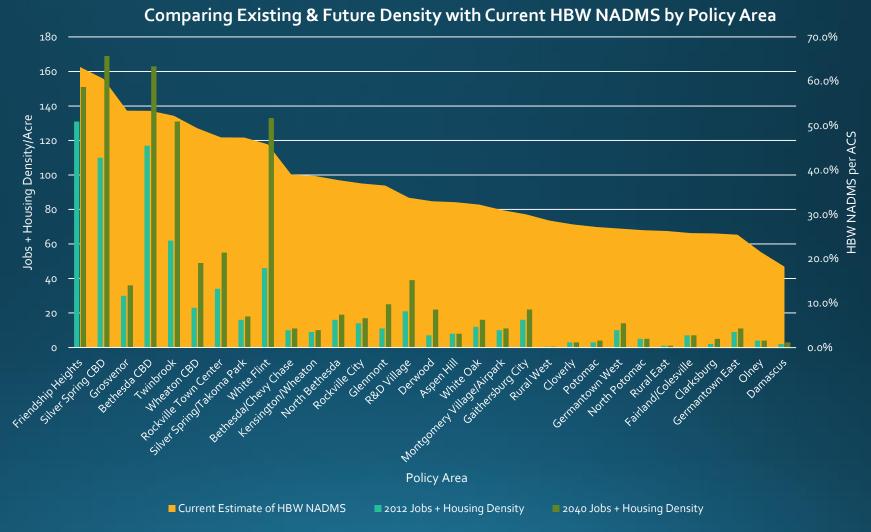
Subdivision Staging – New Concepts Discussion (Continued)

Planning Board Worksession February 18, 2016

Using Three Metrics to Group Places



Note: Relevant data for Germantown TC & Shady Grove MSPA unavailable.

Example Grouping of Policy Areas

Core, or Corridor with Metrorail

Friendship Heights Silver Spring CBD Bethesda CBD Twinbrook White Flint

Corridor with Metrorail, Purple Line, or CCT

Grosvenor Wheaton CBD Rockville Town Center Chevy Chase Lake Glenmont R&D Village

North Bethesda Bethesda / Chevy Chase Kensington / Wheaton Long Branch Takoma Langley

Silver Spring / Takoma

Residential Communities

Rockville City

Derwood

Aspen Hill

White Oak

MV/Airpark

Gaithersburg City

Cloverly

Potomac

Germantown West

North Potomac

Fairland Colesville

Clarksburg

Germantown East

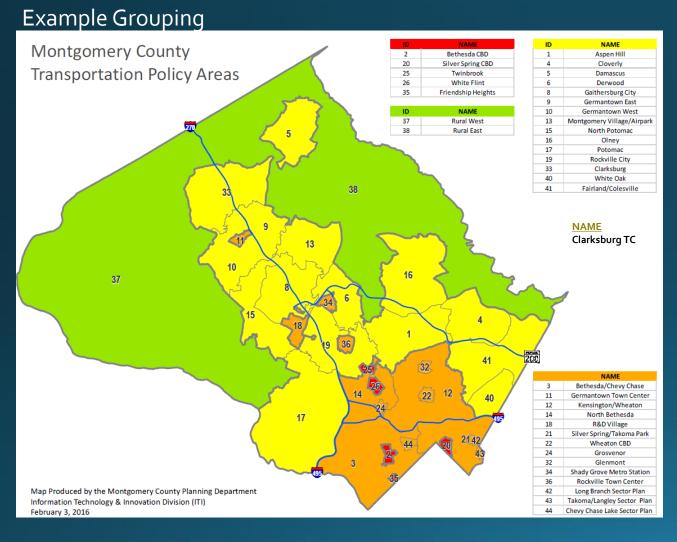
Olney

Damascus

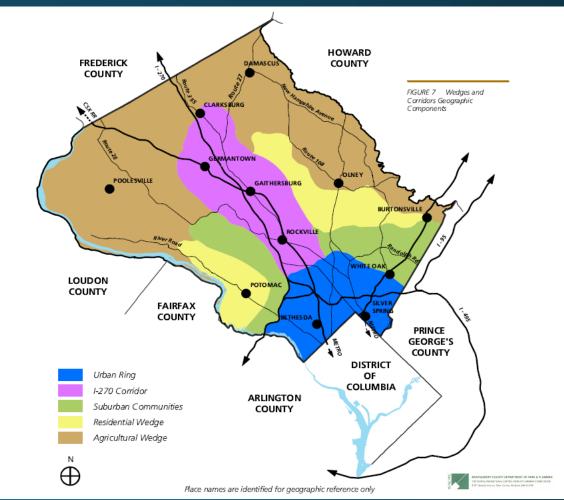
Rural Communities

Rural East **Rural West**

Comparing Example Grouping with 1993 General Plan Refinement



1993 General Plan Refinement



Core, or Corridor with Metrorail

Friendship Heights (1,800)

Silver Spring CBD (1,800)

Bethesda CBD (1,800)

Twinbrook (1,800)

White Flint (1,800)

| Area Test | Area Payment | Local Test | Local Payment | Impact Tax | Notes |
|-----------|--------------|---------------|------------------|---------------|---|
| None | None | None | None | Yes | All or Portion of Impact Tax Allocated to Policy Area? |

Corridor with Metrorail, Purple Line, or CCT

Grosvenor (1,800)
Silver Spring / Takoma (1,600)

Wheaton CBD (1,800)

North Bethesda (1,550)

Rockville Town Center (1,800)

Bethesda / Chevy Chase (1,600)

Chevy Chase Lake (1,600)

Kensington / Wheaton (1,600)

Glenmont (1,800)

R&D Village (1,450)

Long Branch (1,600)

Takoma Langley (1,600)

Germantown Town Center (1,600

Shady Grove (1,800

| | Screen | Eva | aluate | Mitigate | | Impact Tax | Mitigation Payment? |
|--------------|----------|---|-----------------------------|-------------------------|----------------------|---------------|---------------------|
| Test Type >> | Local | Local | Area | Local | Area | Area | |
| | 30 Trips | 1600 clv or 1800 clv for mspa | Job Access by Transit | 25% of Impact Tax | 25% of Impact Tax | Yes | Yes |

(1,800) – Denotes current CLV standard

Emerging TOD, with planned CCT

Clarksburg TC

| | Screen | Eva | aluate | M | litigate | Impact Tax | Mitigation Payment? |
|--------------|----------|-----------------|-----------------------------|-------------------------|----------------------|---------------|---------------------|
| Test Type >> | Local | Local | Area | Local | Area | Area | |
| | 30 Trips | 1500 clv | Job Access by Transit | 25% of Impact Tax | 25% of Impact Tax | Yes | Yes |

Residential Communities

| | Screen | Eva | aluate | Mitigate | | Impact Tax | Mitigation Payment |
|--------------|----------|----------|--------------------------|--|-------------------------|---------------|--|
| Test Type >> | Local | Local | Area | Local | Area | Area | |
| | 30 Trips | 1500 clv | Job Access by Transit | Mitigate Unless Road Code Area where design standards to promote ped/bike travel apply (25% of Impact Tax) | 25% of Impact Tax | Yes | No – Unless Road Code Area where design standards to promote ped/bike travel apply |

Rockville City (1,500)

Derwood (1,475)

Aspen Hill (1,475)

White Oak (1,600)

MV/Airpark (1,425)

Gaithersburg City (1,425)

Cloverly (1,450)

Potomac (1,450)

Germantown West (1,425)

North Potomac (1,450)

Fairland Colesville (1,475)

Clarksburg (1,425)

Germantown East (1,425)

Olney (1,450)

Damascus (1,400)

(1,500) – Denotes current CLV standard

Example of how different metrics can be applied ...

| <u>Metric</u> | <u>Measurement Tool</u> | <u>Status</u> | | Potential Application in Planning Department | | | | |
|--|---|----------------------------------|------|--|------------|-------------------------|----------------------------|-----|
| | | | Regu | ulatory (SSP) | Monitoring | Master Plan Analysis | Master Plan Test | |
| | | | Area | Local | | | | |
| Accessibility-Jobs & Person Trips Accessible within 45 Minutes by Mode | Travel/4 (for all modes) & GIS based analysis for transit, walk, & bike | Under Development | Yes | No | Yes | Yes | Yes | Yes |
| Arterial Roadway & Transit Mobility – TPAR | Travel/4 (for all modes) & Post Processing | Refinement Underway | No | No | Yes | Yes | No | Yes |
| Intersection Delay - Person Delay by Mode | CLV/Synchro/HCM | Application Under Development | No | Yes - Major Projects Only? | Yes | Yes | No | Yes |
| CLV Level | CLV/Synchro | Existing | No | Yes – In Specific Areas | Yes | Yes | Yes – in Specific Areas | Yes |

Setting a Threshold for Job Accessibility as the Area Test

One Potential Approach (Example Only)

Another Potential Approach (Example Only)

| Policy Area Average/Group Average + |
|-------------------------------------|
| Policy Area Average/ County Average |
| = Job Access Composite |

Job Access Composite > 2 = Policy Area that Passes Area Test Until Next Assessment (every 2 Years)

Variable is jobs in region within 45 minutes via transit (including walk access)

Theoretically, more Policy Areas pass as more high quality transit comes on line and/or more jobs locate in more transit accessible areas.

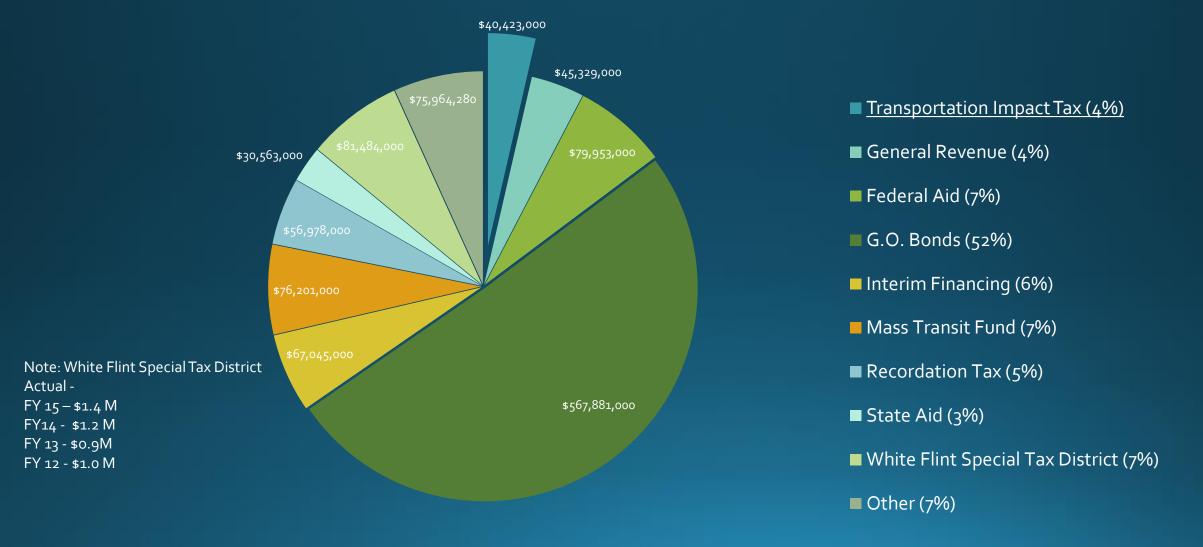
| Policy Area | 30 Min | 45 Min | 6o Min | 90 Min |
|-------------|--------|--------|--------|--------|
| Corridor | 40% | 50% | 60% | 70% |
| Residential | 30% | 40% | 50% | 60% |

Variable is <u>minimum</u> % of jobs in region accessible in X time by transit.

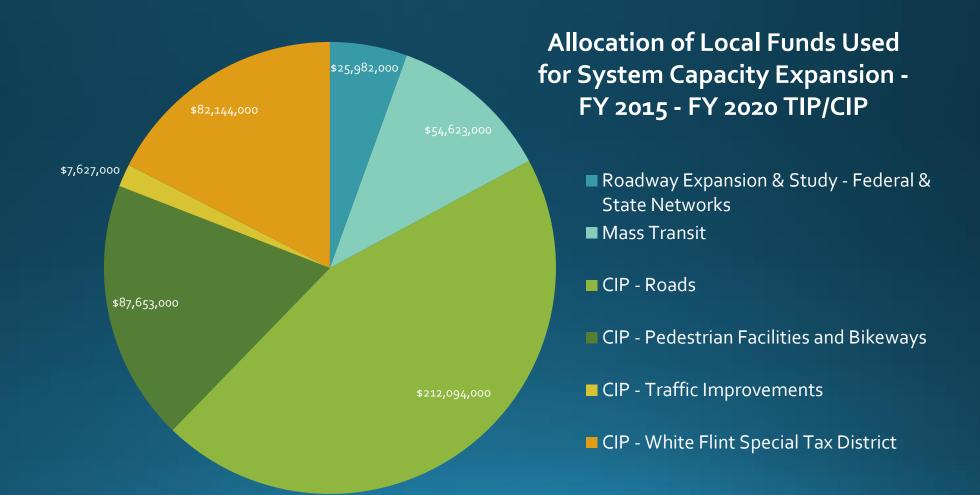
Policy Area has to exceed all four thresholds to "pass"

The Transportation Impact Tax (estimated at \$40.4 million over the six year CIP) funds only about 4% of <u>all</u> transportation projects in the CIP ...

Funding Sources for <u>All</u> Transportation Projects in FY 2015 - FY 2020 CIP



The Transportation Impact Tax (estimated at \$40.4 million) is a little less than 10% of the \$470 million in <u>local funds allocated for capacity expansion in the six-year CIP.</u>



Transportation Impact Tax Collections (source Mont. Co. Department of Finance)

| Fiscal Year ending in: | Transportation Impact Tax Collections for Projects – Includes Cities of Rockville & C | |
|------------------------|---|------------|
| 2004 | \$ | 5,245,203 |
| 2005 | \$ | 8,470,768 |
| 2006 | \$ | 6,252,060 |
| 2007 | \$ | 11,500,814 |
| 2008 | \$ | 9,743,841 |
| 2009 | \$ | 2,398,310 |
| 2010 | \$ | 3,812,138 |
| 2011 | \$ | 5,444,115 |
| 2012 | \$ | 6,352,401 |
| 2013 | \$ | 13,179,898 |
| 2014 | \$ | 20,274,781 |
| 2015 | \$ | 16,643,380 |

PAMR Payments FY 10 – FY 16

FY 10 - \$132,000

FY 11 - \$176,000

FY 12 - \$ 45,400

FY 13 - \$383,000

FY 14 - \$468,000

FY 15 - \$214,058

FY 16 - \$16,694

Total - \$1,435,452

How
Impact Tax
Was
Initially
Calculated
in 2007

| Α | County Capital Improvement Program (CIP) — Local \$ for Projects adding Network Capacity Expansion — 25 Year Estimate | | | | | | | |
|------------------|--|------------------------------------|---|---------------------------------------|---------------------------------------|---------------------------------------|--|--|
| В | New Residential Estin | _ | New Commercial Growth 25 Year Growth Estimate | | | | | |
| С | Resident | ial Units | Office Jobs | Retail Jobs | Industrial Jobs | Other Jobs | | |
| D | Single family | Multi-Family | Office SF | Retail SF | Industrial SF | Other SF | | |
| Е | Trip Rate | Trip Rate | Trip Rate | Trip Rate | Trip Rate | Trip Rate | | |
| F | New DailyTrips | New Daily Trips | New Daily Trips | New Daily Trips | New Daily Trips | New Daily Trips | | |
| G | Cost (A) Allocated by Trips (F) | Cost (A) Allocated by Trips (F) | Cost (A) Allocated by Trips (F) | Cost (A) Allocated by Trips (F) | Cost (A) Allocated by Trips (F) | Cost (A) Allocated by Trips (F) | | |
| | | | | | | | | |
| Est. Tax Rate | G/C | G/C | G/C | G/C | G/C | G/C | | |
| | | | | | | | | |

Current
Estimate
using 2007
Subdivision
Staging
Approach

| Variable | SF Residential | MF Residential | Office | Retail | Industrial | Other Commercial |
|--|--------------------|-------------------|--------------------|--------------------|-------------------|---------------------|
| Forecast Growth 2015-2040 | 11,218 DU | 71,419 DU | 128,822 Jobs | 30,697 Jobs | 12,180 Jobs | 11,418 Jobs |
| SF of Commercial | | | 32,205,500 | 12,278,800 | 5,481,000 | 5,709,000 |
| Vehicle Trip Gen Rate | 9.52 per DU | 6.65 per DU | 3.32 per job | 21.47 per KGSF | 2.77 per job | 2.77 per job |
| Daily Vehicle Trip Ends | 106,795 | 474,936 | 427,689 | 263,626 | 33,739 | 31,628 |
| % of Total Trip Ends | 8.0% | 35.5% | 32.0% | 19.7% | 2.5% | 2.4% |
| Proportional Allocation of \$1.6 Billion | \$129M | \$574M | \$517M | \$318M | \$41M | \$38M |
| Resultant Unit Impact Tax Rates | \$11,499 per DU | \$8,032 per DU | \$16.04 per GSF | \$25.93 per GSF | \$7.43 per GSF | \$6.69 per GSF |

Comparing 2007 and current forecast

| Variable | SF Residential | MF Residential | Office | Retail | Industrial | Other Commercial |
|---|-------------------|-------------------|--------------|----------------------|--------------|---------------------|
| Forecast Growth 2015- 2040 (Round 8.3) | 11,218 DU | 71,419 DU | 128,822 Jobs | 30 , 697 Jobs | 12,180 Jobs | 11,418 Jobs |
| Forecast Growth 2005- -2030 | 26,645 DU | 67,655 DU | 119,533 Jobs | 18,232 Jobs | 12,208 Jobs | 20,027 Jobs |
| SF of Commercial 2015 - 2040 | | | 32,205,500 | 12,278,800 | 5,481,000 | 5,709,000 |
| SF of Commercial 2005-2030 | | | 29,883,250 | 7,292,800 | 5,493,600 | 10,013,500 |
| Vehicle Trip Gen Rate 2015-2040 | 9.52 per DU | 6.65 per DU | 3.32 per job | 21.47 per KGSF | 2.77 per job | 2.77 per job |
| Vehicle Trip Gen Rate2005 2030 | 9.57 per DU | 6.72 per DU | 3.30 per job | 21.47 per KGSF | 2.77 per job | 2.77 per job |

Comparing 2007 and current forecast

| Variable | SF Residential | MF Residential | Office | Retail | Industrial | Other Commercial |
|---|-------------------|-------------------|---------|---------|------------|---------------------|
| Daily Vehicle Trip Ends 2015-2040 | 106,795 | 474,936 | 427,689 | 263,626 | 33,739 | 31,628 |
| Daily Vehicle Trip Ends 2005-2030 | 254,993 | 454,642 | 394,459 | 156,577 | 33,816 | 55,475 |
| % of Total Trip Ends 2015-2040 | 8.0% | 35.5% | 32.0% | 19.7% | 2.5% | 2.4% |
| % of Total Trip Ends 2005-2030 | 18.9% | 33.7% | 29.2% | 11.6% | 2.5% | 4.1% |
| Proportional Allocation of \$1,617 M – 2015-2040 | \$129M | \$574M | \$517M | \$318M | \$41M | \$38M |
| Proportional Allocation of 1,182M – 2005-2030 | \$223M | \$398M | \$345M | \$137M | \$30M | \$49M |

Comparing
2007 and
current
forecast
with current
or actual
rates

* Eventual adopted rate was an estimated 25% higher

| Variable | SF Residential | MF Residential | Office | Retail | Industrial | Other Commercial |
|--|--------------------|--------------------|-----------------------|-----------------------|----------------------|----------------------|
| Resultant Unit Impact Tax Rates – 2015-2040 | \$11,499 per DU | \$8,032 per DU | \$16.04 per GSF | \$25.93 per GSF | \$7.43 per GSF | \$6.69 per GSF |
| Resultant Unit Impact Tax Rates 2005-2030* | \$8,380 per DU | \$5,884 per DU | \$11.56 per GSF | \$18.80 per GSF | \$5.39 per GSF | \$4.85 per GSF |
| Current- General | \$13,966 per DU | \$8,886 per DU | \$12.75 per SF GFA | \$11.40 per SF GFA | \$6.35 per SF GFA | \$6.35 per SF GFA |
| Current- Metro Station | \$6,984 per DU | \$4,443 per DU | \$6.35 per SF GFA | \$5.70 per SF GFA | \$3.20 per SF GFA | \$3.20 per SF GFA |
| Current - Clarksburg | \$20,948 per DU | \$13,330 per DU | \$15.30 per SF GFA | \$13.70 per SF GFA | \$7.60 per SF GFA | \$7.60 per SF GFA |

Local Funds for Federal/State Network & Mass Transit Expansion

Note: This list excludes projects and funds related to the White Flint Special Tax District

| Project | CLRP/TIP | CIP | Total |
|---|--------------|--------------|--------------|
| | | | |
| Roadway Expansion & Study - Federal & State Network | | | |
| | | | |
| Watkins Mill Interchange @ I-270 | \$3,163,000 | | \$3,163,000 |
| MD 124 Corridor Study PE | \$5,000,000 | | \$5,000,000 |
| MD 355 @ Randolph Road Interchange PE | \$6,728,000 | | \$6,728,000 |
| Brookville By-Pass | \$9,467,000 | | \$9,467,000 |
| Montgomery Hills / MD 97 Study | \$1,624,000 | | \$1,624,000 |
| | | | |
| Sub Total | \$25,982,000 | | \$25,982,000 |
| | | | |
| Mass Transit | | | |
| | | | |
| MD ₅ 86 BRT Study | \$4,402,000 | | \$4,402,000 |
| Bethesda Metro South / Purple Line Entrance | | \$48,910,000 | \$48,910,000 |
| Montgomery Mall Transit Center | | \$1,311,000 | \$1,311,000 |
| Ride On Bus Replacement | | N/A | \$0 |
| | | | |
| Sub-Total | \$4,402,000 | \$50,221,000 | \$54,623,000 |

Local Funds for Road Projects That Expand Network Capacity

Note: This list excludes projects and funds related to the White Flint Special Tax District

| Project | CLRP/TIP | CIP | Total |
|--|----------|---------------|---------------|
| | | | |
| Roads | | | |
| | | | |
| Burtonsville Access Road | | \$2,412,000 | \$2,412,000 |
| Chapman Avenue Extended | | \$6,293,000 | \$6,293,000 |
| Clarksburg Transportation Connections | | \$10,000,000 | \$10,000,000 |
| Goshen Road South | | \$63,292,000 | \$63,292,000 |
| Montrose Parkway East | | \$50,785,000 | \$50,785,000 |
| Platt Ridge Dive Extended | | \$3,180,000 | \$3,180,000 |
| Snouffer School Road North Webb Tract | | \$12,268,000 | \$12,268,000 |
| Snouffer School Road | | \$20,539,000 | \$20,539,000 |
| State Transportation Participation (Local Funds) | | \$5,673,000 | \$5,673,000 |
| Subdivision Road Participation | | \$6,914,000 | \$6,914,000 |
| Facility Planning - Transportation | | \$10,713,000 | \$10,713,000 |
| Ripley Street | | \$730,000 | \$730,000 |
| Bethesda CBD Streetscape | | \$7,116,000 | \$7,116,000 |
| East Gude Drive | | \$2,586,000 | \$2,586,000 |
| Seminary Road Intersection Improvements | | \$7,258,000 | \$7,258,000 |
| Wapakoneta Road Improvements | | \$945,000 | \$945,000 |
| Public Facilities Roads | | \$600,000 | \$600,000 |
| Maryland / Dawson Extended | | \$250,000 | \$250,000 |
| Rainbow Drive - Thompson Road Extended | | \$540,000 | \$540,000 |
| | | | |
| Sub-Total | | \$212,094,000 | \$212,094,000 |

Local Funds for Ped/Bike and Other Projects That Expand Network Capacity

Note: This list excludes projects and funds related to the White Flint Special Tax District

| Project | CLRP/TIP | CIP | Total |
|--|--------------|---------------|---------------|
| | | | |
| Pedestrian Facilities / Bikeways | | | |
| , and the second | | | |
| Capital Crescent Trail | | \$77,356,000 | \$77,356,000 |
| Metropolitan Branch Trail | | \$10,297,000 | \$10,297,000 |
| | | | |
| Sub-Total | | \$87,653,000 | \$87,653,000 |
| | | | |
| Traffic Improvements | | | |
| | | | |
| Intersection & Spot Improvements | | \$7,224,000 | \$7,224,000 |
| Redland Road | | \$403,000 | \$403,000 |
| | | | |
| Sub-Total | | \$7,627,000 | \$7,627,000 |
| | | | |
| TOTAL - LOCAL FUNDS FOR NETWORK EXPANSION | \$30,384,000 | \$357,595,000 | \$387,979,000 |