

# Trail Entry

Reducing barriers, increasing safety  
by Dan Packard

# Too many posts, bad spacing



Thin people only





Ft. Vancouver, land bridge trail southbound

# Problems:

- Bollards in travel path
- Invites head-on crash or close call
- Spacing doesn't allow for easy entrance/exit
- Confusion and conflict
- Need room for two consecutive paths of travel - in and out



FORT VANCOUVER  
National Site  
← Land Bridge





I-5 interstate bridge entrance southbound





I-205 bridge entry from SE 23rd St.



I-205 exit



Discovery trail, Eastbound at NE 18th Ct.



Discovery trail, Westbound at NE 18th Ct.

# Many bollards, not well marked



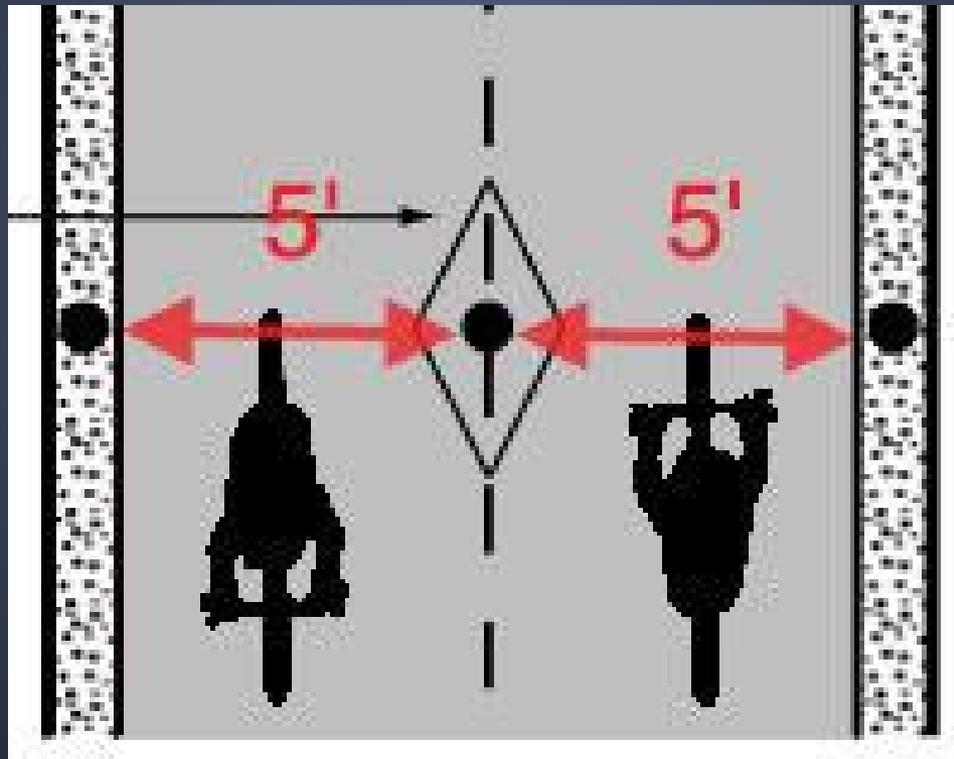
Ft. Vancouver Land Bridge exit, SE Columbia way

# Solutions:

## Signage



5 foot clearance, bollard in center



# Correct placement of bollards



Discovery trail, St. Johns Rd, westbound

# Correct and safe design

- Allows peds and bikes to enter and exit simultaneously
- Bright yellow markings on pavement and posts for best visibility day and night
- Reflectors on posts for after dark visibility
- A single bollard -- easier removal by emergency personnel than multiple numbers



Discovery trail, St. Johns Rd, eastbound



Discovery trail, Linda lane, northbound

Bollard tops  
painted bright  
white with  
permanent  
reflectors

Seattle, I-90 trail at Holgate St.





# Advance warning



# Goals

- Provide safe, convenient, and pleasant cycling conditions
- Encourage walking and make it safer

New projects or changes involving  
bike/ped facilities should be routed to  
our committee for review



# Thanks to:

- [http://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/guidance/design\\_guidance/bollards/index.cfm](http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/bollards/index.cfm)
- [http://www.fhwa.dot.gov/environment/recreational\\_trails/guidance/accessibility\\_guidance/bollards\\_access.cfm](http://www.fhwa.dot.gov/environment/recreational_trails/guidance/accessibility_guidance/bollards_access.cfm)
- Joshua Putnam, <http://www.flickr.com/photos/jputnam/6290164081/in/photostream/>

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by Dan Packard  
Clark County bicycle pedestrian community  
Vancouver, Washington, USA  
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Bonus pictures - SE Ellsworth Rd at SE 32nd Ave, looking south



BIKE LANE

ENDS



R 237

