Proposed Strategies for Meeting White Flint Sector Plan Transportation Goals

Community Meeting

April 18, 2016

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In Association with: RENAISSANCE PLANNING; CROSSROADS TRANSPORTATION

Presentation Agenda

1 Study Purpose

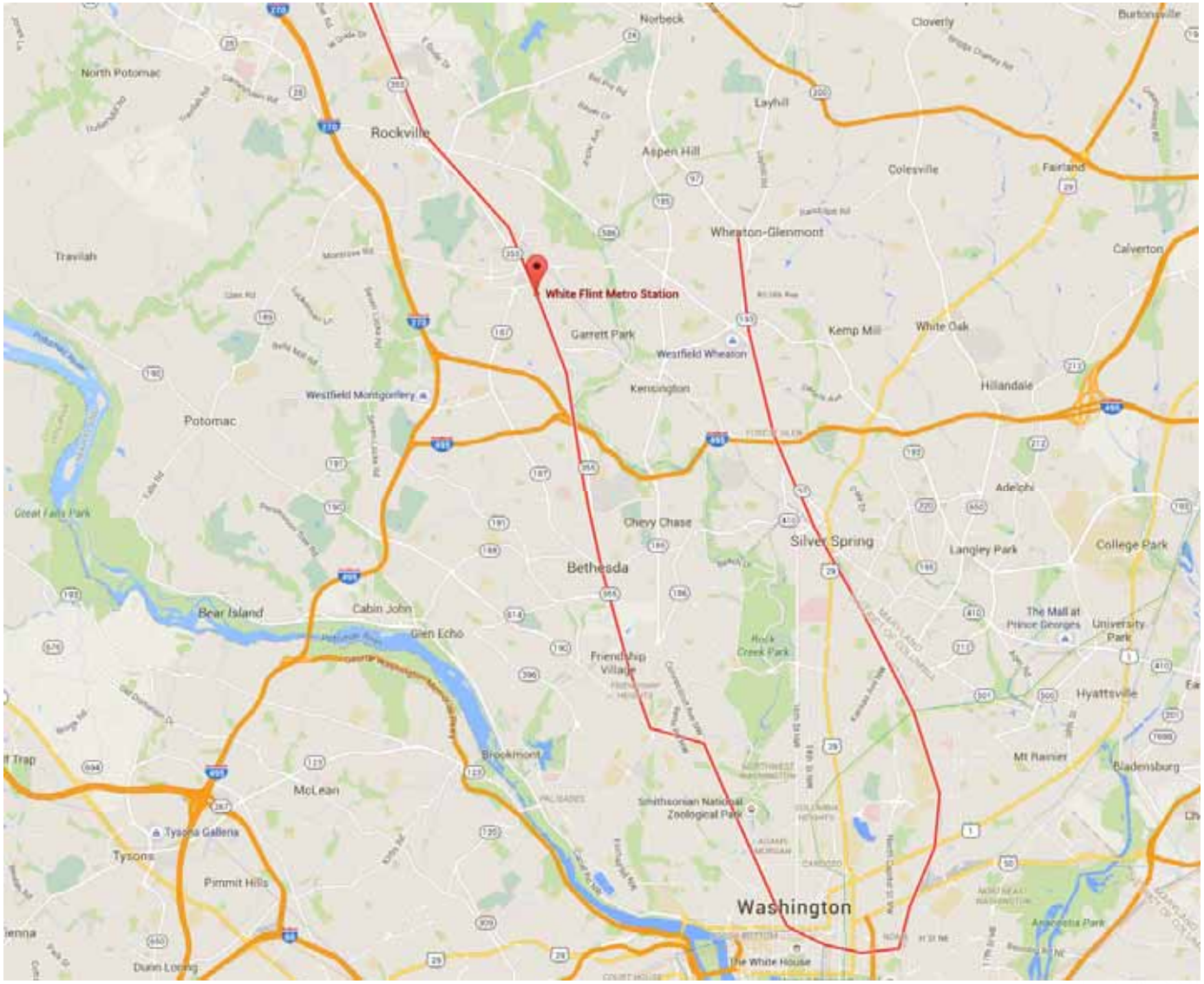
2 Approach and Key Findings

3 Potential TDM Options

4 Implementation

1 Study Purpose

Study Location



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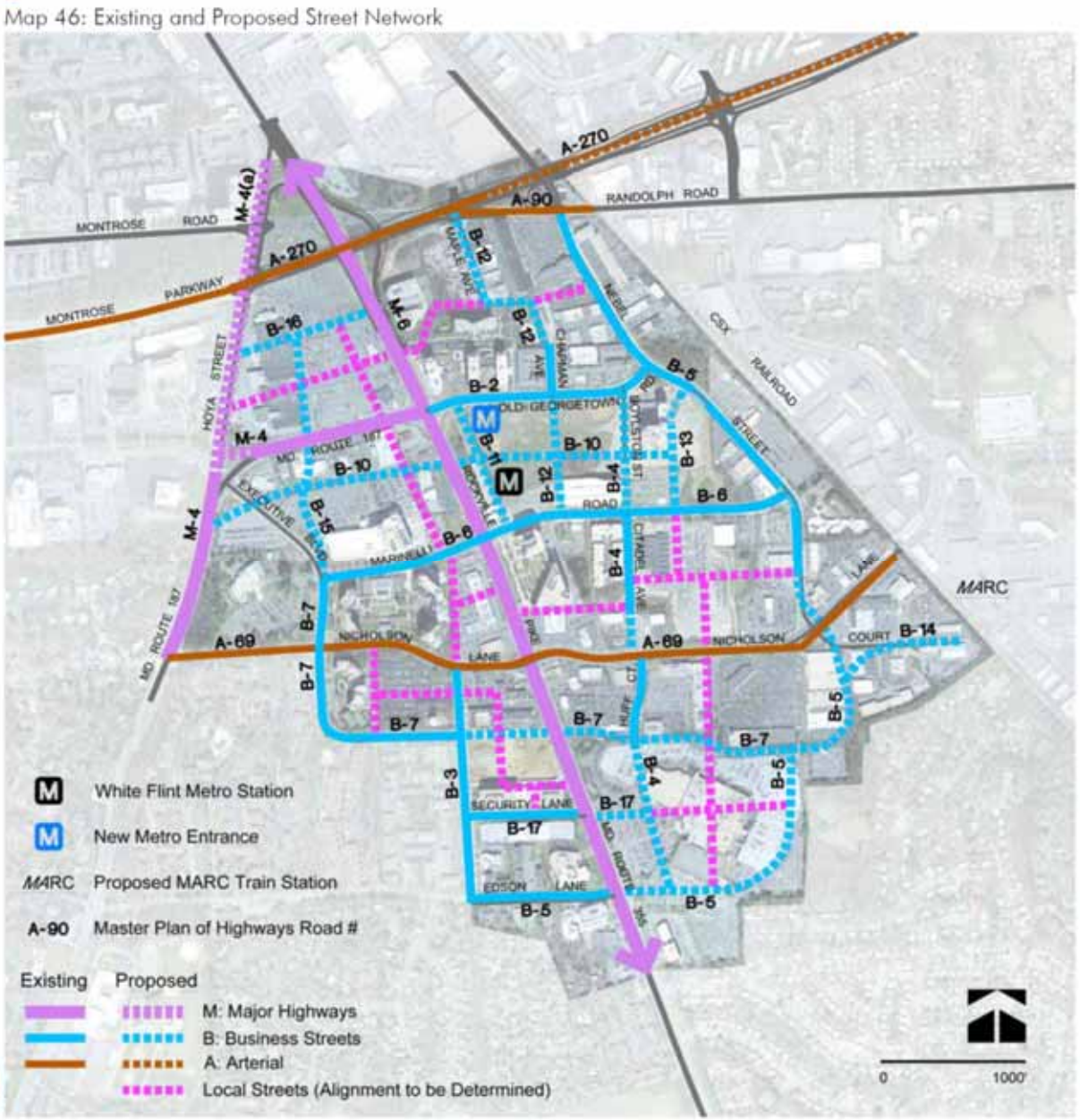

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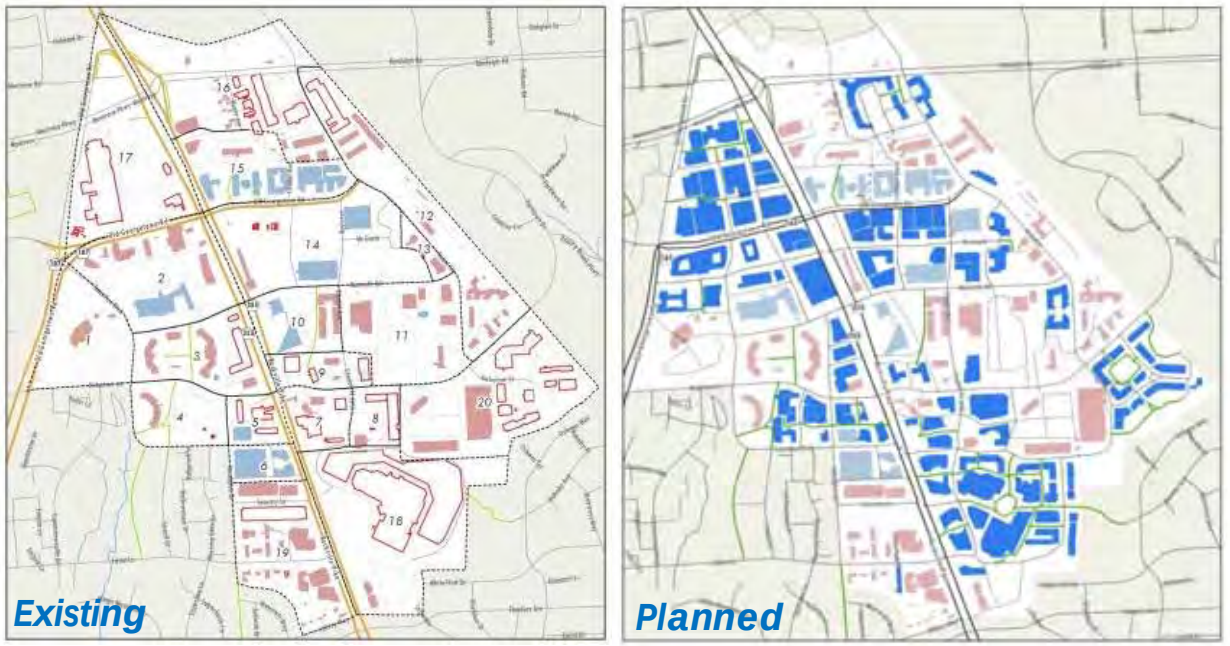


- White Flint development will help promote walking/biking trips by breaking up large blocks through redevelopment of parking lots and other spaces
- TDM strategies will benefit both existing and new residents and workers

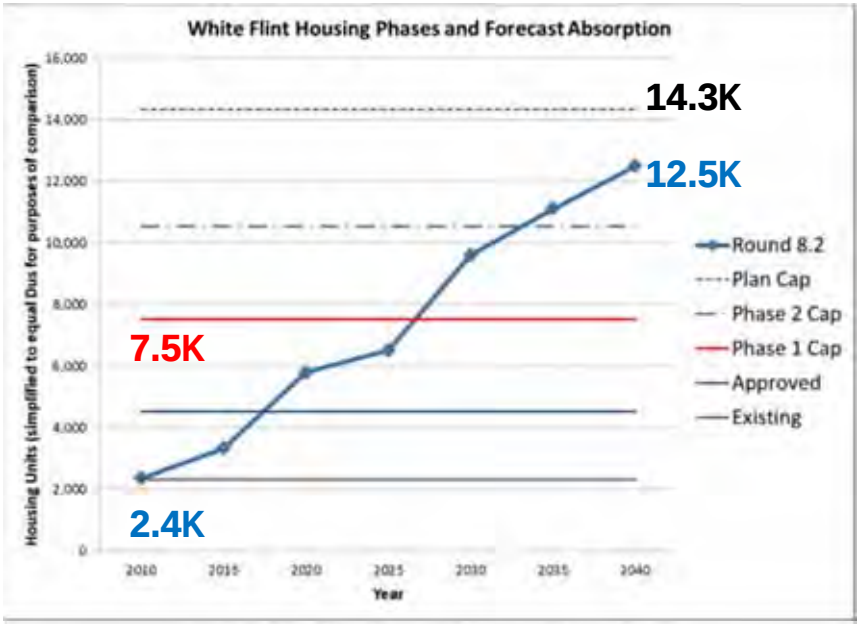
Study Purpose

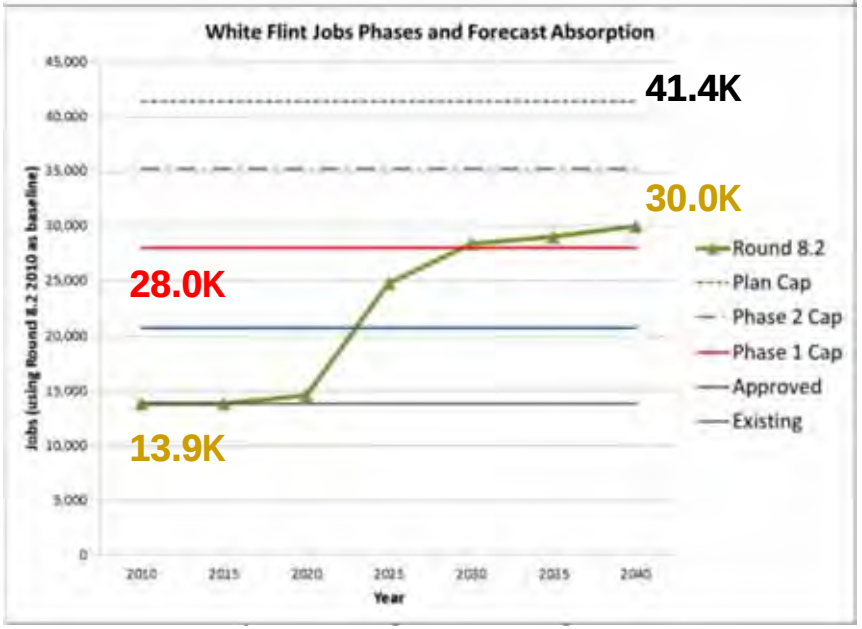
Sector plan a game-changer

- 3x jobs, 5x housing
- Brand new street grid
- MD 355 BRT

TDM integral to success

- Special taxing district
- No development TIS
- TDM in staging plan





White Flint Sector Plan Transportation Goals

Study Purpose

Establish Transportation Demand Management (TDM) strategies to achieve White Flint Sector Plan goals:

- 50% Non-Auto Driver Mode Share for employees (NADMS-E) working in the Sector Plan Area
- 51% Non-Auto Driver Mode Share for employed residents (NADMS-R) living in the Sector Plan Area

Identify phased implementation strategies to achieve interim Sector Plan goals:

- 34% at end of Phase 1
- 42% at end of Phase 2
- 50% ultimately

2 Approach and Key Findings

Study Approach

1. Evaluate effect of various TDM strategies using research-based data and modeling

2. Identify alternative TDM packages that would reach goal of 50%

3. Assess feasibility and cost-effectiveness of alternative TDM packages, develop recommendations

4. Develop implementation, monitoring, and enforcement plan

Key Findings

	Current	Goal
Employees	30%	50%
Residents	50%	51%

Primary challenge is addressing employees

- Gap between existing and goal is 20%
- Ample free parking
- Transit services oriented to DC urban core

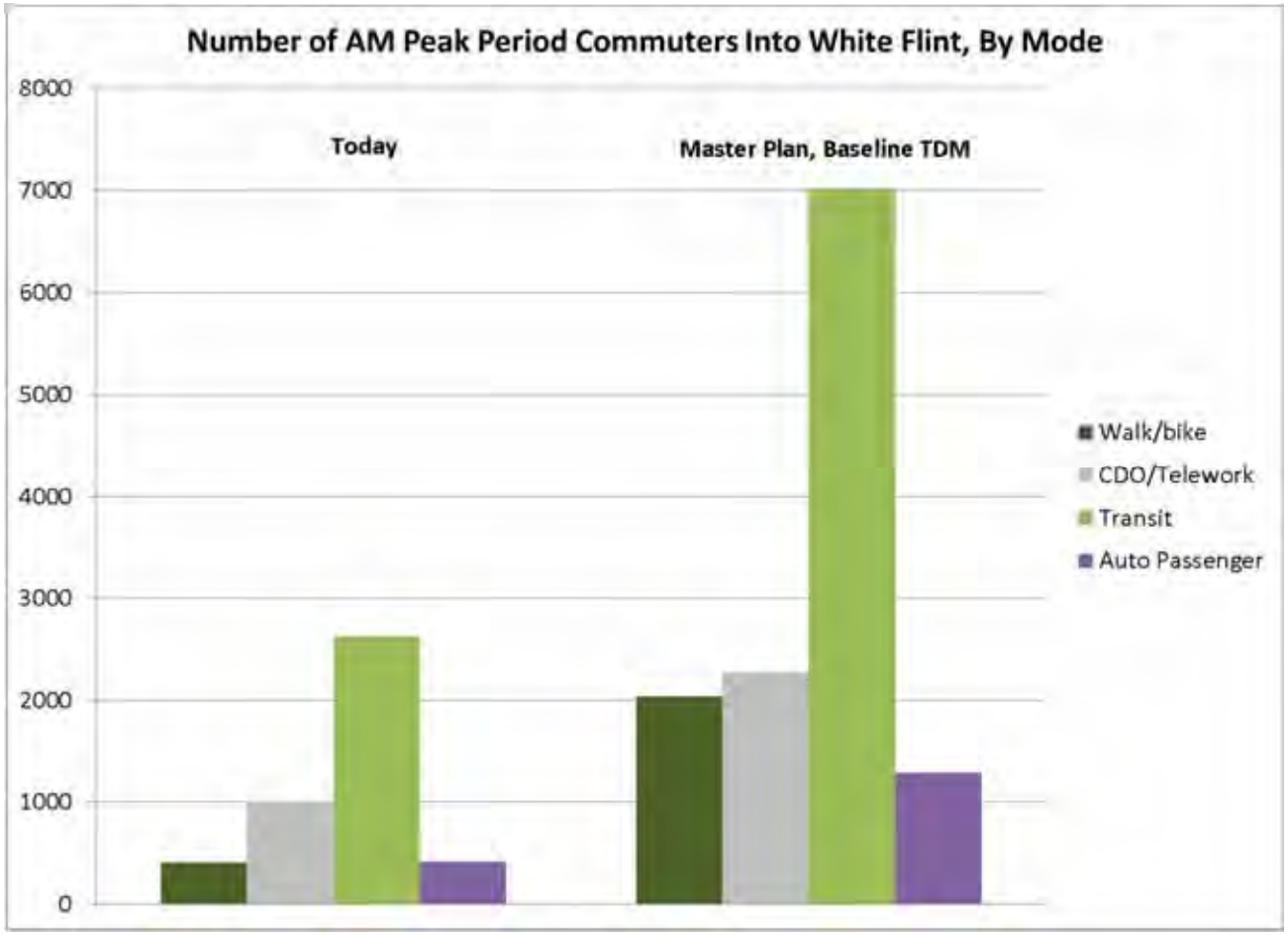
Increased land use density and diversity is part of the solution

There is no silver bullet – a full suite of TDM strategies required

The most effective strategies are those that increase cost of drive-alone commuting

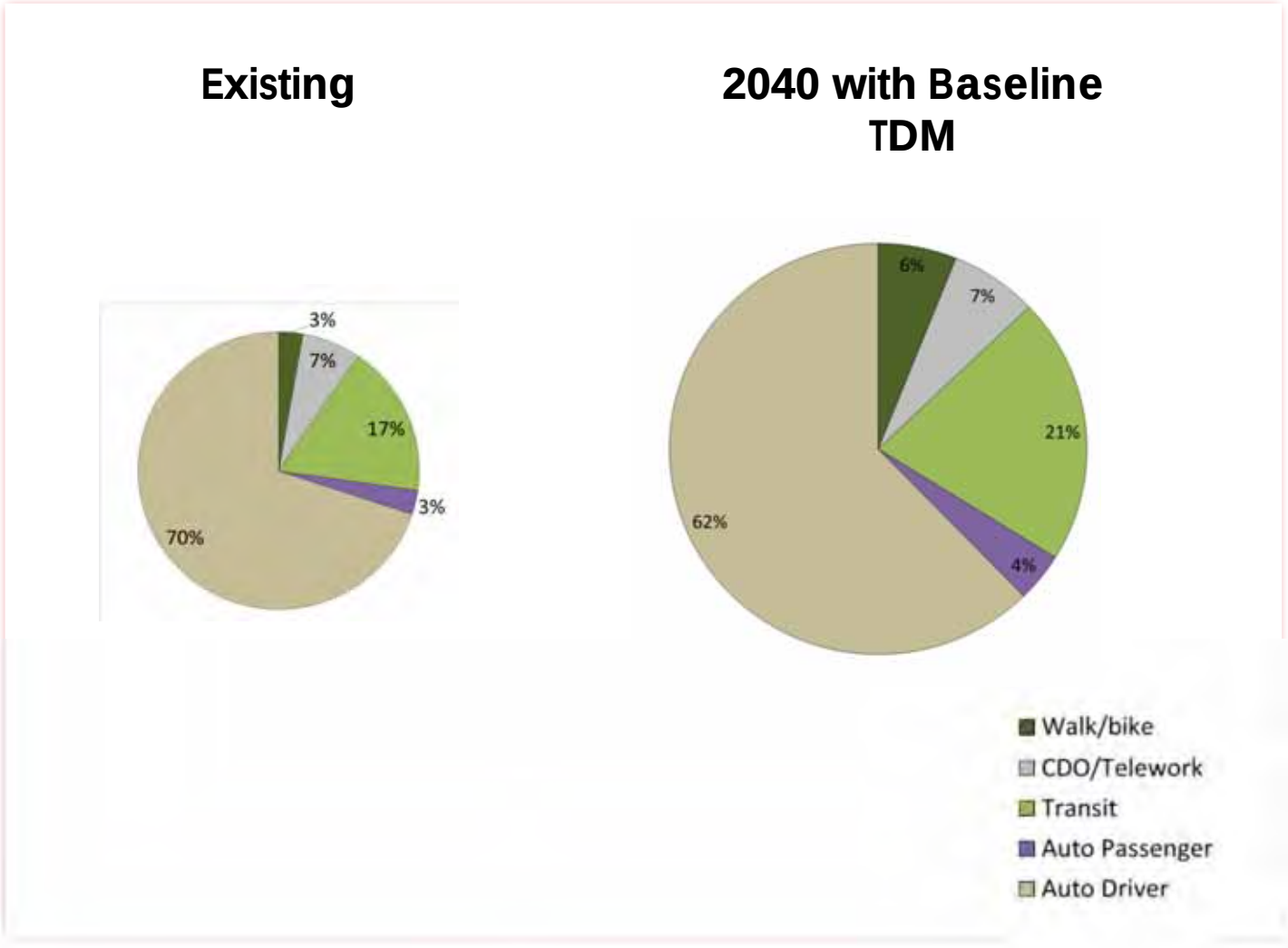
TDM Option Evaluation

With master planned changes, but no new TDM policies, there will be many more commuters utilizing all modes....



TDM Option Evaluation

...but the NADMS will "only" increase from 30% to about 38%.



TDM Option Evaluation

Disaggregate logit TDM model used for technical evaluation

Agency, developer, and civic feedback used for feasibility evaluation (what's achievable at the high end).

TDM Element	Low Estimate	High Estimate
Parking policies and charges	2%	3%
Transit subsidies	2%	3%
Reduced transit system headways	1%	2%
Additional TDM Programs	1%	2%
CDO / Telework	1%	2%
Local circulator	0%	2%
Employer shuttles	0%	1%
Bikesharing	0%	<1%
HOV/queue jump	0%	<1%

3 TDM Options

Policy Options

Parking Policies: Minimum daily fees, parking cash-out programs, parking maximums, unbundled parking, etc.

Transit Subsidies: Vouchers for the purchase of transit passes.

Compressed Day Off (CDO): Employees work longer shifts and take an additional day off weekly or biweekly.

Telework: Employees work offsite or at home.

Enhanced Monitoring and Enforcement: Monitor site-specific goals, develop rewards and/or penalties to encourage attainment of goals.

Facility Options

Bikeshare: Bicycles available for short-term rentals (can replace motor vehicle for some short trips).

Improve transportation infrastructure:

Regional projects including:

- Corridor Cities Transitway
- Purple Line
- I-270 Express Lanes

Additional master planned facilities:

- Second Metrorail station entrance
- MARC station
- Bus Rapid Transit (BRT)

Service Options

Improve bus services in North Bethesda: Increase frequency

TDM Education and Information: Hire additional Transportation Management District (TMD) staff, increase outreach to residents and employers.

Circulator Shuttle: Provide "last-mile" connection between residences/offices/retail and transit (Metro, MARC, bus).

Private Shuttles: Connect major employers with transit services (fill in gaps of circulator shuttle).

4 Implementation

Implementation Plan Summary

Now (< 10 Years)

- Implement low-cost, market-ready strategies.
- Make policy changes needed for monitoring and enforcement.
- Ensure all developments adopt TDM-supportive measures.

Later (> 10 Years)

- Evaluate current development levels and refine forecasts biennially.
- Adjust TDM measures.
- Implement infrastructure/service changes for higher-intensity, higher-cost TDM strategies.
- Identify timing for key projects (Metrorail second entrance, MARC station, etc.).

TDM Policy Options

TDM Strategies	Low-Level Implementation (<10 Years)	High-Level Implementation (>10 Years)	Life-Cycle Cost	Benefit	Activity
Transit Subsidies	Provide subsidies at maximum-allowable federal levels. (1 – 3 Years)	$300/month	Med-High	High	Provide support/information for transit subsidies.
Compressed Day Off (CDO)/ Telework	Encourage employers to offer CDO/ Telework options (1 – 3 Years)	15% of employees participate in CDO/Telework	Low	Medium	Provide support/information for CDO/Telework.
Parking policies and charges for employees	Minimum of $4/day (1 – 3 Years)	Minimum of $7.50/day	Low	High	Unbundle parking, parking cash-out program, implement daily minimum parking fees, parking maximums and monitor daily parking utilization, etc.

- **Benefit: High = >700 Daily Commuters, Medium = 350 – 700 Daily Commuters, Low = <350 Daily Commuters**
- **Life Cycle Cost: Low = <$3 million; Medium = $3 – 6 million; High = >$6 million (annualized capital and operating cost)**

TDM Facility Options

TDM Strategies	Low-Level Implementation (<10 Years)	High-Level Implementation (>10 Years)	Life-Cycle Cost	Benefit	Activity
Bikeshare	At least 10 bikeshare stations (1 – 5 Years)	At least 20 bikeshare stations	Low	Low	Provide space and funding for bikeshare stations. Support system with sponsorships, corporate memberships, etc.
Facility and Service Enhance-ments	Increase transit system frequency, implement BRT on MD 355 (5 – 10 Years)	Regional CLRP Projects, Second Metrorail Station Entrance, MARC Station	High	Medium*	Identify potential funding sources, complete studies and design.

- **Benefit: High = >700 Daily Commuters, Medium = 350 – 700 Daily Commuters, Low = <350 Daily Commuters**
- **Life Cycle Cost: Low = <$3 million; Medium = $3 – 6 million; High = >$6 million (annualized capital and operating cost)**

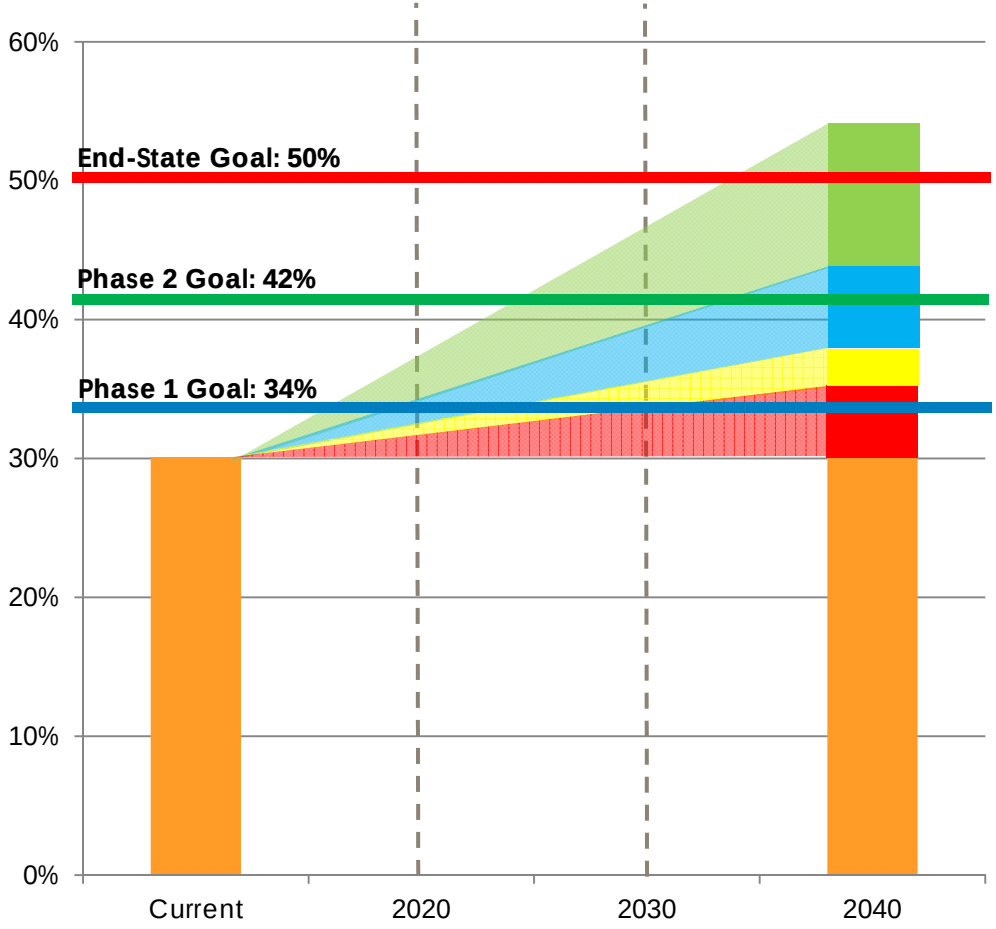
*** Transit enhancements will also provide benefits to areas outside of White Flint.**

TDM Service Options

TDM Strategies	Low-Level Implementation (<10 Years)	High-Level Implementation (>10 Years)	Life-Cycle Cost	Benefit	Activity
Additional TDM Programs	Increase current operating budget. (3 – 5 Years)	Double TDM outreach efforts.	Low	Medium	Increase outreach and marketing efforts within White Flint.
Local Circulator Shuttle	10 – 15 minute frequency, peak period operation (5 – 10 Years)	6-minute frequency with expanded operating hours	Medium	Medium	Explore potential public-private partnership opportunities.
Employer Shuttles	Fill gaps in local transit services for large employers (as needed)		Medium	Low	Implement specific shuttle for large employers to address unmet demand.

- **Benefit: High = >700 Daily Commuters, Medium = 350 – 700 Daily Commuters, Low = <350 Daily Commuters**
- **Life Cycle Cost: Low = <$3 million; Medium = $3 – 6 million; High = >$6 million (annualized capital and operating cost)**

How Do We Get There?



- High-Level Implementation of TDM Options
- Low-Level Implementation of TDM Options
- Additional Master Planned Facilities (not in CLRP)
- Development Through 2040 and Regional Projects (CLRP)**
- Current

* NADMS gains for TDM strategies are not additive – interaction between certain TDM strategies may reduce or increase the overall effectiveness. Actual performance of individual strategies may vary.

** CLRP – Fiscally Constrained Long Range Transportation Plan: Approved by the Transportation Planning Board (TPB). The CLRP is a fiscally constrained regional plan that includes all transportation projects planned for the region over the next 25 years.

Monitoring and Enforcement

Use a combination of survey and field data.

Track goal achievement on a building/project level.

Monitoring data could be used to evaluate the transportation system.

Develop a system of meaningful incentives and disincentives to encourage compliance.

Recognize political and logistical factors to enforcement.

Thank You!

Questions?

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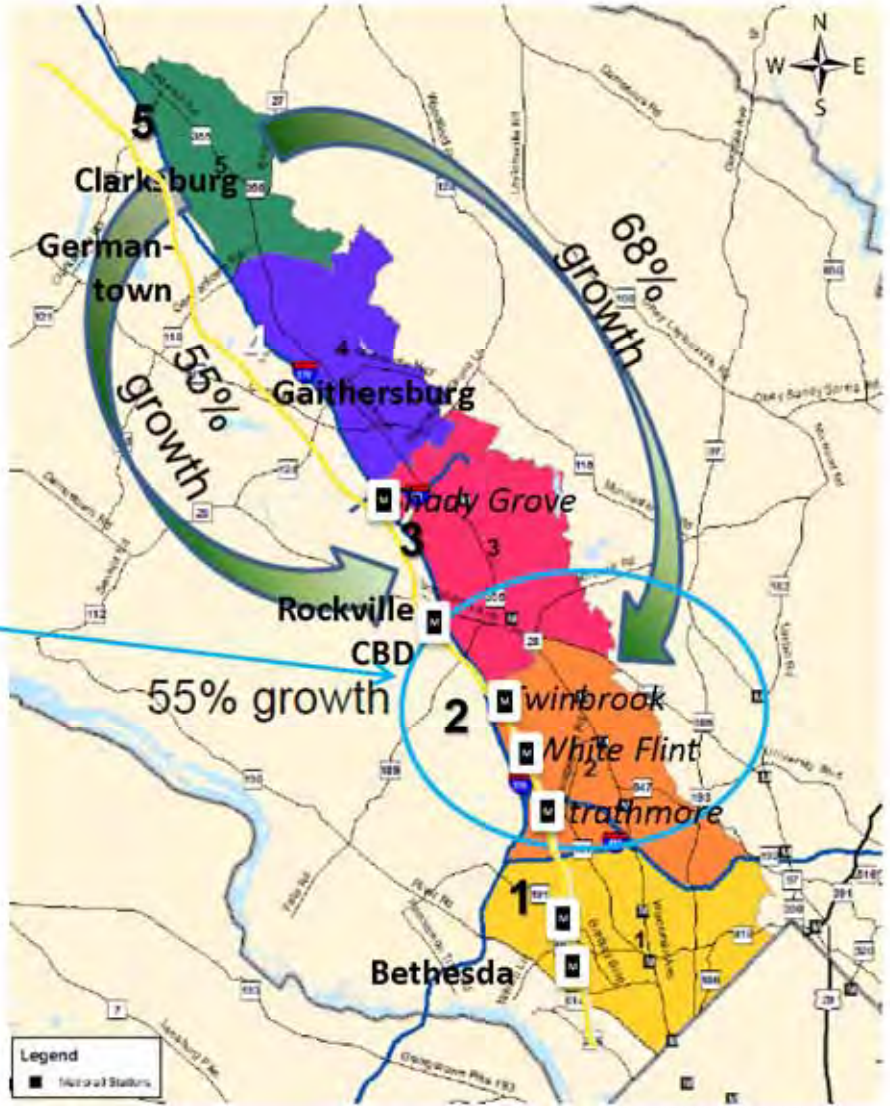
MD 355 Travel Patterns

Travel Patterns

- Intra-Study Area Trips forecast to grow by 27% by 2040
  - 504,000 in 2014
  - 639,000 in 2040
- Short trips prevalent: Largest numbers of trips within districts, or between adjacent districts
- Major market for future trips within the corridor is non-Commute trips
- Most trips in 2040 are associated with District 2

From/To District	1	2	3	4	5	Corridor Total
1	101,942	29,794	6,134	2,086	471	140,427
2	33,964	143,191	25,101	5,405	1,112	208,773
3	7,852	28,843	68,343	13,512	1,863	120,413
4	5,002	10,635	20,008	66,741	7,901	110,287
5	2,081	3,642	4,662	13,000	35,890	59,275
Corridor Total	150,841	216,105	124,248	100,744	47,237	639,175

Source: 2040 No-Build Analysis, MWCOG

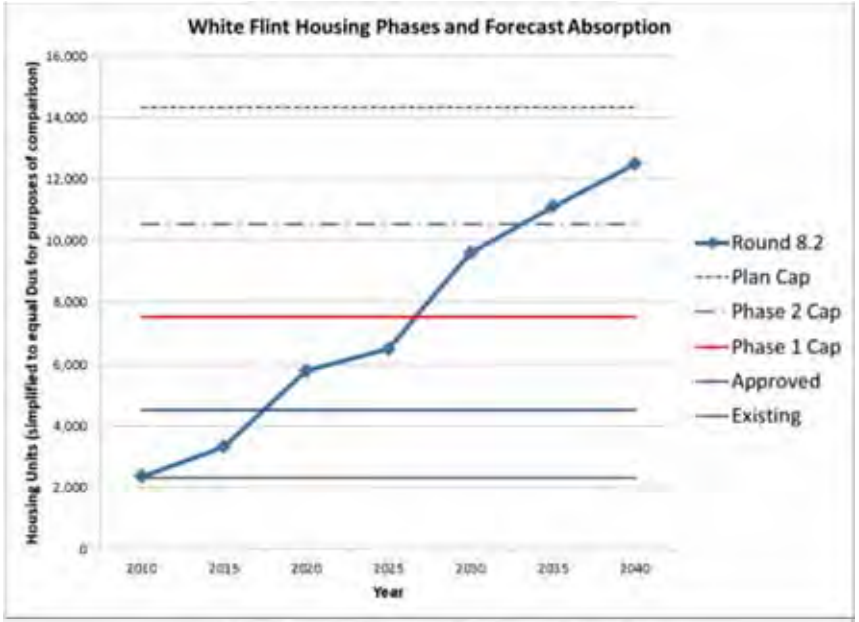


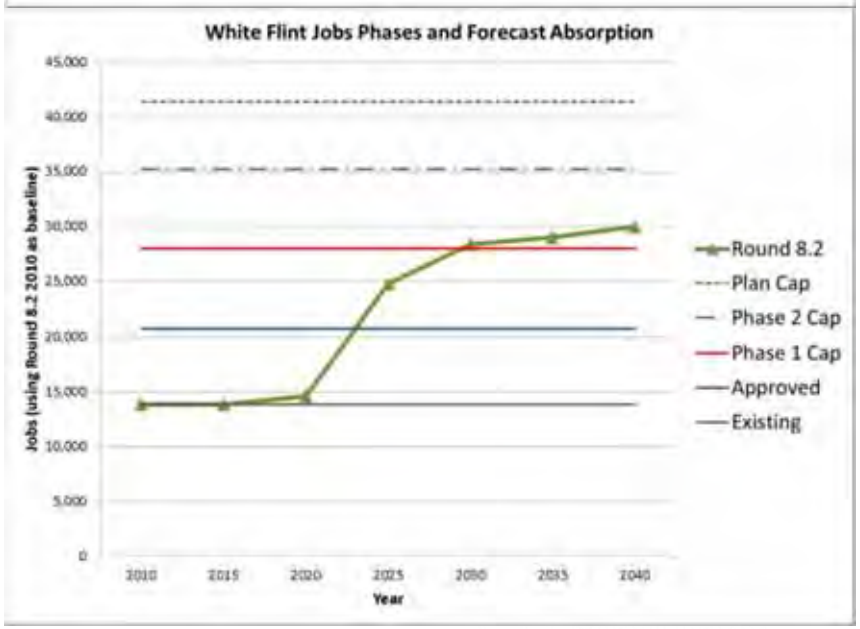
White Flint in 2040

- Sector Plan development will increase by 2040 (diagonal lines on charts):
  - From 2,400 housing units to 12,500 housing units
  - From 13,900 jobs to 30,000 jobs

- The Sector Plan Phase 1 ceilings (red horizontal line on charts) will likely be reached in about 10 years.

- This timing will facilitate TDM program development, funding, implementation, and maturation as Phase 1 completion approaches.





Survey Data

- **Auto Driver – 70%**
- **Auto pax – 3%**
- **Transit – 18%**
- **Non-motorized - 3%**
- **CDO/telework - 7%**

			Q2. Peak Period Commuting -- 6:30am - 9:29am		
			Peak Period Commuter	Off Peak Period Commuter	Total
Q3. Weekday Mode Split (Mon-Fri)	Drove alone	Trips	1,839	442	2,281
		Col%*	65.4%	57.0%	63.6%
	CP/VP driver	Trips	127	42	169
		Col%*	4.5%	5.4%	4.7%
	CP/VP rider	Trips	79	42	121
		Col%*	2.8%	5.4%	3.4%
	Ride-on	Trips	89	18	107
		Col%*	3.2%	2.3%	3.0%
	Metrobus/Commuter bus	Trips	78	54	132
		Col%*	2.8%	7.0%	3.7%
	Metrorail	Trips	251	53	304
		Col%*	8.9%	6.8%	8.5%
	MARC/VRE	Trips	79	34	113
		Col%*	2.8%	4.4%	3.2%
	Walked /bicycled	Trips	78	8	86
		Col%*	2.8%	1.0%	2.4%
	Compressed schedule day off	Trips	31	13	44
		Col%*	1.1%	1.7%	1.2%
	Teleworked	Trips	160	69	229
		Col%*	5.7%	8.9%	6.4%
	Total	Trips	2,811	775	3,586
		Col%*	100.0%	100.0%	100.0%

* Percentages based on Trips/Responses.