

# Overview of Transportation Demand Management Montgomery County, Maryland

Presentation to  
OEA 2007 Growth Summit  
December 13, 2007



**Sandra L. Brecher, Administrator  
Montgomery County Commuter Services**

**Ronald E. Wilson, Director  
NIH Division of Facilities Planning**



# Montgomery County, MD

## Key Info (2007 data)



- Urbanized suburb located north of Washington, D.C.
- Population: 968,000      Households: 360,000
- Employment:
  - **518,000 total jobs; Unemployment <3%**
  - **Largest sector: Professional & Business Svcs: 106,000 jobs**
  - **Federal: 13 agencies with 68,000 employees**
  - **315,000 of County's 527,000 employed residents (60%) work in the County**
- 2020 Projections : 107,000 new residents  
100,000 new jobs



# Montgomery County, MD

## Bracing for BRAC

- **BRAC: Consolidation of Walter Reed Army Medical Center (WRAMC) & National Naval Medical Center (NNMC) at NNMC campus**
- **Creating Walter Reed National Military Medical Center (WRNMMC)**
  - Site just N of Bethesda, one of the County's most highly-developed urban centers.
  - Directly across from NIH main campus w/ 18,000 employees
- **NNMC (2006 data)**
  - 4,500 staff
  - 8,000 admissions, 455,000 clinic visits annually (2006 data)
- **BRAC to add**
  - 1,400 - 2,500 additional personnel
  - Double the number of visitors = one million/year
- **Medical Center Metro Station located on NIH Campus**

# Commuter Services



- **Commuter Services Mission: Implement TDM**  
**Promote use of Alternative Modes to Single Occupant Vehicles (SOVs) to address congestion & air quality concerns**
- **TDM = Transportation Demand Management**  
**“Any method of reducing demand for road capacity (primarily) during the peak period . . .”**  
**(Enabling legislation)**
- **Peak Period Focused**
- **Work Trip Focused = Employer/Developer focused**  
**– Partnering w/ business/employment community**



**[www.montgomerycountymd.gov/commute](http://www.montgomerycountymd.gov/commute)**

# Why TDM?



- **Helps Communities**

- Address traffic congestion & air quality concerns
- Make better use of infrastructure – More bang for the buck!
- Provide more sustainable, economical land use patterns
- Improve workforce access & health
- Address Global Warming/Climate Change concerns

- **Helps Businesses**

- Recruit & retain employees - Help them find “*Better Ways to Work*”
- Reduce cost of commuting-related & other travel delays
- Reduce cost of office space & parking
- Reduce taxes

- **Helps Employees/Residents**

- Reduce cost & stress of commuting, parking, gas, multi-car ownership
- Make better use of time
- Improve health, balance work & family concerns
- Reduce taxes

# Commuter Services

- **Backbone of TDM in Montgomery County is Transit**
  - All types of transit, regional & local, including:
    - Metrorail, Metrobus - regional
    - Ride On bus - local
    - MTA buses, MARC Commuter Rail - state
- **Promote all other commuting options (“modes”) as well, including:**
  - **Car/Van Pooling**
  - **Biking**
  - **Walking**
  - **Telework**

# Key Facts on Transit Infrastructure: Metro Ridership in Montgomery County

- **Metrorail Red Line: 85,000 Total Boardings on an average weekday in Montgomery County**
- **Two most heavily-used stations – approx. 15,000 boardings/weekday**
  - **Silver Spring**
  - **Shady Grove**
- **Next two most heavily-used stations – approx. 10,000 boardings/weekday**
  - **Bethesda**
  - **Friendship Heights**
- **Medical Center Metro Station**
  - **approx. 5,000 boardings/weekday**

# Key Facts on Transit Infrastructure: Bus Service in Montgomery County

## Metrobus (In Montgomery County)

- 160 Peak Period Buses
- 21 Lines - 38 Routes
- Annual Ridership – 15 Million
  - Approx 60,000 Riders (Boardings) Each Weekday
- Annual Hours - 440,000

## Ride On (Montgomery County's Local Bus System)

- 300 Peak Period Buses. Total Fleet = 370 Buses
- 81 Routes
- **Annual Ridership – 28 Million +**
  - **Over 90,000 Riders (Boardings) Each Weekday, OR 2 Million Riders/Month**
  - **Ridership Has Grown 23% Over the Past 3 Years**
- Annual Hours - 1 Million Plus

# Ride On – Investing In Technology

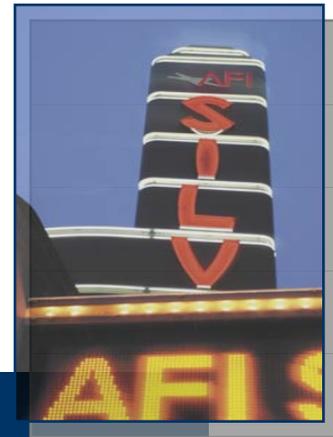


- **Advanced Transportation Management Center**
  - Co-Location of Traffic & Transit Management
  - Integration of Operations & Management
  - Signal Prioritization
  - Computer Aided Dispatch
  - Internet – Provides 24/7 Access to Information
- **Additional Elements**
  - AVL – Automated Vehicle Locator System
  - Real-Time Bus Schedule Info at Stops – “Signs of the Times”
  - Ride On Now 100% Accessible
  - Bike Racks – On All Ride On Buses
  - SmarTrip (Electronic Fare Collection)
    - –SmarTrip Fare Boxes on All Ride On Buses
  - E-Commerce - Fare Media Sales; SmartBenefits



- **Create and/or promote amenities & “adjuncts” to make it easier, more attractive, sensible to use commute options**
  - **Bus Shelters, Benches**
  - **Good Lighting, Landscaping, Security**
  - **Pedestrian Amenities/Safety**
  - **Clear, Easy-to-Use Information**
    - **Static Information**
    - **Dynamic Information – e.g., Real Time Information**
  - **Parking Management (“Parking Parity”)**
  - **Car Sharing**
  - **Bike Routes/Racks/Lockers/Showers**
  - **SmarTrip; Smart Benefits**
  - **Guaranteed Ride Home (GRH)**
  - **Other Programs & Services**

# TMDs – Transportation Management Districts



- **Efforts concentrated in four TMDs**
  - Silver Spring
  - Bethesda
  - Friendship Heights
  - North Bethesda
  - Newly adopted: Greater Shady Grove TMD
- **Mode Share & Other Goals established for each TMD in Master Plans & Growth Policy**
  - Goals Range from 26% - 46% Non-Auto Driver Mode Share
- **Advisory Committees for each TMD provide input from diverse perspectives**
  - Employers
  - Residents
  - Developers
  - Public agencies
- **CSS Services are available (& provided by staff) to any employer & any employee anywhere in the County – not just within TMDs.**
  - Over 2,200 employers with about 200,000 employees are involved in some way in Commuter Services programs

# TMD Funding Sources

- **Parking Management Revenues**
  - Parking Lot Districts, Other Managed Parking
- **Developer Parking Reduction Program Fees**
  - (Developer Option under Zoning Ordinance)
- **Transportation Management District Fees**
- **Other Developer & Municipal/State Contributions**
- **General Fund**

# TMD Law (Bill 32-02)

## Requirements for Employers of 25+ Employees



- Downtown Silver Spring
  - 80 employers with 8,000 employees
- North Bethesda
  - 260 employers with 24,000 employees
- Results to date:  
400 + TMPs Filed  
(Employer-filed Traffic Mitigation Plans)
- Downtown Bethesda
  - 120 employers with 12,000 employees
- Friendship Heights
  - 30 employers with 4,000 employees
- 44,000 Employees at Worksites Affected by Bill 32-02

# Working with Employers to Address Congestion

## Requirements of Bill 32-02

1. Develop a Traffic Mitigation Plan (TMP)
  - Template provided
  - TMD staff provide assistance
2. Actively implement their TMP – Working with TMD staff
3. Participate in CSS's Annual Commuter Survey
4. Submit an annual report of activities
  - Template provided
  - TMD staff provide assistance



# Commuting Benefits for Employers & Employees

- Transit subsidies
  - Metrorail
  - Metrobus
  - Ride On
  - MARC
- Maryland tax credit – 50% back
- Federal & State tax benefits
- Pre-tax Metrochek
- Recognition – e.g.,  
Transportation Awards Ceremony





# Super Fare Share

County Transit Subsidy Program Available w/in TMDs

- \$110/month/employee maximum benefit
- Year 1 = \$1 Deal
  - Employer pays just \$1/month/employee
  - County pays up to \$109/month/employee
- Years 2-5 Employer & County 50-50
- Years 6 – 9 Progressively greater employer contribution & reduced County contribution
  - Year 6: Employer 60%/County 40%
  - Year 7: Employer 70%/County 30%
  - Year 8: Employer 80%/County 20%
  - Year 9: Employer 90%/County 10%



# Basic Fare Share

Transit Subsidy Program Available Throughout the County

- \$110/month/employee maximum benefit
  - Year 1 - Employer & County 50-50
  - Year 2 - Employer 60%, County 40%
  - Year 3 – Employer 70%, County 30%
  - No further contribution from County beyond Year 3

# Developer Agreements

- Traffic Mitigation Agreements (TMAGs)
  - 40 TMAGs pending now/100s completed
- Negotiated with developers based upon conditions of preliminary plan approval established by Planning Board
- Baseline agreements require relatively basic efforts by developer; if greater trip reduction necessary, more strategies required

# Basics:

## Employer & Developer Cooperation

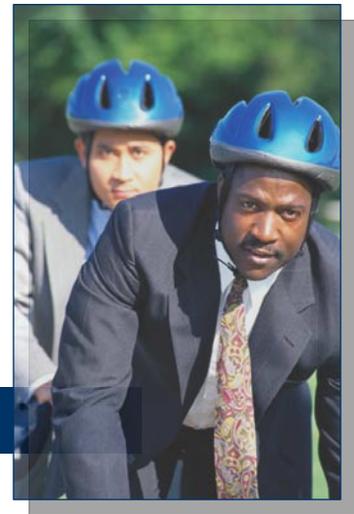
- **Appoint TBC** – Designate a Transportation Benefits Coordinator (TBC) to assist employees/residents at the site to exercise commute options and to serve as a point of contact for TMD/CSS staff.
- **Post/Distribute Information** for tenants/employers and employees on commute options, programs and services available in the TMD/that part of County.
- **Facilitate use of space** at the site on a periodic basis (by prior arrangement) for marketing and promotional activities of the TMD/CSS staff – to educate & inform employees about options.

# Basics:

## Employer & Developer Cooperation

- **Designate permanent information display** areas in lobbies of building(s) or other prominent and highly-used locations for commute options information.
- **Participate in Survey** – Facilitate tenant/employer and employee/resident participation in the Annual Commuter Survey.
- **Annual Report** -- Compile information and monitor results of the traffic mitigation program elements at the development/building.

# A Higher Level: Enhanced Employer & Developer Participation



## Examples

- **Car/van pool incentives** – parking spaces in preferential locations
- **Car Sharing incentives** (= short term rental program) – reserve parking spaces in preferential, visible locations; provide membership, rental discounts
- **Bicycle incentives** – weather-protected, secure racks/lockers sufficient to meet demand; lockers/showers; bicycle purchase discounts; safe, well-lit paths
- **Walking incentives** – attractive, well-lit, safe sidewalks/paths; shoe discounts
- **Transit and/or vanpool subsidies** for employees and/or residents at the site
- **Contribution to costs of additional transit service** - e.g., buses
- **Parking supply limits** (constrained supply)
- **Parking charges/Parking parity** – equalizing cost and support for parking and transit. Goal: Level the Playing Field
- **Transit Centers; Bus super-shelters** (heated, lit, higher standard of amenity);
- **Real Time Signs/Systems** – to let riders know what time the bus will be there
- **Provision of circulator shuttle** connecting with transit, other uses
- **Telework incentives** – laptop & other equipment discounts
- **Flexible or Staggered Work Hours, Compressed Work Week**
- **Live Near Your Work** – Mortgage or Rent Incentives

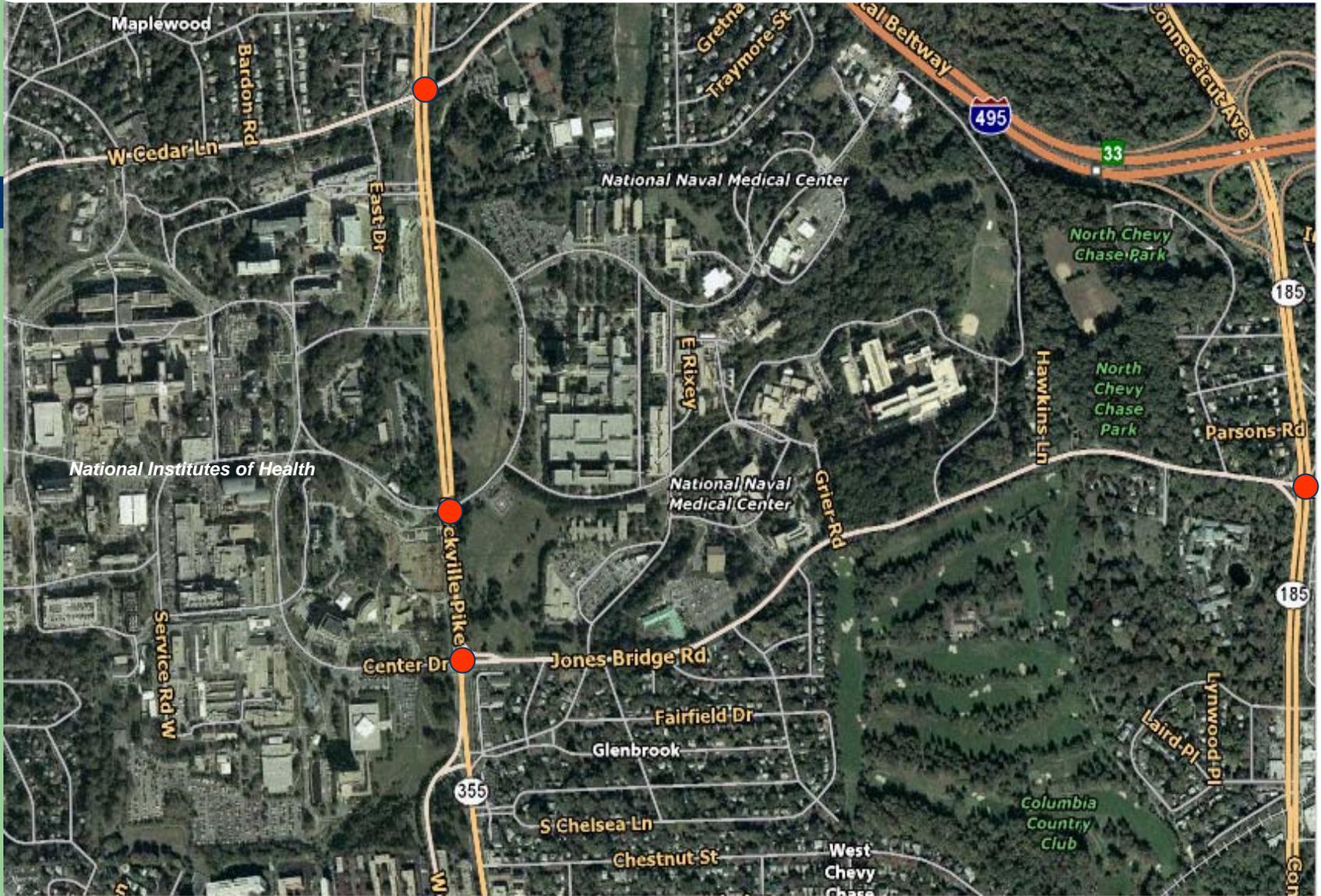
# CSS Partners with NIH, NNMC, & Other Federal Agencies to Help Implement TDM Strategies

- **Medical Center TMO – Examples of Recent Efforts**  
[= NIH, NNMC, Suburban Hospital]
  - Brochures on transportation alternatives created/published
  - Express bus services to the NIH & NNMC campuses promoted through ads & direct mail
  - Kiosk provided with transportation information software
  - Fixed information displays provided
  - Staffing provided to conduct outreach events for employees
  - Promotional items & materials provided (including for GRH), contests conducted to market programs
  - Bicycle map for Med Center area under development
  - Annual Commuter Survey conducted

# National Institutes of Health Transportation Demand Management



# NIH and National Naval Medical Center (Nearby intersections Currently with E or F Level of Service)



# NIH Bethesda Master Plan 2003 Update

## Factors Driving Campus Development

- Need to revitalize aging facilities and infrastructure
- Need to provide modern, flexible research and support facilities to accommodate existing and new research initiatives
- Need to keep pace with new technologies
- Need to provide supportive work environment
- Need to optimize use of Federal property
- Need to accommodate new security requirements

## Factors Affecting Campus Development

- **Traffic & Transportation**
- Utilities & Air Quality
- Stormwater Management
- Power Plant limitations
- Site size, shape and topography
- Historical and archaeological resources
- Ability to build incrementally
- Neighborhood compatibility and community involvement
- Federal and State compliance and approvals

# NIH Traffic Management Plan - Parking

**MOU between NCPC, MNCPPC and the NIH in May, 1992. This MOU established Ongoing, Short- and Long-Term Strategies as follows:**

- On-going: Semi-Annual Traffic Surveys, Development of Goals for Trip Reduction, Development of Strategies to Minimize Vehicle Work Trips and Discourage Single-Occupancy Commuting.**
- Short-Term: Establish an ETSO, Place CP/VP/HC in close proximity to intended destinations (and create disincentives for CP violations), Improve NIH Shuttle Bus Service, Further Promote Flexitime/Flexitour, Pay Parking for Visitors.**
- Long-Term: Maintain the parking supply at no greater than 0.5 space per NIH employee, Reestablishment of the 250' buffer zone, Implement an internal loop road, Satellite Parking Lots, and failing all attempts to achieve stated TMP goals, establish pay parking for employees as a last resort.**

## Parking Ratio – 2002 through 2020

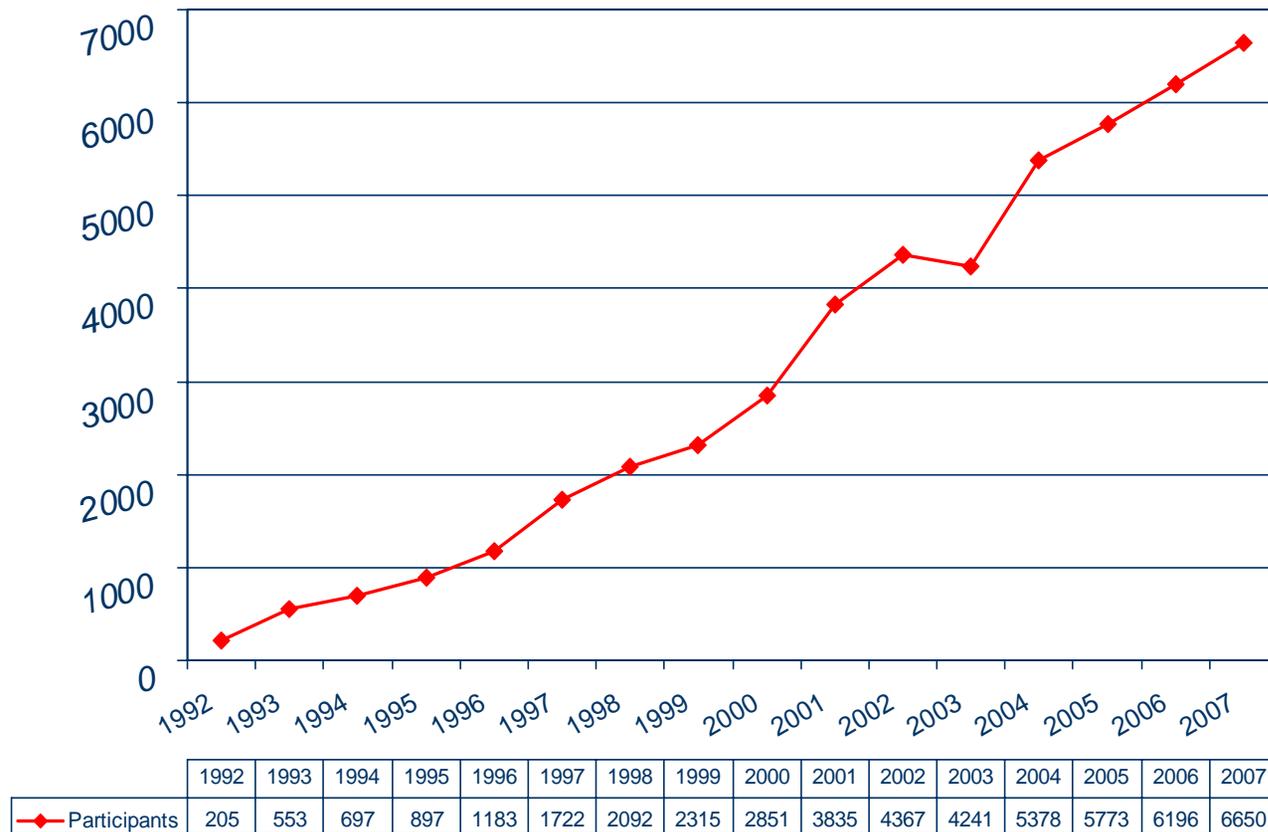
(Growth Based on Bethesda Master Plan 2003 Update)

Year	Population (Projected)	Parking Spaces	Parking Ratio
2002	17,500	8,319	0.48%
2005	17,900	8,304	0.46%
2006-2010	19,520	8,304	0.43%
2011-2015	20,411	8,904	0.44%
2016-2020	22,024	10,304	0.47%

# Current Campus Transportation Demand Management Measures

- Carpools
  - 166 Registered Carpools/368 Carpoolers
  - 452 Spaces
  - Preferred Lots/Available until 9:30
- Van Pools
  - 12 Registered Vanpools/180 Vanpoolers
  - Reserved Spaces in Lot of Choice
- Transhare
  - 6,650 Current Participants
  - Up to \$110 per month transit subsidy
  - Currently transferring participants from Metrocheks to SmarTrip

# NIH Transshare Program



# NIH Traffic Management Plan - Parking

## Future Issue—Coordination with NCPC on Campus Parking

National Capital Planning Commission is recommending that federal agencies locate near public transportation routes, where possible, to reduce parking requirements further.

Recent tightening of NCPC's parking standards at federal facilities in the region impact NIH's agreed upon parking ratio of 0.5 space per employee. New rate is 0.33 space per employees. NIH is currently at a 0.46 ratio. Even with all construction projects and final population increase until 2020 as approved in Master Plan, NIH would remain at 0.47.

To meet this NCPC recommendation of 0.33 spaces, NIH would need to reduce current parking space inventory by approximately 1,804 spaces.

Currently ORS/ORF working with NCPC to address this issue as NIH continues to meet all TMP goals from 1992.

# Additional Resources

[www.montgomerycountymd.gov/commute](http://www.montgomerycountymd.gov/commute)

<http://dtts.ors.od.nih.gov/transportation.htm>

Other TDM Resources:

[www.vtpi.org](http://www.vtpi.org)

[www.nctr.usf.edu/clearinghouse](http://www.nctr.usf.edu/clearinghouse)

[www.actweb.org](http://www.actweb.org)

Montgomery County's BRAC website:

<http://www.montgomerycountymd.gov/brctmpl.asp?url=/Content/EXEC/BRAC/index.asp>

# Contacts

<p><b>Montgomery County Commuter Services</b> Division of Transit Services, DPWT 8401 Colesville Road Suite 150 Silver Spring, MD 20910 <a href="http://www.montgomerycountymd.gov/commute">www.montgomerycountymd.gov/commute</a></p>	<p><b>Sandra L. Brecher, Administrator</b> (301) 565-5701 <a href="mailto:sandra.brecher@montgomerycountymd.gov">sandra.brecher@montgomerycountymd.gov</a></p>
<p><b>National Institutes of Health</b> Division of Facilities Planning, ORF &amp; Division of Travel and Transportation Services, ORS 31 Center Drive, Room 3B44 Bethesda, MD 20892 <a href="http://www.orf.od.nih.gov">www.orf.od.nih.gov</a></p>	<p><b>Ronald E. Wilson, Director, Division of Facilities Planning</b> <a href="mailto:wilsonron@ors.od.nih.gov">wilsoron@ors.od.nih.gov</a></p> <p><b>Tom Hayden, Director, Division of Travel and Transportation Services</b> <a href="mailto:haydent@ors.od.nih.gov">haydent@ors.od.nih.gov</a></p>