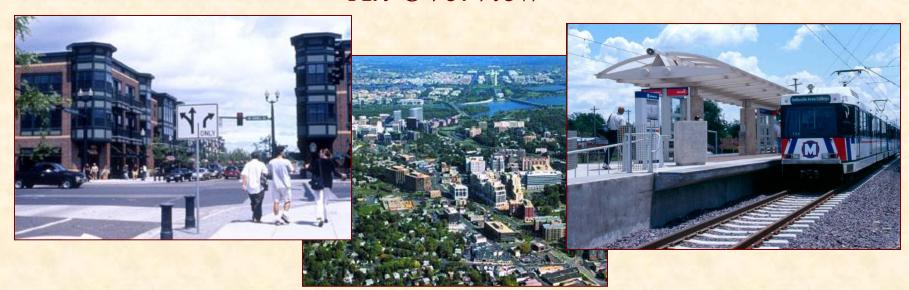
Transit-Oriented Development (TOD)

An Overview



Credit: Virginia Transit Association

What Is TOD?

- TOD is a synergism between land use and transit with the following key characteristics:
 - Compact Mixture of Uses;
 - Pedestrian Friendly and Walkable; and
 - Supportive of a Variety of Transit Options.



TOD Core's Features

- A vibrant mix of uses including:
 - Residential
 - Retail
 - Office
 - Commercial
 - Institutional
- Thoughtfully designed community spaces;



 Exciting, pedestrian friendly areas for live, work and play.

Benefits of TOD

- Increase transit ridership and reduce number of automobile trips generated;
- Improve air quality;
- Provide opportunities for neighborhood connections;
- Increase sense of community; and
- Reduce household fuel costs associated with heavy auto use.

Benefits Of TOD (Cont.)

- Promote attractive, safe, walkable mixed-use neighborhoods; and
- Increase value and income for property owners.



Benefits Of TOD (Cont.)

- Expand markets and increase revenues for businesses;
- Enhance tax revenues for local governments from rising land values;
- Increase
 development and
 business
 transactions in
 areas near transit.



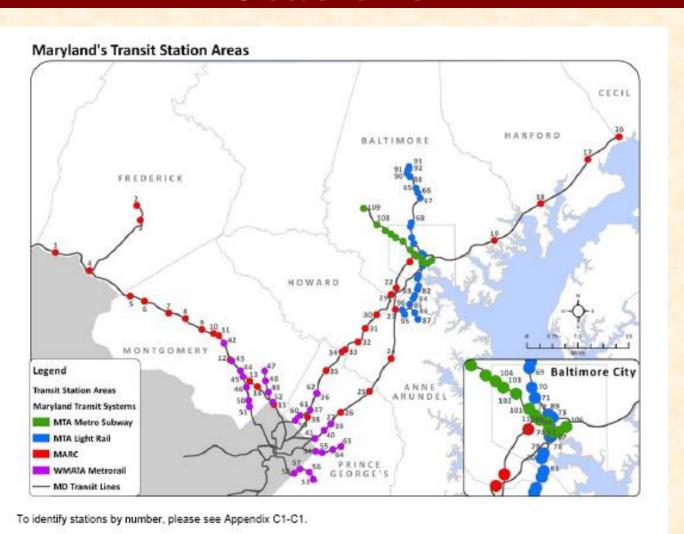
Who Will Live Near Transit Stations?

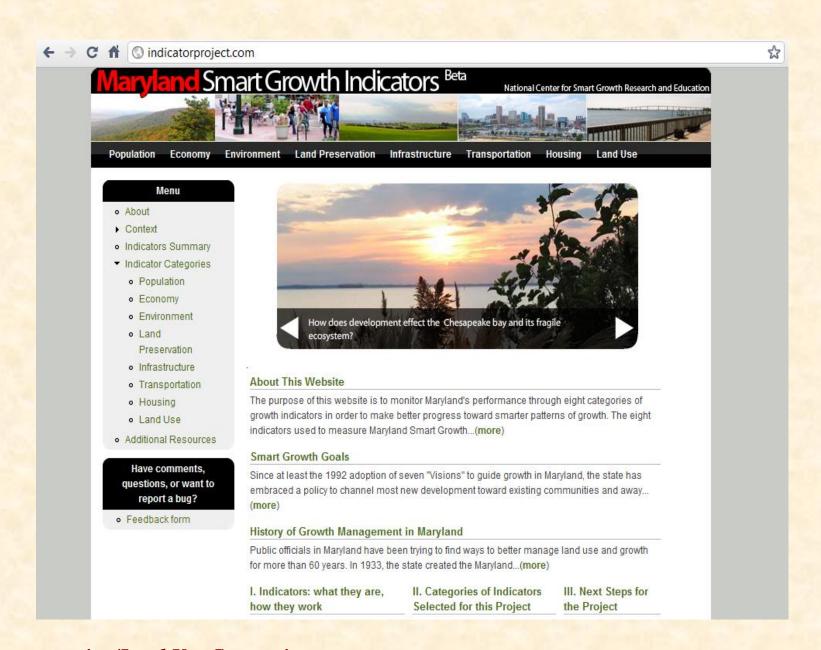
- Single householders and couples without children (regardless of age) will generate nearly two-thirds of the total demand for TOD, a disproportionate share given their percentage of total households; and
- Households with children will account for only about 20 percent of the demand for TOD.

Real Estate Investment Adjacent to Transit

- Washington DC, \$15 billion (since 1976);
- Portland, \$3 billion (since the late 1970s);
- Dallas, \$1 billion (since 1996);
- St. Louis, \$1 billion (since 1993); and
- Charlotte, \$400 million (2000-2003).

Maryland's Existing Transit Stations









Percent of County Population Living within 1/2 Mile of a Transit Station

Year: 2000 ▼

Explanation of this Indicator

County	Abrv.	Percent	Мар
Baltimore City	вс	19.00	
Montgomery	MG	8.81	
Prince George	PG	5.43	
Baltimore	BL	3.08	
Anne Arundel	AA	2.76	
Harford	HF	1.33	
Howard	HW	1.20	
Cecil	СС	0.32	
Frederick	FR	0.16	
			By County - 2000
			20
			18
			16
			16 14 12
			12 10
			8
			6
			4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
			10 8 6 4 2
			BC MG PG BL AA HF HW CC FR
			County
			Standard W.

Source: US Census





Jobs Within 0.5 Mile of a Washington Metro Station

Year:

2007 ▼

Explanation of this Indicator

Station	Abrv.	Line	Jobs		Мар
Bethesda	вт	Red	37,415	•	Shady Shady College Co
Silver Spring	SS	Red	20,769		
White Flint	WF	Red	16,167		Rockville Forest Glen White Flint St.
Rockville	RV	Red	15,804		White Flint O Silver S. West Landover
Twinbrook	ТВ	Red	9,815		
New Carrollton	NC	Orange	6,339		medical Center 72 Cheverly
Wheaton	WN	Red	5,867		Friendship Heights Queen August August River
Friendship Heigt	FH	Red	5,397		Cabitol Worldon Paulo
Forest Glen	FG	Red	4,161		Aug.
Prince Georges I	PG	Green	4,037		Southern Ave
Medical Center	MC	Red	3,832	III.	CC WOOK 10 PK
Branch Avenue	ВА	Green	2,313		By Station - 2007
Morgan Bouleva	МВ	Blue	1,948		
Shady Grove	SG	Red	1,487		36,000.00
College Park	CP	Green	1,348		32,000.00 28,000.00
Largo	LG	Blue	1,145		24,000.00
Cheverly	CV	Orange	1,136		20,000.00
Takoma	TK	Red	1,090		16,000.00
Landover	LN	Orange	1,064		12,000.00
West Hyattsville	WH	Green	959		4,000.00
Grosvenor	GV	Red	753		
Glenmont	GM	Red	636		BT SS WF RV TB NOWN FH FG PG MC BAMB SG CP LG CV TK LN WH GVGM AR NR SL CHOW GB SA
Addison Road	AR	Blue	373		Station
Naylor Road	NR	Green	319		Time Series - All Stations

Source: Maryland Department of Labor, Licensing and Registration





Population Living Within 1/2 Mile of a Washington Metro Station

Year:

2000 ▼

Explanation of this Indicator

Station	Abrv.	Line	People		Мар
Silver Spring	SS	Red	8,760.99	•	Shady Shady College Co
West Hyattsville	WH	Green	6,849.94		
Bethesda	ВТ	Red	6,335.08		Rockville Rockvi
Prince Georges I	PG	Green	5,795.40		Twinbrook White Flint Silver S. West Sulled Landover
Grosvenor	GV	Red	4,921.35		
Wheaton	WN	Red	4,636.78		Medical Center - Cheverly
Forest Glen	FG	Red	4,616.45		Friendship Heights Commond Height Rose glvd
Twinbrook	тв	Red	4,355.35		Capitol Molday Palao
Glenmont	GM	Red	4,062.27		Aug.
Friendship Heigt	FH	Red	3,878.31		Southern Ave Surhand O Branch Ave
Landover	LN	Orange	3,869.28	1111	
Rockville	RV	Red	3,820.45		By Station - 2000
White Flint	WF	Red	3,692.71		9,000
Naylor Road	NR	Green	3,685.03		8,000
Greenbelt	GB	Green	3,620.01		7,000
Suitland	SL	Green	3,533.03		6,000
Addison Road	AR	Blue	3,433.08		5,000
New Carrollton	NC	Orange	3,010.80		3,000
Morgan Bouleva	МВ	Blue	2,963.50		2,000
Cheverly	cv	Orange	2,723.61		1,000
Capitol Heights	СН	Blue	2,607.53		0_
Takoma	TK	Red	2,544.43		SS WH BT PG GVWN FG TB GM FH LN RV WF NR GB SL AR NC MB CV CH TKMC CP SG SA LG BA DW
Medical Center	MC	Red	2,400.78		Station
College Park	CP	Green	2,156.19		Time Series - All Stations

Source: US Census





Population Density of the Area Within 1/2 Mile of a Washington Metro Station

Year:

2000 ▼

Explanation of this Indicator

Station	Abrv.	Line	Persons per So		Мар
Silver Spring	SS	Red	13,236.40	•	Shady College
Friendship Heigt	FH	Red	10,784.10		1/o. JPA
Takoma	TK	Red	9,092.02		Rockville Forest Glen Hyatts West
West Hyattsville	WH	Green	8,728.21		Twinbrook White Flint Silver S. Landover
Bethesda	ВТ	Red	8,072.15		
Prince Georges I	PG	Green	7,384.51		
Grosvenor	GV	Red	6,270.76		Friendship Heights Road Height a Road Blyd
Wheaton	WN	Red	5,908.17		Capitol Addition Morgan Largo
Naylor Road	NR	Green	5,905.32		No.
Capitol Heights	СН	Blue	5,890.52		Southern Ave Southand Southand Branch Ave
Forest Glen	FG	Red	5,882.27	1	
Twinbrook	ТВ	Red	5,549.55		By Station - 2000
Glenmont	GM	Red	5,176.12	П	14,000
Landover	LN	Orange	4,930.26		
Rockville	RV	Red	4,867.97	П	12,000
White Flint	WF	Red	4,705.22		10,000
Greenbelt	GB	Green	4,612.62		8,000
Suitland	SL	Green	4,501.81		6,000
Southern Avenu	SA	Green	4,374.94		4,000
Addison Road	AR	Blue	4,374.45		2,000
New Carrollton	NC	Orange	3,836.38		
Morgan Bouleva	МВ	Blue	3,776.10		SS FH TKWH BT PG GVWN NR CH FG TBGM LN RV WF GB SL SA AR NC MB CV MC DW CP SG LG BA
Cheverly	CV	Orange	3,470.44		Station
Medical Center	мс	Red	3,059.07		Time Series - All Stations

Source: US Census





Percent of Average County Density of Washington Metro Station Transit Sheds

Year:

2000 ▼

Explanation of this Indicator

Station	Abrv.	Line	Percent		Мар
Silver Spring	SS	Red	754.74	•	Shady College
Friendship Heigt	FH	Red	614.90		
West Hyattsville	WH	Green	529.69		Rockville Rockville Park New Carrollton Twinbrook New Carrollton
Takoma	TK	Red	518.42		Twinbrook White Flint Silver Str. Silver Str. Landover
Bethesda	ВТ	Red	460.27		White Flint Silver Soring Change Landover
Prince Georges I	PG	Green	448.14		Grosvenor Amage Amage Amage Amage Cheverly Bethesda
Naylor Road	NR	Green	358.38		Friendship Heights Rose Blvo
Grosvenor	GV	Red	357.55		Captrol Addition Morgan Largo
Capitol Heights	СН	Blue	357.48		Ne Ne
Wheaton	WN	Red	336.88		Southern Ave Suntand Branch Ave
Forest Glen	FG	Red	335.40	1	
Twinbrook	ТВ	Red	316.43		By Station - 2000
Landover	LN	Orange	299.20		800
Glenmont	GM	Red	295.14		700
Greenbelt	GB	Green	279.92		600
Rockville	RV	Red	277.57		500
Suitland	SL	Green	273.20		400
White Flint	WF	Red	268.29		300
Southern Avenu	SA	Green	265.50		200
Addison Road	AR	Blue	265.47		100
New Carrollton	NC	Orange	232.82		0_
Morgan Bouleva	МВ	Blue	229.16		SS FH WH TK BT PG NR GV CHWN FG TB LN GM GB RV SL WF SA AR NC MB CV MC DW CP SG LG BA
Cheverly	CV	Orange	210.61		Station
Medical Center	MC	Red	174.42		Time Series - All Stations

Source: US Census





WMATA Station Parking Spaces

Year:

2008 ▼

Explanation of this Indicator

Station	Abrv.	Line	Spaces		Мар
Shady Grove	SG	Red	5,821	•	Shady Greenbelt College
Greenbelt	GB	Green	3,861		
New Carrollton	NC	Orange	3,656		Rockville Por New Carrollton Twinbrook New Carrollton White Gint St.
Branch Avenue	ВА	Green	3,392		Twinbrook White Flint Silver S. West Sulled Landover
Largo	LG	Blue	2,341		
Southern Avenu-	SA	Green	2,180		Cheverly
Suitland	SL	Green	2,065		Friendship Heights Road Rive
College Park	CP	Green	2,023		Capitol Pegingon Molday (aldo
Landover	LN	Orange	1,880		No.
Grosvenor	GV	Red	1,871		Southern Ave Suitland Branch Ave
Glenmont	GM	Red	1,850	1	
Addison Road	AR	Blue	1,318		By Station - 2008
White Flint	WF	Red	1,270		6,000
Twinbrook	тв	Red	1,135		8,000
Prince Georges I	PG	Green	1,124		5,000
Wheaton	WN	Red	977		4,000
Silver Spring	SS	Red	760		3,000
Morgan Bouleva	МВ	Blue	713		2,000
Rockville	RV	Red	667		
Forest Glen	FG	Red	658		1,000
West Hyattsville	WH	Green	604		
Cheverly	CV	Orange	557		SG GB NC BA LG SA SL CP LN GVGM AR WF TB PG WN SS MB RV FG WH CV NR CHDW TK MC BT FH
Naylor Road	NR	Green	414		Station
Capitol Heights	СН	Blue	386		Time Series - All Stations

Source: WMATA

Employment Capacity in Transit Station Areas in Maryland

Prepared by: The National Center for Smart Growth Research and Education at the University of Maryland*

Gerrit Knaap, PhD, Director

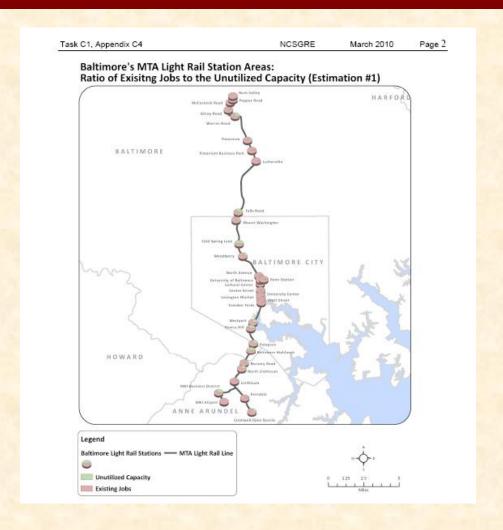
Terry Moore, Senior Research Scholar

Rebecca Lewis, Research Assistant

Research assistance provided by Chis Domey, Cathy Dowd, Steve Gehrke, Ray Hayhurst, & Doug Kampe

March 2010

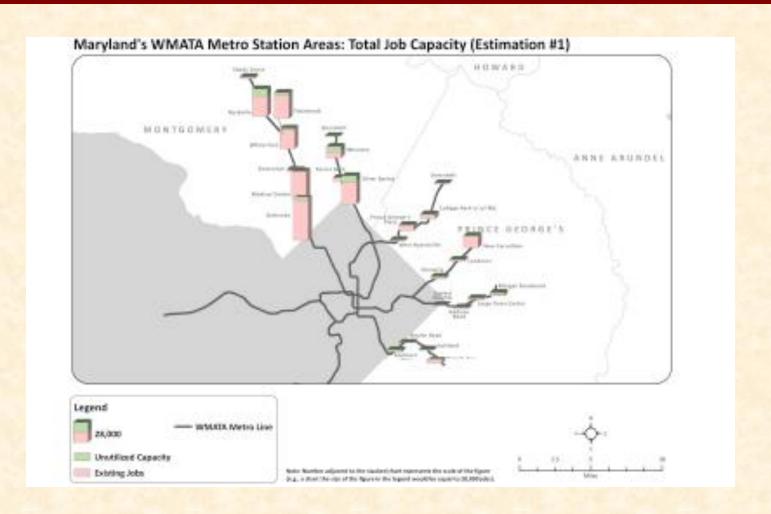
Job Capacity in Baltimore



Job Capacity in MARC Stations



Job Capacity Utilization at WMATA Stations



Jobs and Job Capacity in MD Station Areas

ID			ACRES IN PAR	CELS	EXISTING JOBS			EMPLOYMENT CAPACITY		
Transit Line	Number of Transit Stations	Percent of Transit Stations	Number of Acres In Parcels Undeveloped Developable in station areas	Percent of Total Acres In Parcels Undeveloped Developable in station areas	Number of Jobs	Percent of Total Jobs in station areas	Employment Density (employees per developed acre)	Percent of Total Unutilized Capacity	Percent of Total Employment Capacity	
Baltimore Metro	14	13%	1,114	14%	331,493	22%	95.34	15%	21%	
Baltimore Light Rail	32	29%	1,605	21%	648,982	43%	77.32	16%	39%	
MARC	38	35%	3,214	41%	268,879	18%	29.48	43%	21%	
WMATA	26	24%	1,854	24%	274,782	18%	41.79	27%	19%	
Total	110	100%	7,786	100%	1,524,136	100%	55.29	100%	100%	

Unutilized Job Capacity in MD Station Areas

	State	9 Counties with Transit Stations	Station Areas
Existing Jobs (BEA/ QCEW Adjusted - 2007)	3,437,502	2,850,054	685,934
New Jobs Projected by 2030 (MDP-BEA)	630,898	521,346	
Total Projected Jobs by 2030 (MDP-BEA)	4,068,400	3,371,400	
Total Job Capacity		3,862,279	842,637
Unutilized Job Capacity		1,012,225	156,703
Percent of County Projections Accommodated by Unutilized Capacity		194%	30%
Percent of State Projections Accommodated by Unutilized Capacity		160%	25%

Summary

- Existing employment densities in Maryland's transit station areas vary considerably: from over 95 jobs per acre on average at stations on the Baltimore Metro line to under 30 jobs per acre on average at stations on the MARC line.
- The greatest unutilized job capacity exists in Montgomery County (a result more of its high existing job densities than of its large amount of undeveloped developable land), but the largest amount of undeveloped but developable land exists in Prince George's County.

Summary

 Even if there were no increase in employment densities, there exists within Maryland's 110 transit station areas enough capacity to accommodate approximately 154 percent of all anticipated employment growth in the region that includes Baltimore City, and Anne Arundel, Baltimore, Cecil, Frederick, Harford, Howard, Montgomery, and Prince Georges counties and 24 percent of all anticipated employment in the state from now until the year 2030.

Conclusions

- Transit station areas create tremendous capacity for good things to happen
- Good things include increases in property values, livability, environmental improvement, and more
- There are good examples of successful
 TODs in Maryland and around the nation.

But....

- TODs have limited capacity to create market potential where markets are weak;
- Even if you build it, and you zone it, they still might not come;
- Jobs are often the overlooked element of successful TODs;
- MOCO has all the ingredients for successful TOD: strong markets, supportive public policy, active engagement.