

Downtown Columbia Transportation Demand Management Plan

Final Draft May 2018

Prepared by:

Howard County Office of Transportation and the Downtown Columbia Partnership



With assistance from:



Executive Summary

The Downtown Columbia Plan includes Transportation Demand Management (TDM) as one element of the overall approach to managing Downtown Columbia's growth. TDM refers to a toolbox of strategies used to manage the demand for travel. TDM strategies encourage people to take transit, rideshare, walk, bike, and telework, thereby reducing the number of motor vehicles using the road network. Effective TDM can reduce the need for new road infrastructure such as additional lanes, intersection widenings, and interchanges that make a place less walkable.

The Howard County Office of Transportation (OoT) has developed this Downtown Columbia Transportation Demand Management Plan (TDMP) in conjunction the Downtown Columbia Partnership (DTCP). The TDMP provides a framework and action steps for TDM in Downtown Columbia, but Howard County and the DTCP envision that the framework and the actions will evolve over time as more is learnt about which types of TDM strategies are most effective in Downtown Columbia, and as modes of transit and transportation continue to evolve. Columbia is unique, and the strategies that work effectively in other places, may not work well here.

TDM is a very important component of the Downtown Columbia Plan. The traffic study¹ that accompanied the Downtown Plan includes a trip generation reduction of 15 percent for TDM. Absent this reduction the amount of development envisioned under the Downtown Plan could cause congestion that would exceed the congestion standard established in the Plan and/or road improvements, some of which will be very costly, may be needed sooner than envisioned. Conversely, if the 15 percent trip reduction can be exceeded, congestion will be less than envisioned – allowing for more free-flowing traffic, costly road improvements can be deferred or, potentially eliminated, and the amount of land needed for parking can be reduced.

The TDMP proposes the following:

Property owners

Property owners with site development plans (SDPs) proposed under the Downtown Columbia Plan will submit property-specific TDM “statements” consistent with this Downtown Columbia TDMP as part of required traffic impact studies. The TDM statements will expand beyond the current TDM statements required in traffic studies to include metrics such as transportation mode-split objectives, pedestrian and bicycle trip objectives, vehicular trip reduction objectives, action plans to achieve the objectives, identification of responsible implementation parties, and methods and timelines for monitoring and reporting. The OoT will review and approve property-specific statements.

Beginning three years after a use and occupancy permit is issued, property owners with SDPs approved under the Downtown Columbia Plan will a submit monitoring report to the OoT for review/approval. The monitoring report will review the TDM performance of the property

¹ Columbia Town Center Generalized Traffic Study, September 2008.

compared to the objectives set forth in the TDM statements submitted with the traffic study and make any necessary adjustments to the mode split or and numerical trip reduction objectives and to the implementation plan. After a site has achieved its TDM goals for two consecutive reporting periods no further monitoring will be required, unless the tenant mix or the SDP changes substantially.

Howard County

Howard County will create a database to track all TDM statements and monitoring reports. The objectives of the tracking will be to 1) assess the ongoing cumulative success of the property-specific TDM statements towards meeting the 15 percent trip reduction goal in the 2008 Columbia Town Center Generalized Traffic Study; 2) use the results from this assessment to inform traffic impact studies including trip generation, parking and TDM statements for new proposed development downtown; and 3) learn which TDM measures are more proving most effective so as to inform future property-specific TDM statements.

Howard County will continue to make improvements that make it easier to walk and bike downtown, and to use transit and other non-single occupancy vehicle methods to get into and out of downtown. To promote and build TDM the Howard County Office of Transportation will take the lead on: meeting with property owners/tenants to market and promote TDM programs; reviewing developer TDM statements, and TDM monitoring reports; tracking downtown TDM performance over time; maintaining a website for downtown TDM, including a database of TDM statements and monitoring reports; serving as an information source/ clearinghouse for TDM best practices; exploring other TDM-related options such as car-sharing; planning, and advocating for, and advancing the transit and transportation infrastructure and operations connecting to, from and within Downtown Columbia

Downtown Columbia Partnership

The DTCP will: promote TDM and TDM programs to DTCP members; facilitate meetings between the OoT and existing or prospective downtown businesses; work with owners of properties that were developed prior to the Downtown Columbia Plan to encourage them to adopt TDM; advocate for improvements to walking, biking, and transit, including wayfinding; provide funding support for TDM from Community Enhancement, Program and Public Amenities (CEPPA) 25 revenues².

The County should update this Downtown Columbia TDMP in 2024 evaluating the success of the Plan and recommending adjustments/changes as warranted.

² CEPPAs are a schedule of implementation actions required under the Downtown Columbia Plan

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1. Background and Purpose

Howard County adopted the Downtown Columbia Plan in 2010 to guide the revitalization and redevelopment of downtown Columbia. The Plan envisions downtown Columbia evolving into a dense, mixed-use area with up to 6,244 housing units, 4.3 million square feet of office, 640 hotel rooms, and 1.25 million square feet of retail, together with institutional, civic, cultural, recreation and entertainment uses. As development increases so too will the demand for travel trips by people wanting access to, from, and within downtown. Downtown Columbia faces the challenge of creating an attractive, walkable area while at the same time providing for and managing a large increase in trips by multiple transportation modes; motor vehicles, transit, walking, and biking.

The Downtown Plan includes Transportation Demand Management (TDM) as one element of the overall approach to managing Downtown Columbia's growth. TDM refers to a toolbox of strategies used to manage the demand for travel. TDM strategies encourage people to take transit, rideshare, walk, bike, and telework, thereby reducing the number of motor vehicles using the road network. Effective TDM can reduce the need for new road infrastructure such as additional lanes, intersection widenings, and interchanges that make a place less walkable.

The Downtown Columbia Plan (Section 2.4) called for the County to develop a Downtown Columbia Transportation Demand Management Plan (TDMP) that would recommend programs and policies aimed at increasing the use of transit, walking, bicycling and ride-sharing for both commute and non-commute trips. The Plan recommended the County prepare the TDMP in conjunction the Downtown Columbia Partnership (DTCP), General Growth Properties³ and other downtown institutions and employers.

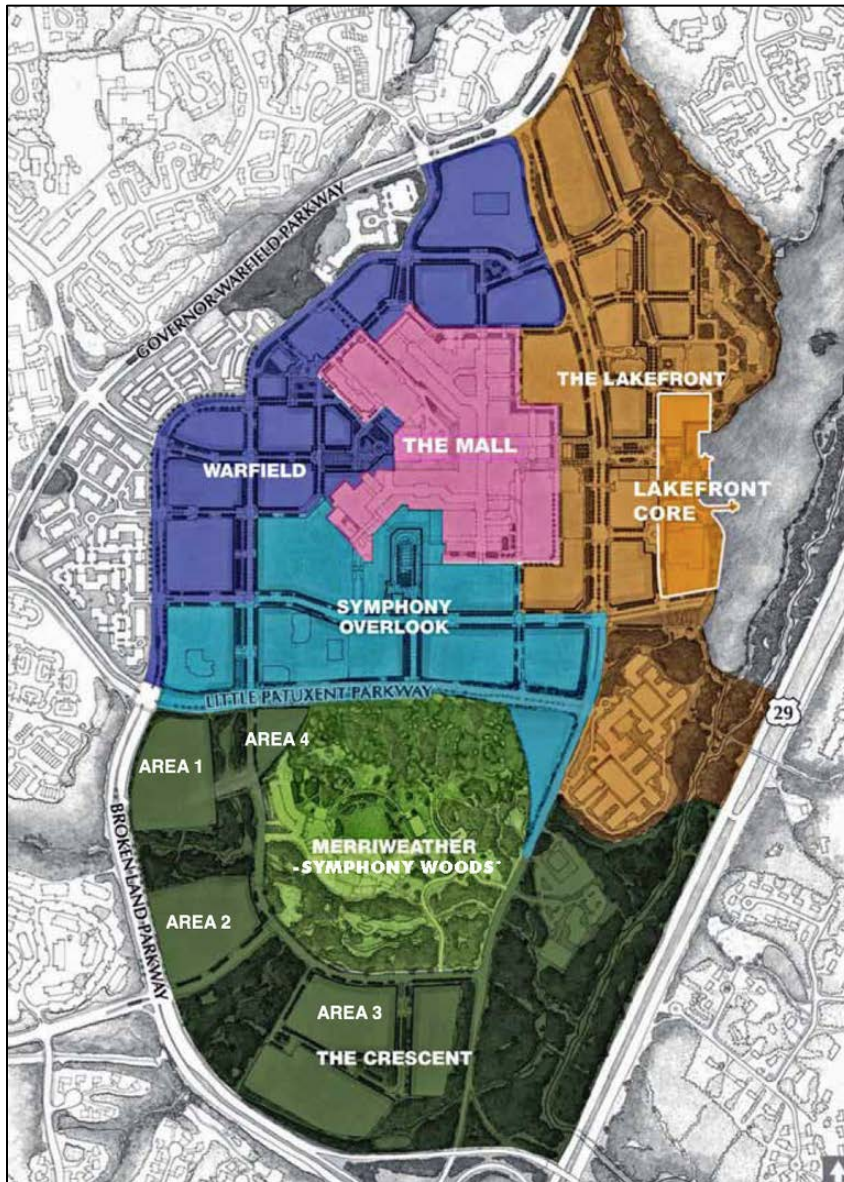
The TDMP set forth in this document responds to the Downtown Columbia Plan's recommendations. The TDMP provides a framework and action steps for TDM in downtown Columbia, but Howard County and the Downtown Columbia Partnership envision that the framework and the actions will evolve over time as more is learnt about which types of TDM strategies are most effective in Downtown Columbia, and as modes of transit and transportation continue to evolve. Columbia is unique, and the strategies that work effectively in other places, may not work well here. The Downtown Plan envisioned this evolution:

“As redevelopment progresses, the TDMP may be revised over time to reflect changing conditions.” (page 43).

For purposes of this TDMP, downtown Columbia is as defined in the Downtown Columbia Plan, that is generally bounded by Governor Warfield Parkway to the north, Broken Land Parkway to the west and south, and US 29 and Lake Kittamaquundi to the east (Figure 1).

³ Howard Hughes Corporation is now the master developer.

Figure 1 Downtown Columbia and Neighborhoods



Source: Downtown Columbia Plan, Exhibit E.

Importance of TDM to the Downtown Columbia Plan

TDM is a very important component of the Downtown Columbia Plan. The Plan’s chapter 2, “Moving and Connecting People” discusses TDM and states (page 43):

The TDMP should include recommendations for programs aimed at increasing the use of transit, walking, bicycling and ride-sharing for both commute and non-commute trips. In developing these recommendations, the TDMP should consider both the short and long term transportation initiatives discussed in the remainder of this section. In addition, this TDMP could include such things as: (1) installation of physical facilities such as bike racks and way finding signage, information kiosks, bus stops and the new transit center; (2) services

including promotion of flexible work hours, promotion of transit benefits programs, promotion of the use of ZIP cars, distribution of ridesharing and transit information, formation and maintenance of a ride matching database, development of websites, etc.; and (3) parking management programs such as reserved carpool/vanpool parking, parking information systems and reduced parking ratios.

The traffic study⁴ that accompanied the Downtown Plan estimated that the proposed downtown development⁵ would generate 8,887 AM peak hour vehicle trips and 12,793 PM peak hour trips, without adjustments. The study adjusted these trip generation numbers down for factors such as internal trips between uses⁶ and TDM measures such as telework, transit, and bicycling. The reductions were based on studies of other town centers that had achieved trip reductions up to 35 percent.

The adjustment for TDM was 15 percent, a reduction of 1,284 AM trips and 1,692 PM peak hour trips. Importantly, this 15 percent reduction is the number achieved at full build-out; the study included the assumption that TDM would increase over time, based on transportation alternatives and the TDM programs called for in the Downtown Plan that would increase the viability of non-automobile trips as density and walkability increased. Indeed, recent development-specific traffic studies, such as for the Metropolitan apartments and for the Medstar building, use a five percent reduction in trips for TDM in the short term.

The reductions are important in that they underpin the extent of road improvements called for in the Plan including for example, intersection improvements at Little Patuxent Parkway and Governor Warfield Parkway, the north-south connector, and a third interchange on US 29 between the two existing interchanges with Broken Land Parkway and Little Patuxent Parkway (MD 175).

Absent the trip generation reductions such as from TDM one or both of the following will occur:

- The amount of development envisioned under the Downtown Plan could cause congestion that would exceed the 1,600 critical lane volume (CLV) congestion standard established in the Plan.
- Road improvements, some of which will be very costly, may be needed sooner than envisioned. For example, the cost of the third interchange was estimated between \$41 million and \$104 million using a 2011 cost estimating manual⁷.

⁴ Columbia Town Center Generalized Traffic Study, September 2008.

⁵ Note that proposed development was about 1.0 million square feet (MSF) retail, 4.3 MSF office, 640 hotel rooms, and 5,500 residential units. The County approved an increase in 2016.

⁶ Internal trips are those made, for example, by any mode between sites, for example, between an office building on Little Patuxent Parkway and the Lakefront.

⁷ Feasibility Study for Downtown Columbia Transportation Improvements, Little Patuxent Parkway US 29 Interchange, January 2012

Conversely, if the 15 percent trip reduction can be exceeded, congestion will be less than envisioned – allowing for more free-flowing traffic, costly road improvements can be deferred or, potentially eliminated, and the amount of land needed for parking can be reduced.

2. Current Transportation Conditions by Mode in Downtown Columbia

The 2010 Downtown Columbia Plan describes downtown as “... still primarily suburban in natureIt is a sparsely populated, automobile-dependent area, with isolated amenities separated from one another by what has become a vehicular thoroughfare.” (page 5)

Downtown Columbia is slowly evolving from its automobile-oriented past towards the Plan’s vision of a “diverse, mixed-use, livable, physically distinctive and human-scaled place with a range of housing choices and recreational, civic, cultural and educational amenities.” (Downtown Columbia Plan, p. 5)

The Downtown Columbia Plan was envisioned to take 30 years to complete. As of early 2018 approximately 10 percent of the Plan’s envisioned development has been built.

The first parts of downtown redevelopment (Metropolitan and Crescent Area 1) by themselves have not significantly changed the overall suburban character, but they are setting the stage and creating the urban form for larger changes and have introduced some elements that will assist in TDM. Such elements, at one or both developments, include: street-facing retail and restaurants; parking garages; pedestrian friendly streetscapes; location within walking distance of the Mall and lakefront, library, and transit; vertical mix of uses⁸; a small TDM program; shared parking for Merriweather Post; off-road pathways, and public art.

Mode share in downtown, Cordon line studies

Mode share (or split) refers to the different types of transportation, such as private car, bus, cab, ride-hailing, ride-sharing, bicycle or walking, that people use to make trips to and from or within a place. Generally, the higher the share by non-single occupancy vehicles the more trips a transportation network can carry (Table 1).

⁸ For example, retail on ground floor of the Metropolitan, restaurant on ground floor of Medstar building.

Table 1 Journey to Work, Selected Locations (Percent)

	Downtown Columbia	Howard County	Downtown Baltimore	Downtown Rockville
Drove alone	78	81	38	45
Carpooled	9	8	4	8
Transit	4	4	15	31
Bicycle	1	<1	1	1
Walked	3	1	39	6
Other	1	1	<1	1
Worked at home	4	5	2	9
Total	100	100	100	100

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimate

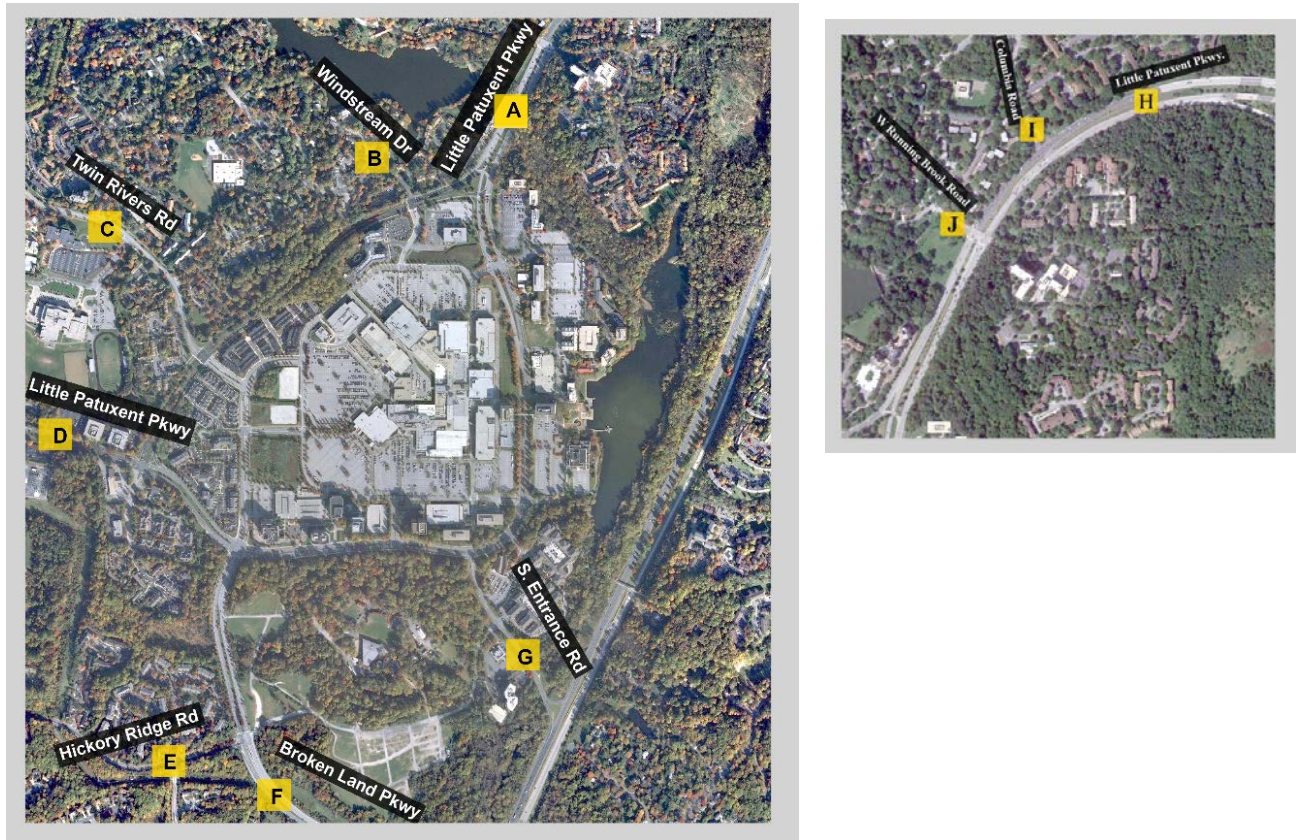
The modal share is a key measure for the success of TDM in Downtown Columbia. For Downtown Columbia as a whole the modal share is measured at the “cordon line”. The line is a series of 10 locations/intersections that are the critical locations for monitoring traffic entering and leaving downtown (Figure 2). Of the 10 locations, seven surround downtown and three are north of downtown on Little Patuxent Parkway/MD 175. By monitoring this traffic over time the County can continue to manage vehicle traffic and evaluate whether its traffic and transportation policies are being effective in achieving the Downtown Columbia Plan’s objective of increasing the use of transit, walking, bicycling and ride-sharing.

The County conducted the first cordon line study in 2011⁹. The study captured a large amount of data such as total in/out traffic, directional split, vehicle characterization, vehicle occupancy, transit, pedestrian, and bicycle. The study was completed before downtown revitalization development began in earnest and, therefore, it serves as a pre-Downtown Plan baseline against which to compare development that happens under the Plan. The County began an update of the 2011 Cordon Line Study in late 2017. Preliminary results do not indicate large changes in trip volumes or mode split in the six-year period.

Figure 3 shows some selected key results from the 2011 study.

⁹ Columbia Downtown Cordon Study, Final Report, 2013. Note the study outcomes included summary Powerpoint presentations and an interactive viewer of the raw data including a user guide.

Figure 2 Cordon Line



- On an average weekday in 2011 there were approximately 91,000 vehicle trips into and out of downtown, i.e., crossing the cordon line each way (total of approximately 180,000 trips), (Figure 3A). Note, some of these trips were through trips, i.e., vehicles going through downtown without stopping. In 2017 the number of vehicle trips into and out of downtown increased by approximately six percent over 2011 to 96,000 (total of approximately 192,000 trips).
- In 2011 average person trips¹⁰ were approximately 108,300 each way on weekdays with higher numbers on Saturdays (Figure 3B). Person trip numbers are higher than vehicle trips due to average vehicle occupancy being above one. In 2017 average person trips were approximately 112,000 each way on weekdays and 110,000 on Saturdays.
- In 2011 approximately 96 percent of trips entering or exiting downtown were by passenger vehicle. All other modes combined were four percent (Figure 3C). In 2017 the comparable share of trips was similar at 95 percent.
- In 2011 for persons with origins or destinations within downtown the share of trips by passenger vehicle fell to approximately 87 percent compared to 96 percent for all trips. The

¹⁰ Person trips count trips private vehicles only, i.e., do not include trips by transit, walking or bicycling

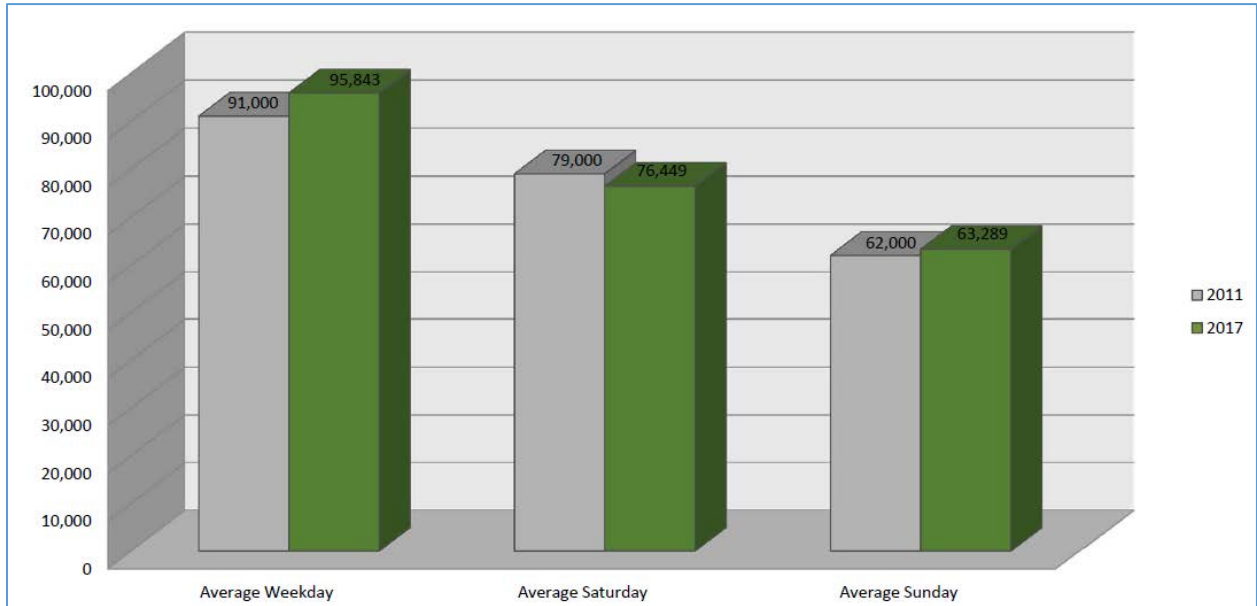
difference was made up by mostly by commercial vehicle trips (approximately eight percent), and transit (approximately four percent), (Figure 3D). In 2017 the share of trips by passenger vehicle was similar at approximately 88 percent, but the transit mode share of trips entering downtown was lower (2.2 percent in 2017 versus four percent in 2011)¹¹.

- In 2011 approximately 57 percent of vehicle trips entering downtown stayed less than two hours, and only 13 percent stay eight hours or more. (Figure 3E). In 2017 the comparable figures were; 59 percent and 10 percent, implying more trips of shorter duration,
- Figure 3F shows an example of many origin and destination figures in the 2011 study. It shows vehicles entering downtown from the north on Little Patuxent Parkway which is the highest volume route-of-entry into downtown. Of all the vehicles, approximately 60 percent had a destination downtown in 2017, versus 50 percent in 2011. In 2011 the other 50 percent left downtown for various destinations. Of this latter 50 percent, approximately 23 percent traveled west on Little Patuxent Parkway towards the college and hospital. In 2017 this remained the dominant direction for traffic leaving downtown, at approximately 16 percent of vehicles.

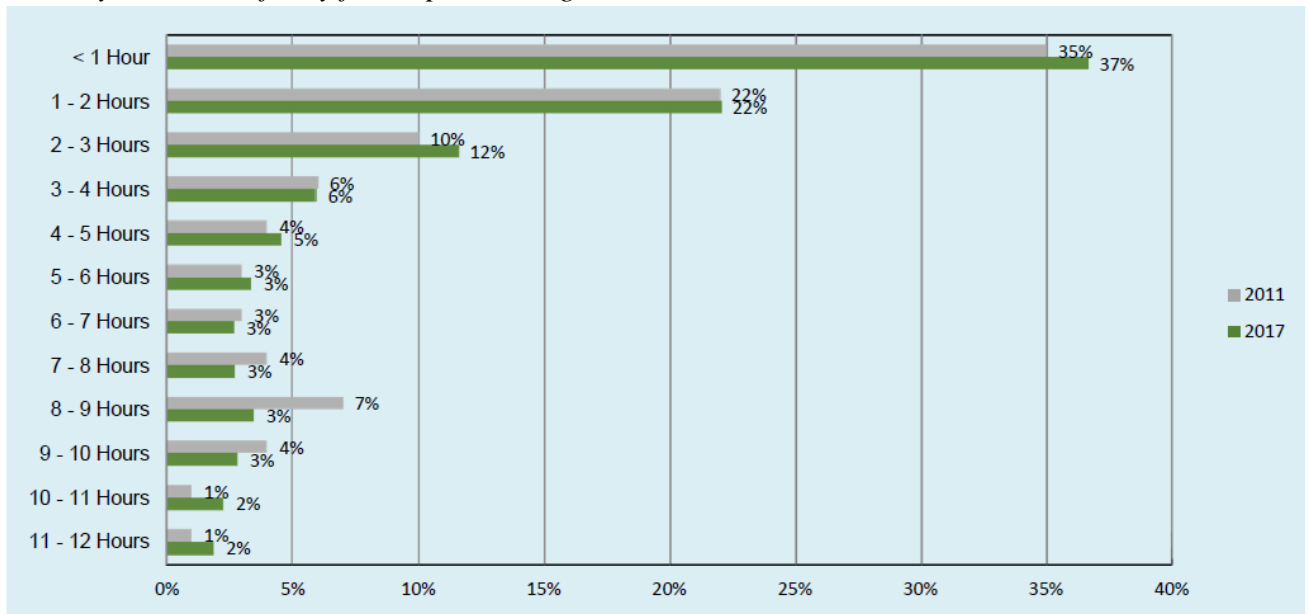
¹¹ This is disappointing from a TDM perspective but is consistent with national and regional trends of falling transit ridership. The County hopes to address this trend with recent investments in the transit fleet and with a new Transit Development Plan.

Figure 4 2011 and 2017 Selected Cordon Line Data Comparisons

Vehicle Trips (average of inbound/outbound)



Weekday Duration of Stay for Trips Entering Downtown Columbia



Driving

For most people, driving is the main way to get in and out of Downtown Columbia. As of late 2017, Downtown Columbia is very drivable. Except for special events, such as Merriweather concerts, July 4th fireworks, Columbia Festival for the Arts, peak shopping days, and high school graduation, most trips to and from downtown can be made easily by car.

The Downtown Columbia Plan envisions increased transportation alternatives especially within Downtown, but for the near future, i.e., five to 15 years, the future role of autonomous vehicles and other innovations being uncertain, driving will remain the most important means to get in and out of Downtown Columbia. The County carefully monitors how the road network is functioning on an ongoing basis; with a detailed traffic study for each new development proposal, and, every few years, with more comprehensive evaluations (cordon line studies).

As the development envisioned in the Downtown Columbia Plan comes on line, the County reviews how traffic generated by each new development will get in and out and what impact it will have on the transportation network. To keep pace with development a number of road and parking improvements have been made since the Downtown Plan was adopted. These serve the new developments but also help traffic flow throughout downtown by putting in place more of a grid road network that disperses traffic on more roads rather than concentrating traffic on a small number of large roads. The improvements include:

New roads such as on the west side of the Mall (Town Center Avenue, Gramercy Place) and in the north part of the Crescent neighborhood (Merriweather Drive, Divided Sky Lane, Symphony Woods Road, Hickory Ridge Road extended east of Broken Land Parkway). Most of these new roads also include on-road or off-road pedestrian and bicycle elements.

Intersection improvements such as an additional turning lane added to the Governor Warfield Parkway/Little Patuxent Parkway intersection.

New parking garage east side of Broken Land Parkway south of the One Merriweather (Medstar) Building. This serves Area 1 of the Merriweather District (including Medstar and Pearson) but is also used for concert parking for Merriweather Post Pavilion.

Many other new road and parking projects are in different planning stages. These will be implemented over time as warranted by new development and regional traffic growth.

Parking

Parking is generally available in Downtown Columbia. It is not as plentiful as in many suburban areas, but such areas are commonly “overparked”; seas of surface asphalt parking that are aesthetically and environmentally undesirable, and that detract from an attractive walkable, downtown environment. The Downtown Columbia Plan (page 47, quoting the 2007 “Downtown Columbia: A Community Vision”, envisions providing:

“...an appropriate level of parking fostering a park-once approach, substantially reducing or eliminating surface parking lots and integrating well-designed structured parking into downtown.”

Since driving will continue to be a key means to get into and out of Downtown Columbia, parking will continue to be an important planning consideration. The Downtown Plan did not include a downtown-wide parking study; since the Plan discouraged surface parking, it assumed that parking would be provided on a site by site, as needed basis, including parking garages.

Because of uncertainty over parking for Merriweather Post due to development in the Crescent neighborhood, Howard County did commission a narrowly focused parking study to understand the possible displacement of Merriweather parking¹². The Study concluded that adequate parking resources are available in the downtown area to support a Merriweather high demand event that is not supported solely by parking facilities in the Crescent.

Parking is expensive to provide, manage, and maintain. A rule of thumb is that it costs approximately \$20,000 to build a parking space in a parking garage. If less parking is needed, the “savings” can help achieve other goals of the Downtown Columbia Plan.

The County carefully monitors the amount and location of parking for each new development in Downtown. From a TDM perspective, fewer trips by cars potentially means less need for parking. The development regulations for Downtown Columbia allow for reductions in the number of required parking spaces, but the amount of parking that is needed is only being learnt with experience and will change over time as the share of trips made by means other than by the single-occupancy car increases. There is now three years’ experience at the Metropolitan apartments on the west side of Downtown, a 380-unit mixed use building easily walkable to office, retail and other commercial uses and to Downtown Columbia’s existing transit center. An internal parking structure includes 534 parking spaces reserved for residential¹³. As of January 2018, parking utilization is 444 spaces showing that demand for parking is approximately 17 percent below the number of spaces provided.

The Downtown Columbia Plan notes (page 48) that shared parking reductions of more than 40 percent have been measured at other mixed-use town centers. Planning parking in Downtown Columbia is made more complex because of the need to plan for special events at the Lakefront and elsewhere, concerts at Merriweather Post, and busy shopping periods. The new parking garage south of the One Merriweather (Medstar) building in the Crescent has helped disperse the parking that used to be concentrated south of Merriweather Post and this has had a beneficial effect on traffic by dispersing trips.

¹² Downtown Columbia Parking Evaluation, Final Report, April 2015.

¹³ The County’s parking regulations would have required 570 spaces but the County approved a reduction based on a parking study showing lower demand for this type of development.

Ridesharing

The Howard County Office of Transportation manages the County's ridesharing program, Howard Commuter Solutions¹⁴. Ride-matching services for this program are powered by the Commuter Connections database, maintained by the Metropolitan Washington Council of Governments, which serves the Baltimore-Washington corridor and enables Howard Commuter Solutions to match residents for carpools and vanpools as well as provide the Guaranteed Ride Home (GRH) program. Over 2,300 Howard County residents have registered for rideshare and/or for the Guaranteed Ride Home program¹⁵. Most report learning about ridesharing options from transit signs and schedules, their employer, word of mouth, government outreach, or the internet. Employees from 22 Downtown Columbia employers have registered in the Commuter Connections database. Of these, six are Mall in Columbia retailers.

Howard Commuter Solutions maintains a website, HowardCommuterSolutions.com, focused on non-SOV travel options in Howard County. It includes information on ridesharing, transit (local and regional), biking and walking, and alternatives to commuting such as telework and compressed work weeks, as well as updates on special projects and events such as Bike to Work Day. The site has a placeholder page dedicated to TDM options in Downtown Columbia.

Walking

Conditions today for walking in downtown are only fair – and many trips that should be quick and easy on foot have challenges that lead people to make such trips by car. Sidewalks exist along most of the major public roads such as Little Patuxent Parkway and Broken Land Parkway, but many are narrow (4 feet wide only) and there are many gaps in the pedestrian infrastructure; missing sidewalk, uneven sidewalk, barriers such as light poles or electric boxes in the sidewalk area.

Important connections are lacking. Notably, connections between the mall and the lakefront are limited, and there is no good accessible route, i.e., for persons with ambulatory disabilities. The mall ring road¹⁶ is carrying more non-vehicular traffic, but sidewalk is discontinuous. Seemingly simple connections are lacking, for example there is no pedestrian connection from Sterrett Place to the Lake Kittamaqundi to Vantage Point Road pathway.

Conditions for walking have improved just in the past two years – though there is still much to do. The downtown multi-use pathway that formally opened in 2017 runs roughly east-west through downtown from Howard County General Hospital to Bridge Columbia (the pedestrian bridge over US 29 to Oakland Mills) and through to Blandair Park in East Columbia¹⁷.

¹⁴ Ridesharing is a ride-matching service, versus ride hailing which is the official name for services provided by companies such as Uber or Lyft.

¹⁵ Employees who have registered for these services but reside outside of the county are counted in their jurisdiction of residence.

¹⁶ Owned by GGP.

¹⁷ This was required under the Downtown Columbia Plan, Community Enhancement, Program and Public Amenities (CEPPA) 12.

Connections to this pathway include the pathway around Lake Kittamaqundi – and north to Vantage Point Road, with more connections planned. As part of the Crescent neighborhood development, in 2017 the sidewalk along the east side of Broken Land Parkway was widened from four to six feet, and a new multi-use pathway was constructed along Merriweather Drive. As part of the Metropolitan development sidewalk along a portion of the mall ring road was widened to six feet. GGP has made spot improvements along the mall Ring Road to improve pedestrian access and accessibility

A key goal of the Downtown Plan is to make walking not just possible, but pleasant and interesting. The lakefront area is already a high-quality pedestrian environment. In addition to a great recreational amenity in which to stroll and people-watch, it provides a non-automotive north-south transportation connection on the east side of downtown e.g., from the Sheraton hotel to Whole Foods and the library. More, and more pleasant and interesting walking options will induce people to walk rather than drive and reduce trips by motor vehicles.

Bicycling

Conditions for cycling in downtown are fair, and have improved significantly since 2016.

Connections for cycling into downtown from surrounding areas are fairly good. The major roads into downtown (MD 175/Little Patuxent Parkway, Broken Land Parkway, and South Entrance Road) are unsuitable for biking as they are high speed roads lacking bicycle lanes or, for the most part, parallel off-road pathways. However, there are alternative, less heavily-trafficked roads to get into the downtown area. These include:

- from the north and west, Columbia Road, West Running Brook Road, Twin Rivers Road, and Hickory Ridge Road. While they do not have bicycle lanes or parallel off-road pathways their lower vehicle volumes and lower travel speeds make them suitable for biking.

Access from the west into downtown improved significantly with the opening of the Downtown Columbia Trail that runs parallel to Little Patuxent Parkway from Howard County General Hospital to the Lakefront and then via Bridge Columbia to East Columbia.

- from the east, the only bicycle (and pedestrian) access to downtown is via the pedestrian bridge from Oakland Mills (Bridge Columbia). This important bicycle and pedestrian connection is undergoing a major rehabilitation as of Fall 2017 .
- from the south, Martin Road, Seneca Drive and Shaker Drive¹⁸.

Once in Downtown, with the exception of the main roads, bicycling becomes a little easier because there are some alternative roads with lower vehicle volumes and lower travel speeds, such as Sterrett Place, Wincopin Circle, Town Center Avenue and the Mall Access Road. These

¹⁸ Planning is underway for a pathway between South Entrance Road and Stevens Forest Road, passing under US 29 and Broken Land Parkway using existing bridges over the Little Patuxent River. This would improve access from the south to Downtown. Preliminary design is complete. Final design is expected in 2018. Construction is expected in 2019.

roads provide access to only a small portion of Downtown, but conditions are improving and will continue to improve concurrent with new development. For example, as part of Crescent area development off road pathways parallel with Symphony Woods Road and Merriweather Drive will be built connecting to the Downtown Columbia pathway. Other Crescent area roads will have on-road bicycle lanes or will be slow-speed streets suitable for bikes and cars to share.

Bicycle parking is an important element in facilitating biking. Bicycle parking convenient to destinations reduces point-to-point trip times compared to driving or walking. As of October 2017, there are approximately 180 public bicycle parking spaces in Downtown Columbia, including bicycle racks at each entrance to the Mall in Columbia and in the Lakefront and Crescent neighborhoods¹⁹.

Over half of the bicycle racks are older and do not meet with Association of Pedestrian and Bicycle Professionals (APBP) recommendations for bicycle parking. In new downtown developments APBP-compliant bicycle parking is being included, consistent with each neighborhood's design guidelines.

Howard County launched bikeshare in 2017 with 70 bicycles at seven stations in and near Downtown Columbia. Of these, 30 are electric-assist bikes designed to increase their attractiveness to a broader sector of the population compared to "typical" bike riders. Initial reception of bikeshare has been positive with over 2,000 trips from more than 1,000 individuals in the first four months of operation. As more bicycle infrastructure is added, bikeshare use is expected to grow, reducing automobile trips in and around downtown.

Transit

In most downtowns and center cities transit is a key component of the transportation network. Today in Downtown Columbia transit plays a small role, but has strong potential for growth.

The Mall in Columbia serves as a regional bus transit hub for two bus systems, the Regional Transportation Agency (RTA) and the Maryland Transit Administration (MTA). The RTA provides 14 local bus routes in Howard, Anne Arundel, and Prince George's Counties. Of these, eight routes run through Downtown Columbia. Key destinations include Arundel Mills, BWI Airport, Columbia Gateway, Ellicott City, Fort Meade/NSA, and Laurel. The MTA operates one express route and six other bus routes during peak hour to Washington DC, Bethesda, and Baltimore.

Rider survey data in the Central Maryland Transit Development Plan (TDP), draft December 2017 indicate that the most RTA transit trips (over 60%) are made by people getting to and from work; the RTA is particularly important in Downtown Columbia for service workers getting to and from jobs at locations such as the Mall, Whole Foods, Howard Community College, and Howard County General Hospital. Other common RTA trip purposes are for shopping, education, and medical. RTA service is also vital to persons without cars including the young,

¹⁹ Rackspotter shows locations across the US including Downtown Columbia <https://www.rackspotter.com/>.

elderly, and people with disabilities. MTA services primarily serve commuters to Washington and Baltimore.

Among Howard County's goals for the TDP is to improve the RTA's routes and service offerings so as to make transit more of a choice and less the option of last resort which it largely is today. By implementing the TDP, transit can become a more realistic option for people working and visiting downtown and can play a stronger role in reducing the number of trips made by single occupancy vehicles and in reducing demand for parking.

Initiatives to further improve transit service in Downtown, currently in various stages of study, include Bus Rapid Transit (BRT) from Downtown to Burtonsville and Silver Spring²⁰, a transit center²¹, and a downtown shuttle²².

3. Transportation Demand Management Policies and Requirements

Adequate Public Facilities

Howard County's Adequate Public Facilities requirements (APF) play an important role in ensuring that public facilities keep pace with growth. Special APF requirements were adopted with the Downtown Columbia Plan and apply in Downtown²³. Under APF nearly all proposed developments must include a traffic study (traffic impact study or TIS). The TIS must identify the motor vehicle impact of the development on the road network, consider the pedestrian and bicycle network, and include a "TDM Statement". If the TIS finds that the proposed traffic generated by the development will not meet APF standards then mitigation is required.

Requirements for the TDM statement are specified in the Howard County Design Manual, Volume III (section 4.9):

A Transportation Demand Management (TDM) statement shall be provided with each traffic study. The statement will discuss appropriate TDM strategies for the development program planned in the FDP or SDP, how they may be implemented, and how the proposed selected strategies and implementation would complement any current Downtown Transportation Demand Management Plan developed under Section 2.4 of the Downtown Columbia Plan.

The statement should also discuss the status of past initiatives, if applicable. Statements shall address strategies to reduce automobile travel and promote alternative means of mobility to and from the proposed development. A typical statement will encourage alternative means of mobility through promotional incentives and programs, transit contributions such as

²⁰ See Bus Rapid Transit at <https://www.howardcountymd.gov/Departments/County-Administration/Transportation/Transportation-Projects>.

²¹ Downtown Columbia Transit Center – Location and Site Analysis Study October 2017 Prepared by Howard County Office of Transportation, consistent with the Downtown Columbia Plan, CEPPA 14.

²² Downtown Columbia Downtown Transit Center and Circulator Shuttle Feasibility Study: Part 1 - Downtown Transit Center & Downtown Circulator Shuttle, December 2011 (Downtown Columbia Plan, CEPPA 5)

²³ County Code section 16.11. APF applies to roads and schools. This TDMP discusses the roads component only.

contributions to a circulator system, new bus routes, higher frequency of service and improved stops and service information, enhancements to the connections between Downtown Columbia and the Village Centers and areas outside of Downtown Columbia, including transit right-of-ways, off-site bicycle and pedestrian facilities improvements or other measures. The scale of the TDM statement shall reflect the number of trips generated by the development and the remaining capacity of the transportation facility

Cordon Line

As discussed in Section 2, data from cordon line studies are an important component of APF monitoring and evaluation in Downtown Columbia. Data from the 2017 cordon line study will set a new baseline for traffic entering, exiting, and travelling within downtown. The new data will become the new existing traffic numbers for developer traffic studies, and will update the mode share data, indicating whether more trips are being made by non single-occupancy vehicles.

Downtown Columbia Partnership, CEPPAs

The Downtown Columbia Plan includes a schedule of implementation requirements, called Community Enhancement, Program and Public Amenities (CEPPAs). CEPPAs 5 and 14 required specific transit related studies. CEPPA 12 required Howard Hughes to build the Downtown Columbia Trail. These CEPPAs were completed as discussed in Section 2 above. CEPPAs 18 and 23 require a pathway to Wilde Lake (in design) and a future \$1 million contribution towards a downtown shuttle. Two other CEPPAs, numbers 6 and 25, are of particular relevance to TDM.

CEPPA 6

The Downtown Columbia Plan proposed the establishment of the Downtown Columbia Partnership (DTCP) as an independent nonprofit organization, to carry out important services and community functions in Downtown Columbia.

CEPPA 6 establishes that one of the primary responsibilities of the DCP shall be the transportation initiatives outlined in the shuttle feasibility study (per CEPPA 5) and the promotion and implementation of the TDMP.

The County Code (section 28.117) provides more specificity; the Downtown Columbia Partnership:

- Shall support the transportation initiatives outlined in the shuttle feasibility study called for in the Downtown Columbia Plan
- Shall promote and implement the transportation demand management plan called for in the Downtown Columbia Plan.
- Shall contract with the County Office of Transportation provider to carry out this section.

CEPPA 25

CEPPA 25 requires owners of new commercial properties to participate as a member in the Downtown Columbia Partnership and to annually contribute \$0.25 per square foot of gross leasable area for office and retail uses and \$0.25 per square foot of net floor area for hotels to the Downtown Columbia Partnership.

Under CEPPA 6 at least 50 percent of the revenue collected pursuant to CEPPA 25 is to be used for the implementation of transportation initiatives in the shuttle feasibility study or other direct transit services downtown.

The DTCP was incorporated in 2013. Working with its eight-member Board and an 11-member Advisory Committee it has been primarily focused on marketing initiatives, branding, and promoting downtown including special events. It also works on transportation; it maintains the Downtown Columbia Trail, works on pedestrian circulation issues, and funded the initial work on this TDMP. The DTCP currently has one full-time employee – its executive director.

As discussed in Section 2, development in Downtown Columbia is still in its early stages. Consequently CEPPA 25 revenues have not grown rapidly. For the first three quarters of 2017 these revenues totaled approximately \$62,000. CEPPA revenues will grow in time, but in the short term the relatively small fund amounts will limit what the DTCP can do to support transportation initiatives.

Transportation Management Association

Transportation Management Associations (TMAs) are typically non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district, mall, medical center or industrial park. They are generally public-private partnerships, consisting primarily of area businesses with local government support. TMAs can provide an institutional framework for TDM programs and services.

The Downtown Columbia Plan mentions Transportation Management Association once (page 55). It is a concept that was discussed in early drafts of the Plan but did not become a Plan recommendation. It is a concept that may warrant revisiting in the future.

Current Private TDM in Downtown Columbia

As noted above, new developments under the Downtown Columbia Plan must develop a TDM statement as part of their Traffic Impact Statements. Such statements have been developed for the apartments in the Warfield neighborhood (Metropolitan and TENmflats), for Crescent Area 1 (One and Two Merriweather buildings), for the first phase of Crescent Area 3, and for the early plans for the Lakefront.

The TDM statements are fairly similar from site to site. For example, the statement for TENmflats proposes a TDM Program with six elements:

- A. Designation of a Transportation Management Coordinator (TMC).
- B. Establishment of a Commuter Center

- C. Methods to Encourage Use of Transit or Alternatives to Automobile Use
- D. Carpool and Vanpool Programs
- E. Parking Management
- F. Pedestrian and Bicycle Programming and Support

See Appendix A for the full TDM statement for the TENmflats.

The Metropolitan began an implementation program based on its TDM statement. It offers an informational brochure for residents and had a website intended to support a wide range of options other than driving alone, focusing on buses, rail and biking. There is a television monitor in the mailroom with MTA and RTA schedule information, the estimated time of arrival for a ride-hailing service, and traffic information. The building includes a large bike room with a map of local bike amenities on the wall.

No other sites have functioning TDM programs

Implications for future TDM in Downtown Columbia

Downtown Columbia has elements of a potentially successful TDM program including a legal and policy framework, local and regional transit, an improving pedestrian and bicycle network, a mechanism (cordon line studies) to monitor travel trips and mode share over time, organizations designated to work on TDM (Office of Transportation and the DTCP), and, through Howard County, participation in regional ridesharing, and guaranteed ride home programs.

Overall, however, these elements do not yet constitute a fully integrated, functional program that will lead to TDM success. Limitations of what is in place include:

- TDM statements do not include numerical goals, such as vehicle trip reductions, number of trips by pedestrians or bicyclists, or mode split the development seeks to achieve.
- TDM statements are essentially a menu of TDM options – they are not customized to the development programs on specific sites; some land uses inherently will have more TDM potential than others and TDM programs need to reflect this.
- TDM statements do not state who is responsible for implementing the TDM program.
- No monitoring is required to report on progress towards meeting the numerical goals.
- Roles of the Office of Transportation and the DTCP in TDM are not defined.

The 2017 cordon line study is providing information regarding TDM performance downtown wide. However, recognizing that development under the Downtown Columbia Plan is relatively recent, we do not know the extent to which TDM is working at a site-specific level and the means are not currently in place to provide that understanding.

4. Transportation Demand Management Plan

This section recommends changes to current TDM policies and requirements in Downtown Columbia to make the TDM program more effective and accountable.

The recommendations result from discussions between Howard County and the Downtown Columbia Partnership, community input from meetings and interviews in 2016, and review of TDM programs in different locations²⁴.

Property-Specific TDM Statements

Owners of properties proposing development in Downtown Columbia should expand the current TDM statements to become more like property-specific TDMPs. Such TDM statements should expand beyond the current TDM statements in the traffic studies to include metrics such as numerical mode split objectives, pedestrian and bicycle trip objectives, vehicular trip reduction objectives, action plans to achieve the objectives, identification of responsible parties, and methods and timelines for monitoring and reporting.

A more detailed TDM statement in the form of a preliminary property-specific TDMP should be submitted with each new Site Development Plan (SDP). This TDM statement will be a more detailed, tailored version of the TDM statement submitted with earlier more general plans such as a Final Development Plan (FDP).

TDM statements need to be tailored, and property-specific because TDM potentials vary by use. For example, the potential for TDM, i.e., to increase mode split, may be higher for office or residential uses compared to restaurant or retail uses. Since all the future tenants may not be known at the time of SDP submittal, the TDM statements may need to make assumptions regarding the future uses on a property.

Figure 4 shows typical strategies that may be included within a TDM statement. Depending on the strength of the goal, TDM programs can range from light to full.

After review and any necessary revisions, the County will approve TDM statement as part of the approved SDP.

Reporting and Monitoring

Property owners should submit TDM statement monitoring reports to Howard County every three years after the use and occupancy permit is issued. The monitoring report will use the TDM statement as its starting point and may include:

- Current uses on the property including changes in the resident and/or tenant mix since the TDM statement was submitted;

²⁴ These included Arlington, Virginia, the North Bay Shore District in Mountain View, California, the Tysons District in Fairfax County, Virginia and the Cities of Bloomington and Eden Prairie in suburban Minneapolis, Minnesota.

- Trip generation and mode split based on traffic counts at site entrances.
- Comparison of actual trip generation versus the trip generation numbers used in the SDP traffic study;
- Site parking utilization, including bicycle parking;
- Status of the action plans in the TDM statement;
- Surveys of tenants, employees, and/or residents trip patterns including parking. Surveys to supplement traffic counts are important because they:
 - can help explain traffic counts and parking utilization. For example, survey data may reveal that trips are low because employees are working from home, versus ridesharing, walking or biking, or taking transit.
 - can also help owners understand which TDM programs or incentives are most effective.
- Adjustments, if any, to the property-specific TDM statements to the mode split and numerical trip reduction objectives and implementation action plan.

The contents and design of the monitoring reports should be agreed by the owner and the County. This would include the specific locations for traffic counts and the survey questions. Monitoring reports should have a standard summary format so that the results of site-specific TDM statement can be aggregated (see Figure 5 for an example).

The County will work with property owners to ensure that any business-confidential TDM statements or monitoring content remains private.

After review and any necessary revisions, the County will approve monitoring report as part of the approved SDP compliance. After a site has achieved its TDM goals for two consecutive reporting periods no further monitoring should be required, unless the tenant mix or the SDP changes substantially.

Figure 4 Sample TDM Strategies

TDM Levels of Participation			
General TDM Elements	Full	Moderate	Light
Bus Benches	X	X	X
Provide Transportation Kiosk or Information Display	X	X	X
OnSite Transportation Fairs	X	X	---
Web Site/OnLine Commuter Store	X	X	X
Participation in FCDOT Rideshare Program	X	X	X
Vanpool Accessible Parking and DropOff	X	X	X
NonSOV Preferred Parking (Office Only)	X	X	X
Pedestrian Facilities	X	X	X
Designate Program Manager	X	X	X
Join area Transportation Management Association	If Available	If Available	If Available
Bicycle Programs			
Bicycle Racks	X	X	X
Protected Bicycle Storage or Lockers	X	X	---
Shower Facilities (Office Only)	X	X	---
Bicycle Routes, Lanes, and/or Paths	X	X	---
Bike Share Participation	If Available	If Available	---
Transit Programs			
Bus Shelters or Bus Stop Improvements	X	X	When Requested
Free or Reduced Cost Transit Passes	X	X	---
RealTime Transit Information	If Available	If Available	---
Shuttle	When Requested	X	---
Marketing Programs			
Access Guide	X	X	---
Bricks and Mortar Commuter Store	If Feasible	---	---
Incentive Programs			
Individualized Marketing Programs	X	---	---
Off Peak Travel Programs (Residential Only)	X	X	---
Shop Near Home Marketing (Residential Only)	X	X	---
Live or Shop Near Work Marketing	X	X	---
Parking Programs			
Occasional Parking Program	X	X	X
Promote Paid Parking	X	---	---
Promote Parking Cashout	X	X	---
Promote Unbundled Parking	X	X	---
Rideshare Programs			
Vanpool Program	X	X	---
Alternative Work Programs			
Promote Compressed Work Weeks (Office Only)	X	X	X
Promote Flexible Work Schedules (Office Only)	X	X	X
Promote Telework Programs (Office Only)	X	X	X
Maintain Onsite Business Center (Residential Only)	X	X	---
Other Programs			
CarShare Program	If Available	If Available	If Available
Concierge Service	X	---	---
Guaranteed Ride Home (Office Only)	X	X	X
Participation in Events & Campaigns	X	X	---
Monitoring			
Surveys	Every 3 Years	Every 3 Years	Every 3 Years
Trip Counts	Annually*	Annually*	Biennially
Reports	Annually	Annually	Annually
Non-Compliance Fee	X	X	X
Incentive Fund	X	X	X
Remedy Fund	X	X	---
TMA Contribution	X	---	---
Penalty Fund	X	---	---

*Or per proffered agreement

Source: Wells + Associates (Towers Crest, Fairfax County, VA)

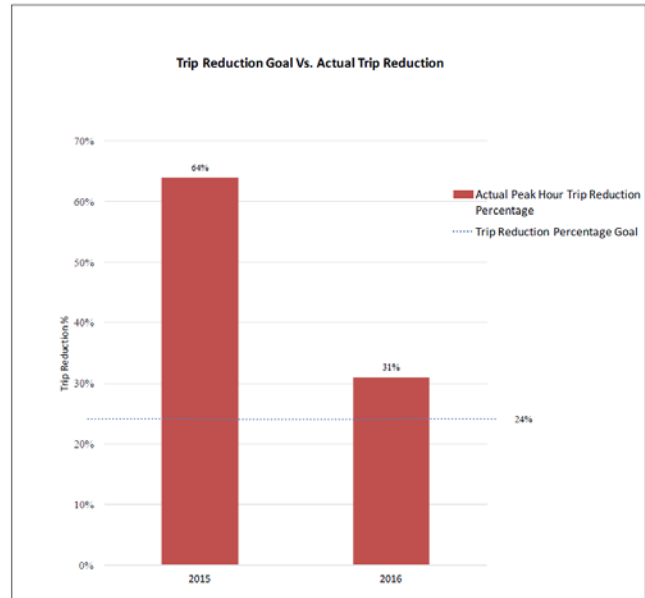
Figure 5 TDM Monitoring Report Results Summary Example

Current/Planned Building Development:

Building	8000	8010	8020	1850	New Building
Site Plan	1984	1998	1998	2007	Planned - No Date
Land Use	Office, Retail	Office, Retail	Office, Retail	Office, Retail	Residential
Under Construction	1985-1986	2000-2001	2001-2002	2008-2009	N/A
Completely Constructed	1986	2001	2002	2009	N/A
Current Occupancy	73%	56%	92%	88%	N/A
Next Year Expected Occupancy	85%	75%	100%	100%	N/A
First non-rup issued	N/A	N/A	N/A	October '10	N/A

Trip Count and Survey Results:

Results	2013	2014	2015	2016	2017
ITE Forecasted Trips Generated by Site	1267	1267	1267	1267	Trip Counts and Survey are Planned for March - May 2017
Maximum Trips Allowed	1102	963	963	963	
Trip Reduction Percentage Goal	13%	24%	24%	24%	
Actual Peak Hour Trip Counts	513	481	452	668	
Actual Peak Hour Trip Reduction Percentage	60%	62%	64%	31%	
Goal Met	Yes	Yes	Yes	Yes	
Non-SOV Mode Split	83%	85%	80%	82%	



Source: Wells + Associates, Towers Crescent, Fairfax County, VA

Downtown-wide Tracking

Howard County will create a database of all TDM statements and monitoring reports to track the key performance data relating to mode split and trip reductions estimated and achieved.

The key objectives of the tracking will be to

1. Assess the ongoing cumulative success of the property-specific TDM statements towards meeting the 15 percent trip reduction goal in the 2008 Columbia Town Center Generalized Traffic Study.
2. Use the results from this assessment to inform traffic impact studies including trip generation, parking and TDM statements for new proposed development downtown. If, for example, TDM is resulting in fewer trips from sites, developers could be allowed to claim larger adjustments to trip generation numbers and/or reductions in parking needs. Conversely if TDM is not resulting in fewer trips then adjusted site specific TDM measures and/or County programs may be needed.
3. Learn which TDM measures are more proving most effective, and i) recommend adjustments to property-specific TDM statements based on what is being learnt ii) use what is learnt in outreach to properties that were developed prior to the Downtown Columbia Plan to prepare TDM statements.

Consequences of not meeting TDM targets

As discussed in Section 1, from a downtown-wide perspective, the potential consequences of not meeting property-specific TDM targets are congestion and/or the need to make costly road

improvements sooner than envisioned. These could result in not being able to achieve the Plan's vision of a walkable, compact, vital downtown.

Some jurisdictions with mature TDM programs have a financial penalty for non-compliance with developer TDMPs. Such jurisdictions may require an upfront financial guarantee (such as a bond) for TDM performance that is returned when compliance is demonstrated, such as by monitoring report. If the site is not in compliance the jurisdiction can use the guarantee funds to support its TDM programs.

Downtown Columbia's TDM program is getting started and is not mature. Until more is understood about the appropriateness of the TDM numbers used in TISs and the effectiveness of different TDM strategies in the context of downtown Columbia and its growing transit and transportation infrastructure, this TDMP does not recommend a financial performance guarantee program. This TDMP recommends reconsidering a financial performance program in an update to this TDMP in approximately six years, or 2024. This will allow time for Downtown Columbia to continue to evolve toward a more dense and walkable environment with more investment in alternative transportation choices, and to review the results of several years of reporting on the development in the Warfield and Crescent neighborhoods.

Other TDM Actions

In addition to the private sector TDM statements, a successful TDM program will rely on continued ongoing, supportive, public sector actions and activities. These will include:

- Improvements to walking infrastructure, such as additional sidewalks, pathways, and pathway/sidewalk connections, more and safer pedestrian crossings, wayfinding.
- Improvements to biking infrastructure such as bike lanes, pathways, bicycle parking, and the bikeshare program.
- Improvements to transit, such as a better bus fleet, more efficient routes, increased bus frequencies, bus rapid transit, a downtown transit center, real time bus location information, newer cleaner bus shelters, and, in time, a downtown shuttle.
- Improved ridesharing and ride-matching services and programs. This should include a rebranding of the Howard Commuter Solutions program to serve as more comprehensive information source for transportation alternatives. Its updated website can serve as a repository for information and reporting about TDM.
- TDM marketing and promotion.
- Exploration/promotion of other TDM-related options such as car-sharing.
- New roads and roadway improvements such as the North-South Connector (connecting Broken Land Parkway and Little Patuxent Parkway), which also improve non single-occupancy vehicle transportation options.
- Public parking in selected locations.

Organizational considerations

Two agencies, working together, should take the lead in advancing TDM; the Howard County Office of Transportation (OoT) and the Downtown Columbia Partnership (DTCP). As the TDM program matures, other resources may be needed, including potentially a Transportation Management Association, but this should be reevaluated when this TDMP is updated.

Office of Transportation (OoT)

The OoT should take the lead on the following:

- Developing site-specific TDM statements and monitoring report content and formats,
- Meeting with property owners/tenants to market and promote TDM programs and assist with scoping site-specific TDM statements,
- Reviewing developer TDM statements, and TDM monitoring reports,
- Coordinating with other County departments especially Planning and Zoning and Public Works,
- Tracking downtown TDM performance over time,
- Maintaining a website for downtown TDM, including a database of TDM statements and monitoring reports,
- Serving as an information source/ clearinghouse for TDM best practices. Exploration of other TDM-related options such as car-sharing.
- Planning, advocating for, and advancing the transit and transportation infrastructure and operations connecting to, from and within Downtown Columbia

Downtown Columbia Partnership (DTCP)

The DTCP should take the lead on the following:

- Promoting TDM and TDM programs to DTCP members,
- Facilitating meetings between the OoT and existing or prospective downtown businesses,
- Working with owners of properties that were developed prior to the Downtown Columbia Plan to encourage them to create TDMPs,
- Advocating for improvements to walking, biking, and transit conditions, including wayfinding.
- Providing funding support for TDM from CEPPA 25 revenues. As noted above, CEPPA 25 revenues are currently low. Examples of future funding use might include: assisting owners in preparing TDM statements, TDMPs and monitoring reports; assisting the OoT in technical review of TDM statements and reports; or support for TDM programs.

5. Next Steps

Following finalization of this TDMP the following should be next steps.

	Who	Step
1.	OoT	Develop recommended site-specific TDM statement content and format for use by property owners
2.	Property owners with SDPs proposed under the Downtown Columbia Plan	Submit property-specific TDM statements consistent with this Downtown Columbia TDMP as part of required Traffic Impact Studies. The OoT will review and approve these statements
3.	OoT	Develop recommended TDM statement monitoring content and format for use by property owners
4	Property owners with SDPs <u>approved</u> under the Downtown Columbia Plan	Beginning three years after a use and occupancy permit is issued, submit a property-specific TDM statement monitoring report to the OoT for review/approval. The OoT in consultation, with the Department of Public Works Division of Traffic Engineering, may allow combined monitoring reports, i.e., for two or more properties/sites.
5	Howard County	Continue to make improvements that make it easier to walk and bike downtown, and to use transit and other non-single occupancy vehicle methods to get into and out of downtown. See list in Section 4 of this TDMP under organizational considerations
6	DTCP	Promote TDM and TDM programs to DTCP members; see list in Section 4 of this TDMP under organizational considerations

The County should update this Downtown Columbia TDMP in 2024 evaluating the success of the Plan and recommending adjustments/changes as warranted.

Appendix

Appendix A – Transportation Demand Management Statement for TENmflats



WELLS + ASSOCIATES

MEMORANDUM

TO: Chad Edmondson
Chief, Howard County Department of Planning and Zoning

CC: Kevin Peterkin
Robert Jenkins
Michael Trappen
Todd Brown

FROM: Michael J. Workosky, PTP, TOPS, TSOS
Jean-Pierre Barbour
Wells + Associates, Inc.

DATE: September 27, 2013
Revised January 10, 2014
Revised May 1, 2014

SUBJECT: Columbia Parcels W-2 & W-5
Site Development Plan (SDP) Traffic Analysis;
Howard County, Maryland

INTRODUCTION

This memorandum summarizes an updated Site Development Plan (SDP) traffic analysis for Columbia W-2 (Parcel C-2) & W-5 (Parcel C-1) located in Howard County, Maryland. This updated traffic report addresses comments provided by Howard County staff, dated March 5, 2014 and reflects an updated development program for both W-2 and W-5 parcels.

The subject parcels are located on the west side of Downtown Columbia, and are bordered on the north and west by Broken Land Parkway, the east by Columbia Mall Circle, and on the south by the Town Center Avenue, as shown on Figure I.

Parcels W-2 & W-5 are planned to be developed with a combination of retail, restaurant, and residential dwellings, and were the subject of a Traffic Impact Study (TIS) dated March 16, 2012 that was reviewed and approved by Howard County in order to satisfy Chapter 4 of the Howard County Design Manual: Adequate Transportation Facilities Test Evaluation Requirements (County Council Bill No. 47-2010). These parcels are planned to be developed in by 2016.

1. All of the turning movements for buses entering and exiting the Mall Ring Road are expected to operate at acceptable levels of service during both the AM and PM peak hours.
2. Overall delays for the Brown, Gold, and Yellow routes are expected to decrease by 2.6 seconds during the AM peak hour and by 37.2 seconds during the PM peak hour when comparing existing to total future conditions.
3. Delays for the Green route are expected to increase by 73.6 seconds during the AM peak hour and 70.7 seconds during the PM peak hour.
4. Overall delays for the Orange, Silver, and E routes are expected to increase by 18.3 seconds during the AM peak hour and by 17.1 seconds during the PM peak hour.
5. Delays for the Red route are expected to increase by 5.6 seconds during the AM peak hour and decrease by 84.7 seconds during the PM peak hour. The reduction in peak hour delay is related to the construction of Twin Rivers Road and Gramercy Place between Broken Land Parkway and Columbia Mall Circle and the widening of Columbia Mall Circle from two (2) to four (4) lanes.
6. Overall delays on the Yellow Route are expected to decrease by 6.1 seconds during the AM peak hour and increase by 24.2 seconds during the PM peak hour. These results are generally consistent with those presented in the traffic study, representing a modest increase in overall system delay.

These results suggest that only modest increases in overall system delay (a maximum of approximately one and one-half minutes) would be realized when comparing existing and total future conditions that include the traffic mitigation measures outlined in this report. It is recognized that adjustments to the bus routes may be needed as construction occurs in the area as Columbia Parcels W-2 & W-5 are constructed. These results are consistent with those outlined in the approved March 2012 traffic study that examined 2016 conditions that included the buildout of all of the Columbia Parcels. The detailed capacity analyses worksheets are contained in Appendix J.

TDM Statement

Overview

As required by the Howard County guidelines, to further mitigate potential impacts of the proposed development, and take full advantage of the site's proximity to the existing transit hub, a key component of all new Downtown Columbia projects is the implementation of a comprehensive and state-of-the-art Transportation Demand Management (TDM) program for each new project.

This section presents a TDM program for Downtown Columbia Parcels C-1 and C-2 (SDP-14-024). The project is located at Twin Rivers Road and Columbia Mall Circle in Downtown

Columbia and is to the immediate west of the theater parking lot at The Mall in Columbia (TMIC). The site is bounded by Broken Land Parkway on the north and west, Columbia Mall Circle on the east, and Town Center Avenue on the south.

The Site Development Plan for the project has been submitted to Howard County for review. The proposed project includes 437 multifamily units, approximately 27,025 square feet of retail/restaurant space, two above grade parking garages with a total of 1,014 parking spaces which include parallel parking on adjacent streets. The project will include a total of approximately 190 indoor and 44 outdoor bike spaces secure bicycle storage spaces for residents between both buildings, and 28 public bicycle racks.

TDM Program Elements

Parcels C-1 and C-2 represent the third new development project in Downtown Columbia to be approved under the updated Downtown Columbia Master Plan. Its location lends itself to this program due to the proximity of the existing transit hub, an outstanding network of arterial highways, collector streets, bicycle routes and pedestrian walkways. The TDM program includes six (6) primary elements listed below along with an implementation strategy for each element.

Element A. Designation of a Transportation Management Coordinator (TMC).

The TMC would implement the TDM program and advise residents, tenant, and employees of the availability and location of the TDM coordinator and program. Duties of the TMC include:

- Assist residents and tenants in making effective and efficient commuting choices.
- Disseminate bus, rideshare, bicycle route maps, trail maps and other relevant transit options to new residents and tenants.
- Provide on-site assistance to residents and tenants in forming and maintaining carpools and vanpools.
- Disseminate park-and-ride lot information to prospective carpoolers and vanpoolers.
- Encourage residents to register for carpool and vanpool participants, transit users, bicyclists, and walkers in the Guaranteed Ride Home (GRH) program.
- Encourage residents and tenants to ride bikes or walk to work
- Market and promote the TDM program to residents and tenants via printed materials and websites.
- The aforementioned information may be provided from sources such as the Central Maryland Regional Transit, Maryland Transit Authority (MTA), Metropolitan Washington Council of Governments (MWCOG), Washington Metropolitan Area Transit Authority (WMATA), Howard County Government, and others.

The TMC for the future buildings will be:

Property Manager, TBD Currently
Downtown Columbia Parcels C-1 and C-2 (SDP-14-024)

Twin Rivers Road and Columbia Mall Circle
Columbia, Maryland 21044
Email: TBD
Phone: TBD

Element B. Commuter Center

B.1 - Designate a centralized space on-site (within one building) as a Commuter Center where TMC functions would take place. The resident mail room, which is typically centrally located near the main resident entrance to the building, and adjacent to the TMC's office, will be the designated Commuter Center.

B.2 - Install display racks and/or an electronic display that would provide information on the various aspects of the TDM program. A static transportation information display kiosk will be located within the Commuter Center and will be maintained by the TMC. Dynamic and real-time transportation information will be available via the community's Building Link (or equivalent) portal. This portal provides customized, real-time information to residents at any time via platforms such as the public computers in the common areas and leasing office, via their own personal computers, via mobile and tablet devices and via a monitor located in the Commuter Center.

B.3 - Install signage with trail maps for bicycle and pedestrian pathways. Within the resident bicycle storage room a large format wall graphic will highlight local trails and designated routes for both pedestrians and bicycles. Hardcopy of local trail maps will be available in the Commuter Center (provided by others).

B.4 - Install bicycle storage. Downtown Columbia Parcels C-1 and C-2 will have several bicycle storage alternatives. In each building, residents will have access to a secure, indoor bicycle storage room with a total capacity of 190 bicycles between the two buildings. This storage capacity will also allow the project to meet LEED Sustainable Sites Credit 4.2. Non-residents will have access to 28 public bicycle rack spaces located along Twin Rivers Road. The public locations are highly visible and at street level, allowing riders to easily identify their location. Some of the public bicycle racks may be located within the public areas of the parking garages provided safe bicycle rack locations can be accommodated with the garages.

Element C. Methods to Encourage Use of Transit or Alternatives to Automobile Use

C.1 – Provide information on local public transit options including public transportation facilities, services, routes, schedules and fares. Information on public transit options will be provided on-site in the designated commuter center.

C.2 – Encourage tenants and employers to include facilities like showers in building programming. A dedicated showering and changing room will be provided for retail and residential employees within one of the buildings. It will be located within the secure retail service corridor. Only retail and residential employees will have access to this room.

C.3 – Disseminate information to transit users regarding free guaranteed rides home in cases of emergency. Information on guaranteed rides home will be provided on-site in the designated commuter center.

C.4– Provide safe, convenient, comfortable, and attractive pedestrian connections on and off site. Sidewalks are provided on all four sides of each Parcel. Numerous seating elements such as benches, seat walls, steps and rainwater planter walls are commonplace on all sides of the Parcels. All sidewalks will be well lit with a variety of lighting fixtures from bollards to pedestrian and street lights. Additional ambient light is provided by art, tree and landscaping lighting around the building. Crosswalks (provided as part of road improvements associated with Road Plan F-13-015) are located at major intersections to aid in pedestrian flow in and around the Parcels.

Element D. Carpool and Vanpool Programs

- Provide on-site assistance to residents and tenants in forming and maintaining carpools and vanpools.
- Disseminate park-and-ride lot information to prospective carpools and vanpoolers.

Element E. Parking Management

E.1 - Reserve at least one conveniently located, first-level, free parking space for Zipcars. To date, no Zipcars, or equivalent, are located in Downtown Columbia. Kettler Management has had success bringing Zipcar to other locations and will make every effort to bring them, or an equivalent service, to Downtown Columbia, and will provide them with a requisite space(s).

If Zipcar (or equivalent) provides a car to be located within the garage, residents will be made aware of this amenity prior to move-in. Information on the availability of Zipcar (or equivalent) will be included in new resident packages provided by building management.

E.2 - Provide secure bicycle parking for residents. Each building will contain a dedicated, secure bicycle parking room on the ground floor of the property. The room will be secured 24/7 and accessible only by keycard/fob, etc. Access to this room will be provided only to residents who sign up and register their information with the TMC. The rooms will contain parking for 190 bicycles (total between both buildings) as well as a large, wall-mounted trail sign and a Dero Fixit stand (or equivalent) for basic repairs.

Residents will be made aware of this amenity prior to move-in. Information on the availability of secure bicycle storage will be included in new resident packages provided by building management.

Element F. Pedestrian and Bicycle Programming and Support

F.1 - Provide bicycle storage. See B.5 and E.2.

F.2 - Provide safe pedestrian trails with adequate facilities for rest and comfort. Sidewalks are provided on all four sides of each Parcel. Numerous seating elements such as benches, seat walls, steps and rainwater planter walls are commonplace on all sides of the Parcels. All sidewalks will be well lit with a variety of lighting fixtures from bollards to pedestrian and street lights. Additional ambient light is provided by art, tree and landscaping lighting around the building. Crosswalks (provided as part of road improvements associated with Road Plan F-13-015) are located at major intersections to aid in pedestrian flow in and around the Parcels.

F.3 – Make signage and trail mapping readily available both on the ground and as digital resources. Hard copy of bicycle and pedestrian trail maps (provided by others) will be provided in the Commuter Center. A large, wall-mounted bicycle and pedestrian trail map will be located within the resident bicycle storage room. Links to digital maps will be provided via the resident web portal. (e.g. Building Link)

Residents will be made aware of this amenity prior to move-in. Information on the trail maps will be included in new resident packages provided by building management.

F.4 - Encourage the provision of showers or other facilities for commuters utilizing bicycle or pedestrian options. A dedicated showering and changing room will be provided for retail and residential employees within one of the buildings. It will be located within the secure retail service corridor. Only retail and residential employees will have access to this room.

F.5 - Consider a Bikeshare program. Currently no bikeshare programs are located in Downtown Columbia. The TMC will continue to monitor this situation and make every attempt to encourage a bikeshare program to locate at one of the Parcels.

Revisions to the TMP

The TMP is designed to be flexible and responsive to future evaluations in prescribing the TDM strategies. The combination of size, scale of buildings, mixed-uses, phasing of development, and transportation infrastructure requires that the TMP has flexibility to respond to the various challenges posed by changes in tenant mix, supply of parking, transit system capacity, transit fares, construction staging and traffic, fuel prices, regional transportation policies and projects, travel behavior, telework and flexible work hours, and changes in surrounding development.