America Grows

200 million in 1968
300 million in 2006
400 million in 2032
500 million in 2050

America adds 100 million people faster than any other nation except India and Pakistan – But faster than China.

Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.
AMERICA CIRCA 2030

THE BOOM TO COME

Source: Architect magazine November 2006 based on analysis by Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah. Note: The proportionalities will be constant for every 30 year period.
## Getting Ahead of the Curve

<table>
<thead>
<tr>
<th>Portland Metro</th>
<th>2005</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2.1 million</td>
<td>3.7 million</td>
</tr>
<tr>
<td>Housing Units</td>
<td>0.9 million</td>
<td>1.6 million</td>
</tr>
<tr>
<td>Jobs</td>
<td>1.3 million</td>
<td>2.3 million</td>
</tr>
</tbody>
</table>

*Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.*
## Residential Development

### Portland Metro: 2005 to 2040

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth-Related Units</td>
<td>700k</td>
</tr>
<tr>
<td>Replaced Units</td>
<td>200k</td>
</tr>
<tr>
<td>Total Units</td>
<td>900k</td>
</tr>
</tbody>
</table>

*Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.*
### Nonresidential Development

<table>
<thead>
<tr>
<th>Portland Metro</th>
<th>2000 to 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth-Related Square Feet</td>
<td>500 million</td>
</tr>
<tr>
<td>Replaced Square Feet</td>
<td>900 million</td>
</tr>
<tr>
<td>Total Square Feet</td>
<td>1.40 billion</td>
</tr>
</tbody>
</table>

*Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.*
Life-Span of Structures

Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah, based on DoE Commercial Buildings Energy Consumption Survey.
Bottom Line Construction

Portland Metro

Residential $350 Billion
Nonresidential $150 Billion
Infrastructure $100 Billion
Total $600 Billion

Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.
How Does It Grow?
Market Analysts Finding Changing Preferences

National Association of Realtors
National Association of Home Builders
Nationally Recognized Market Analysts
Urban Land Institute
Lend Lease/PriceWaterhouseCoopers
Joint Center for Housing Policy at Harvard

Golfing Buddies and Taxi Drivers
Households are Changing

<table>
<thead>
<tr>
<th>Household Type</th>
<th>1960</th>
<th>2000</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH with Children</td>
<td>48%</td>
<td>33%</td>
<td>26%</td>
</tr>
<tr>
<td>HH without Children</td>
<td>52%</td>
<td>67%</td>
<td>74%</td>
</tr>
<tr>
<td>Single/Other HH</td>
<td>13%</td>
<td>29%</td>
<td>34%</td>
</tr>
<tr>
<td><strong>Portland Metro</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH with Children</td>
<td>32%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>HH without Children</td>
<td>68%</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>Single/Other HH</td>
<td>25%</td>
<td>28%</td>
<td></td>
</tr>
</tbody>
</table>

*Source:* Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.
People Turning 65 Each Year

[Figures in 000s]

What Futurists Tell Us

Bio-medical advances extend lifetimes. Insurance actuarial tables extend to 120. Another 20 years added – minimum
Adulthood mostly after child-rearing →

Gen-X & -Y “family” location decisions differ from their parents.

Pearl District has more children than market studies predicted.
# Share of Growth 2000-2040

<table>
<thead>
<tr>
<th>Portland Metro HH Type</th>
<th>Growth</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH Growth</td>
<td>700k</td>
<td></td>
</tr>
<tr>
<td>With children</td>
<td>100k</td>
<td>14%</td>
</tr>
<tr>
<td>Without children</td>
<td>600k</td>
<td>86%</td>
</tr>
<tr>
<td>Single/Other</td>
<td>200k</td>
<td>29%</td>
</tr>
</tbody>
</table>

*Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.*
Neighborhood Feature Preferences

Retired Location Preference

City or suburb close to a city 51%
Suburb away from a city 19%
Rural community* 30%

Conventional suburbs away from cities are the losers for this demographic group.

*Interpreted as isolated retirement communities.

Buy-Sell Rates by Age Cohort

# Relocation Choices of Seniors

<table>
<thead>
<tr>
<th>Housing Type</th>
<th>Move</th>
<th>After Move</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attached</td>
<td>24%</td>
<td>54%</td>
</tr>
<tr>
<td>Renter</td>
<td>20%</td>
<td>59%</td>
</tr>
</tbody>
</table>

*Source: American Housing Survey 2003. New movers means moved in past year. Annual senior movers are about 5% of all senior households; 75%+ of all seniors will change housing type between ages 65 and 80.*
Housing Unit Preference by Type, National Surveys

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attached</td>
<td>38%</td>
</tr>
<tr>
<td>Apartments</td>
<td>37%</td>
</tr>
<tr>
<td>Condos, Coops</td>
<td>24%</td>
</tr>
<tr>
<td>Townhouses</td>
<td>39%</td>
</tr>
<tr>
<td>Detached</td>
<td>62%</td>
</tr>
<tr>
<td>Small Lot (&lt;7,000 sf)</td>
<td>60%</td>
</tr>
<tr>
<td>Large Lot (&gt;7,000 sf)</td>
<td>40%</td>
</tr>
</tbody>
</table>

Supply & Demand by Housing Type 2007-2030

Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah
Suburban Fringe Time Bomb?

Source: Michael Hudson, “The New Road to Serfdom.” *Harpers* (May 2006), p. 46. This graph depicts the total mortgage market as viewed by Hudson.
U.S. homes lost $2 trillion in value in '08
$4 trillion 2006 through 2008
Housing + Transportation Costs

Mobility-option areas reduce “location” costs making households more resilient to economic changes.

“Drive ‘til you qualify” mortgage underwriting bias increases foreclosure risks.

Source: Center for TOD Housing + Transportation Affordability Index, 2004 Bureau of Labor Statistics.
New Housing Market Realities

- Sub-prime mortgages are history
- Alt-A mortgages no more
- FHA-like conventional mortgages king
- “Jumbo” loans expensive and difficult
- Demand for $1million+ homes in 30 largest markets has tanked → from ~15% to <5%

**Meaning**

- Smaller homes
- Smaller lots
- More renters
### Shifting Tenure Implications – US

<table>
<thead>
<tr>
<th>Year</th>
<th>Units</th>
<th>%Owner</th>
<th>Owner</th>
<th>Renter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>125M</td>
<td>67%</td>
<td>84M</td>
<td>41M</td>
</tr>
<tr>
<td>2015</td>
<td>134M</td>
<td>64%</td>
<td>86M</td>
<td>48M</td>
</tr>
<tr>
<td>Change</td>
<td>9M</td>
<td></td>
<td>2M</td>
<td>7M</td>
</tr>
<tr>
<td>Share</td>
<td></td>
<td></td>
<td>25%</td>
<td>75%</td>
</tr>
</tbody>
</table>

Units are “year-round” and include occupied, vacant, transitional, and other units meant for year-round occupancy. Figure for 2008 estimated from *American Housing Survey for the United States 2007*.

*Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.*
Housing Market Shift

Portland Metro ownership in 2000s = 65%
PDX Metro ownership may fall to 60% by 2020

Portland Metro tenure split in 2020:

- 60% owner
- 40% renter

Portland Metro new construction to 2020:

- 50% owner-occupied (200k units)
- 50% renter-occupied (200k units)

*Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.*
33% Solution …
New Metropolis Template

1%+ Demand for downtown living (~40k)
1%+ Demand for near-downtown living (~40k)
1%+ Demand for suburban center living (~40k)
5%+ Demand for near-center living (~200k)
25%+ Demand for “urbanity” v. “sprawl” (~900k)

Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.
New Metropolis Demand
2005-2040

3.7M people 2040
1.6M growth 2005 to 2040
1.2M demand for New Metropolis options
0.2M supply in 2010(?)
1.0M net new metropolis demand

60%+ of all new housing units must be in new metropolis options to meet demand of the 1/3rd of who want them in 2040.

Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah.
HOW DOES DAMASCUS FIT IN?

- Not central
- Not a major employment center
- No rail in its future
- Value-stagnation risk

Planned Urbanity or Sprawl?
Value Loss at Fringe: 2006-2007

Housing Prices Declines Greatest at the Suburban Fringe Portland-Vancouver MSA

Change in Median Single Family Home Price, Relative to MSA Median (Source: Zillow)
Damascus Core Values = Urbanity

- Well-Designed Communities and Core Areas
  = Density, mixed uses, renewability

- Effective Transportation Systems
  = Density, accessibility, connectivity

- Employment and Economy
  = Density, accessibility, connectivity

- Sense of Community
  = Walkability, life-stage options, connectivity

- Rural and resource preservation
  = Sustainability
Urbanity Guides

- Population/employment density that is sustainable and resilient
- Housing mix that matches life-cycle stages
- Housing mix that sustains schools
- Development design promoting “urbanity”
- Preserving/protecting vital open spaces
- Planned renewal
Sustainability & Resilience

**Minimums to be taken seriously:**

- 10,000+ people per square mile.
- 4,000+ occupied residential units per sq. mile.
- Average of 6,000 jobs per square mile with centers 3-times this surrounded by areas 1/3rd this – walking, biking, Segway distance
- 400,000 square feet of retail + service space per square mile but with centers of 2-times this surrounded by areas of 1/2 this.
Parameters for Damascus

- Total Planning Area = 16 square miles
- Target 10 “urbanity” square miles
  - 40% of planning area protected/preserved/rural
- 100,000 residents \((6,000/\text{gross square mile})\)
- 40,000 residential units
- 60,000 jobs (full- and part-time)
- 30 million square feet of nonresidential space

\textit{Roughly twice what is currently planned}

\textit{Within range of sustainability and resilience}
Why?

- Facilitates reduction of vehicle trips & VMT to target levels of emissions for sustainability.
- Improves resilience to economic downturns.
- Creates wide range of housing options for each life stage.
- Creates resilient sense of community.
Housing Mix for Life Stages

- **40% for traditional families**
  - Mostly detached on 1/6-1/4 acre lot moderate- to large-home (＞2,500 sq.ft.)

- **25% for young and low-/moderate-income families**
  - Apartment (garden), townhouse, small lot detached small-size home; some “over-the-store units” (＜1,200 sq.ft.)

- **25% for transition, empty-nester, higher-density choice families**
  - Condominium, upscale townhouse, small-lot moderate-size home (1,200-2,500 sq.ft.)

- **10% of housing in Accessory Dwelling Units**
  - Allowed in larger detached and attached homes
  - *Untapped resource for humane housing options*
Fairview Village = 10,000/Sq. Mile
Sustainable Schools

- **Student generation** rates by unit size/type are predictable.

- **Design neighborhoods** around access to schools with housing mix to support life-cycle stages. Link neighborhoods to high schools with multi-modal accessibility.

- **Design** and use schools for multiple functions.

- **Integrate schools** into neighborhoods, don’t isolate them.
Sustainable-School Neighborhood Unit

Clarence Perry’s “Neighborhood Unit” of 1929

Clinton Mackenzie’s Ideal Town
Suburban Urbanity

- **Every home within ¼ mile** of primary retail (grocery) and personal service centers
  - “Walkable” sidewalks, “bikeable” bikeways, segways okay.
  - Accessible with golf-cart ways either in multi-purpose walk/bike/seg ways or dedicated ways.

- **Every home within ½ mile** of significant, active and passive open spaces

- **Complete connectivity** → no dead-ends, cul-de-sacs

- Benign **home office** home occupations allowed.

- **Transportation corridors** include BRT plus dedicated “European-style” bikeways, walkways → and have **transit ready option**.
Orenco Station = 15,000/Sq. Mile
The New Promised Land?
Tear Up a Parking Lot, Rebuild Paradise

Large, flat and well drained
Single, profit-motivated ownership
Major infrastructure in place
4+ lane highway frontage \(\rightarrow\) “transit-ready”
Committed to commercial/mixed use
Can turn NIMBYs into YIMBYs

Slide title phrase adapted from Joni Mitchell, *Big Yellow Taxi*, refrain: “Pave over paradise, put up a parking lot.”
Planned Renewal

- *Don’t fret* the “big box”
  - Anticipate their ripeness for conversion
  - Streamline processes to facilitate renewal

- *Use incentives* to leverage the “right” renewal
  - Tax increment financing, tax abatement, low-interest secured subordinate loans, etc.
  - Leverage long-term rewards with low-risk options

- *Plan for resilience*
  - The more mixed uses the more resilient
  - The more accessibility the more resilient
  - The more density/intensity the more resilient
THANK YOU