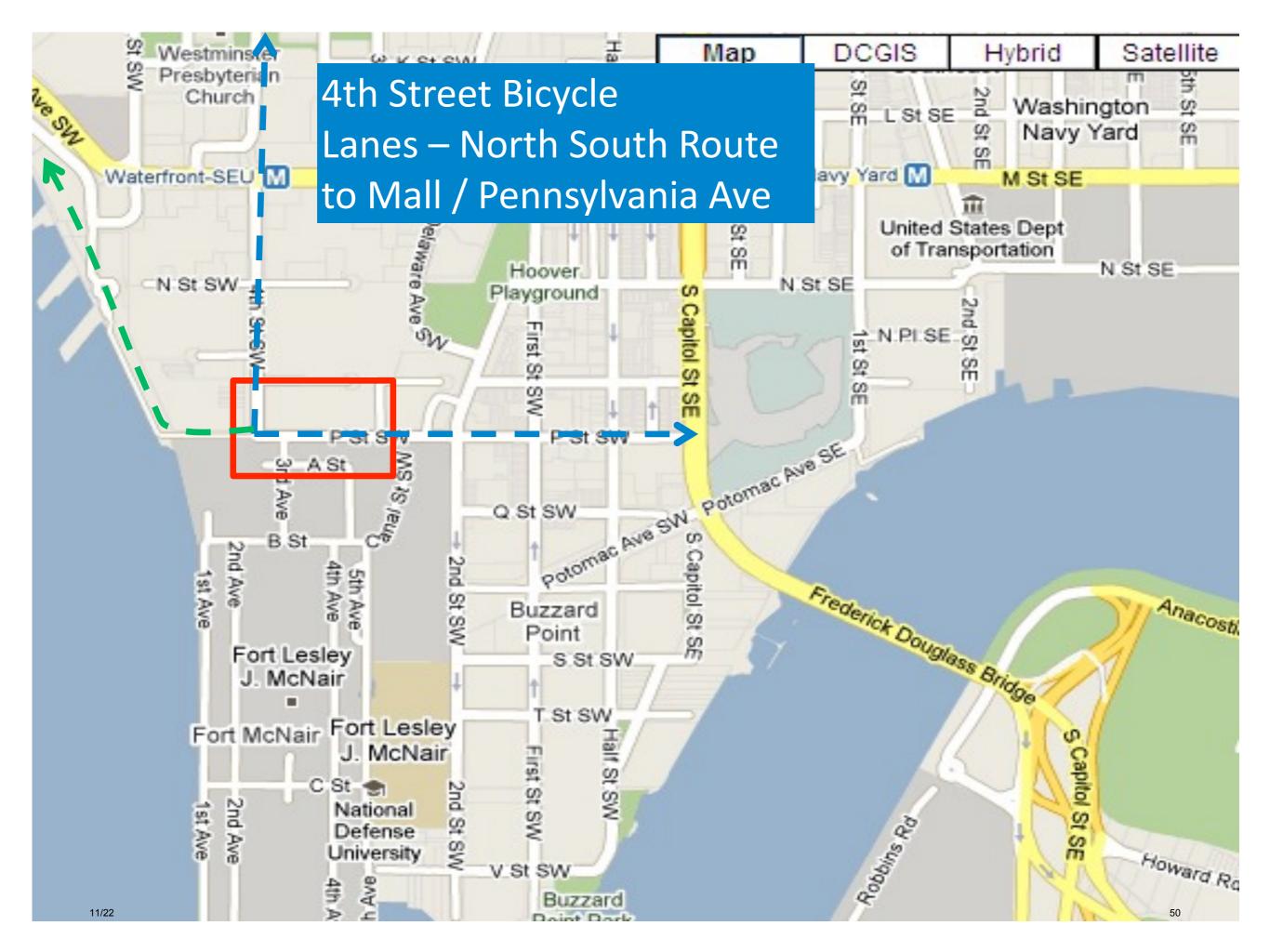
## I Street & South Capitol Street

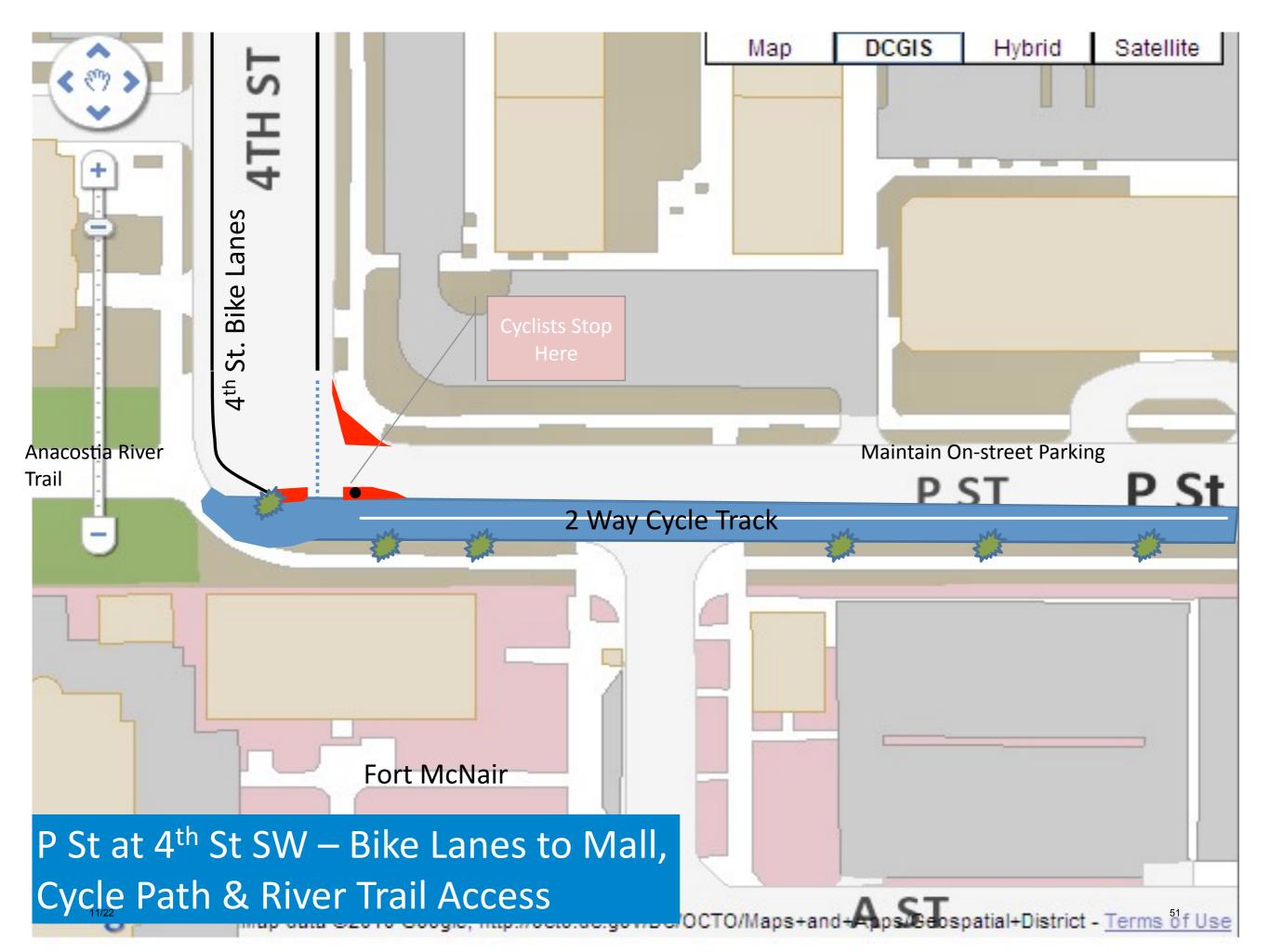




## I Street & South Capitol Street



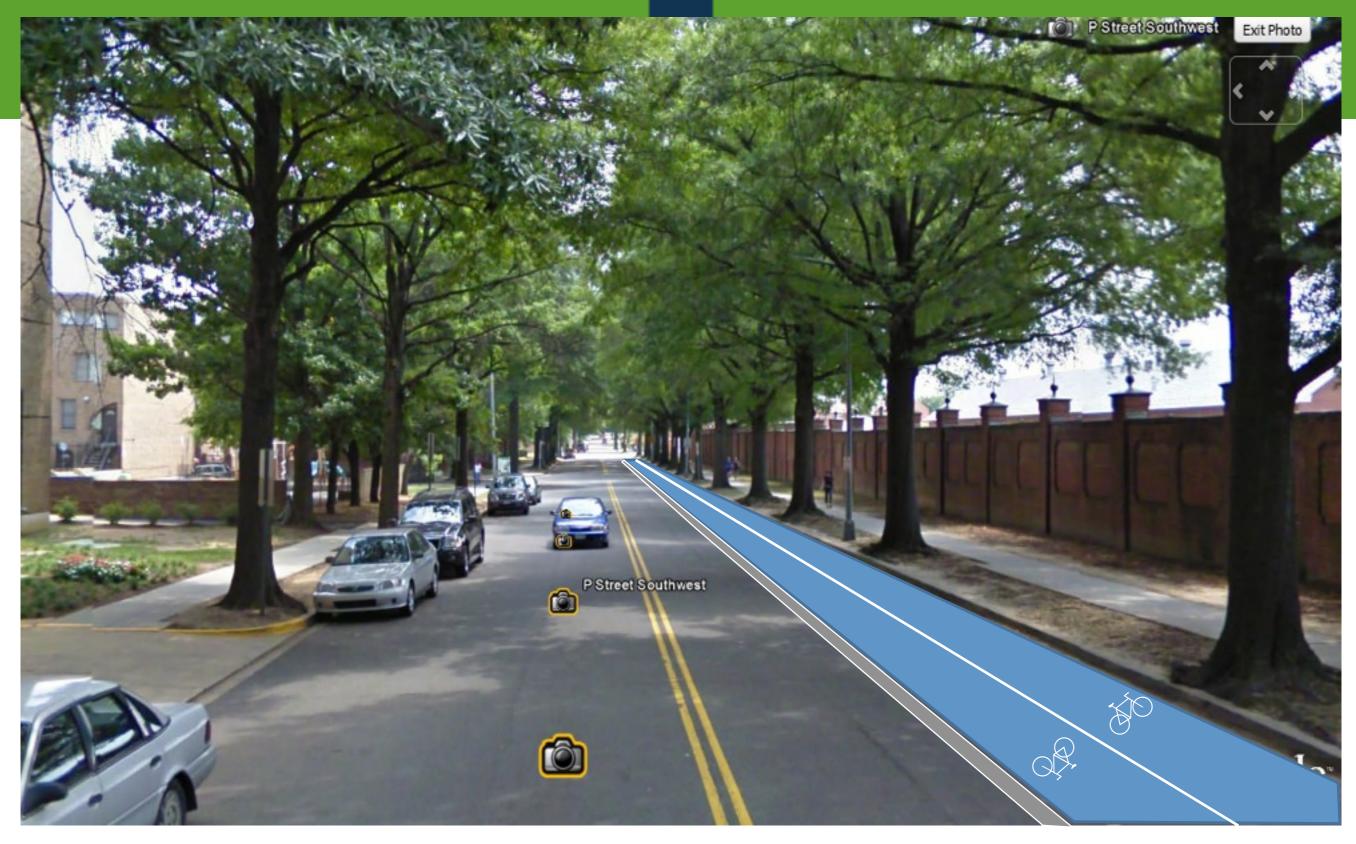








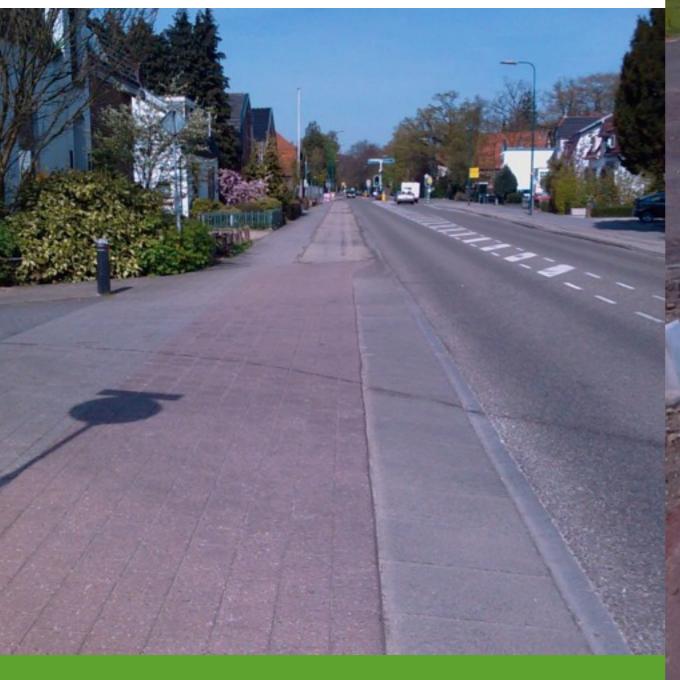
P 1/2Street SW



P Street SW – 2 Way Cycle Track with Buffer



#### Navy-entrances







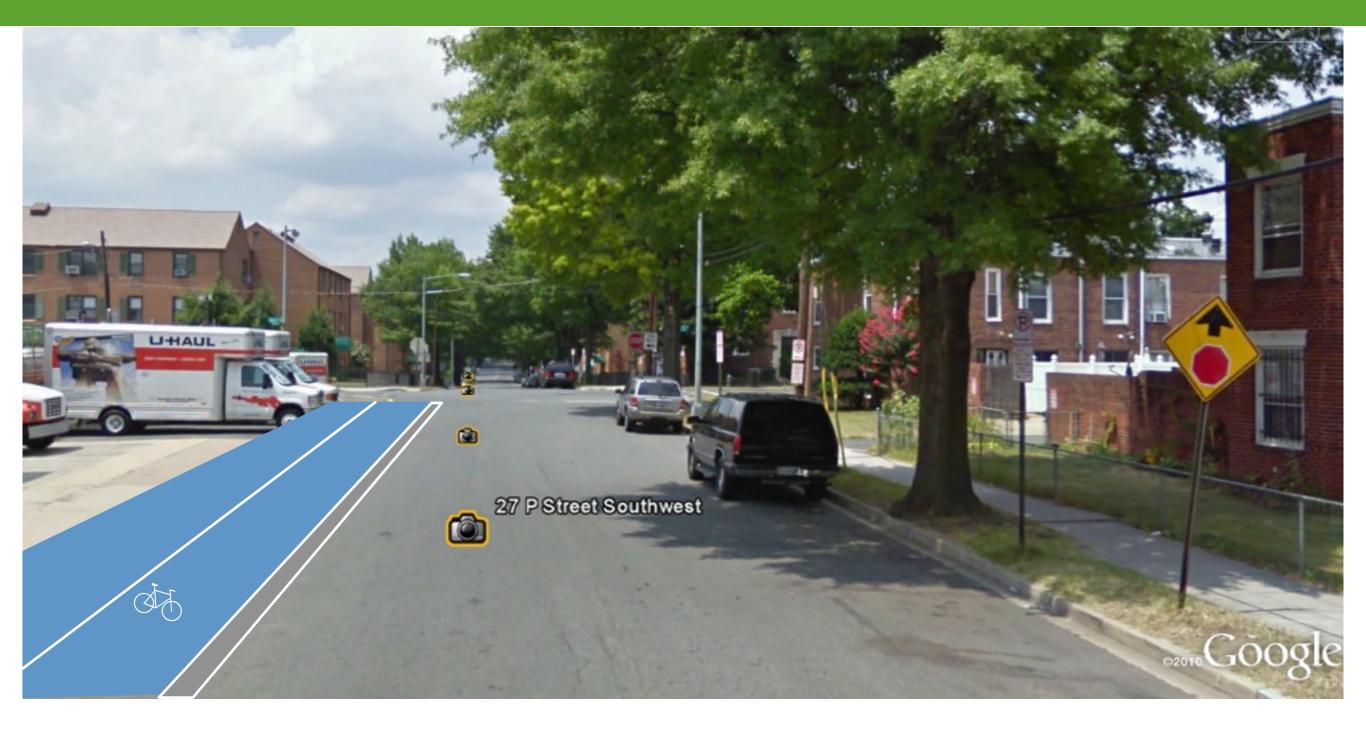






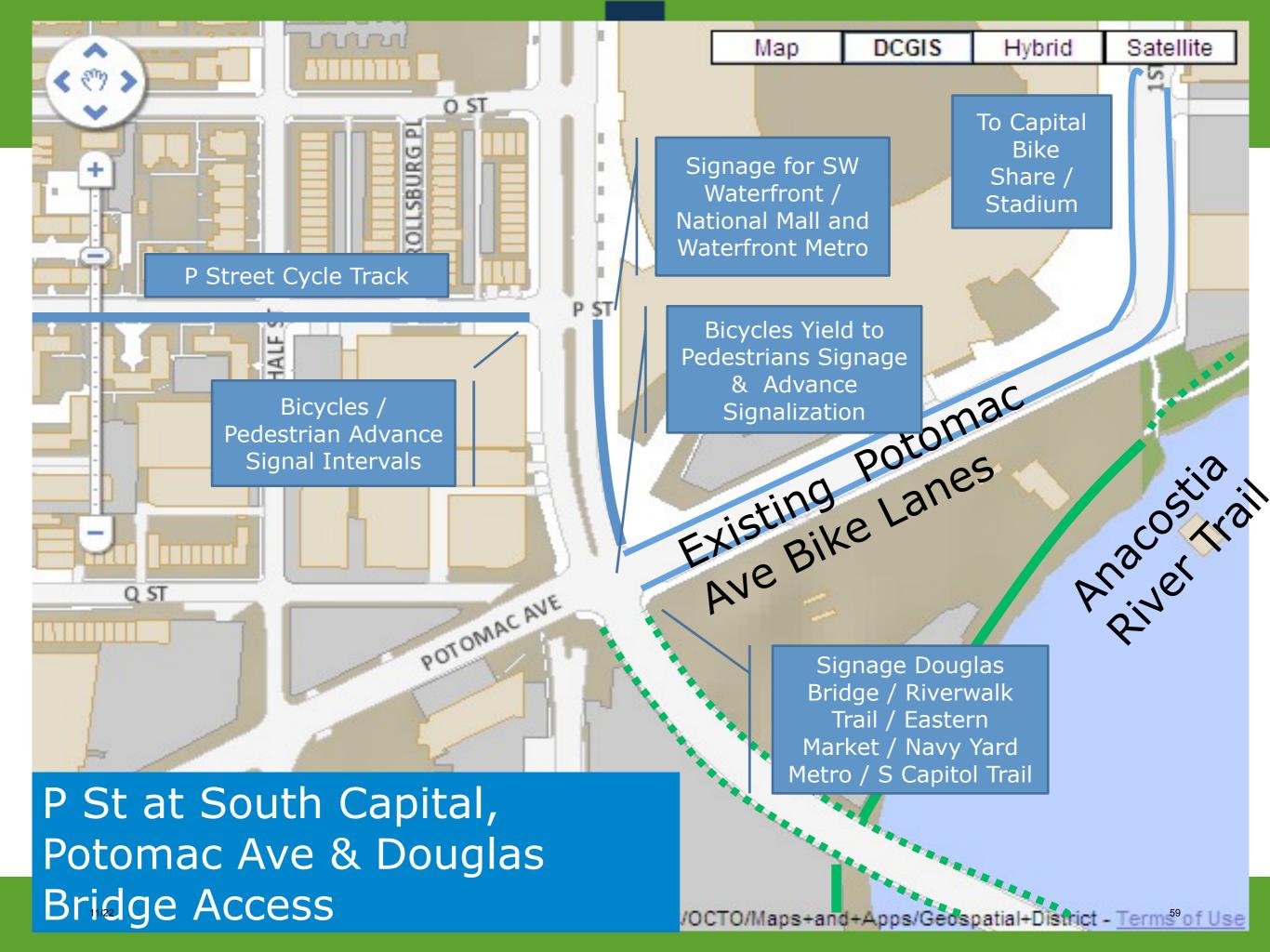
P Street SW (Bus Route west of Half St<sub>1/22</sub>)





P Street SW - 2 Way Cycle Path with Buffer (vs lanes)











#### **SW** and Stadium Area Improvements

4<sup>th</sup> Street bike lanes north of P Street to Mall/ Pennsylvania Ave.

P Street bicycle track (River Trail to South Capital)

South Capital bicycle track (Potomac Ave to P St)

Potomac Ave/Frederick Douglas Bridge/River Trail access, signage connects to existing bike lanes and new bicycle tracks

Cycle Track as Anacostia River Trail on 2<sup>nd</sup> St

Lead Bicycle / Pedestrian Signal Interval across Potomac Ave & P Street at South Capitol

Major Bicycle/Pedestrian Crossroads

#### ThinkBike Washington, DC/Recommendations

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## The Dutch taught us: Think BIG for Cycling

- Biking helps the environment, reduces stress, traffic, and gives you joy
- Bike infrastructure and smart street design encourages bicycling, and reduces conflict with automobiles
- Bicycle infrastructure doesn't have to be expensive a can of paint goes a long way
- Bikes flow like water and we should design for it
- Think about a whole bicycle network, not just two routes (M and L, NW)
- Some routes must be fabulous and have priority (green waves)
- Other routes can be bike-safe but don't require big changes
- Balancing legal liability between motorists and bicyclists encourages safety and efficiency



## M and L Streets (NW) recommendations

- M and L Streets can become a key cross-town bike connection between existing trails and paths
- Two directions cycle path over the whole route
- •In the CBD, on-street parking can be rearranged to protect cycling
- In neighborhoods, fewer lanes are needed for automobile traffic
- Right turn bike boxes at the intersections
- Innovative feature 2-stage left turn box
- Colored pavement for cycle path at the intersections
- Special signal phasing for cyclist



#### I Street recommendations

- 1. Bicycle boulevard principles
- 2.Possibly limit through-volumes by restricting traffic every 2-3 blocks
- 3. Traffic calming measures, for example pedestrian refuge islands
- 4. Green wave configuration
- 5.Option for bicycle tunnel configuration on I Street and South Capitol Street
- 6.Colored bicycle lanes



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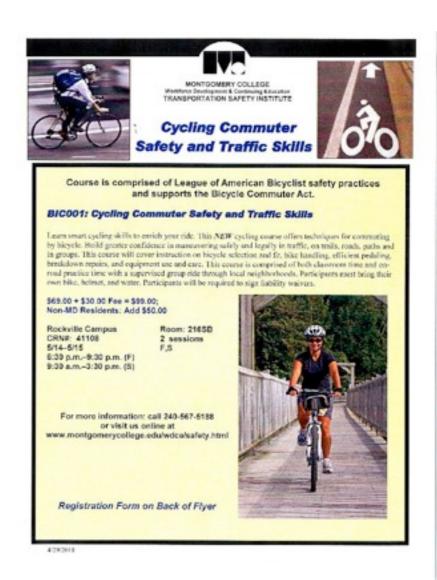
# Southwest and Stadium Area Improvements

- •4th Street bike lanes north of P Street to Mall/Pennsylvania Ave.
- P Street bicycle track (River Trail to South Capital)
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- Cycle Track as Anacostia River Trail on 2<sup>nd</sup> St
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- Major Bicycle/Pedestrian Crossroads



#### Outreach Ideas

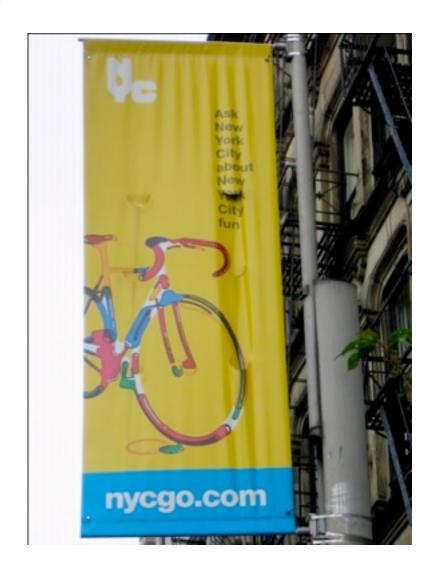
- 1. Target people who do not bike yet
- 2. "Try a bike" class (WABA, bike shops, DDOT)
- 3. Work with churches, health centers, youth centers, doctors, nurses





#### Outreach Ideas

- 1.Provide free trial on Capital Bikeshare or discount annual membership
- 2.Hold classes and do outreach at Universities, community colleges
- 3. Target areas around new bikeways
- 4. Bike education at schools
- 5.Banners





#### **Education Ideas**

More/Better Driver training

(In the Netherlands, 18 years old, 40 classes, 5 questions on bicycling on exam)

Colored bike lanes

Radio ads, internet videos

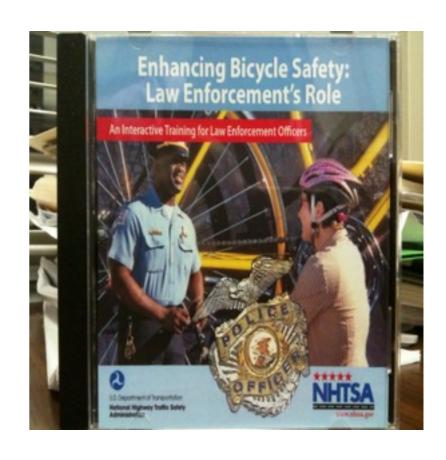
Reduce speeding (enforcement, traffic calming)





#### Enforcement

- 1.Lights (for bicyclists)
- 2. Citations to cars (speeding)
- 3. More police on bikes
- 4. Waive ticket fee for bicyclists who if they agree to take a class
- 5. Points on your drivers license for bicycle violations





#### Other Policies

- 1.More/better wayfinding signs
- 2. Make driving/parking more expensive
  - In NL, gas is \$9/gallon
  - In NL, parking is \$20/day
- 3. More surveys/counting of bicyclists



