

PLANNING YOUR COMMUNITY'S WALKING AND WHEELING NETWORK

AN EQUITABLE APPROACH TO BIKE/PED LIVABILITY



U.S. Department of Transportation Federal Highway Administration

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2010 TRANSPORTATION PLANNING EXCELLENCE AWARDS

LIVABILITY / SUSTAINABILITY CATEGORY

- Todd Klocke of the City of Salem, OR Union Street Railroad Bridge
- Yves Zsutty of the City of José, California Trail Network
- Hayes Lord of the New York City DOT 200 Lane-Mile Commitment
- Helen Chaney of the North Carolina DOT Bicycle and Pedestrian Planning Grant Initiative

Learn more at <u>www.fhwa.dot.gov/planning/tpea/</u>

Nomination process for 2012 TPEA will open this fall!

FTA BIKE/PED POLICY

• Joanne Waszczak of the Federal Transit Administration (FTA) "When I'm not riding public transportation, I'm on my bike!" ~FTA Administrator Provide the Provide

INNOVATION FIRMS

- Frank Hebbert of OpenPlans:
 - Open data and open source software to support planning and operations of your walking and wheeling network
- Andy Mortensen of TranspoGroup:

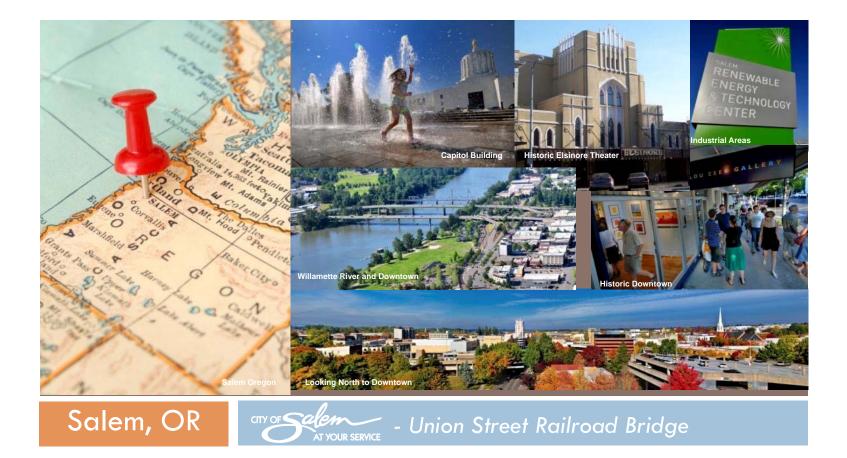
Route Directness Index, a robust tool to measure connectivity and compare benefits of bike/ped project alternatives

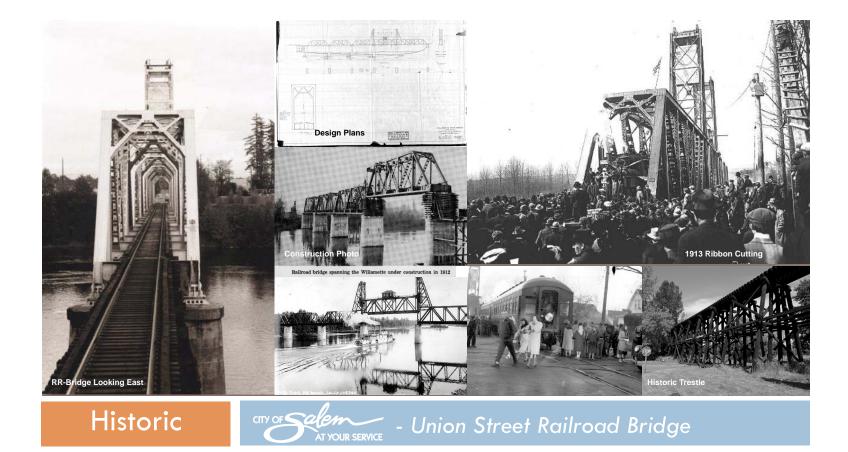


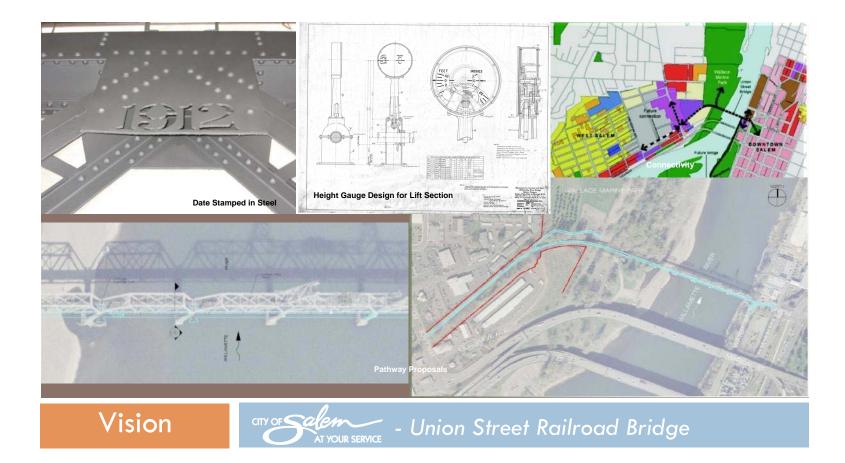
WINNERS OF THE 2010 TRANSPORTATION PLANNING EXCELLENCE AWARDS



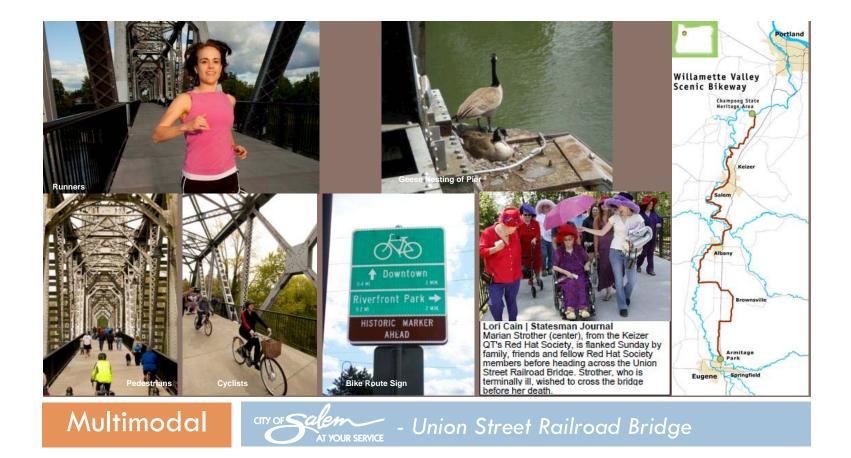
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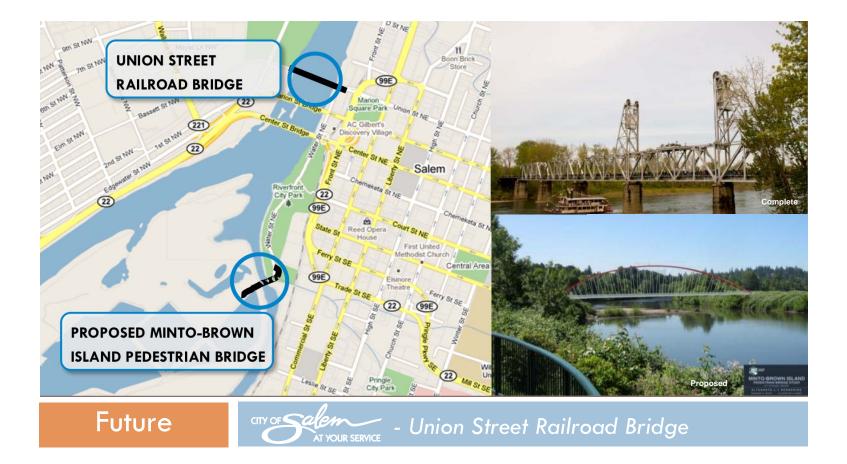












- Design
 - Oregon Transportation Enhancement Grant \$600,000

• Phase I

- Oregon Transportation Enhancement Grant \$1,346,376
- Oregon Parks and Recreation Department Grants \$575,700
- Urban Renewal Agency \$1,118,000
- City of Salem General Funds \$225,000
- Cycle Oregon \$2,500.

•Phase II

• Oregon Transportation Enhancement Grant program from the American Recovery and Reinvestment Act – \$2,200,000





Funding



🕻 - Union Street Railroad Bridge



Todd Klocke, Project Coordinator City Of Salem, Urban Development Department 350 Commercial St NE, Salem OR 97301 503-588-6178 Ext. 7535 Tklocke@cityofsalem.net www.cityofsalem.net/unionbridge

Contact



city of Salem - Union Street Railroad Bridge

WINNERS OF THE 2010 TRANSPORTATION PLANNING EXCELLENCE AWARDS



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About San Jose

- 300 days of sunshine
- Over 1M residents
- 53.22 miles of trails
- Over 50% of trail users commute



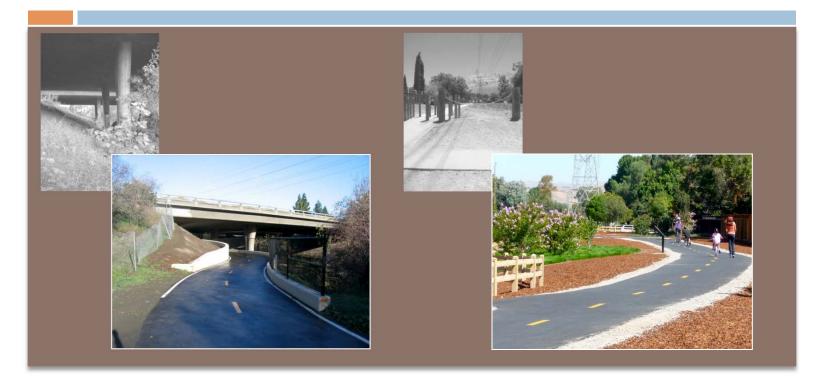
Opposition / Obstacles to Trail Development



Opposition / Obstacles to Trail Development



Opposition / Obstacles to Trail Development



Equitable Trail Development



Equitable Trail Development

- Prioritization Process
 - Grant Seeking Process
- Proposals for each council district





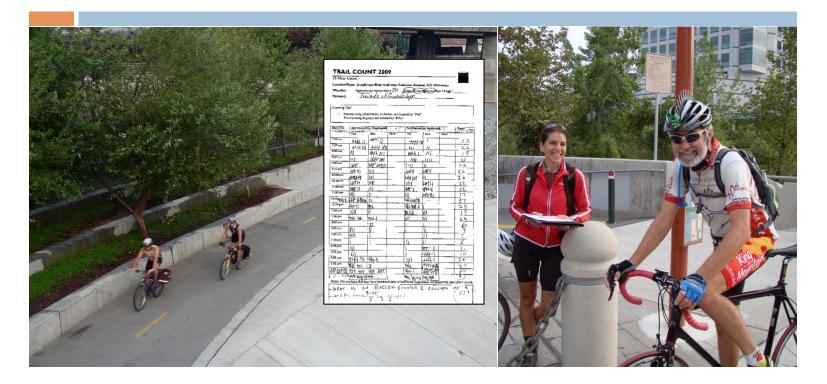








Unique Attributes of San Jose Trails



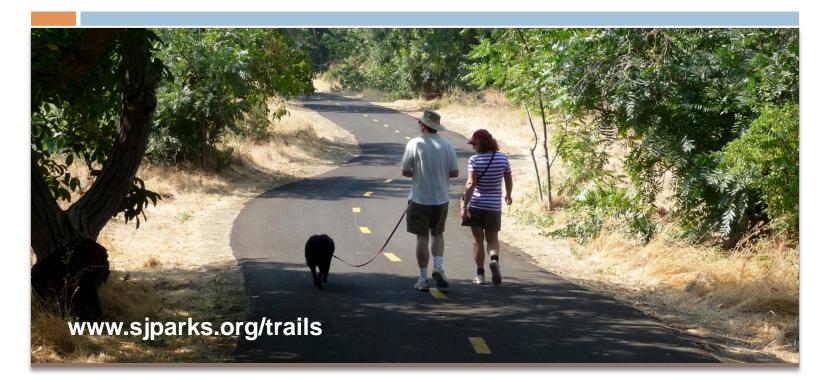
Unique Attributes of San Jose Trails



Unique Attributes of San Jose Trails



Visit San Jose Trails



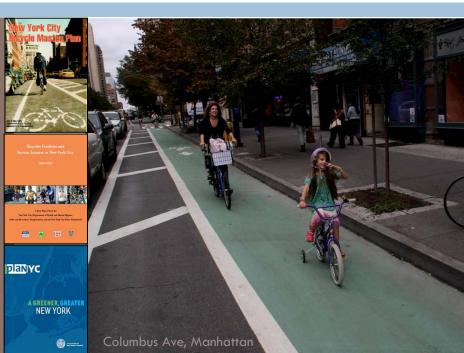
NYC Department of Transportation 200 Lane Mile Commitment



NYC Cycling Background

- 1,800-mile NYC Bicycle
 Master Plan (1997)
- Bicyclists Fatalities and
 Serious Injuries Report (2006)
 200-mile / 3-year commitment
- PlaNYC 2030 (2007)

NEW YORK CITY



Complete Streets Design Philosophy

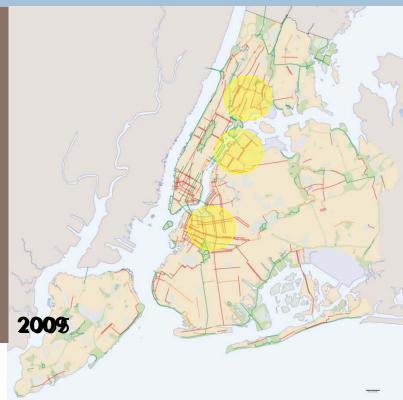


- ✓ Safety is a top priority
- Re-program the street for all road users
- ✓ Improve quality of life for all New Yorkers

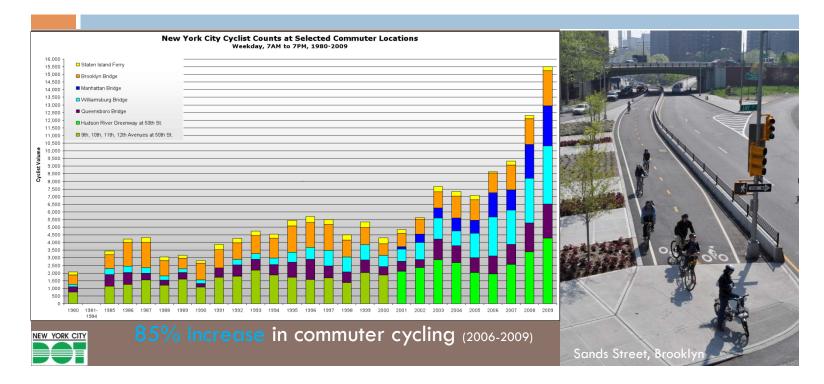
NYC Bicycle Network Implementation

- 200 lane miles in 3 years (2006-2009)
 - Increased Bridge Access
 - Southern Bronx
 - Northwest Queens
 - Northwest Brooklyn

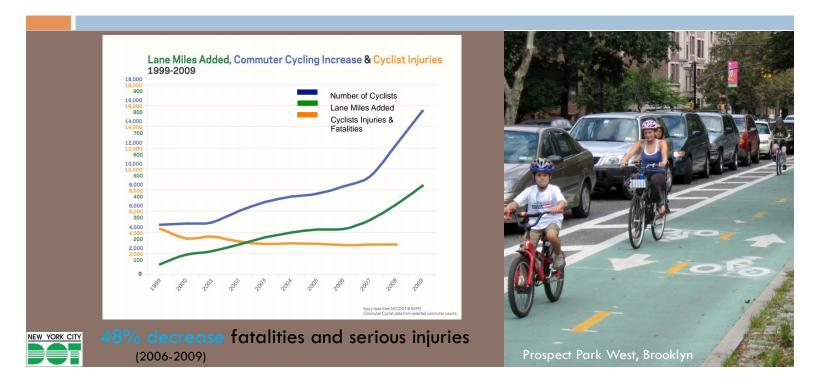




Increases in Ridership



Gains in Safety



Innovative Design

- Innovative On-Street Designs
 - Left-turn lanes
 - Bicycle Signals
 - Pedestrian islands
 - Mixing zones



9th Ave, Manhattan

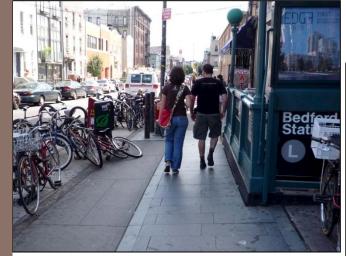
Grand St, Manhattan





Multi-modal Connections

- Neckdown
 Bicycle
 Parking
- Bicycle
 Parking
 Shelters



Bedford Ave Subway Station, Brooklyn

36th St Subway Station, Brooklyn





Education / Outreach Programs



Equity and Transportation Options

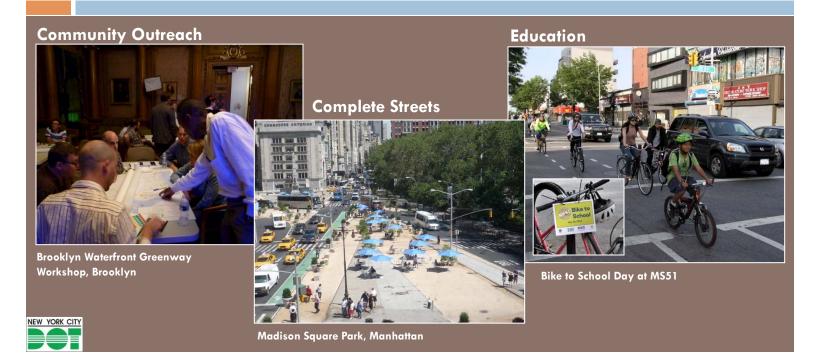
- Robust facilities on
 commercial corridors
- Increased network in neighborhoods with low vehicle availability
 - Southern Bronx (10% vs. 64.3% Citywide

NEW YORK CITY



Weekend

Future



Hayes A. Lord, Director Bicycle Program NYC Dept. of Transportation hlord@dot.nyc.gov



DOT's Livability Initiative marks the beginning of a new era! Walking and biking are considered equal with other modes.

- Go beyond minimum design standards.
- Improve non-motorized facilities during maintenance projects.
- Remove snow from sidewalks and shared-use paths.
- \sim from the US DOT Policy Statement on Bicycle and Pedestrian Accommodation

Let's "work toward an America where bikes are recognized to coexist with other modes and to safely share our roads and bridges."

~ US DOT Secretary Ray LaHood



U.S. Department of Transportation



Federal Transit Administration Policy on Pedestrian and Bicycle Access to Public Transportation



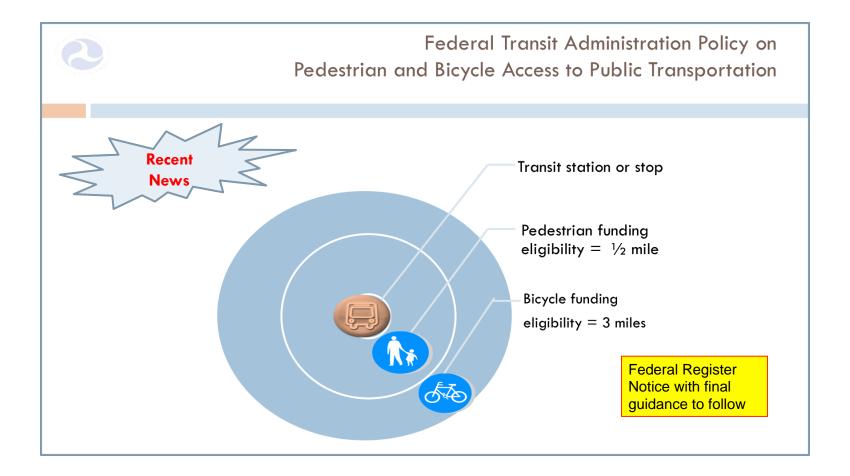




Bicycle improvements within <u>3 miles</u> of a transit stop or station, and pedestrian improvements within $\frac{1/2}{2}$ mile of a transit stop or station, are deemed to have a de facto relationship to public transportation.



Federal Transit Administration



Federal Transit Administration Policy on Pedestrian and Bicycle Access to Public Transportation

Capital Project Definition:

"A public transportation improvement... including...pedestrian and bicycle access to a public transportation facility."

FTA funds can be used for:

- <u>Planning</u> for pedestrian or bicycle integration with public transportation
- Access to a public transportation stop or station (sidewalk, multi-use path, etc.)
- <u>Bicycle Parking</u> at a public transportation stop or station
- <u>Storage on a bus or train (bike hooks on trains, bus-mounted bike racks, etc.)</u>



Federal Transit Administration







OpenPlans



















NEW YORK CITY DEPARTMENT OF CITY PLANNING





DIGITALGLOBE

🔊 Metro



OpenPlans

NACTO John S. and James L. Knight Foundation

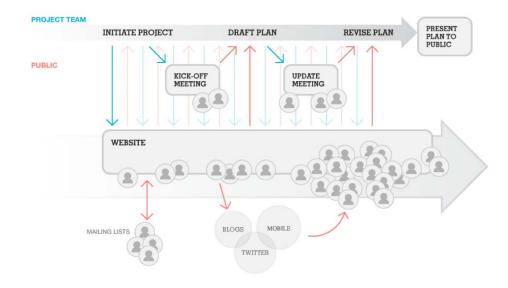
MTA Metropolitan Transportation Authority

Photo by Dan Nguyen on flickr http://www.flickr.com/photos/zokuga/5049175447

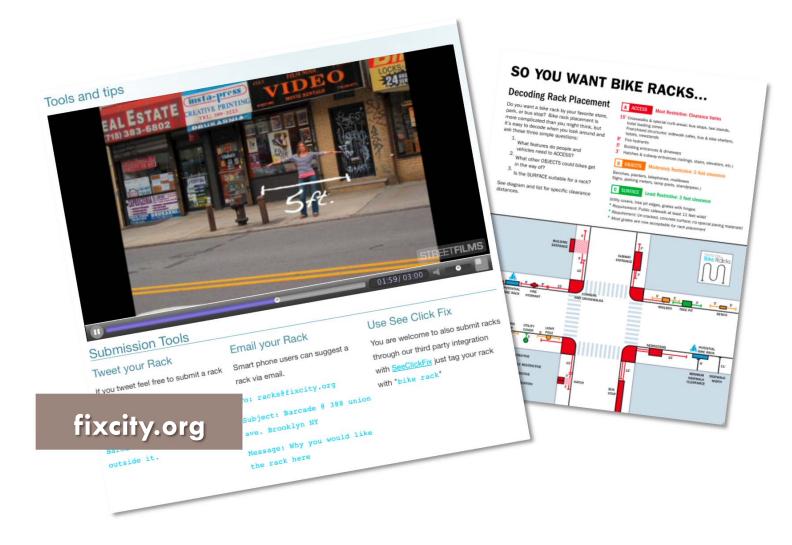
Public Participation, New Insights



Public Participation, New Insights









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Search | Email Updates | Contact Us Back Forward * () (http://a841-tfpweb.nyc.gov/jackson-heights/ Business 🗄 Visitors 🗄 Government 🗄 Office of the Mayor Residents Jackson Heights NEW YORK CITY Neighborhood Transportation Study A Home VHERE IS PARKING IN DEMAND Overview in Jackson Heights? Timeline EXPLORE THE MAP Data map Data and Presentations Explore the Data February 12th is Getting Closer **News archive** Posted on January 28, 2011 Contact us It's just about two weeks until the February 12th public meeting at PS 69! We are looking forward to discussing the Subscribe (RSS) proposed recommendations with the Jackson Heights community then. If you have any ideas on how to get the word out to more people, please let us know. We'll also have light refreshments in case you get hungry. Save the Date February 12, 2011 Posted on January 18, 2011 DOT will present recommendations for short-term

Jackson Heights | Neighborhood Transportation Study

improvements for congestion, safety and mobility for Jackson Heights at a workshop in February. Community members are invited to attend and give feedback. Download this fiver and help us spread the word. More details.

Can't make it? The recommendations will also be posted to

this site for your comments.

Community travel survey

Reducing congestion: See the data on current traffic speeds in Jackson Heights and learn what this project will do to improve them.

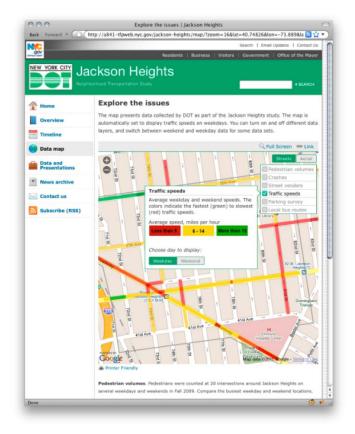
Improving pedestrian safety: View intersections with high crash rates and learn what measures DOT proposes to make them safer.

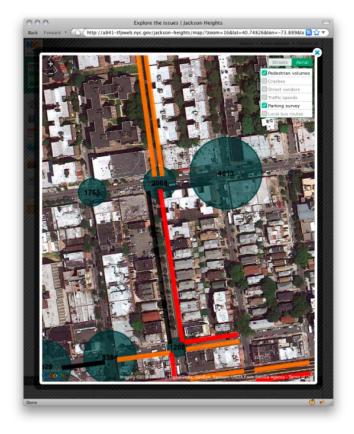
Serving the community and visitors: See who is walking and driving the streets of Jackson Heights and what brings them here. This data helped inform many of the proposals you'll see on this site.

CoPlan

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NC gov





Project Timeline

UPCOMING EVENTS

Spring 2011: Short Term Improvements Begin

Short-term treatments from the Jackson Heights Neighborhood Transportation Study will begin implementation. Check this site for updates on which treatments will be happening, as well as where and when.

February 12, 2011: Presentation of Short Term Treatments

Where: P.S. 69 (37th Avenue and 77th Street, Jackson Heights, Queens)

When: February 12, 2011. Session #1 - 10 am to 12:00 pm, Session #2 - 1:00 pm to 3:00 pm (Two identical sessions will held - please come at your convenience!)

What: Please join us for a presentation of proposed Short-Term Treatments. Please click here for more details.

PAST EVENTS

✓ Fall 2010: Develop Short-Term Improvements

DOT worked throughout the Fall of 2010 to develop proposals for short-term improvements that will be shared with and refined by community stakeholders in early 2011.

June 2010: Queens Community Board 3 Transportation Committee Presentation Jun 16th, 2010

DOT staff presented findings and feedback from community meetings to CB 3. <u>Download</u> the presentation.

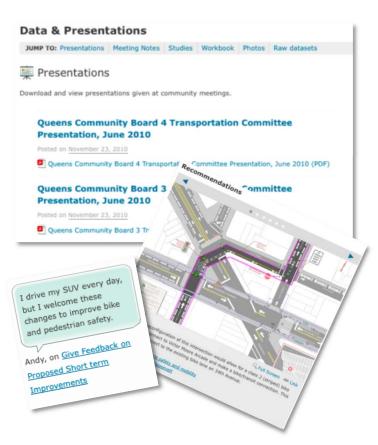
June 2010: Queens Community Board 4 Transportation Committee Presentation Jun 1st, 2010

DOT staff presented findings and feedback from community meetings to CB 4. <u>Download</u> the presentation.

April 2010: Community Visioning Workshops

Community members were asked to create a vision of how Jackson Heights streets will look and function, and create the framework for future transportation improvements. Workshop participants used the <u>streets classification workbook</u>.

Anril 2010: Jackson Heights Community Onen House



I hope she does. RT @Naparstek: Maybe NYC's CDO @RachelSterne can help to open up NYPD's crash data http://nprs.tk/huls90 /v @StreetsblogNYC newamsterdamize New Amsterdamize 26 Jan in reply to @newamsterdamize † @rachelsterne @newamsterdamize @Naparstek 0 @streetsblogNYC Duly noted. Have you Cath Ave 34th A 1310 seen @NYC_DOT's interactive map of Crashee Jackson Heights? http://bit.ly/eWV8fg Traffic speeds Parking survey 26 Jan via HootSuite 🖧 Favorite 🛱 Retweet 🖘 Reply 37th A 72md St Mentioned in this Tweet Streetsblog founder, playing to ever-smaller or, shall we say, more Naparstek Aaron Naparstek exclusive niche audiences. Providing for the safe, efficient and sustainable movement of people 41st Ave 41st Ave and goods, in order to enhance the economy and quality of life in NYC. http://bit.ly/bCj4as in the new world with amsterdam cycle chic; **#BikeNYC** lover; newamsterdamize New Amsterdamize @TransAlt fan Covering livable streets and sustainable transportation in the five StreetsblogNYC Streetsblog New York boroughs.





OpenPlans.org

Frank Hebbert fhebbert@openplans.org @fkh

MEASURING EQUITABLE CONNECTIONS between **AFFORDABLE HOUSING AND TRANSIT**

Methods for Transferable GIS Applications

Andrew Mortensen



7/ transpogroup

DOT – HUD – EPA Partnership for Sustainable Communities



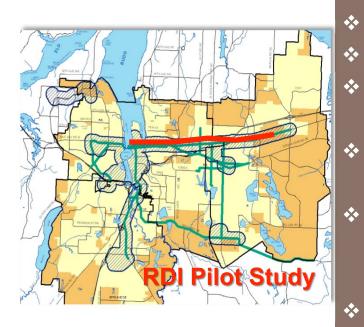
* Livability Principles

- ✓ Improve access to affordable housing
- ✓ More transportation options
- Lower transportation costs while protecting environment

Partnership Agreement

- Develop livability measures and tools
- ✓ Undertake joint research & data collection

Affordable Housing & Transit – The Challenge



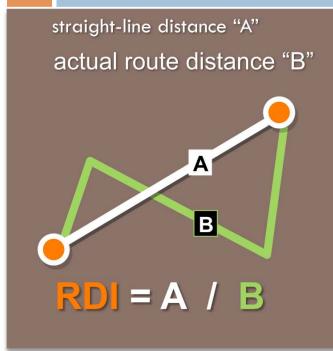
- Measuring Local Connectivity
- Emphasizing <u>Sustainability & Equity</u>
- Applying Available GIS Data and Techniques
- Output to Supplement City
 Transportation System Plan
- Establishing Strategic Planning Model for Efficient & Transferrable Applications
 - Olympia, WA Example

Pedestrian Planning Technique

- Z Transpo engaged at the CNU defining best method for measuring connectivity for <u>Local</u> <u>Planning</u>
- Z Evaluating other options
 - □ NCHRP 616 / Multi-modal LOS
 - □ I-Place3s
 - Buffering Analysis / Walk score
- Z Built ViaCity applying Route Directness Index (RDI)
- Z On-going research collaboration



What is Route Directness Index?



The direct measurement of connectivity by means of the route directness index (RDI):

- can be effectively and consistently applied across varying contexts
- provides a greater differentiation in measured connectivity than other metrics
- is a more robust measure of connectivity for analyzing land use-transportation relationships, and
- can be integrated with modeled walk and bicycle travel times

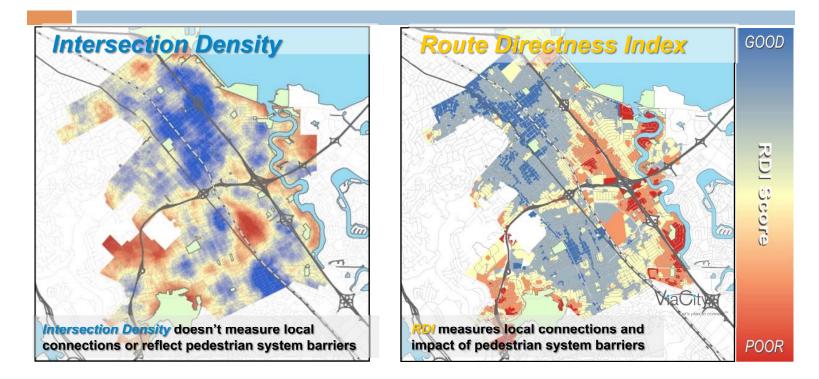
Why Route Directness Index?

- Z Other connectivity indices do not provide for parcellevel precision
 - Focus only on transportation network and not also the land use relationships to the transportation system
 - Research shows stronger correlation; previously considered hard to measure.
- Z Limited ability for other metrics to evaluate subtle changes in the connectivity of a system or to compare benefits of project alternatives.
- Z More intuitive for broader public, agency staff and elected official understanding.

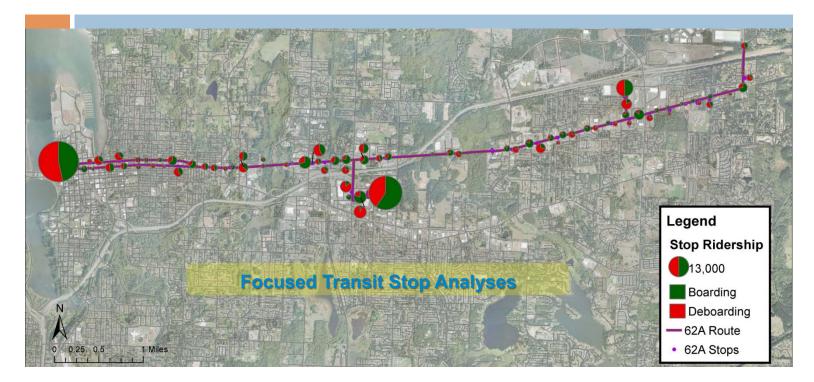


Intersection Density

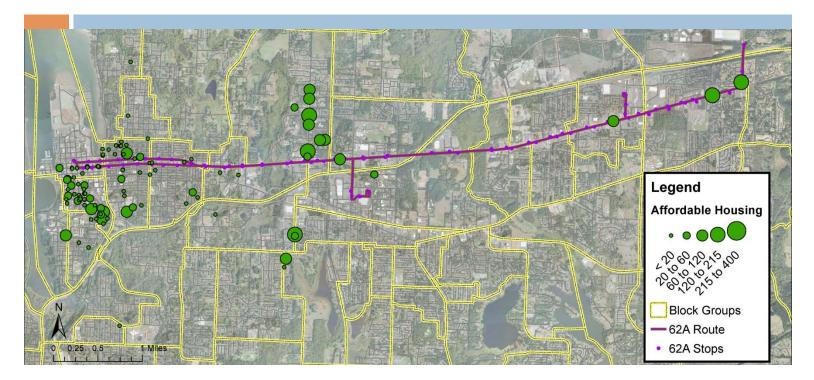
Comparing Connectivity Metrics



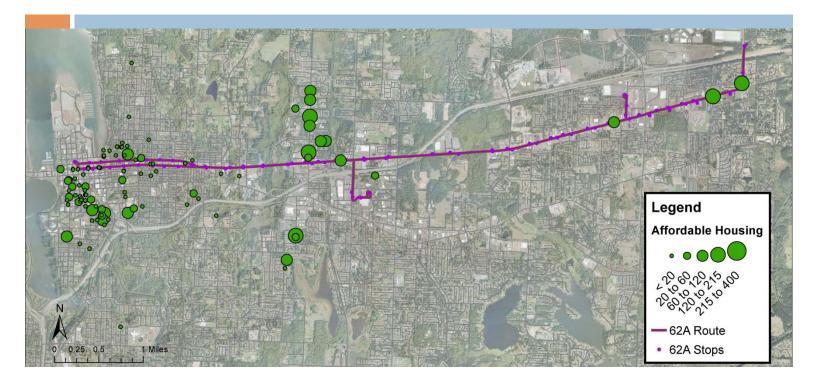
Olympia Primary Transit Route & Ridership



Census Data Limitations – Block Groups



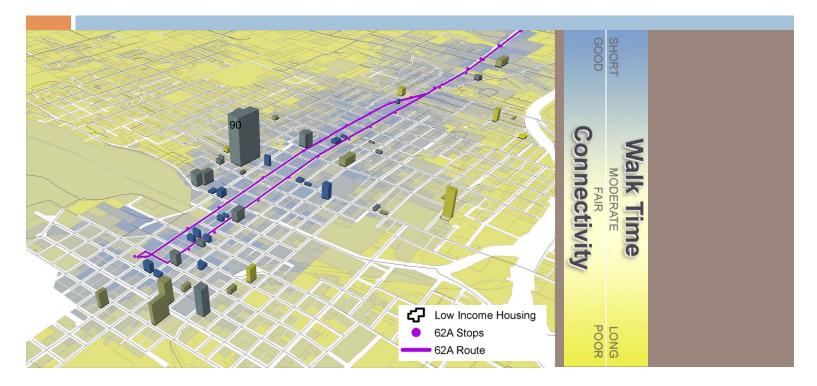
Olympia Affordable Housing Inventory



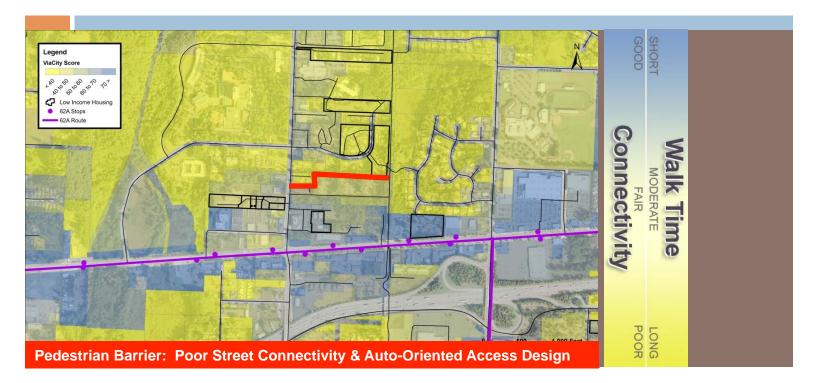
Area 3: Composite RDI / Walk Time Score



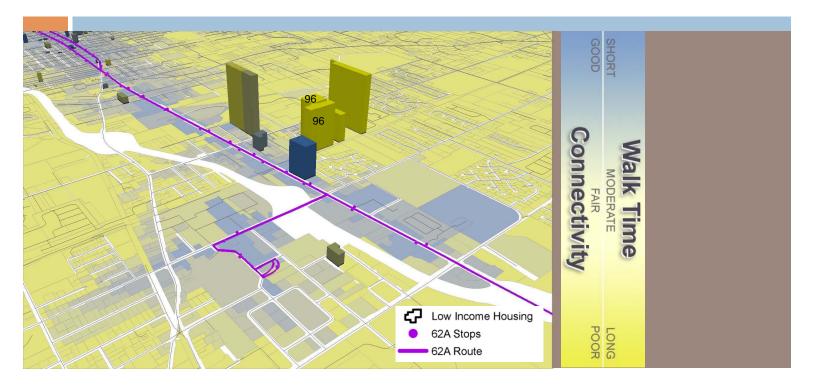
Area 3: Composite RDI / Walk Time Score



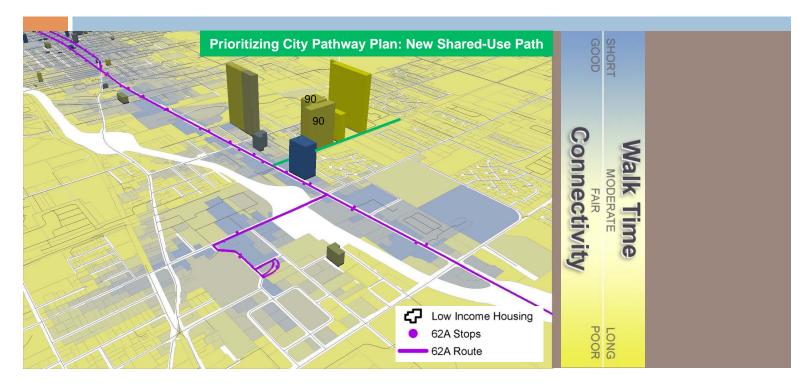
Area 2: Composite RDI / Walk Time Score



Area 2: Poor Street Network Design



Area 2: Impact of City Bike Plan Priority



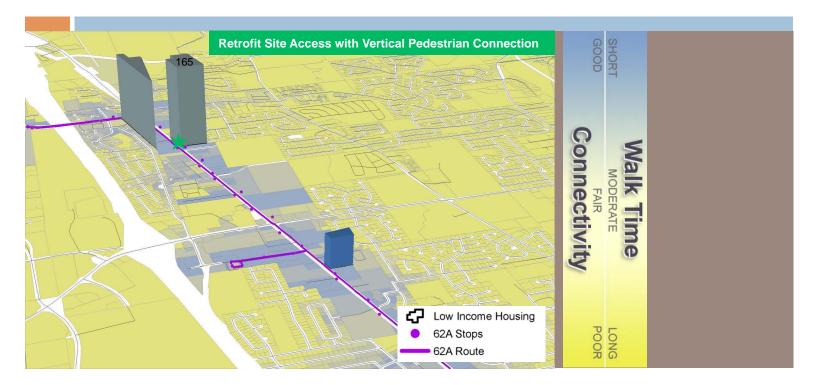
Area 3: Composite RDI / Walk Time Score



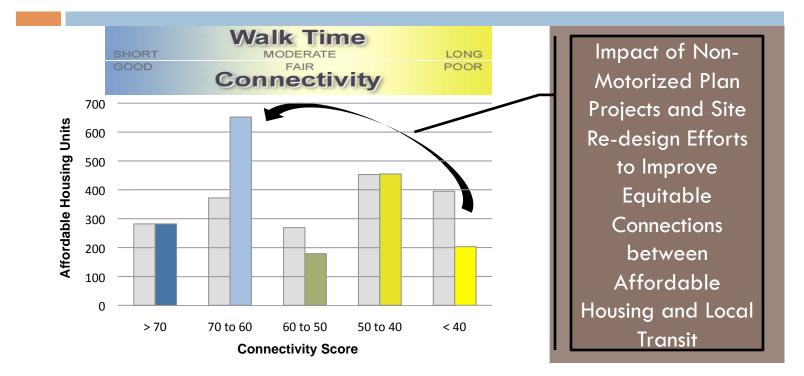
Area 3: Poor Site Design & Pedestrian Access



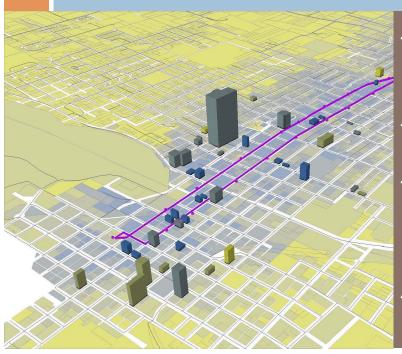
Area 3: Impact of Site Access Enhancements



Local Plan Prioritization & Site Design Impacts



Affordable Housing & Transit – The Take-Away



- Measuring Local Connectivity
 with Emphasis on Sustainability
 & Equity Policy
- Can use available GIS Data and Applied Techniques
- Outcomes used to re-prioritize Multi-Modal Transportation Plans / Capital Improvement Plans & Re-design Site Accesses
 Efficient & Transferrable Strategic Planning Model

Please feel free to contact us!

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Hayes Lord: <u>hlord@dot.nyc.gov</u>

Frank Hebbert: fhebbert@openplans.org

QUESTIONS?



Andy Mortensen: <u>andy.mortensen@transpogroup.com</u>

Joanne Waszczak: joanne.waszczak@dot.gov



THANK YOU FOR ATTENDING OUR SESSION