

Answering Heavy Questions About Light Rail

A National Research-Informed Perspective



John W. Martin's
 Presentation To The Virginia Beach
 Central Business District Association
 On 04-27-16

SIR Transportation Experience





Envision2040 Virginia Beach



The content in this presentation reflect the insights and opinions of SIR, not those of SIR's transportation agency clients.

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Today's Agenda

- 1** A National Perspective
- 2** Local Perceptions
- 3** Your Imperatives

Today's Agenda

- 1 A National Perspective**
- 2 Local Perceptions**
- 3 Your Imperatives**



5

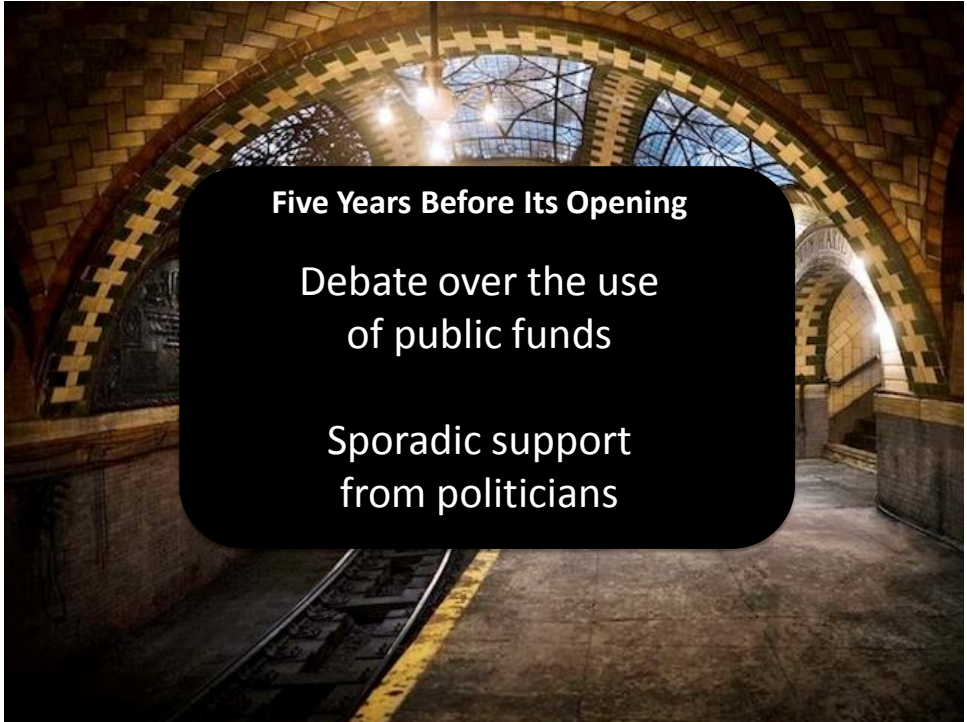
Insights From A National Lens

1

Transportation System Expansion Plans Come With Healthy Debate

New York Subway

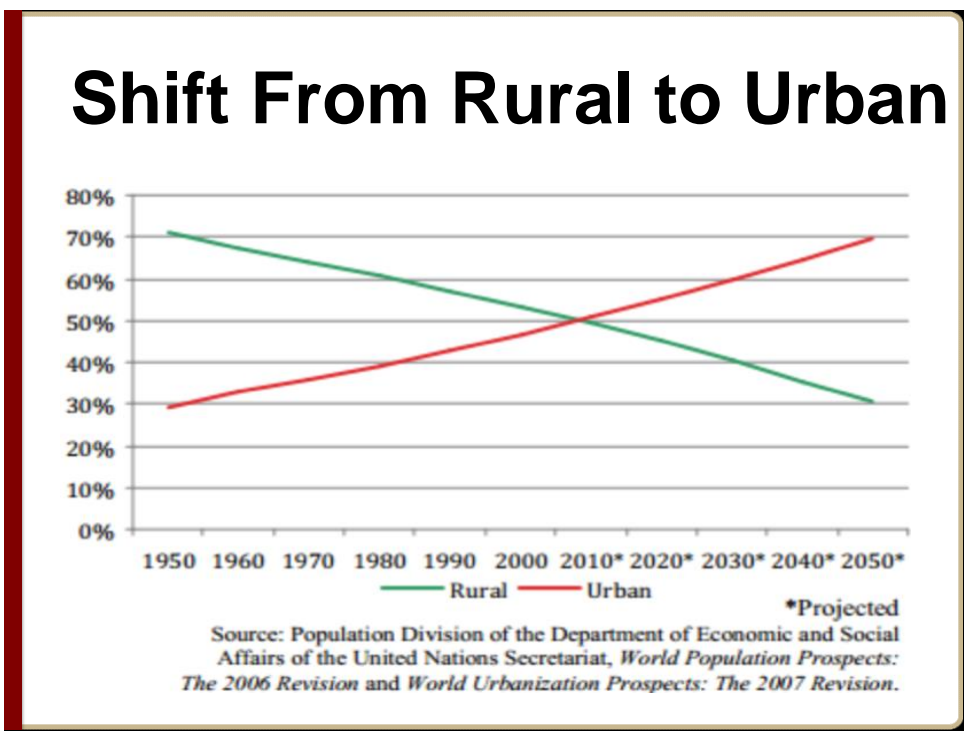
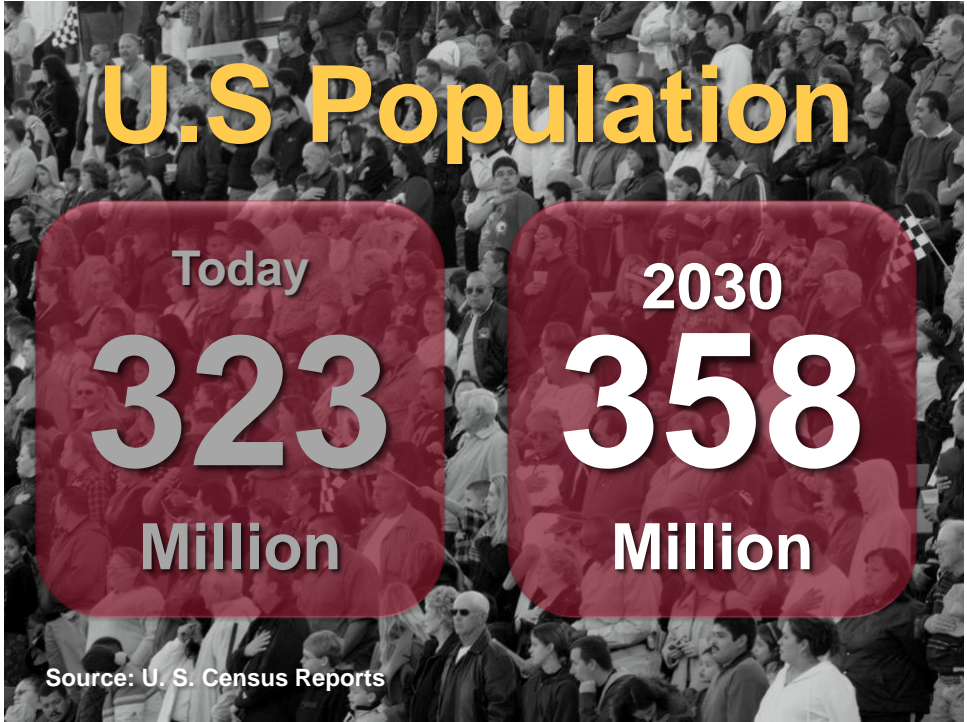
1900 – The Interborough Rapid Transit (IRT) Underground Railway



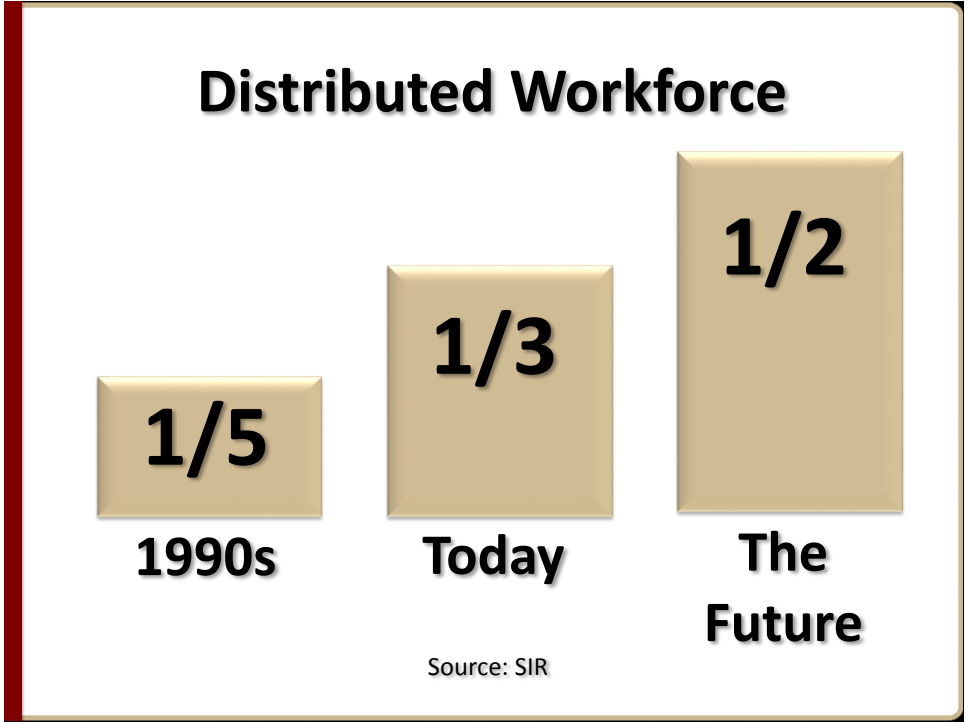


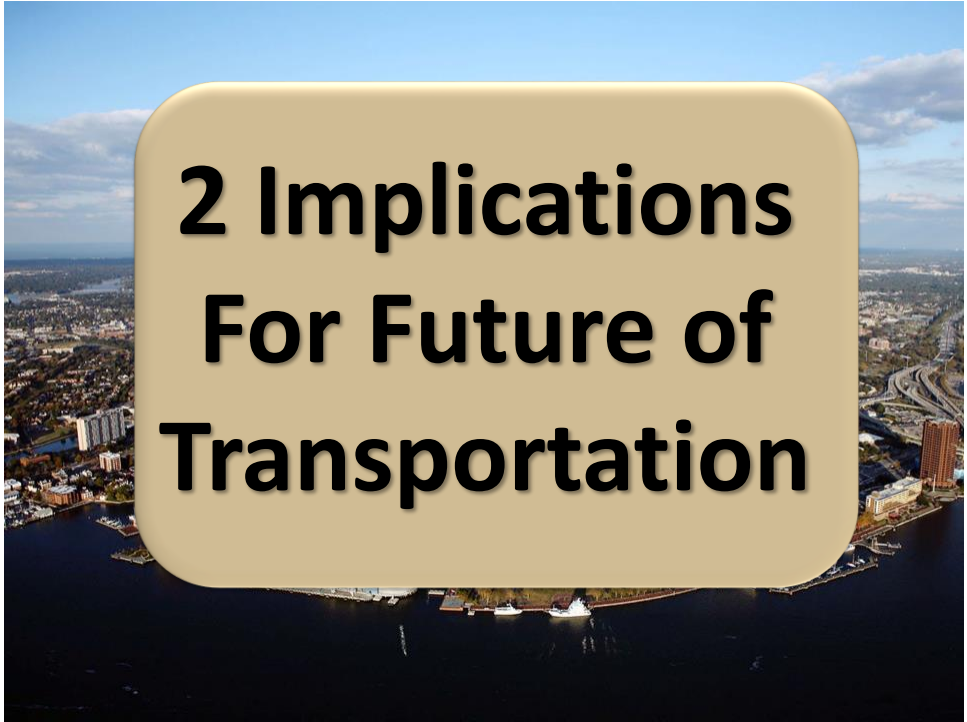
2

Light Rail and BRT Are Often The “Spine” of A 21st Century Transportation System



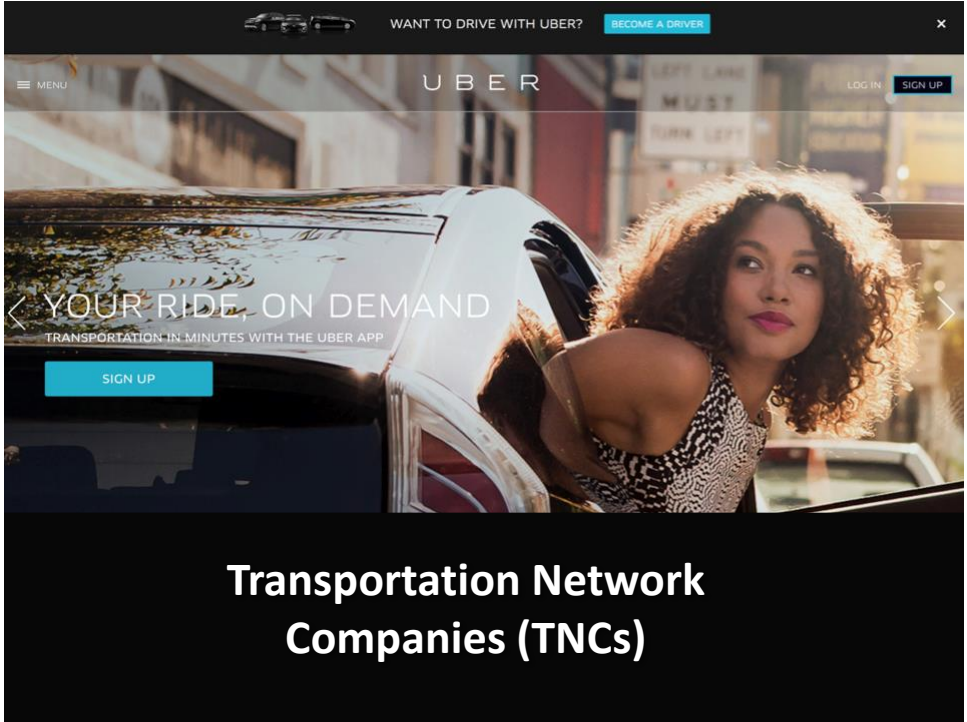












3

Light Rail Is A Proven Success In Other Markets

System	Largest city served	Annual Ridership (2014) ^[1]	weekday boardings (Q4 2014) ^[1]	System length	boardings per mile (Q4 2014)	Year opened	Stations	Lines	Year last expanded
1 MBTA light rail ^[note 1] Green Line & Ashmont-Mattapan High Speed Line ^[note 2]	Boston	69,378,400	223,300	26 miles (42 km) ^[2]	8,588	1897 ^[3] 1929	74 ^[2]	5 ^[2]	2004; n/a
2 Metro Rail light rail ^[note 1] Blue, Expo, Gold & Green Lines	Los Angeles	63,890,000	200,800	81.1 miles (130.5 km) ^[4]	2,856	1990 ^[4]	65 ^[4]	4 ^[4]	2016 ^[4]
3 Muni Metro ^{[note 1][5]} (incl. F Market ^[6] [7] ^[note 2])	San Francisco	56,712,900	128,500	35.7 miles (57.5 km) ^[8]	3,599	1980 ^[9]	152 ^{[7][8]}	8 ^{[9][8]}	2007
4 San Diego Trolley ^[note 3] (incl. Silver Line ^[9] [^{note 2}])	San Diego	39,731,900	119,800	53.5 miles (86.1 km) ^[10]	2,239	1981 ^[10]	53 ^[10]	4 ^{[9][10]}	2005 ^[10]
5 MAX Light Rail ^[note 2]									2015
6 SEPTA light rail Subway-Surface Ave Trolley ^[11]									2005
7 DART ^[note 3]									2014 ^[15]
8 Denver RTD The Ride Light Rail ^[12]									2013 ^[19]
9 TRAX (UTA)									2013
10 MetroLink									2006 ^[20]
11 Hudson-Bergen Light Rail ^[note 1]									2006
12 METRO Light Rail									2014 ^[31]
13 Valley Metro									2016 ^[33]
14 Sacramento RT Light Rail				(69.0 km) ^[36]					2015 ^[36]
15 METRORail	Houston	13,300,700	45,300	22.7 miles (36.5 km) ^{[37][38]}	1,996	2004 ^[38]	44 ^[37]	3 ^[37]	2015 ^[37]
16 Link Light Rail ^{[note 3][39]} Tacoma Link & Central Link	Tacoma & Seattle	11,915,900	35,200	20.4 miles (32.8 km) ^[40]	2,035	2003, 2009	5 ^[40] 15 ^[40]	2 ^[40]	2016 ^[41]
17 Santa Clara VTA Light Rail ^[note 3]	San Jose	11,345,600	35,200	42.2 miles (67.9 km) ^[42]	834	1987 ^[42]	62 ^[42]	3 ^[42]	2005 ^[42]
18 The T Pittsburgh Light Rail	Pittsburgh	8,166,100	27,700	28.2 miles (45.2 km) ^[43]	1,057	1984	53 ^[43]	2 ^[43]	2012 ^[43]
19 Baltimore Light Rail ^[note 1]	Baltimore	8,092,300	27,100	33 miles (53 km) ^[44]	821	1992	33 ^[44]	3 ^[44]	1997

**Many Cities
Have Some Form of Light Rail
(including urban streetcar)**

Inside Business

The Hampton Roads Business Journal

[Advanced Search](#) [Search by Date](#)

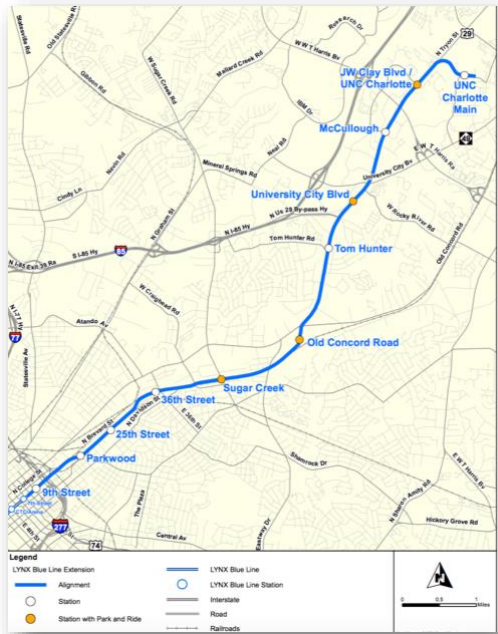
Wednesday, April 27, 2016

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Fast track for development: A look at light rail's growth elsewhere

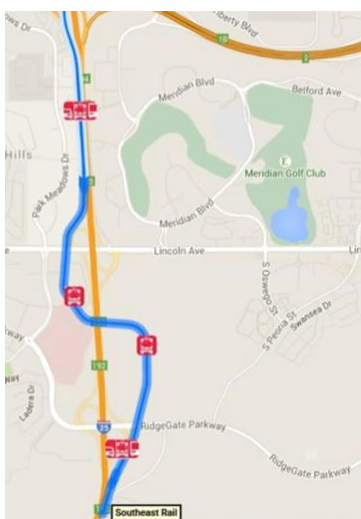
By Nate Delesline III
nate.delesline@insidebiz.com Apr 22, 2016

Charlotte Is Extending Blue Light Rail



Denver Is Extending Light Rail

Extending SE Light Rail Line



Minneapolis Is Extending

METRO BLUE LINE EXTENSION
Bottineau Transitway – Minneapolis & Northwestern Communities

The METRO Blue Line Extension (LRT) will operate northwest from downtown Minneapolis through north Minneapolis, Golden Valley, Robbinsdale, Crystal and Brooklyn Park, drawing riders northwest of Brooklyn Park. The proposed alignment is primarily at-grade and will have 11 new stations in addition to Target Field Station and about 13 miles of double track. The line will interline with the METRO Blue Line and connect Minneapolis and the region's northwestern communities with existing LRT on the METRO Green Line, future LRT on the METRO Green Line Extension, bus rapid transit on the METRO Red Line, the Northstar commuter rail line and local and express bus routes.

ENEWSLETTER / TEXT
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SOUTHWEST LRT
METRO Green Line Extension – Eden Prairie to Downtown Minneapolis

The Southwest Light Rail Transit (LRT) project (METRO Green Line Extension) will operate from downtown Minneapolis through the communities of St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, passing in close proximity to Edina. It will be part of an integrated system of transitways, including connections to the METRO Blue Line, the Northstar Commuter Rail line, bus routes and proposed future transitways. The total estimated project cost of \$1.79 billion will be funded through a mix of federal, state and local sources, with federal funds making up approximately half the total. At Target Field Station in Minneapolis, Green Line Extension trains will continue along the METRO Green Line, providing one-seat rides to the University of Minnesota, State Capitol area and downtown St. Paul.

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It Just Makes Sense

*“In the past decade the region has seen about **\$1.5 billion in development** along the light-rail line that includes hotels, residential and multi-use properties. More rail-line expansions are in the works.”*

Olaf Kinard, Charlotte Area Transit System

4

Light Rail and other transit alternatives (BRT, streetcar) work best when aligned to land-use policies.

Multi-use, dense,
pedestrian-friendly
communities around
the stations

An aerial photograph of a city waterfront, showing a mix of residential and commercial buildings, a highway interchange, and a body of water with boats. A large, semi-transparent white rounded rectangle is overlaid on the center of the image, containing the text '15-Minute Livable Community'.

**15-Minute
Livable
Community**

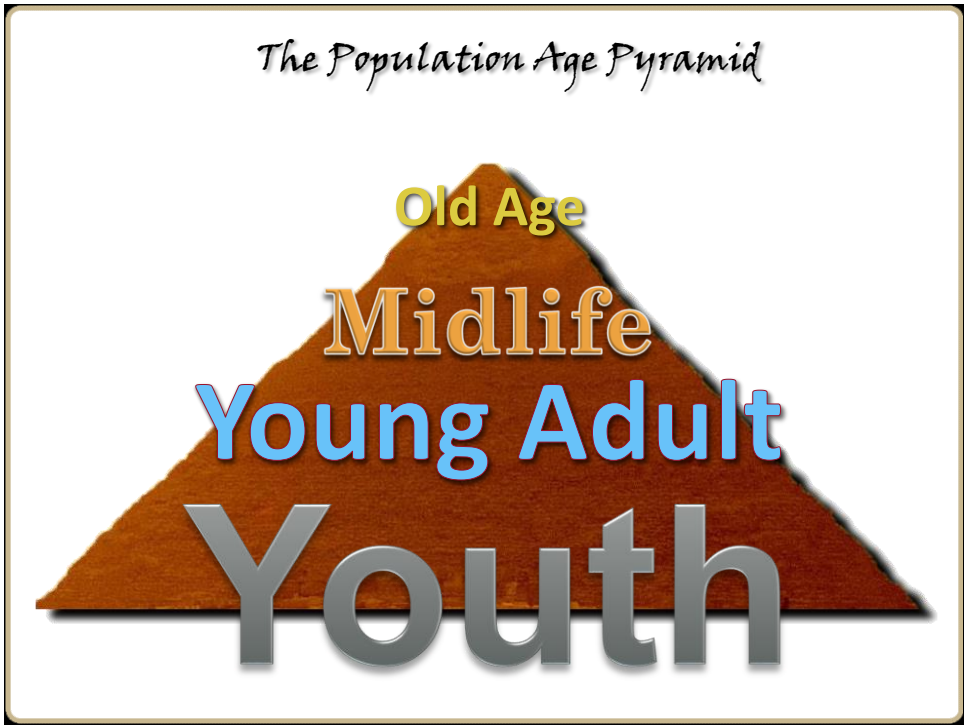
It's Reality

Great examples where land use policies and transportation policies have been coordinated

- Portland
- Denver
- Salt Lake City
- Dallas

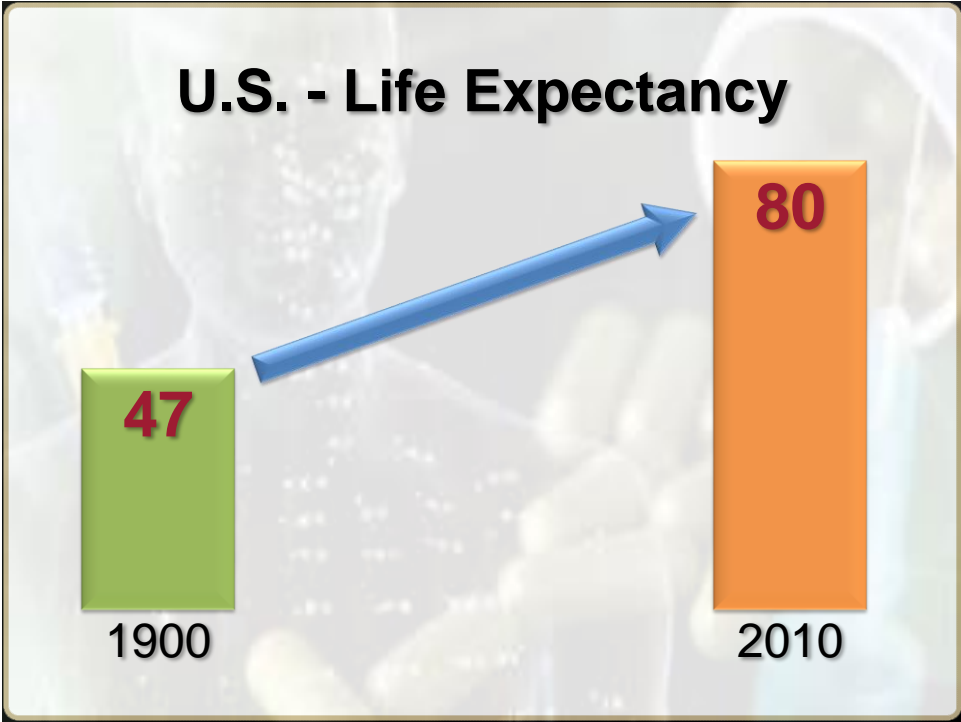
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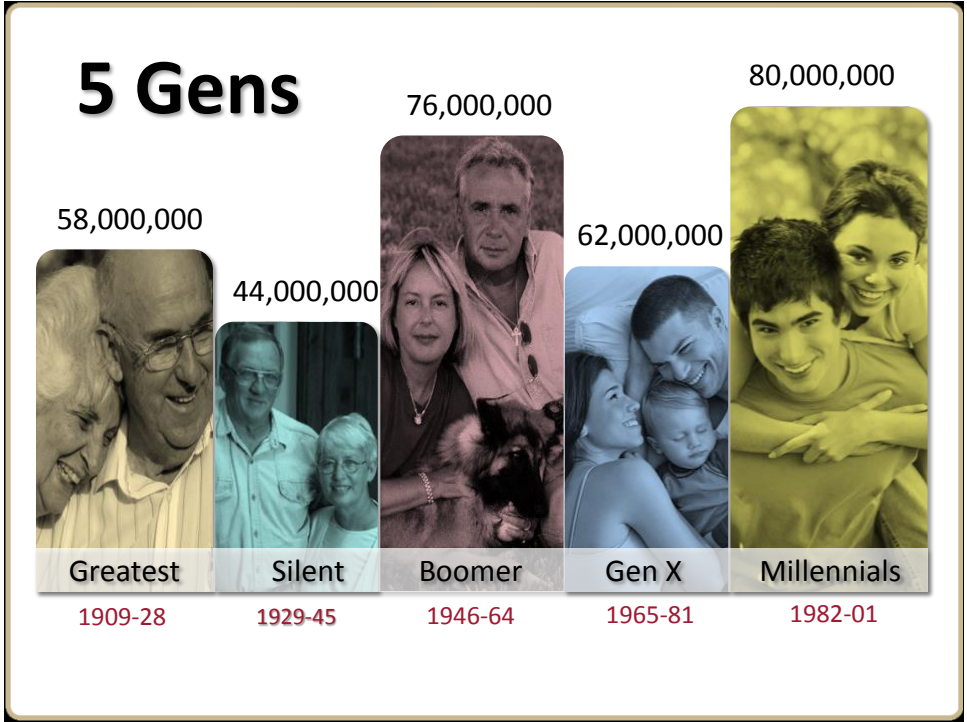
Light Rail and other transit alternatives are now part of the new economic development model



1

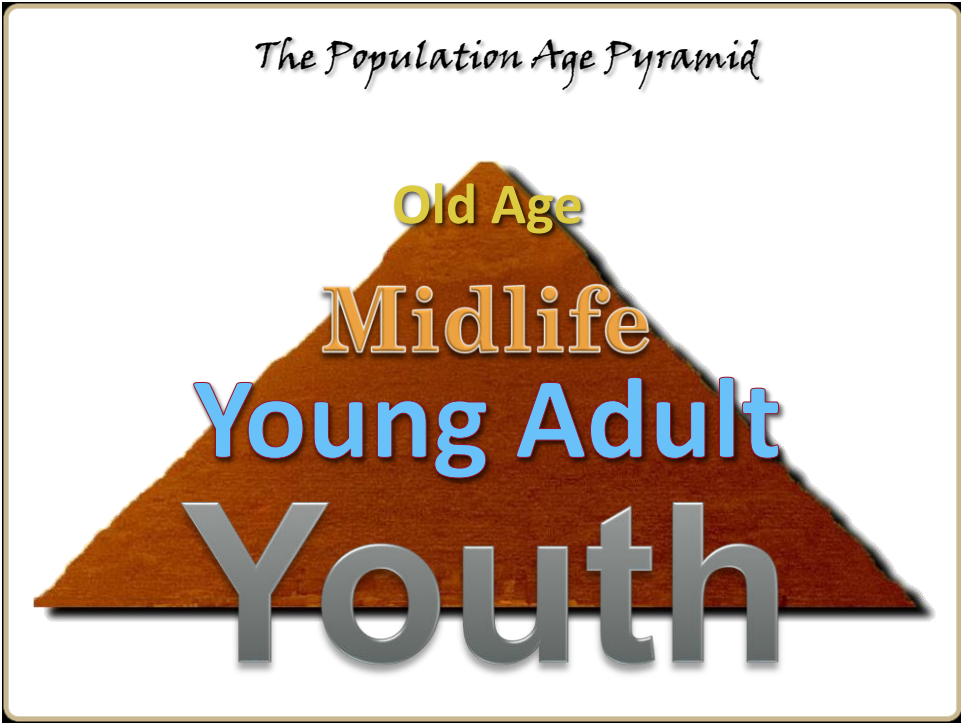
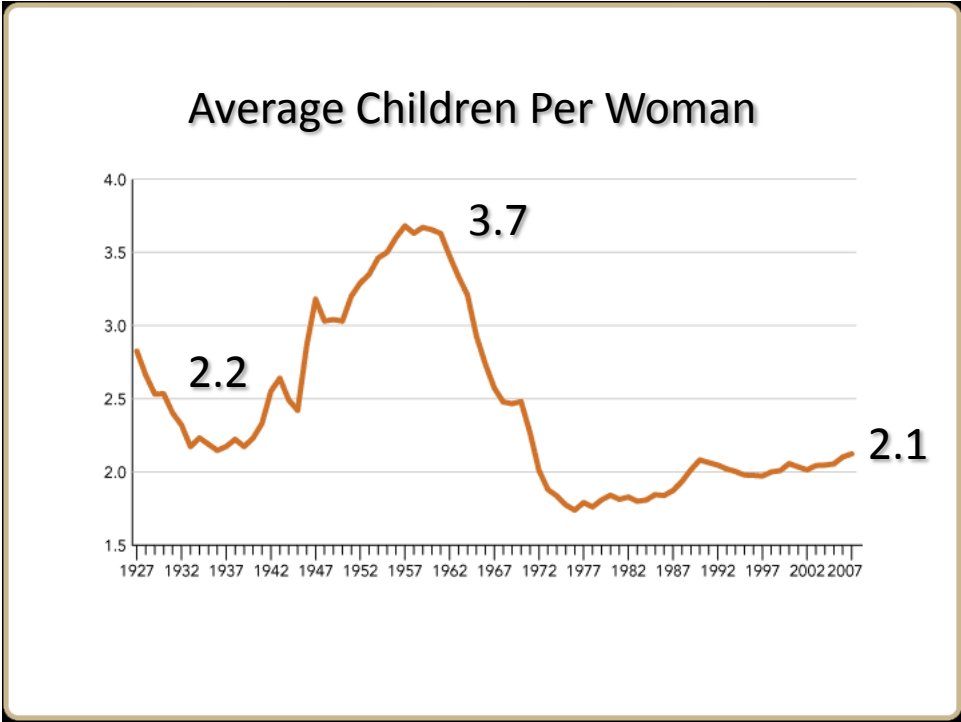
Extended Life Expectancy

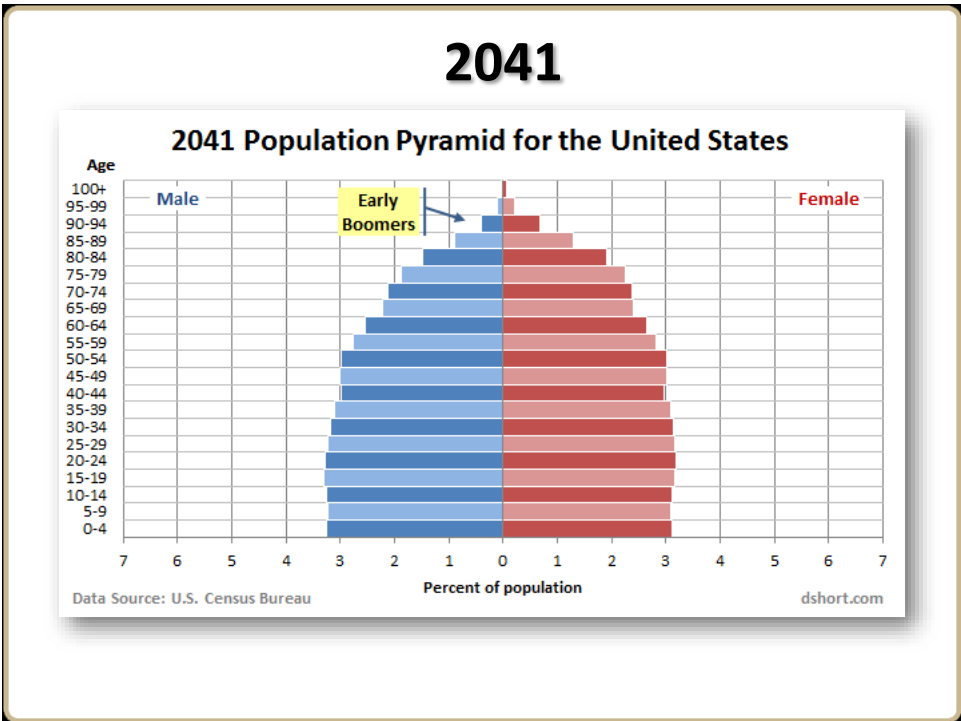
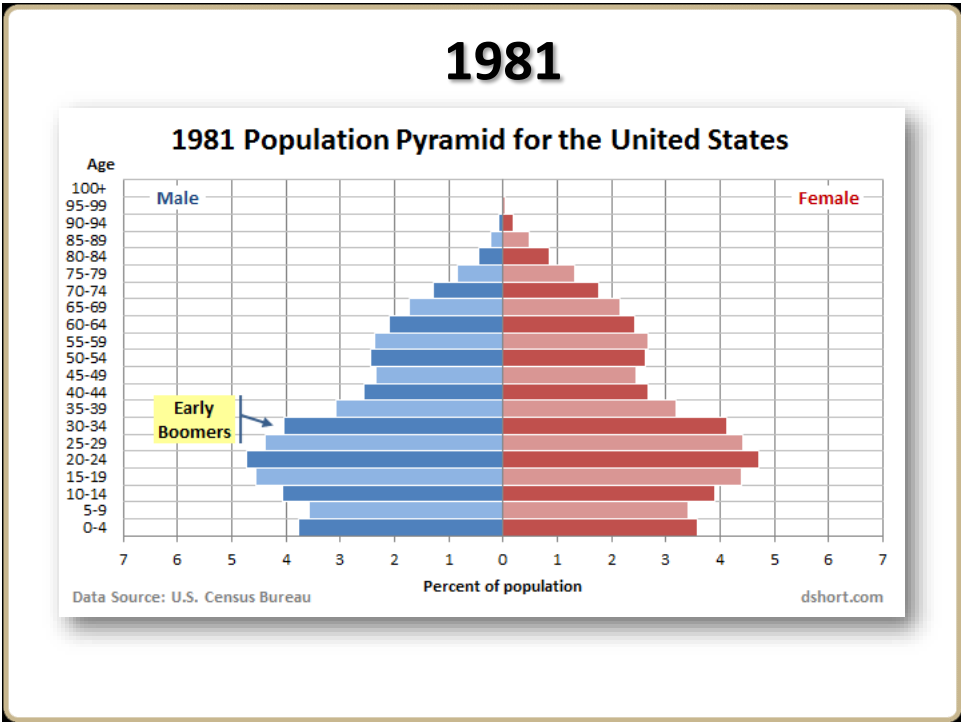


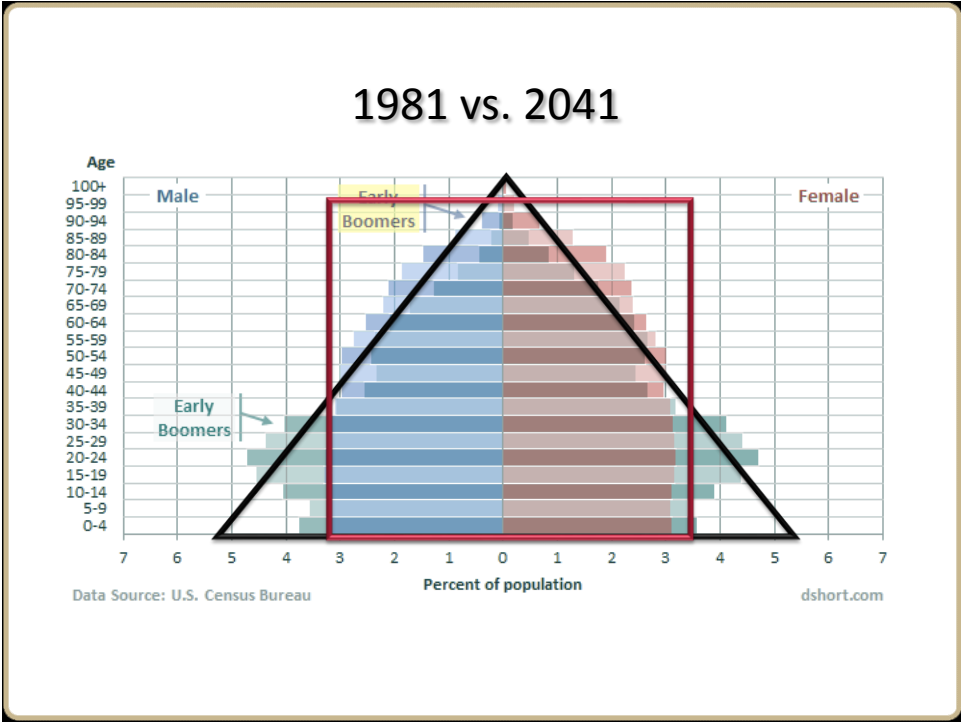


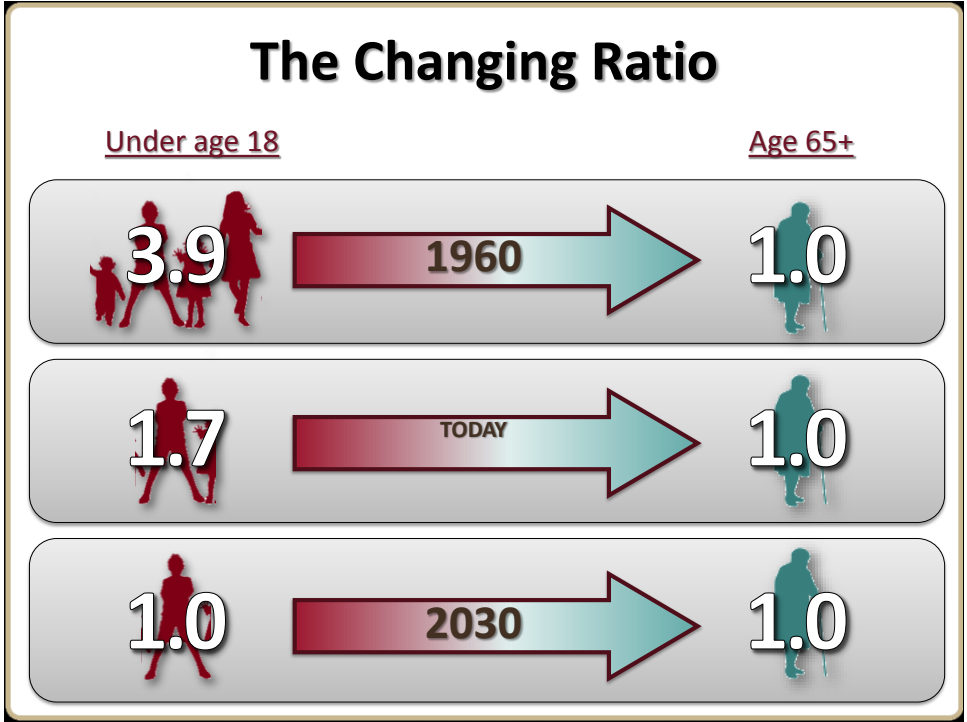
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Shifting Birth Rates

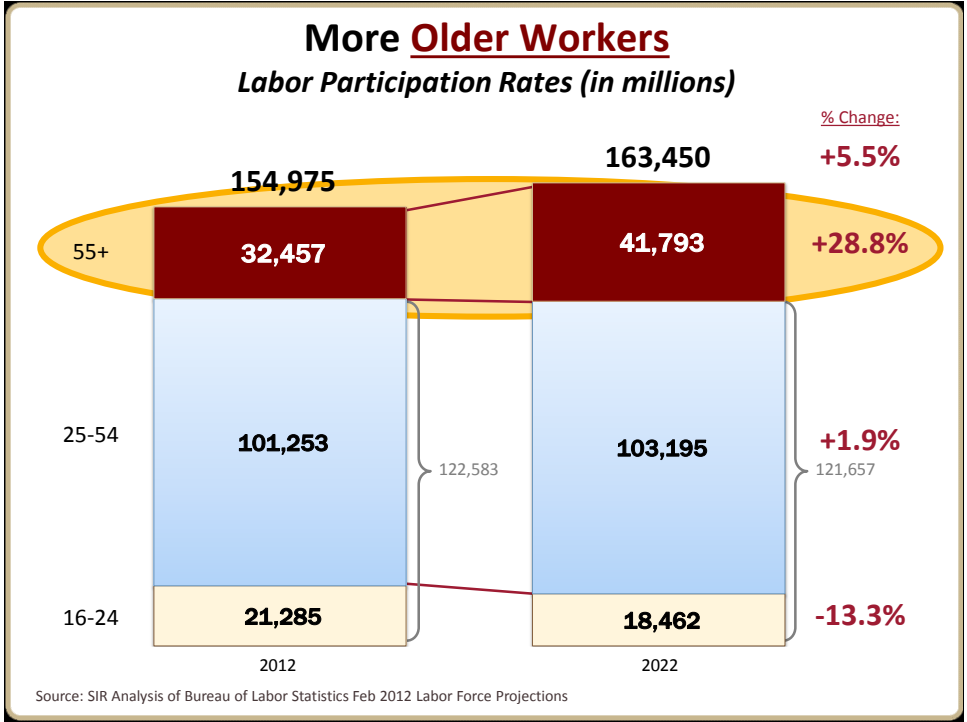
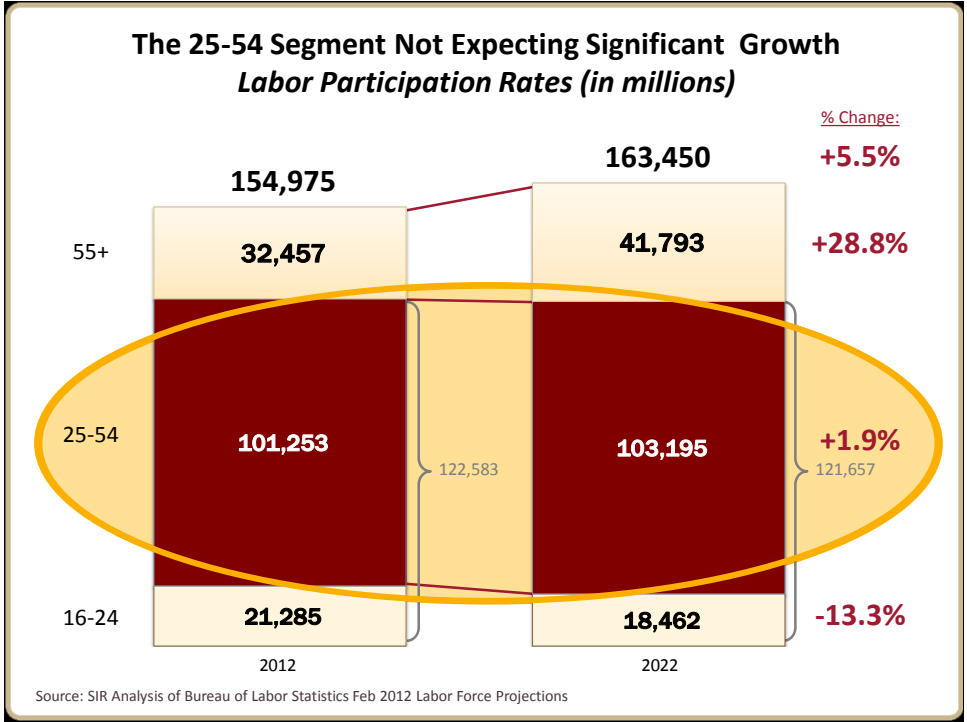


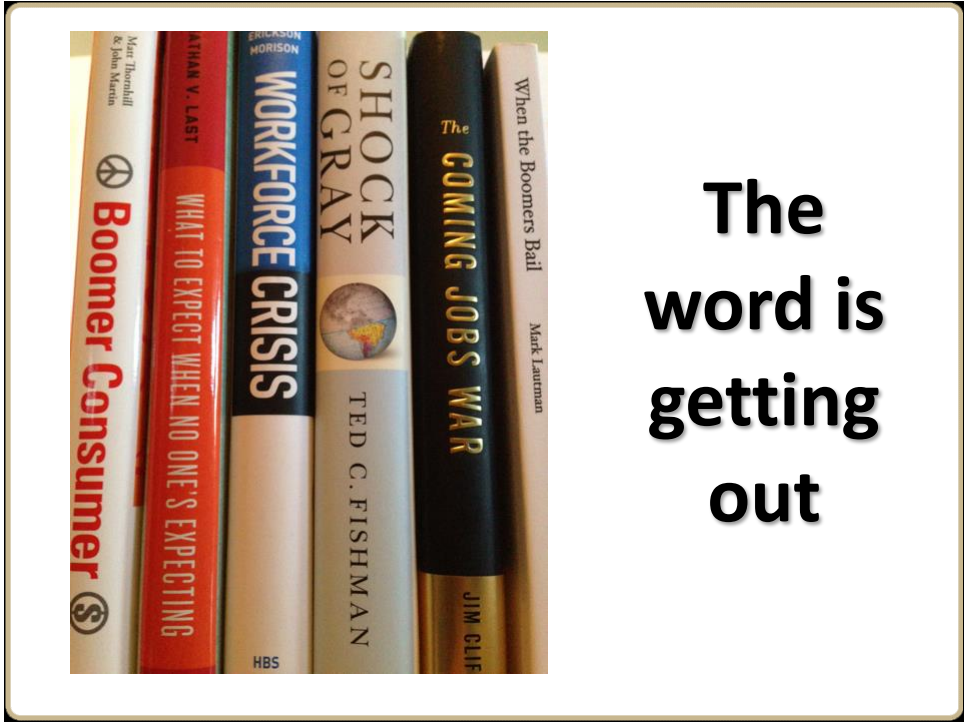
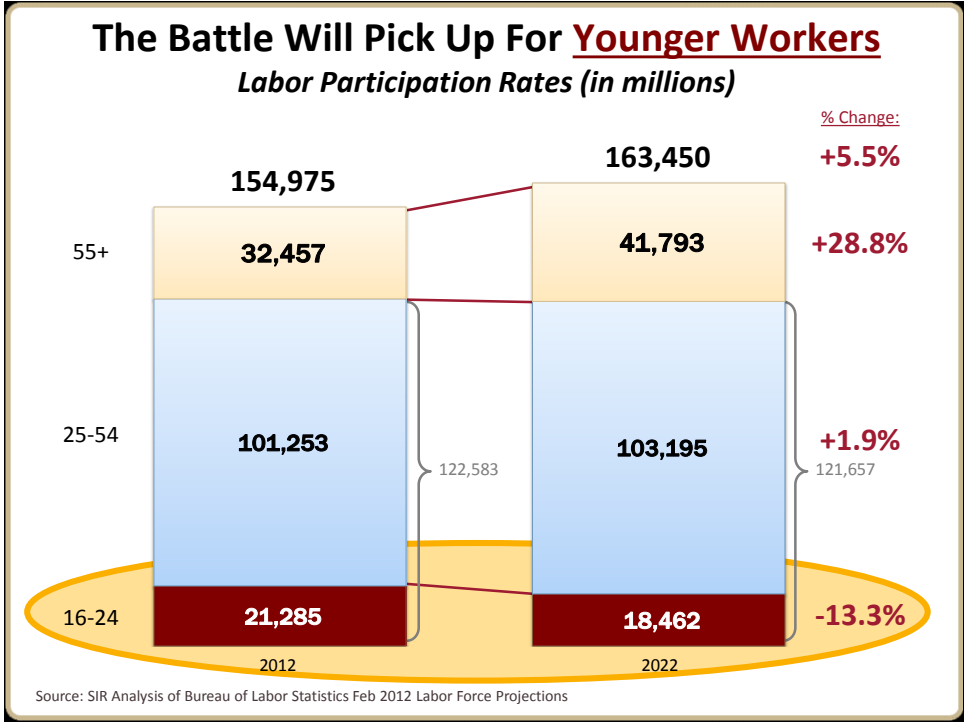






**While The Age
Shift Impact Our
Future Workforce
Pipeline?**



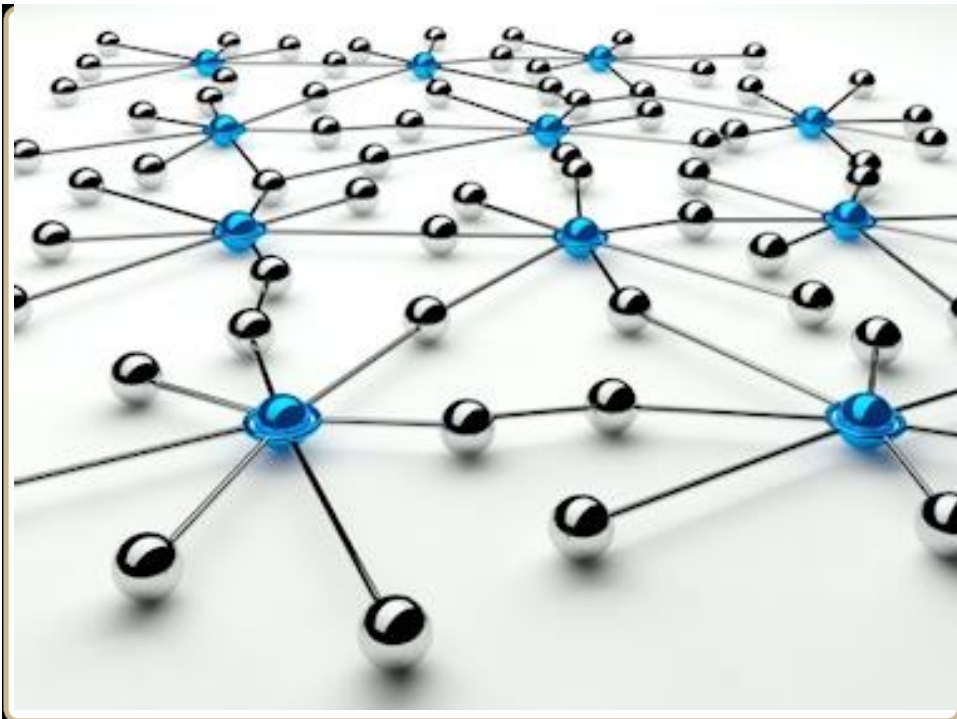


There's A Coming Battle for the Young Workforce





**Goal for Regions:
Become A Hub
For Talented
Younger Workers**



**What Do
Millennials
Want In
A Place?**

**SIR's Millennial
City Placemaking
Research**

For Millennials - Expectations for Safety, Variety of Employment, Quality and Affordability of Housing Top The List

Basics

	Raleigh NC	Wash. DC	Charlotte NC	Austin TX	Atlanta GA	Denver CO
Is safe	89%	87%	86%	91%	81%	90%
Has a variety of employment options	90%	82%	83%	85%	82%	87%
Quality <u>and</u> affordability of housing options	92%	83%	87%	87%	83%	83%
Offers outdoor recreation options	71%	60%	71%	77%	71%	76%
Offers a great food scene	76%	75%	78%	85%	77%	75%
Embraces creativity	59%	55%	58%	69%	59%	64%
Embraces innovation	70%	58%	61%	69%	60%	64%
Is near the mountains	28%	24%	40%	17%	30%	64%
Has access to water	59%	54%	64%	65%	54%	63%
Is bike-able/walkable	46%	50%	41%	43%	44%	61%
Has easy public transportation	42%	66%	40%	47%	46%	60%
Embraces small business/start-ups/entrepreneurship	54%	48%	60%	61%	54%	57%
Higher education options	76%	60%	60%	73%	62%	57%
Is diverse	60%	63%	55%	69%	55%	55%
Urban living environment	47%	59%	51%	60%	46%	53%
Offers an active music scene	51%	36%	46%	53%	49%	49%
Offers an active arts scene	42%	38%	44%	43%	42%	46%
Has rich history	42%	47%	39%	41%	42%	42%

Q20. When you think about a city as a place you'd really want to live, how important are each of the following to you?

67

New Mobility Modes Are Important Placemaking Assets

Placemaking

	Raleigh NC	Wash. DC	Charlotte NC	Austin TX	Atlanta GA	Denver CO
Is safe	89%	87%	86%	91%	81%	90%
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Has rich history	42%	47%	39%	41%	42%	42%

68

66%

**Place high-quality transportation
in their top three concerns when
evaluating a new place to live**

Source: Rockefeller Foundation

69

75%

**Believe they will live in
a place that does not
require a car**


Source: Rockefeller Foundation

70

Marriott CEO: We will move our headquarters

[f](#) [t](#) [in](#) [e](#) [+](#) CHALLENGE EVERYTHING YOU'D EXPECT FROM A SAVINGS ACCOUNT.

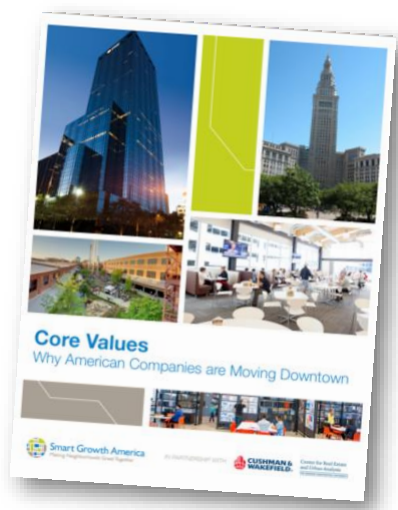
By Jonathan O'Connell March 1 [Follow @OConnellPostBiz](#)



A photograph showing a large white sign in the foreground with the Marriott logo and 'CORPORATE HEADQUARTERS' written on it. In the background, a large, modern multi-story office building is visible, surrounded by trees and a paved area.

“As with many other things, our younger folks are more inclined to be Metro-accessible and more urban.”

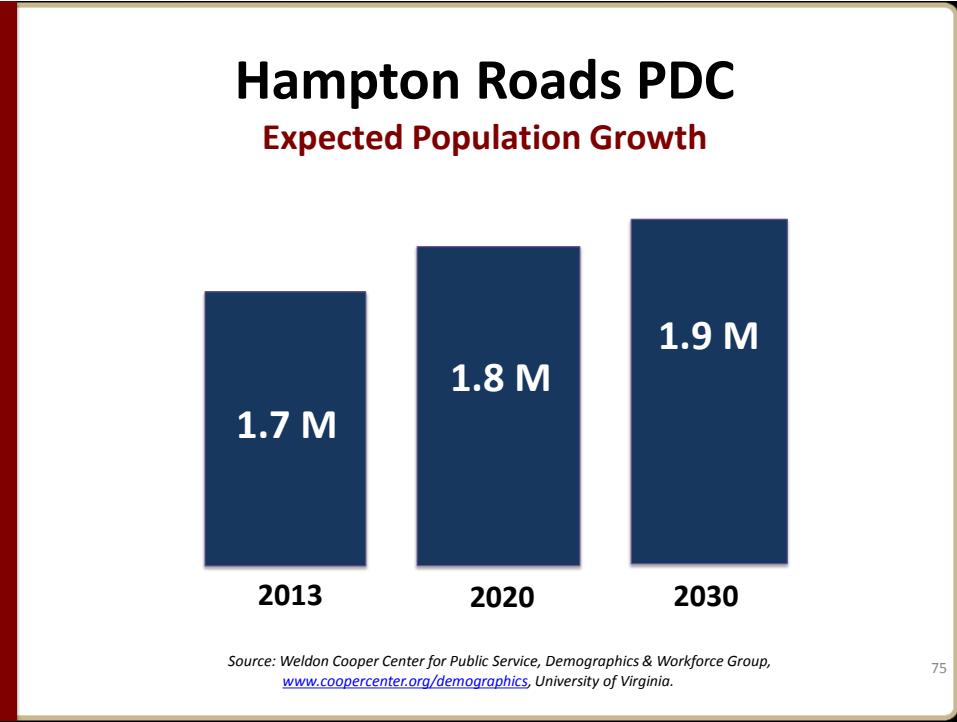
Arne M. Sorenson
Chief Executive



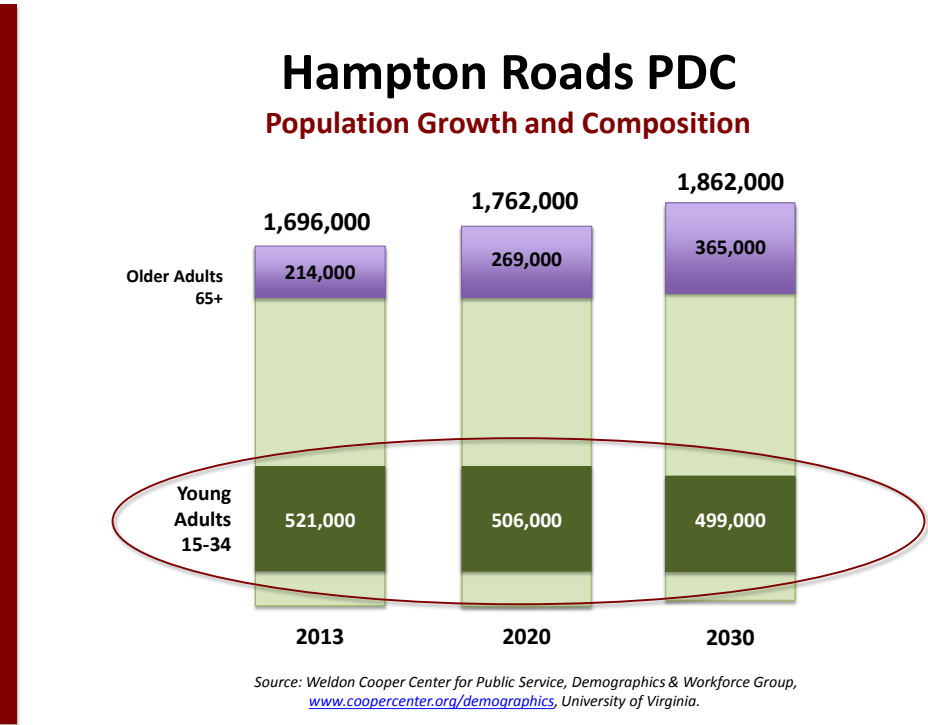
“Talent recruitment and retention”

Source: Smart Growth America

Will The Age Shift Hit Hampton Roads?



75



**How Is
Hampton Roads
Doing with
Millennials?**

65%

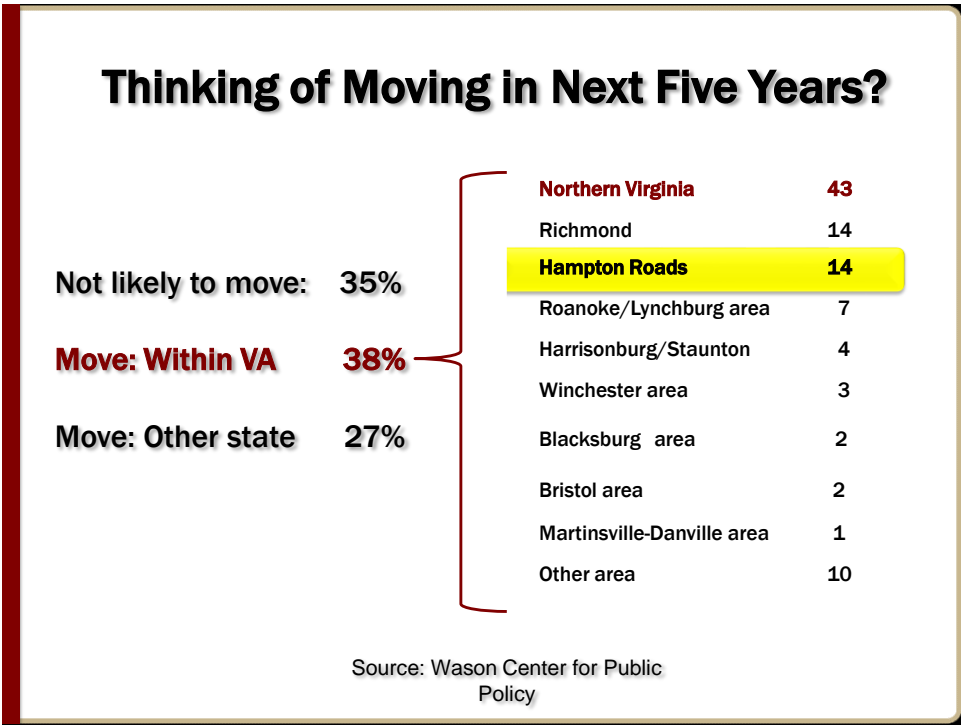
**Millennials say they are
thinking about moving in
the next five years.**

Source: Wason Center for Public Policy

Source: Wason Center for Public Policy

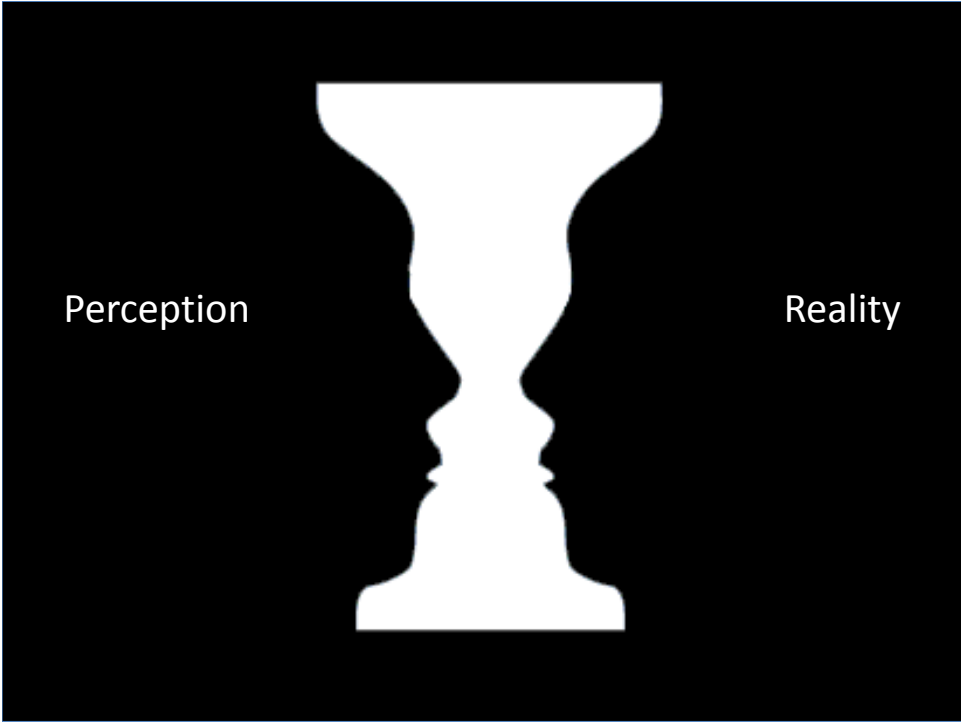
Where Are They Headed?

Source: Wason Center for Public Policy



Today's Agenda

- 1 A National Perspective
- 2 **Local Perceptions**
- 3 Your Imperatives



Perception

Reality

**It's Transit
(Light Rail)
OR
Roads**

83

Perception

Reality

**It's Transit
(Light Rail)
OR
Roads**

**It's Transit
(Light Rail)
AND
Roads**

84



Perception

Reality

**Light Rail
Hasn't Been
Studied**

85

Perception

Reality

Light Rail
Hasn't Been
Studied

**Conversation
Started 13
Years Ago**

86

When The Tide Extension Conversations First Started

Comprehensive Plan	2003
Resort SGA Plan	2008
Comprehensive Plan Update	2009
Purchased right-of-way	2009
Environmental Impact Statement	2009
Newtown SGA Plan	2010
Rosemont SGA Plan	2011
Lynnhaven and Hilltop SGA Plans	2012
Centerville SGA Plan	2012



Perception

Reality

Region Lacks A Transportation Vision

Perception

Region Lacks A Transportation Vision

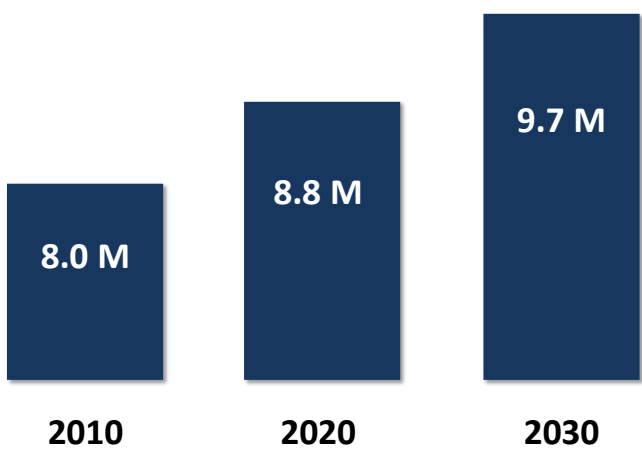
Reality

Connect-Hampton Roads Plan

89

Virginia

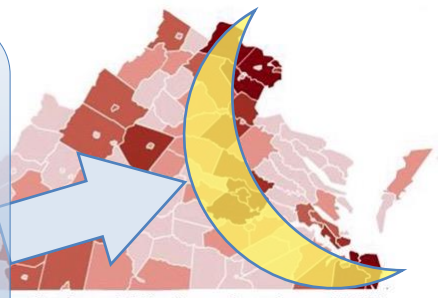
Projected Population Growth



Source: U.S. Census projections, updated August 2013 by the Weldon Cooper Center for Public Service, Demographics & Workforce Group, www.coopercenter.org/demographics, University of Virginia.

Virginia Population Growth

80%
of Virginia's future
population growth
will occur in the
"Golden Crescent"



Data Source: Weldon Cooper Center, January 27, 2015

Source: Weldon Cooper Center for Public Service, Demographics & Workforce Group,
www.coopercenter.org/demographics, University of Virginia.



Connect Hampton Roads

13,830

People Provided Input
All Local Jurisdictions

Perception

Reality

**It's Just
3 Miles
of Track Being
Added to 7.4
Miles.**

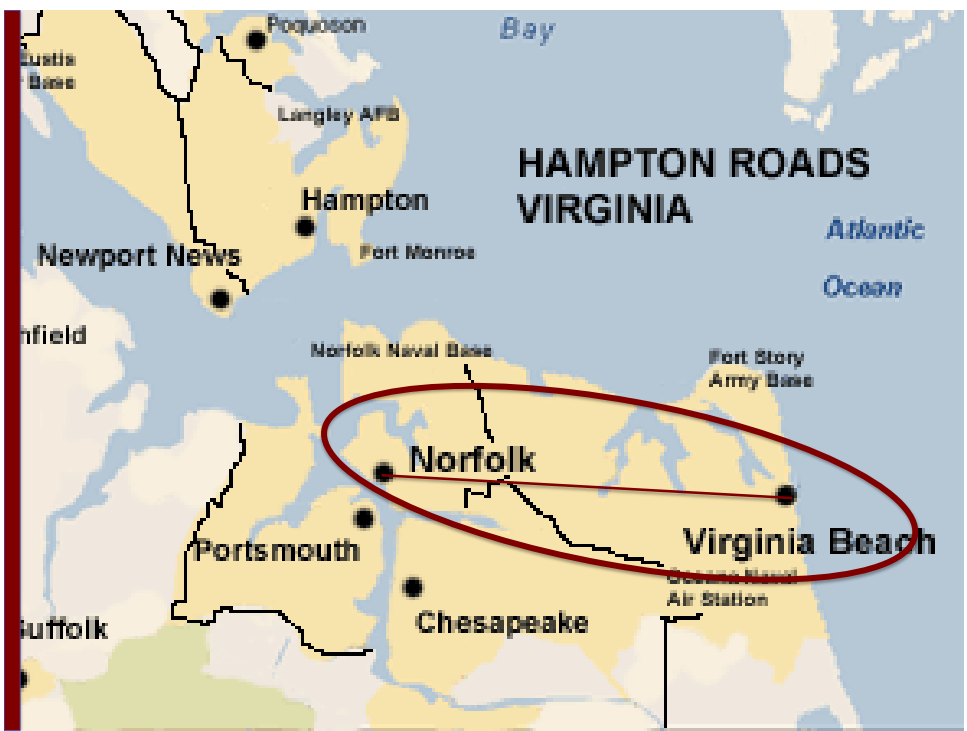
Perception

It's Just 3 Miles of Track Being Added to 7.4 Miles.

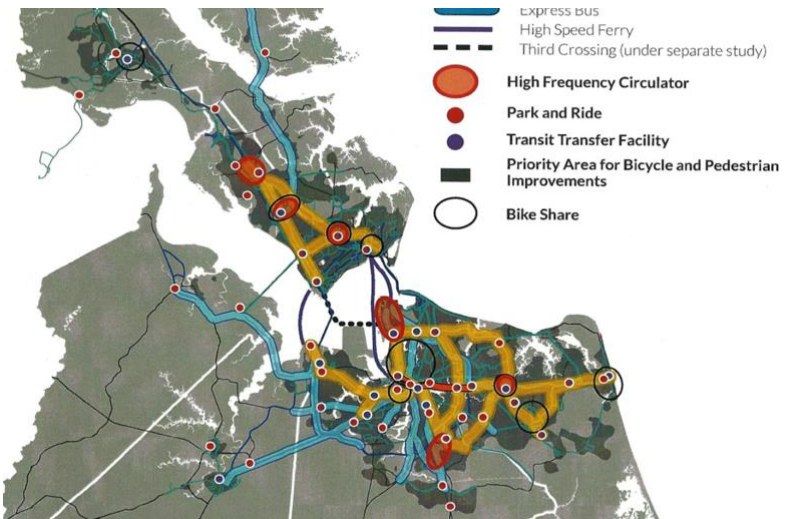
Reality

It's The Backbone of Our Regional Transportation System

95



The Tide Extension Is Part of A Larger "Connected" Hampton Roads Plan



97



98

The Va. Beach Light Rail Package



Perception

Reality

**Will Change
Life As We
Know It**

Perception

Reality

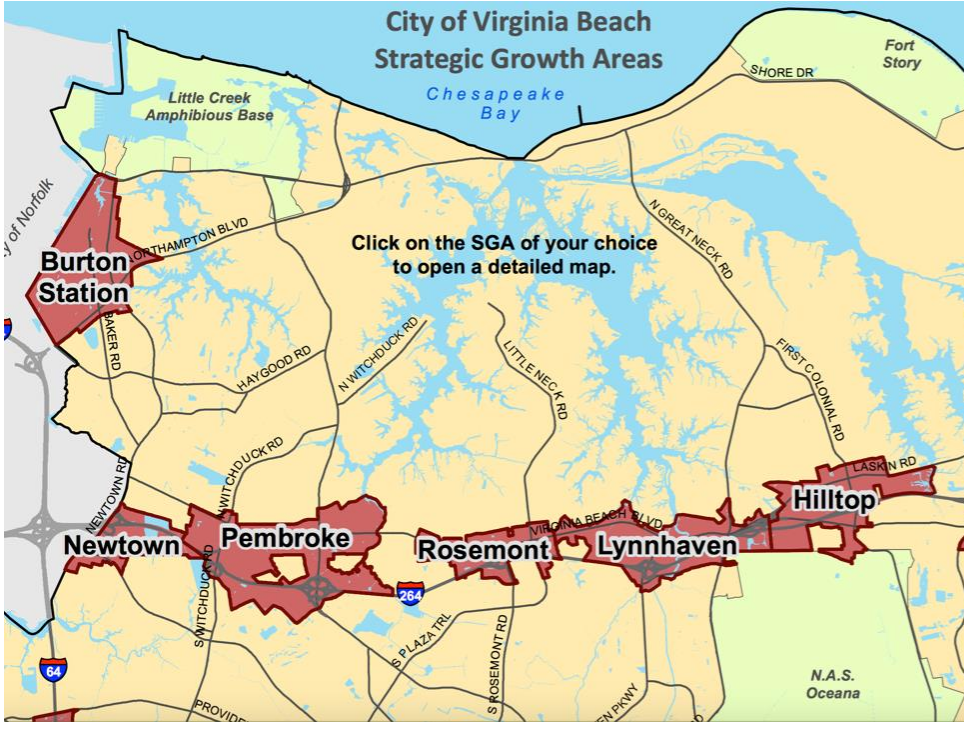
Will Change
Life As We
Know It

Attracts
Concentrated
Development

101



102



Perception

Reality

**Lead
To More
Crime**



Perception

**Lead
To More
Crime**

Reality

**Uninformed
Fear.
There's No
Evidence**

105



Perception

**We Can't
Afford It –
Annual Cost**

Reality

106

Perception

Reality

We Can't Afford It – Annual Cost

Less Than 1% of Budget

107

James Wood

GUEST COLUMNIST

Next step: Getting the funding facts

By Jim Wood
Nov 15, 2015



THERE ARE a lot of opinions floating around about light rail generally and the extension to Virginia Beach's Town Center specifically. So it's important to look at the facts.

First, the referendum question. It is possible that a citizen-driven effort will come up with the required number of signatures, and it is possible that the City Council will add a question to the 2016 ballot.

Let me be clear about this: The people have an absolute right to be heard. Should this issue advance to the ballot, I have no doubt that the council will heed the will of the voters, just like it did in 2012.

Regardless of the oratory on either side, the 2012 election showed that 62.7 percent of those voting, some 116,000 people, agreed that the City Council should "adopt an ordinance approving the use of all reasonable efforts to support the financing and development of the Tide light rail into Virginia Beach."

108

VB Transit Today:

**\$6.5 Million
Operating Budget**

0.64%

(Less than 1% of the City of VB's total annual operating budget)

109

VB Transit Today:

**\$6.5 Million
Operating Budget**

0.64%

(Less than 1% of the City of VB's total annual operating budget)

VB Transit 3rd

**Year:(With Light Rail Extended
To VB)**

**\$8.5 Million
Operating Budget**

0.85%

(Less than 1% of the City of VB's total annual operating budget)

110



Perception

Reality

**Will Not
Benefit
Residents**

111

Perception

Reality

**Will Not
Benefit
Residents**

**Many
Benefits**

112

Q2. Have you ever used the light rail system in Norfolk? (Base: Total Respondents, N=401)

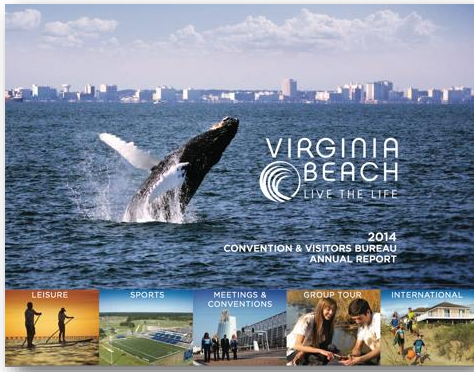
42%

Virginia Beach Residents Have Used Norfolk's Light Rail System

Source: No Light Rail / Virginia Beach Light Rail Survey
Conducted by: Issues & Answers September 2015

Removing Cars From I-264 During Rush Hour

- Virginia Beach Light Rail extension is expected to carry 2,250 riders.
- I-264 between Witchduck and Independence carries ~50,000 vehicles during the morning and evening peak periods.
- Taking close to 1 in 20 cars off I-264 during rush hour would have a real benefit to I-264



12,000
Hotel rooms

12,000 jobs

\$1.3 billion
annual revenue

Source: Virginia Beach
 Convention & Tourism Bureau

115

The Navy has supported light rail extension for 10+ years

116



Perception

Reality

**Argument
Between
The Ages**

117



Perception

Reality

Argument
Between
The Ages

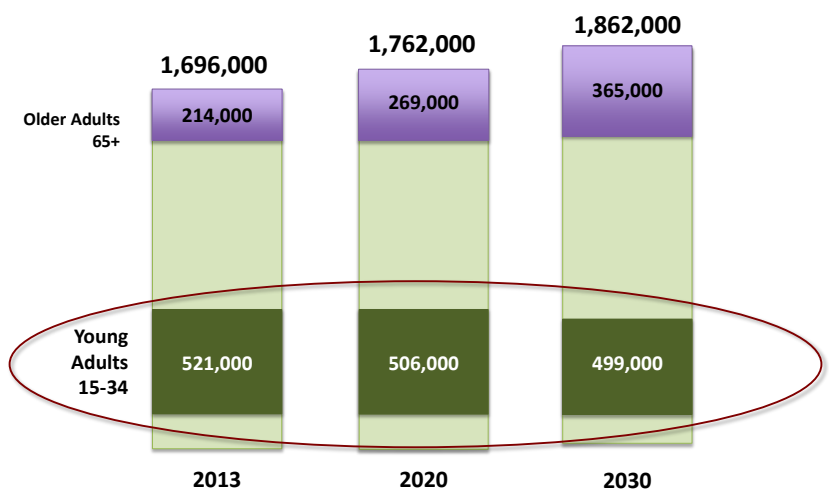
**Hope
For Future
Generations**

118



Hampton Roads PDC

Population Growth and Composition



Source: Weldon Cooper Center for Public Service, Demographics & Workforce Group, www.coopercenter.org/demographics, University of Virginia.

Today's Agenda

- 1** A National Perspective
- 2** Local Perceptions
- 3** **Your Imperatives**

1

**Take A Neighbor
On The Tide**



Q2. Have you ever used the light rail system in Norfolk? (Base: Total Respondents, N=401)

42%

Virginia Beach Residents Have Used Norfolk's Light Rail System

Source: No Light Rail / Virginia Beach Light Rail Survey
Conducted by: Issues & Answers September 2015

Q2b. Was it a positive experience? (Base: Total Respondents, (N=169))

92%

Of Virginia Beach Residents
Who Have Ridden The Tide
Say It Was Positive Experience

Source: No Light Rail / Virginia Beach Light Rail Survey
Conducted by: Issues & Answers September 2015

2

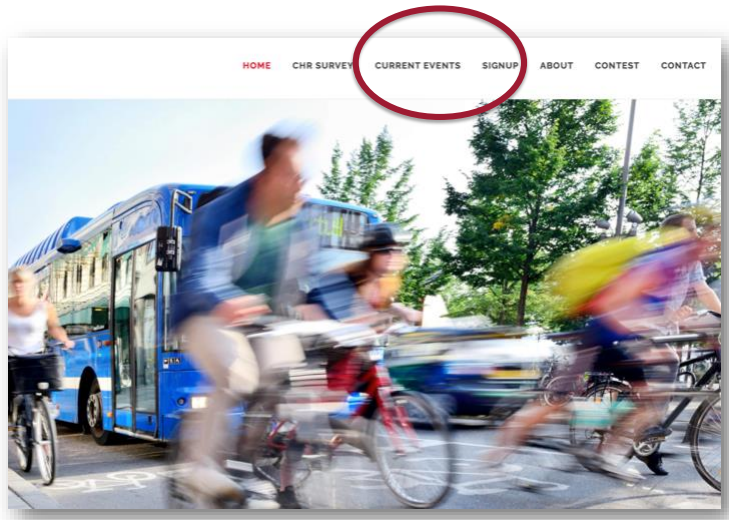
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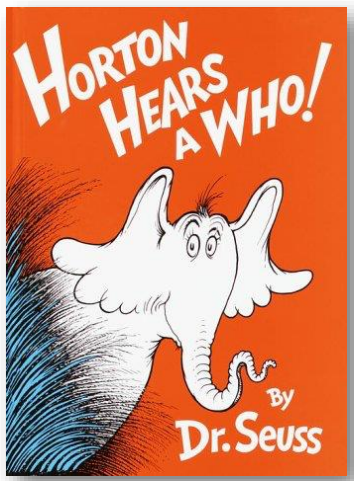
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Local & Regional Businesses Support Light Rail

Central Business District Association Central Business District Nextgen
 Chesapeake Economic Development Authority Citizens Transportation Advisory
 Committee Coliseum Central Business District Connect Hampton Roads
 Currituck Chamber of Commerce Downtown Hampton Business District
 Downtown Norfolk Council Downton Norfolk Civic League Empower Hampton
 Roads ForKids, Inc. Fraim & Fiorella Freemason Civic League Future of Hampton
 Roads Greater Norfolk Corporation Hampton Economic Development Hampton
 Roads Center for Civic Engagement Hampton Roads Chamber of Commerce
 Hampton Roads Community Foundation Hampton Roads Housing Company
 Hampton Roads Democrats Hampton Roads for Rail Hampton Roads Association
 for Commercial Real Estate Hampton Roads Property Owners Association Downtown
 Norfolk Council Hampton Roads Public Transportation Alliance Hampton Roads
 Planning District Commission Hampton Roads Transit Hampton Visitors and
 Convention Bureau Leadership Hampton Roads League of Women Voters Light Rail
 Now Mobility Matters Norfolk Economic Development Paratransit Riders
 Advisory Committee Hampton Roads Public Transportation Alliance Peninsula
 Realtors Association Portsmouth Partnership Sierra Club The Up Center
 Tidewater Bicycle Association Tidewater Builders Association Transit Riders
 Action Committee Urban Land Institute – Hampton Roads Virginia Beach
 Economic Development Virginia Beach Vision Virginians for High Speed Rail
 Virginia Peninsula Chamber of Commerce Virginia Transit Association
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**NGOs
 Support
 Light Rail**

**Everyone
 has to get
 the word
 out!**





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