

Planning and Urban Design for Tysons Corner

Community Workshops July 2007



Submitted to:



Fairfax County, Virginia

Submitted by:

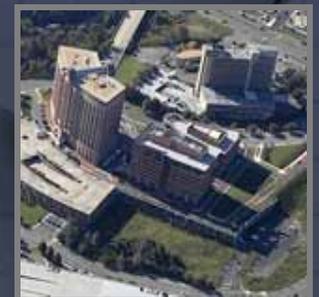


McLarand Vasquez Emsiek & Partners, Inc.

Presentation

Why are we here?

- Provide guidance to the Tysons Task Force
- Asking you to think about Tysons: *what is your vision to create a workable dynamic livable future for Tysons Corner?*
- No decisions have been made
- Need your input to help guide the process



The Overall Process

Community Dialogues Stakeholder interviews



Six planning workshops - March



Test & refine 3 alternative scenarios



Three planning workshops – this week



Test & refine 2 advanced alternatives – July - November



Community workshop on implementation – September



Community workshop on Advanced Alternatives - December



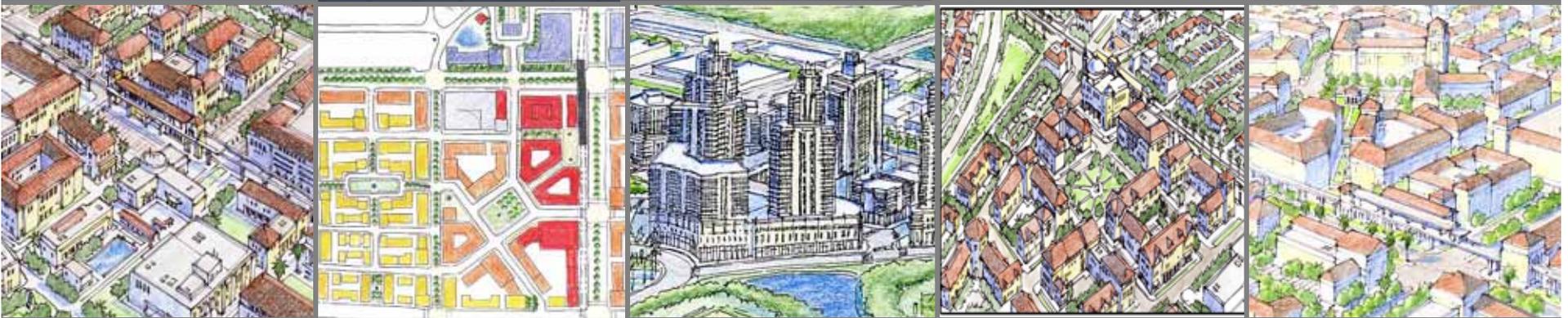
Test & Refine Preferred Model – December - January



Task Force Recommendations – early 2008

Path to 21st Century Tysons

- Task Force Principles set the direction
 - Focus growth within Tysons & around transit
 - Mix of uses for an active 24-hour place
 - Increase connectivity & walkability
 - Preserve & enhance natural features



Where Are We Trying To End-Up

- In March, you said the New Tysons should be:
 - Different Kind of Place – more walkable, more mixed use, more open space...
 - Happily you have great examples to learn from throughout the DC region



Learning From the DC Region



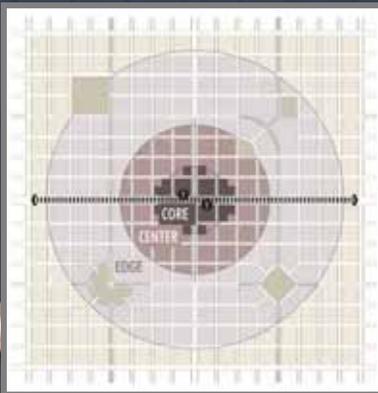
The Scenarios

Scenario	Residential	Total	People
Existing	8,000 DU	45 m sq. ft.	123,000
Base Case	18,000 DU	74 m sq. ft.	198,000
Test Scenario A	45,000 DU	136 m sq. ft.	338,000
Test Scenario B	31,000 DU	101 m sq. ft.	253,000
Test Scenario C	38,000 DU	100 m sq. ft.	240,000

Note "people" is housing + jobs

Process to Create Test Scenarios

- Took your input from March
- Looked at TOD best practice
- Beyond TOD circles in Comprehensive Plan
- Developed three different spatial models
- Test in relation to Comprehensive Plan



Test Scenarios

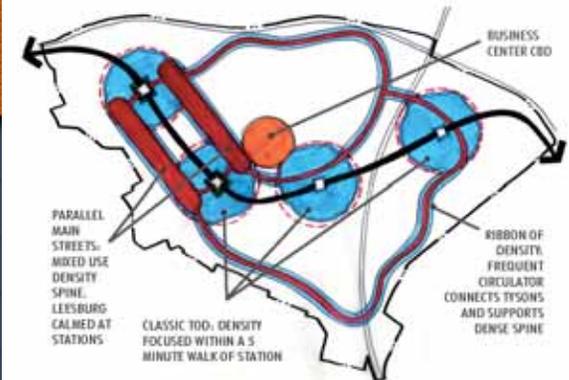
- Purpose of Test Scenarios –
 - explore 3 contrasting patterns of growth
- Test Scenarios –
 - not designed to survive analysis
 - not anticipated to work well
- None of the Test Scenarios will be advanced
- More refinement necessary

Test Scenarios

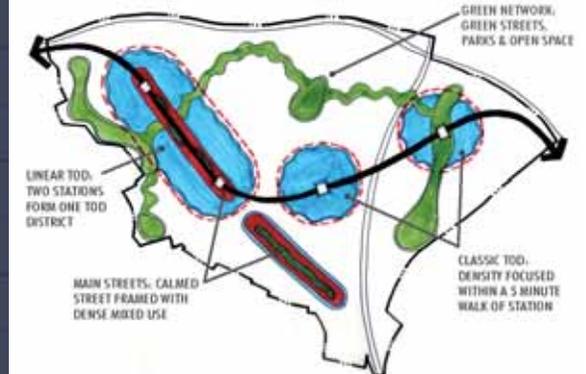
Drawing on TOD best practices

- Test Scenario A –
 - Hierarchy of TOD and Transit
 - Pushing the envelope
- Test Scenario B –
 - Tier of density by station
 - Employment
- Test Scenario C –
 - Extended TOD
 - Housing

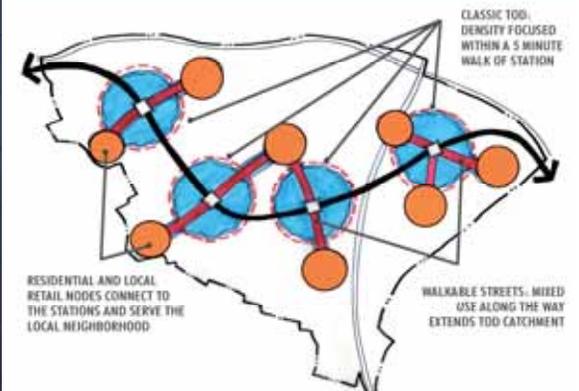
TEST SCENARIO A



TEST SCENARIO B



TEST SCENARIO C



21st Century Tysons: Many Places

- One Plan With a Series of Unique Parts
 - Working Tysons
 - Living Tysons
 - Shopping Tysons
 - Playing Tysons
- Each Area With its Own Mix



21st Century Tysons: Many Connected Places

- Like different rooms in your house
 - May use all of your house,
 - but not at the same time
- Tysons is the same



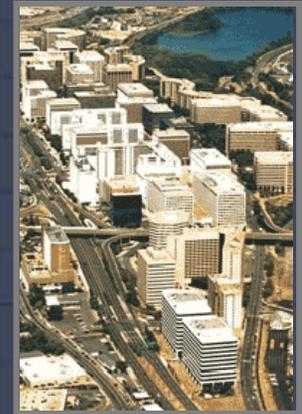
21st Century Tysons: Many Connected Places

- Need to Design
 - Each “Room” for its unique needs
 - How the rooms connect to each other to make a functional house
- Goal is a livable connected Tysons



21st Century Tysons: Many Compact Places

- A Series of Places
 - A “room” with Metro might have 29,000 jobs and 8,000 residents w/in 3 or 4 minutes of Metro
- In scale the equivalent of Crystal City



Crystal City

Visualizations

- Depiction of the future
- Another tool for understanding scenarios
- Not a recommendation or a prediction
- Applies Task Force Principles
- Plan for assumed growth
- Pattern & amount of growth vary



Existing



Future



Future Character

Route 50 Fairfax, Virginia



*How might Tysons evolve?
A visualization from Fairfax:
Existing conditions*

Urban Advantage

Route 50 Fairfax, Virginia



Converting to boulevard with slow multi-use travel lanes, new sidewalk, trees, street lamps, bike racks

Urban Advantage

Route 50 Fairfax, Virginia



*New mixed use infill
development, public plaza*

Urban Advantage

Route 50 Fairfax, Virginia



Further infill development

Urban Advantage

Route 50 Fairfax, Virginia



*More infill development at
intersection*

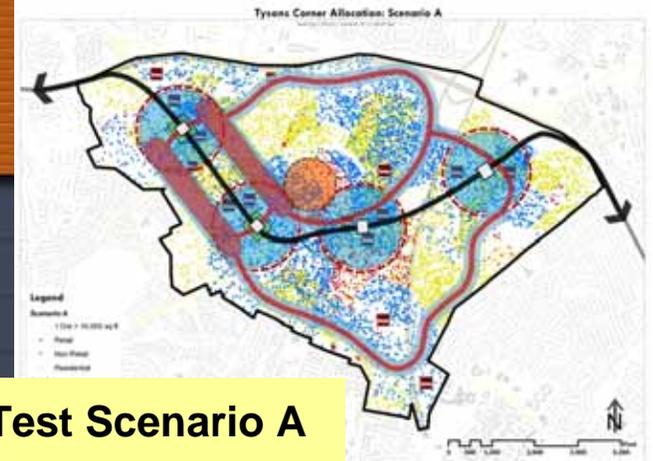
Urban Advantage

The Test Scenarios

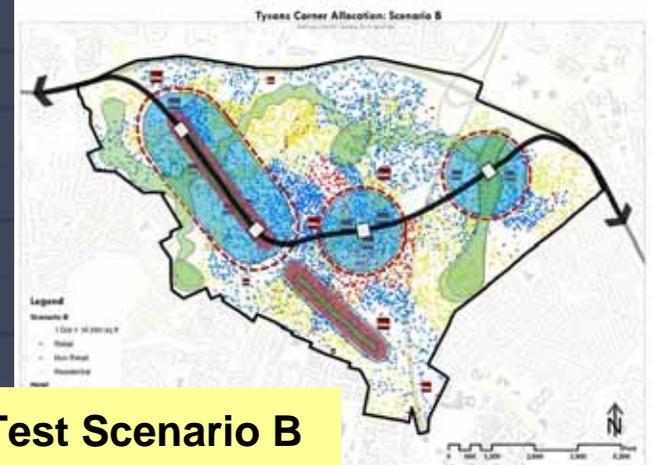
- Common Characteristics
 - Focus most growth around transit stations
 - Growth throughout Tysons
 - Protect the neighborhoods on the edges
 - Create mixed-use centers
 - Walkable network

DOT 10,000 sq ft of employment

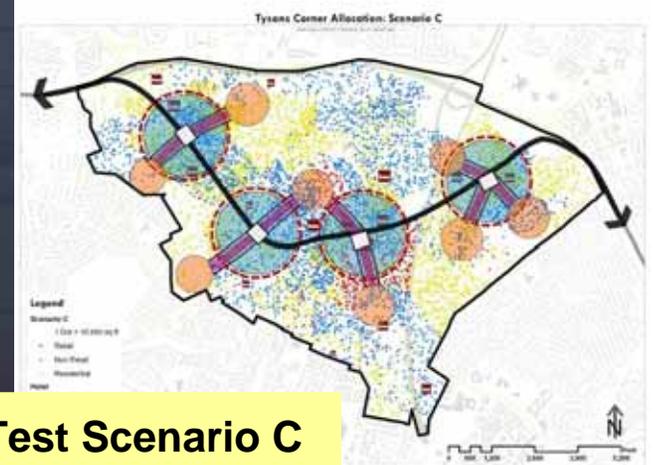
DOT 10,000 sq ft of housing



Test Scenario A



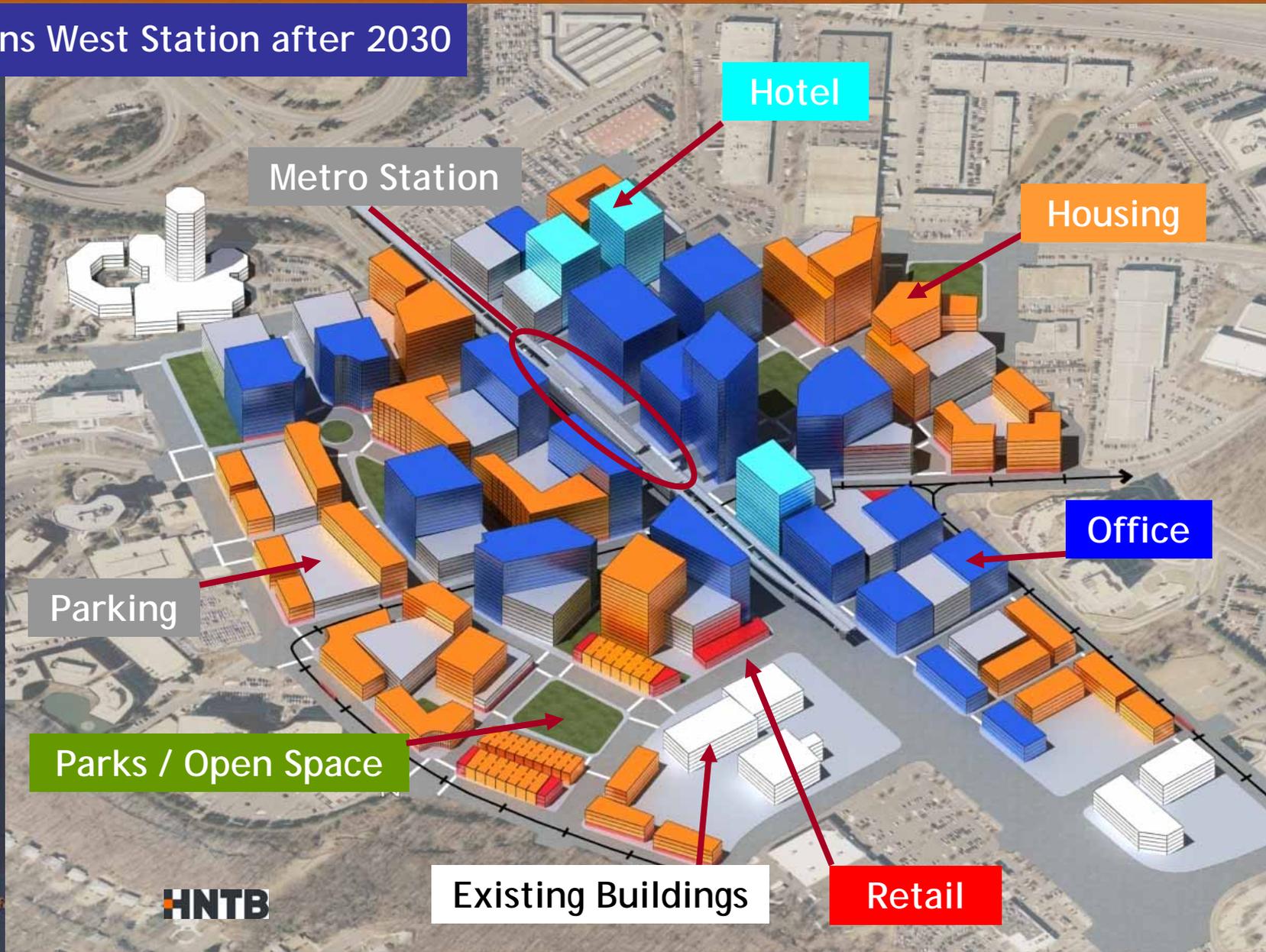
Test Scenario B



Test Scenario C

Reading the Visualizations

Tysons West Station after 2030

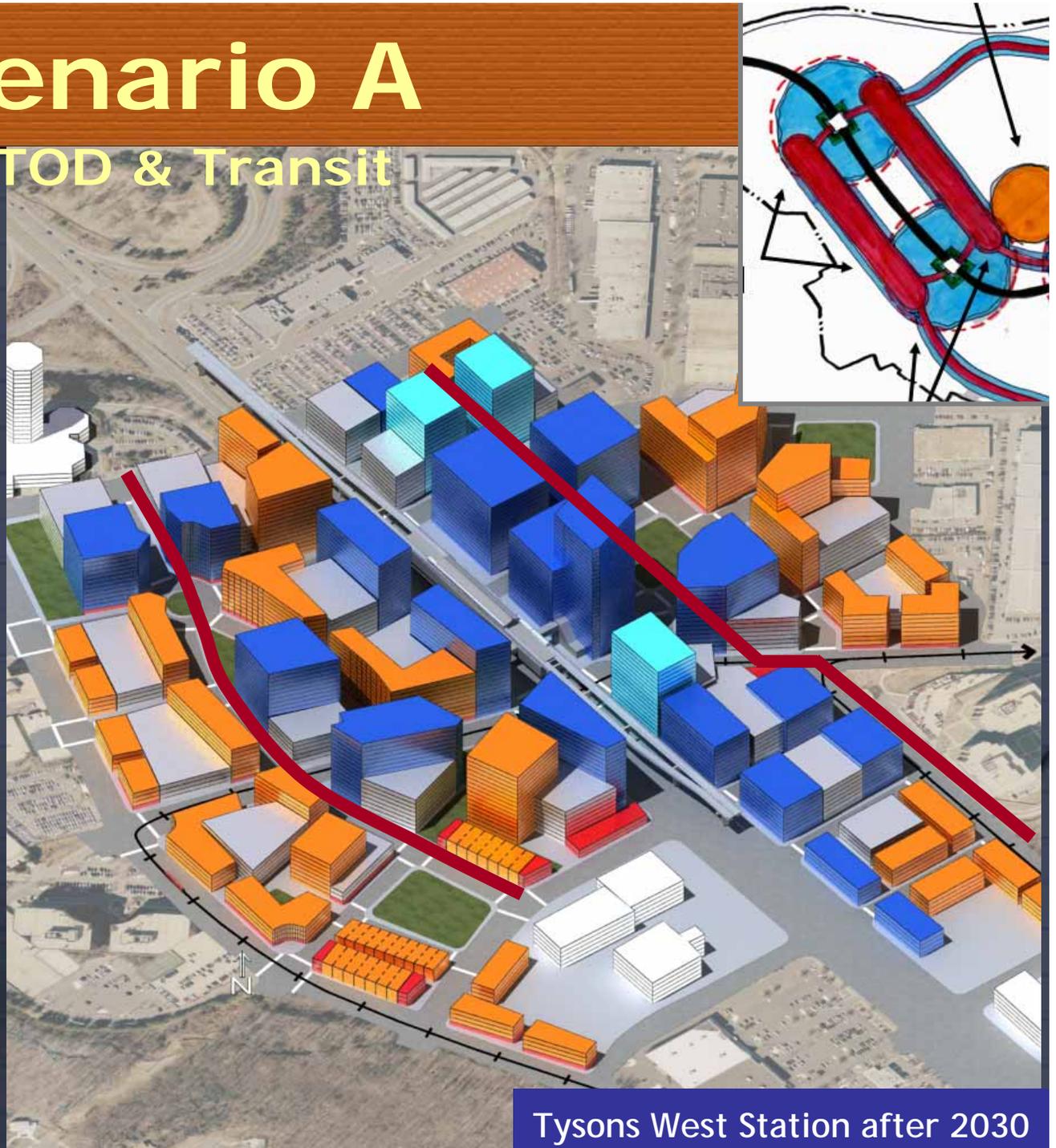


HNTB

Test Scenario A

Hierarchy of TOD & Transit

- Focus growth along Metro and transit
- Two main streets
- High growth throughout Tysons



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Tysons West Station after 2030

Test Scenario A –

- Buildings 12 to 30 stories close to station
- Buildings 4 to 8 stories 1,000 ft from station
- Active uses at street level
- Tysons West share of 330,000 people

Tysons West Station after 2030



Fairfax County, Virginia

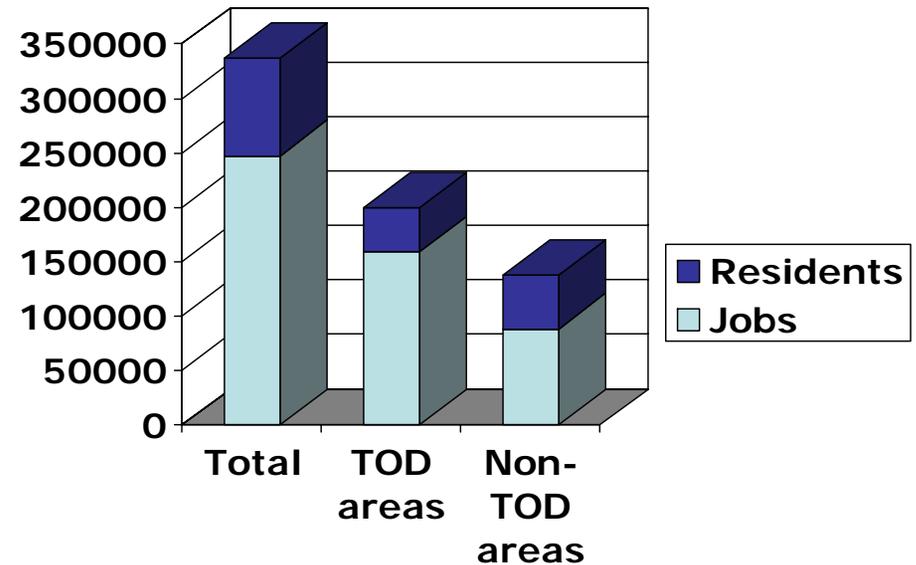


Test Scenario A

“Pushing the Envelope”

Where is the growth?

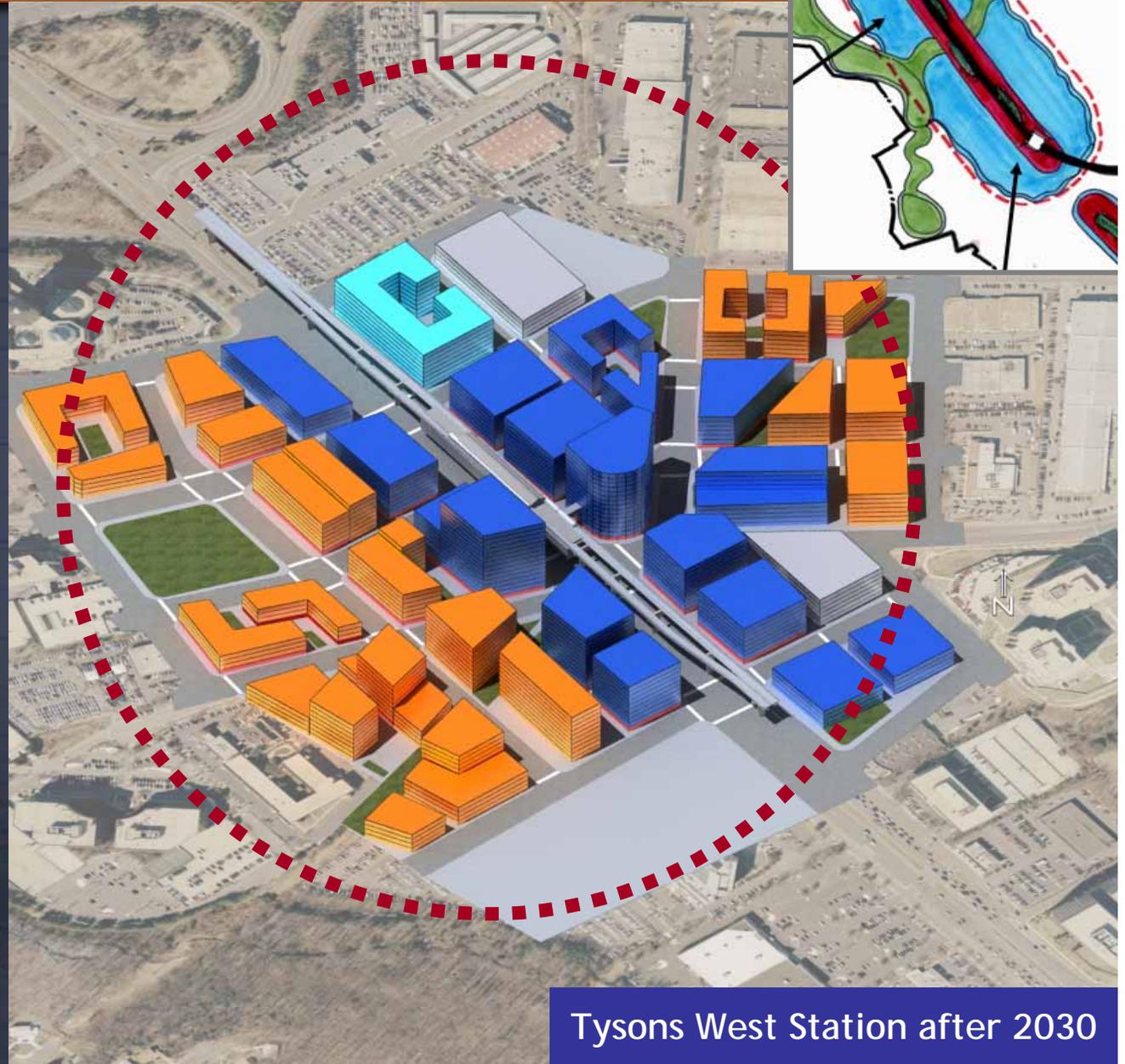
- Jobs @ stations
 - 159,000 jobs
 - 66% of Tysons
- Dwellings @ stations
 - 20,200 dwellings
 - 45% of Tysons



Test Scenario B

Classic TOD

- Focus growth at Metro
- Tapers away from Metro
- Office & hotel on Rt 7
- Housing & parks on edge of TOD
- Green network



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Tysons West Station after 2030

Test Scenario B

- Buildings 8 to 15 stories close to station
- Buildings 4 to 8 stories 1,000 ft from station
- Active uses at street level
- Rt 7 a "great street"
- Tysons West share of 253,000 people

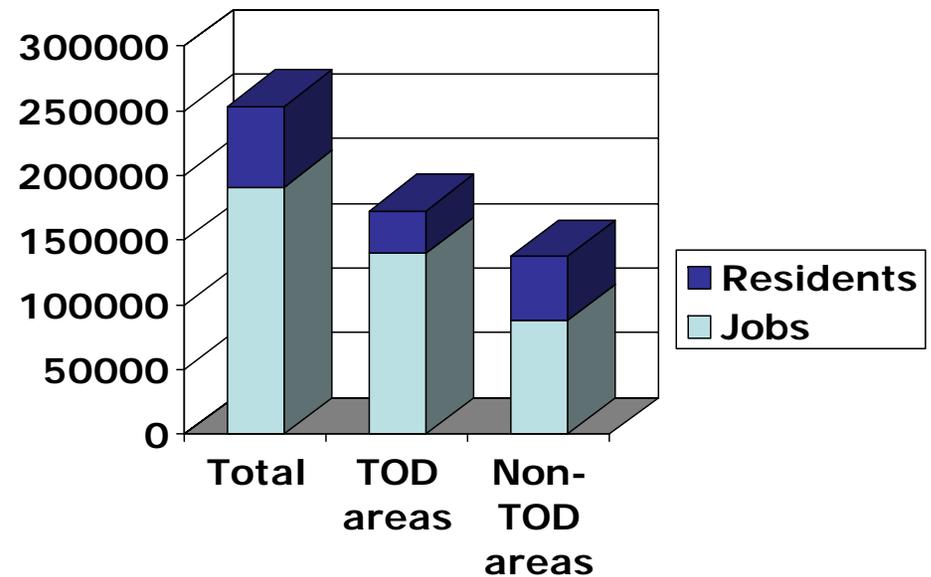
Tysons West Station after 2030



Test Scenario B – “Employment”

Where is the growth?

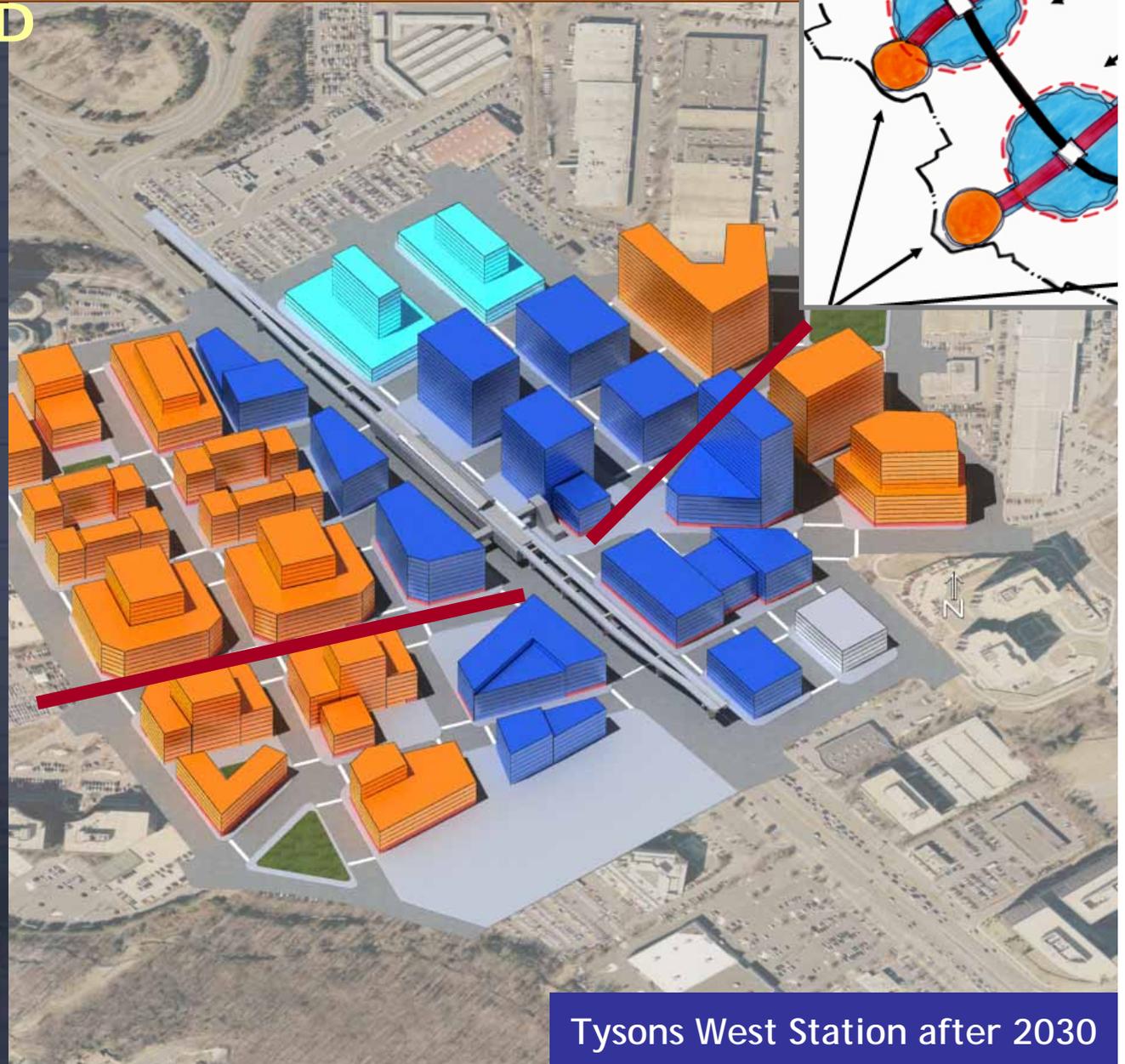
- Jobs @ stations
 - 140,000 jobs
 - 74% of Tysons
- Dwellings @ stations
 - 16,400 dwellings
 - 53% of Tysons



Test Scenario C

Extended TOD

- Focus jobs growth at Metro
- Secondary TODs w/ housing & retail away from station
- Walkable connectors



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Tysons West Station after 2030

Test Scenario C

- 7 to 20 story buildings close to station
- 7 to 20 story buildings on spine 1,000 ft from station
- 5 to 7 stories on edge
- Active uses at street level
- Tysons West share of 240,000 people

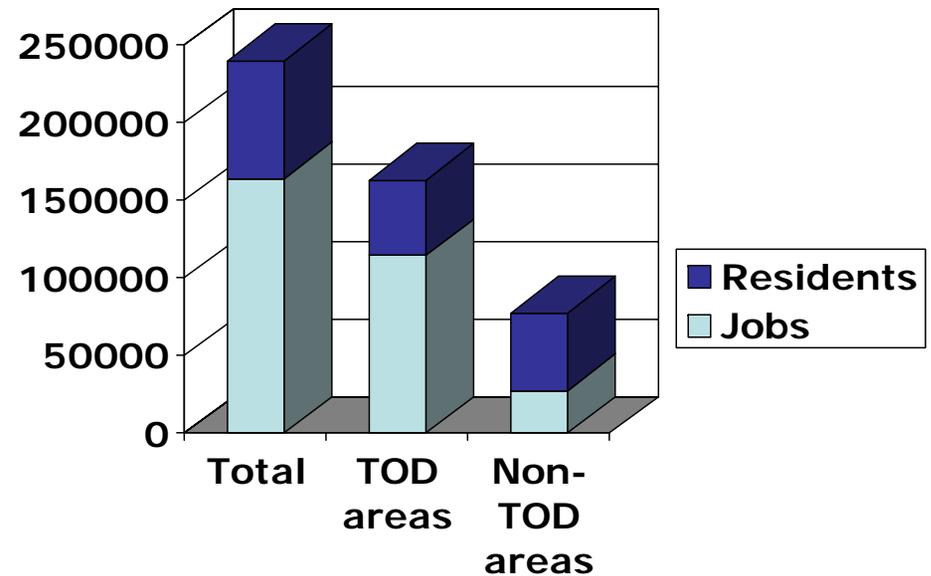
Tysons West Station after 2030



Test Scenario C "Housing"

Where is the growth?

- Jobs @ stations
 - 114,400 jobs
 - 71% of Tysons
- Dwellings @ stations
 - 24,300 dwellings
 - 64% of Tysons



Test Scenario A "Pushing"

Tysons West Station after 2030



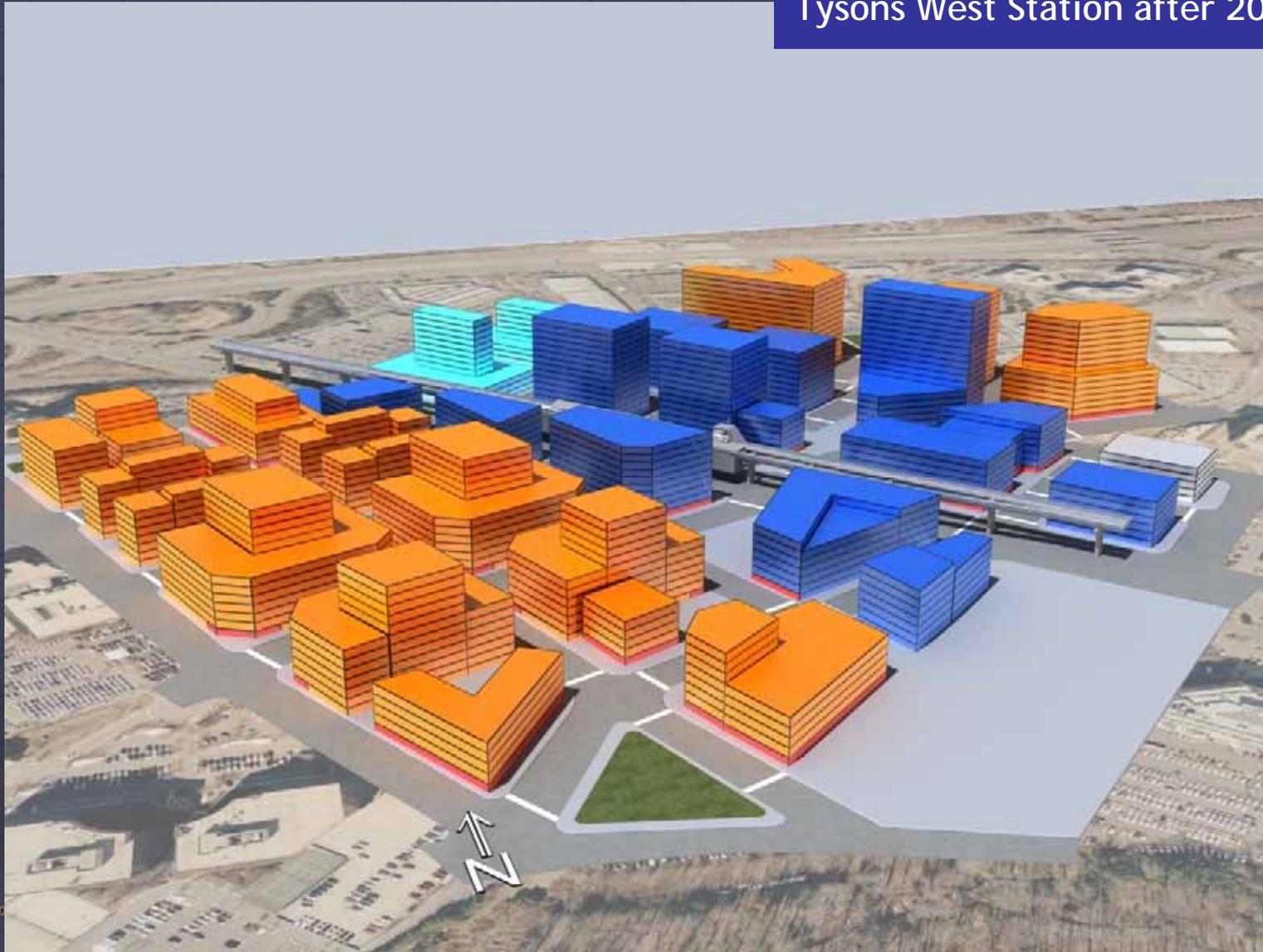
Test Scenario B "Jobs"

Tysons West Station after 2030



Test Scenario C "Housing"

Tysons West Station after 2030



Understanding the Scenarios

Some Risk of Planning by Numbers

- Not everything that can be counted counts
- Staggering amount of data
- Going from data to knowledge

Your
Reference
Guide:
Test Scenario
Newsletter



What Did the Testing Tell Us?

- How much growth can come to Tysons and have the new Tysons work
- Tried to Look at making “Tysons Work” 5 different ways
 1. Getting To and From Tysons
 2. Getting Around in Tysons
 3. Creating Active Places
 4. Being a Good Neighbor
 5. Need for Public Facilities

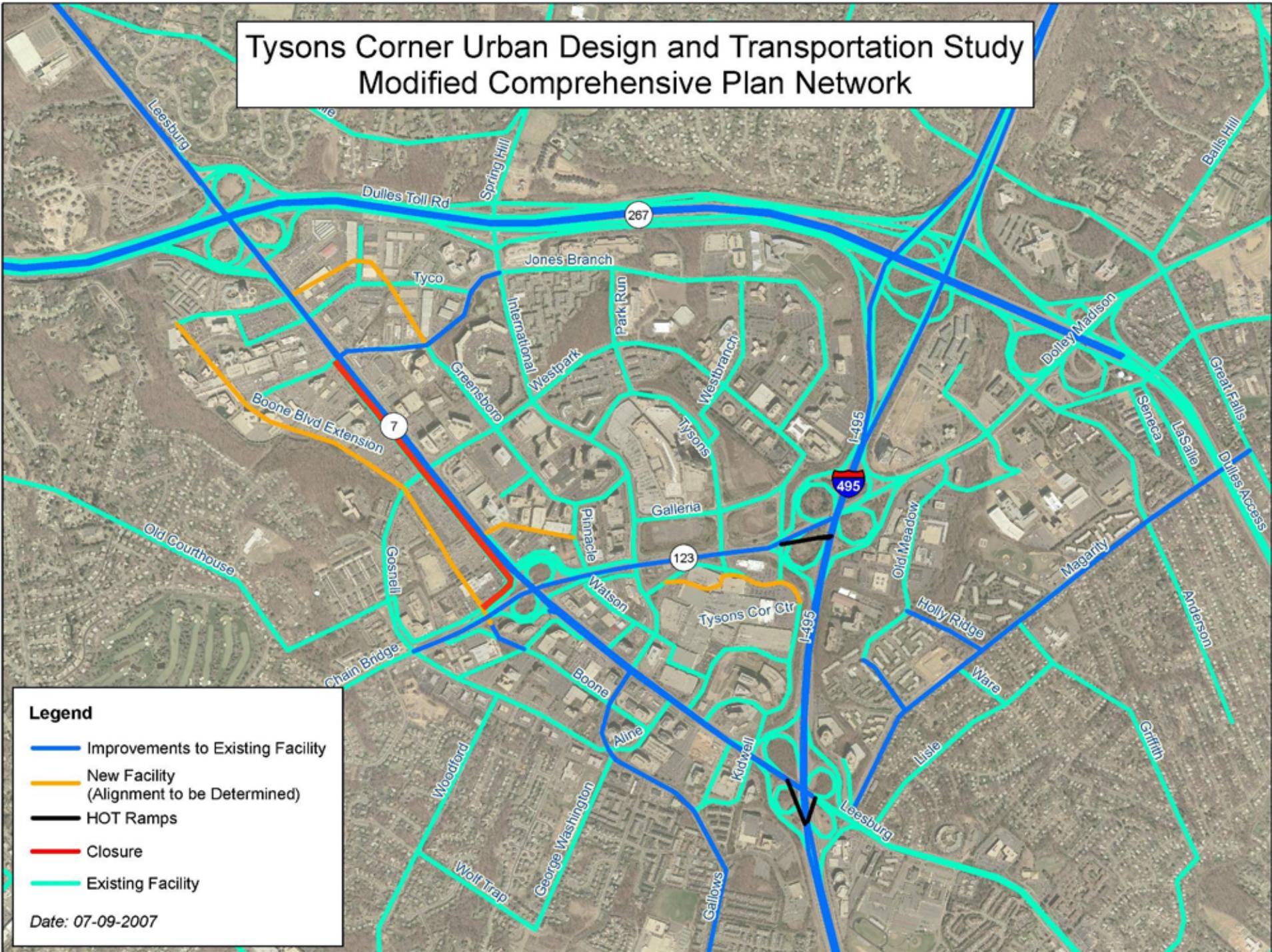
Getting To and From Tysons

Future system used for testing

- Modified comprehensive plan network
 - Metrorail, HOT lane elements, Toll Rd access
- No new interchanges (Rt 7, Rt 123)
- Grid of streets network
- Additional transit & roadway connections to Tysons



Tysons Corner Urban Design and Transportation Study Modified Comprehensive Plan Network

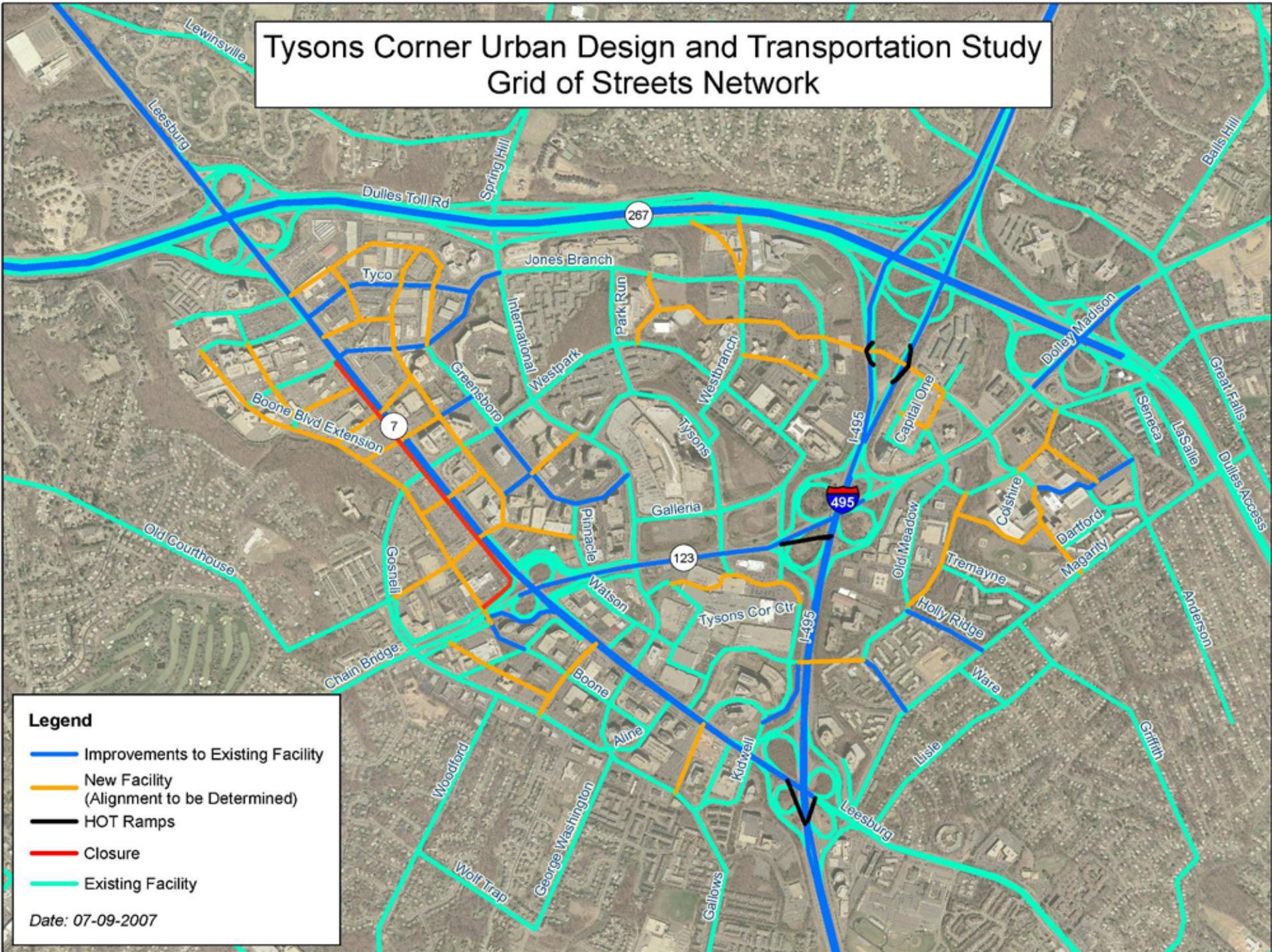


Legend

- Improvements to Existing Facility
- New Facility
(Alignment to be Determined)
- HOT Ramps
- Closure
- Existing Facility

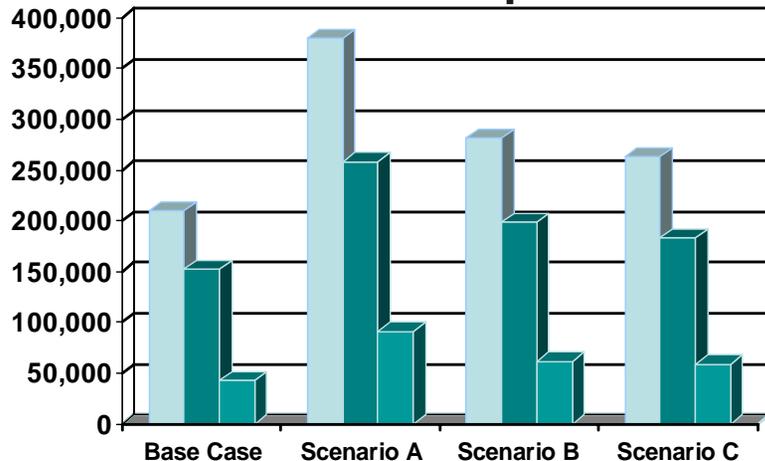
Date: 07-09-2007

Tysons Corner Urban Design and Transportation Study Grid of Streets Network



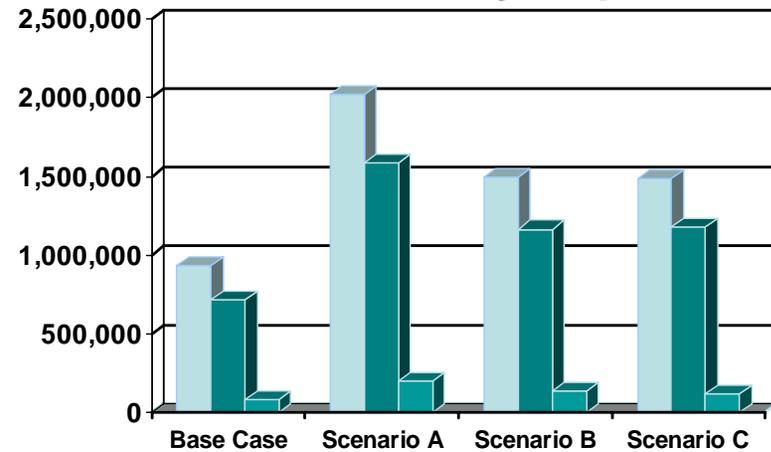
Trip Forecasts

Work Trips



Person Trips Auto Driver Transit

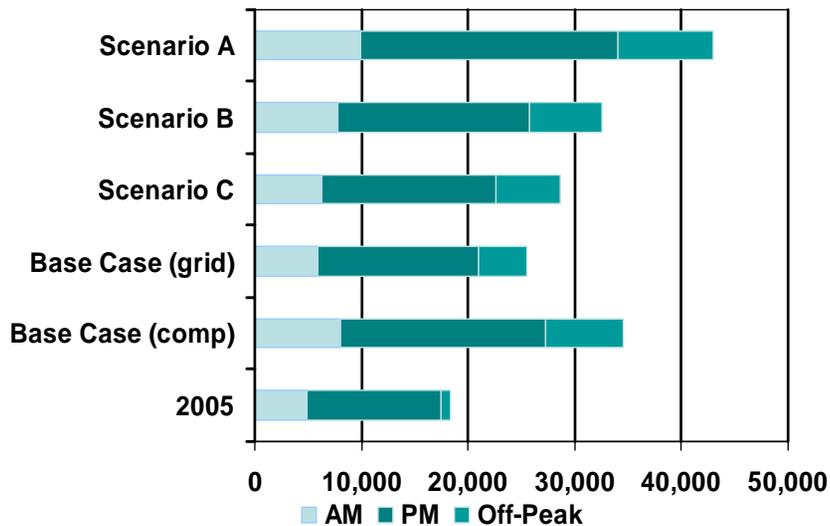
Total Daily Trips



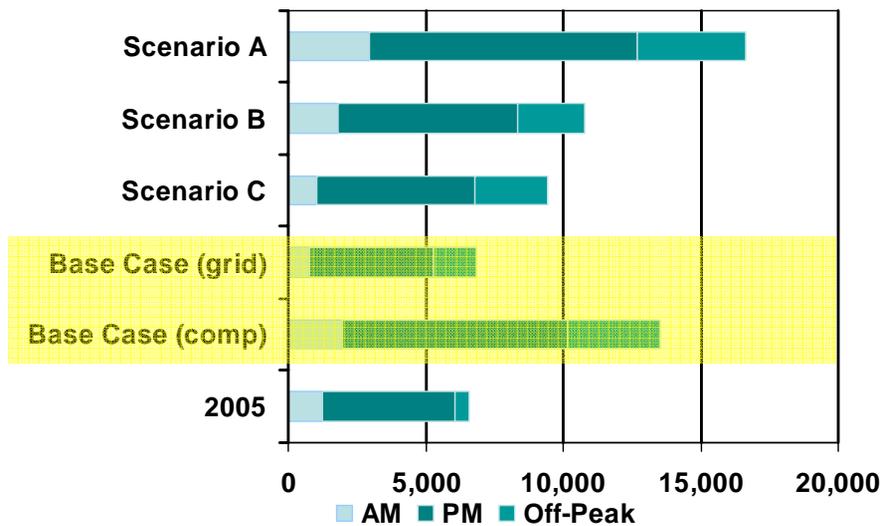
Person Trips Auto Driver Transit

- Auto driver 76-80% share
- Passenger 11-17% share
- Transit 8%-9% share of total trips
- Transit 20%-24% share of work trips

More Congested Conditions



Hours of LOS "F" Travel, including Beltway and DTR



Hours of LOS "F" travel, excluding Beltway and DTR

- Congestion occurs both in peak & off-peak
 - off-peak congestion a new condition
- Increased housing results in less congestion
- Grid of streets positive impact on congestion

Increase in Time "thru" Tysons

	Base Case	C Housing	B Employment	A Pushing
Bailey's Crossroads to Reston	+8.6 minutes	+5.6 minutes	+7.0 minutes	+9.0 minutes
Lewinsville to Vienna	+5.7 minutes	+5.5 minutes	+6.7 minutes	+7.9 minutes
Reston (Lawyers Rd.) to McLean	+6.9 minutes	+5.7 minutes	+7.0 minutes	+8.6 minutes

Increase in evening travel times over 2005 model results

- Housing & employment compare well to the comp plan even with 36% more growth

Increase in Time within Tysons

	Base Case	C Housing	B Employment	A Pushing
VA 7 @VA 123 to Dulles Toll Road	+3.0 minutes	+3.1 minutes	+3.2 minutes	+3.4 minutes
International Drive to Dulles Toll Road	+1.5 minutes	+4.2 minutes	+3.7 minutes	+4.7 minutes
VA 123 – VA 7 to I-495	+1.9 minutes	+4.6 minutes	+4.2 minutes	+5.3 minutes

Increase in minutes evening travel times over 2005 model results

- TOD can reduce all trips by 6 to 10%
- TDM can reduce work trips by 10 to 20%

Creating Active Places

- Better jobs & housing balance than today
- Tysons 7 and Tysons 123 remain predominately jobs focused
- Tysons West and East are more likely to become 18/7 active places
 - Numbers similar to DC Metro examples
- Lower parking requirements provides space for other public uses – like parks



Being a Good Neighbor

- TODs have 65% to 74% of jobs growth
- TOD area captures 30-45% of work trips
- Tallest buildings near transit
- Development on the edge is less dense
- Scenario A more growth in non-TOD areas than other scenarios



Need for More Public Facilities

- Under all scenarios Tysons needs:
 - New fire station, and existing fire station expanded
(Scenario A requires 2nd new station)
 - School capacity equivalent to 2 elementary schools, ½ a middle school & ½ a high school
 - New electrical substation
 - New police station
 - New library
 - Water and wastewater improvements

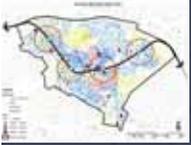


Need for Parks

- Preserve existing park land in Tysons
- Need for approximately 50 to 140 acres of new park land



Comparing the Scenarios



Base Case - plan

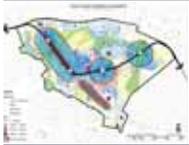
- 73m sq ft
- 120% more housing than today
- 37% more growth than today
- Work trips on transit 20%
- 24,000 hours of congestion



Scenario A - pushing

- 135m sq ft
- 450% more housing than today
- 83% more growth than base case
- Work trips on transit 24.1%
- 63% more congestion than base case

Comparing the Scenarios



Scenario B - jobs

- 100m sq ft
- 290% more housing than today
- 36% more growth than base case
- Work trips on transit 22%
- 35% more congestion than base case



Scenario C - housing

- 100m sq ft
- 370% more housing than today
- 36% more growth than base case
- Work trips on transit 22.4%
- 10% more congestion than base case

Next Steps

- Build two advanced alternatives
 - From “best bits” of test scenarios
- Narrow the range of growth for planning
- Further testing & refinement
- More specifics on land use, urban design, comprehensive plan, transportation
- Community workshops
 - Implementation September
 - Advanced Alternatives December
- Task Force recommendations early '08