

June, 2010

Reston Master Plan Special Study Task Force:

RCA's Reston 2020 Committee is an open group of Reston residents and others interested in the future of Reston. Since the Task Force was formed last December, we have followed its work closely, and have provided our views to the Task Force on specific elements of the Plan such as the Planning Principles. All of our meetings are open to the public and several Task Force members and alternates have actively participated in Reston 2020. As required by FOIA, our meetings have been officially listed by the county as public meetings.

The members of the RCA Board and the Reston 2020 Committee are all residents; we are not, however, anti-development. We understand the importance of the changes coming to Reston with the Metro and that the inevitable growth represents opportunities for our community as well as potential dangers. It is crucial that this growth is well planned and implemented in order to benefit both current and future residents, as well as developers and the business communities of Reston.

We have formed working groups to study and write about specific issues that we feel are important in the planning process. Each group has read background material, looked at what the Tyson's Task Force has done on their topics, had presentations from local experts in their fields, and many of the groups have members with professional qualifications and experience in planning and design.

The Working Groups are:

- Environment,
- Transportation,
- Parks, Recreation and Public Facilities,
- Residential and Urban Design, and Livability,
- Implementation, Phasing, and Financing.

The papers in this binder are the output of the various Working Groups over the past five months. The papers are all designed to be helpful to the work of the Task Force. All the papers have principle authors and, to an extent, represent the views of the principle author. Each paper has been reviewed, however, by the members of the Working Groups and the leaders of Reston 2020; they reflect a commonality of views represented by our Planning Principles. We hope these papers are indeed helpful.

In the future, we hope to continue in our efforts of assisting the task force by submitting additional work group papers to be added to these binders. New work will be accompanied by updated index sheets to help keep our research convenient and organized for your use as you make the decisions that will shape our tomorrows in Reston.

Dick Stillson, Co-Chair, Reston 2020

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Parks, Recreation and Public Facilities: Needs for a New Master Planned Reston

Prepared for
The Reston Master Plan Special Study Task Force

By:

The Parks, Recreation and Public Facilities Work Group
Reston 2020 Committee
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Parks, Recreation and Public Facilities: Needs for the New Master Plan of Reston

Executive Summary

Members of this Working Group examined public amenities in Reston, how they were funded and are maintained and operated and the opportunities and needs that would likely be present in the community as it responds to the changes occasioned by the arrival of the Metro Silver Line. The areas reviewed included:

- Pathways and Trails
- Parks
- Indoor and Outdoor Recreational Facilities
- Cultural, Educational and Health-related Public Facilities

We present summaries of the existing conditions or assets in these categories as well as guidance for future amenities and their ideal locations. With regard to new development opportunities in the Reston Center for Industry and Growth (RCIG) and Reston Town Center (RTC), we recommend:

- Assuring overall connectivity of old and new elements of trail/pathway systems
- Public art features planned for and financed as part of new development and in association with any and all new public amenities
- Mandatory participation in Reston Association membership for all new residents in RCIG and RTC developments
- Cooperative and collaborative financing arrangements between private developer contributions, Fairfax County Park Authority, Reston Association, and Reston Community Center to achieve the optimum outcomes for Reston resident and employee benefits from public park, recreational, cultural, educational and other leisure-time amenities
- Defining the community's priorities for public amenity outcomes irrespective of delineated parcels and providing incentives to property owners to be collaborative in realizing them in the most appropriate sites and manners

Unlike many other areas of Fairfax County, Reston has had a tradition of visionary planning as a foundation of the community. The opportunity to build upon that vision, as enshrined in the principles enunciated at the outset by Robert Simon and that will be enhanced in the revisions to the Comprehensive plan, is one that has the advantage of a history of planned development benefiting both the private and the public realms. The incredible success of Reston Town Center would not have been possible without the significant public realm environments located there being included in the developers' vision. Reston has long attracted the best-quality developers and they have made significant and permanent contributions to the community's public infrastructure. Such contributions should be motivated by the planning to come to assure that

the Reston of tomorrow continues to thrive as a vibrant, environmentally, recreationally, and culturally rich mix of many people in a single setting. Reston should be seamlessly connected for future generations by trails, pathways, transportation options and attractions that will provide for the best quality of life, for a lifetime, and include a place for final rest.

Overall Objectives and Background

Reston has forged a unique and useful approach to providing parks, recreational and public facilities that has served it well in its 46 year history. Unlike other areas of Fairfax County, Reston, as a Planned Residential Community, affirmed that park, recreational, cultural and related public amenities should be available to the community from the outset. To this end, developers made significant contributions to the inventory of Reston's assets in these categories, most of which are now governed by the Reston Association. Beginning in 1977, the community has taxed itself through Small District 5 to provide its own Community Centers and related programs and services. Fairfax County Park Authority has contributed key parks. Fairfax County Government located schools, police/fire stations, public health facilities, a regional library, and a community center (in partnership with Reston Association and supported as well by Reston Community Center) as the community grew and matured.

The future of Reston with respect to parks, recreational and public facilities will necessarily continue to rely on creative collaboration among a variety of resources, both public and private, to continue a tradition of excellence and innovation that makes the quality of life in Reston outstanding and fulfills the planning principles upon which it was founded.

Efforts were directed to identify the existing facilities and likely future opportunities, locations and attributes for these types of amenities as well as the challenges in achieving them. Following the description of our objectives, opportunities and challenges for each is analysis of potential future locations for them. The author relied on data from a variety of resources which are listed at the close of this paper and cited where appropriate.

Objective 1: Pathways and Trails

Existing Pathways and Trails

Currently, Reston is supported by the W & OD Trail, elements of the County/Park Authority Trail System, Reston Association's 55 miles of pathways, Virginia Department of Transportation (VDOT) sidewalks and numerous private feed-in trails.

Opportunities

Pathways and trails: These are identified consistently as Restonians' most treasured of community assets. Existing trails and pathways should be maintained appropriately and as new development occurs, connections to the existing system must be provided. As referenced in the County Comprehensive Plan, 2007 Edition, amended through 7-13-2009, "Trails in this sector are an

integral part of the overall County system.” It is essential that pathways and trails, both for pedestrian and bicycle use, be established to support integral use, protect the safety of walkers and riders, provide for accessibility to disabled individuals, and support and enhance the connections between the projected new transit stations along the Dulles Toll Road and other parts of the community.

Establishment of new connections to the developing areas in the RCIG will be fundamental to efficient movement of people and also to the retention and enhancement of the sense of “one community” of Reston. The recommendations in the Reston Metrorail Access Group (RMAG) study provide descriptions of “missing links” with specific recommendations for thirty-three intersections and six trail crossings. RMAG recommendations should be implemented concurrently with development of the transit stations.

Note: Overall connectivity between old and new elements of a comprehensive trail and pathway system and over the entire geography of the community is of paramount importance.

Reston On Foot, a study published by Reston Association’s Pedestrian and Bicycling Advisory Committee, identifies missing links and pedestrian and bicycling enhancements throughout Reston. Its many recommendations should also serve as a prioritized guide for those areas considered for redevelopment.

Pathway and bicycle access should provide easy methods for residents to get to and from the Wiehle, Reston Parkway, and Herndon/Monroe TOD areas as well as the W & OD trail, which serves as a primary east-west transportation and recreation route. They should be aligned with the existing main vehicle arteries in such a way as to promote safe navigation apart from road use. North/south and east/west navigability must be enhanced by:

- new crossings,
- W & OD alignment,
- further establishment of new connections between higher density, mixed use areas such as Reston Town Center,
- more development at Reston Heights (to and from the Reston Parkway station as well as Plaza America), and
- new development that will occur with the Wiehle and Reston Parkway stations.

The natural areas surrounding the planned station at Herndon/Monroe also offer ideal settings for trails and pathways that lead to and from that ecosystem and related neighborhoods.

Public Art and Environmental Education Opportunities associated with Trails: With expansion of Reston’s pedestrian pathway and bicycle trails systems, opportunities for Public Art abound. These should be associated with areas with a unique feature, such as a crossing, or focus, such as entry to a transit station,

and should provide “way-finding” in creative and suitable manners throughout the system. Public Art considerations should inform the establishment of new pedestrian crossings (bridges), and consistent and beautiful design should inform the markers placed where key environmental features can be appreciated. Reston’s commitment to the environment can be reiterated throughout the pathways and trails system in signage and suggestions for “nature-based” learning activities; supply stations for pet-related needs; wetland and storm-water management explanations; and the like.

Challenges

Funding: Financing of pedestrian pathway and bicycle trails and related improvements associated with all aspects of the RCIG and further Reston development represents the single greatest challenge to achieving the outcomes desired. Key to attaining the funding needed will be several pillars of understanding that should be imbedded in the Comprehensive Plan language adopted:

1. Residential units in newly developed areas of the RCIG should be required (above and beyond the above requirements) to participate in the Reston Association on a par with all other community segments.*
2. To the extent that new development in Town Center is not governed by existing relationships to Reston Town Center Association, new residences should be required to participate in the Reston Association on a par with all other community segments.*
3. When economic benefits associated with expansion of the tax base in the RCIG and developed areas of Town Center derive to Fairfax County, a portion of those benefits commensurate with RMAG recommended transportation improvements, including the trails, should be returned to Reston in the way of dedicated funding for these improvements.
4. Occasionally development interests seek waivers of pedestrian requirements related to their site development activities, and language should be included that either precludes or severely limits the approval of waivers for such requirements.

Note: The current Comprehensive Plan language supports such an arrangement being established insofar as it states: “Recognizing the unique nature of the Reston Association in the development of natural and open areas and recreation amenities within the boundaries of the Reston Master Plan, the County and the Reston Association should work together in a public/private partnership in attaining the goals and objectives outlined in the Comprehensive Plan under Land Use, Goals 14 and 15; Parks and Recreation; Public Facilities; Environment, and Transportation.” (AREA III, p. 133)

Rights of Way: To the extent needed, rights of way to support the expansion of the pedestrian and bicycle pathways to connect to Reston's existing network efficiently and safely will be challenging to acquire and should be encouraged in the architectural, design and landscaping of new development and the transit station environments.

Design and Construction: To the extent possible, parking at grade should be avoided in favor of pedestrian, biking and mass transit options, and/or designed and constructed in such ways as to avoid as much "at grade" parking as possible, minimizing storm water runoff and supporting environmental "best practices."

Objective 2: Parks

Existing Parks in Reston

Current Fairfax County Park Authority properties in Reston include Lake Fairfax Park, which is now master planned and will soon incorporate a skate park in addition to camping, the Water Mine Park aquatics feature and other recreational amenities; South Lakes Drive Park; Reston North Park; Baron Cameron Park (owned by the Board of Supervisors, but operated by agreement with the Park Authority); Stuart Road Park; and the Merrybrook Run Stream Valley Park. In addition, FCPA owns approximately 5 acres in Town Center, Town Center Green, that is currently undeveloped and not master planned. Although not located in the Planned Residential Community proper, adjacent to it, the Park Authority operates and will improve Stratton Woods Park which hosts tennis court, picnic shelter, ball field, and handball/racquetball court amenities with soon to be added lighting.

Reston Association owns and cares for 55 miles of pathways, 700 acres of forest, 50 meadows, 4 wetland areas, 4 lakes, 3 ponds, 20 miles of streams, 15 outdoor community pools, and 48 tennis courts as well as numerous playgrounds, tot lots, rec fields, garden plots, picnic facilities and the year-round Nature House and center. The fiscal burden to sustain Reston Association properties once new residents arrive in the RCIG should be offset by public/private agreements to require residential participation in Reston Association to the same extent required of its current membership. Absent such arrangements, the current inventory of publicly accessed amenities managed by Reston Association without controlled access monitoring (especially the pedestrian and bike pathway system) will be overwhelmed. Prior additions to the property under RA covenants have occurred, and in each case capital contributions were provided to help offset the additional demand on facilities and services brought by new residents.

Opportunities

Urban Park Development: Not included in the above is privately held property, such as Reston Town Square Park and the Reston Town Center Pavilion, which represent models for park development consistent with the Comprehensive Plan description of Urban Park Development (Policy Plan, Parks and Recreation, Park Classification System, Local Parks, pp. 10-11.) Properties in the RCIG should be developed in a manner consistent with the Comprehensive Plan Policy with respect to Urban Parks. The policy reads in part:

These publicly accessible urban parks should include facilities that are pedestrian oriented and provide visual enhancement, a sense of identity, opportunities for social interactions, enjoyment of outdoor open space and performing and visual arts. Urban parks are generally integrated into mixed use developments or major employment centers in areas of the County that are planned or developed at an urban scale. Areas in the County that are generally appropriate for urban parks include Tysons Corner Urban Center, Transit Station Areas, Suburban Centers, Community Business Centers and identified "Town Centers" or mixed-use activity centers. Urban parks can be administered by private land owners, Fairfax County Park Authority, or through joint public and private sector agreements for public benefit.

Primary elements of urban-scale local parks are ease of non-motorized access and a location that complements, or is integrated with, surrounding uses. Features may include urban style plazas, mini-parks, water features and trail connections, oriented to pedestrian and/or bicycle use by employees and residents. Park architectural characteristics reflect the built environment. Short-term, informal activities and programmed events during lunch hours and after-work hours are intended to foster social interactions among users, provide leisure opportunities, and create a visual identity to strengthen sense of place and orientation. In urban areas, park size is typically less than 5 acres and often under ½ acre. Service area is generally within a 5-10 minute walking distance from nearby offices, retail and residences. Well-conceived and executed design is critical to the viability of this type of park. To be successful, urban parks need high visibility, easy access, lots of pedestrian traffic, immediacy of casual food service, access to basic utilities, landscaped vegetated areas, ample seating, high quality materials, a focal point or identity, regular custodial maintenance, and an inviting and safe atmosphere.

Related Comprehensive Plan Policy text (pp. 62, 73, 132, and 161) supports thoughtful programmed open space and collaboration with partners such as the Park Authority, Reston Association, and possibly including Reston Community Center for purposes of providing entertainment in such settings. In the Wiehle or Reston Parkway station area developments, emphasis should be on designed environments that support outdoor performances, outdoor dining, picnicking, and play. These environments are superb candidates for public art (which can be climbed, provide play elements, establish identity and provide other signature elements). These two areas suggest plazas, fountains, benches, tables, and game (bocce, chess, checkers, etc.) areas more than active recreation facilities

and/or playing fields given the densities likely to be massed around the two stations. However, open areas like these might be ideal for environments that also include other indoor facilities related to education and culture. Ideally, architectural and design approaches should consider both indoor and outdoor elements and seek to connect them in a conscious and deliberate aesthetic.

Multi-use areas, which are designed for flexible adaptation to many recreation activities, could serve users as needs and interests change over time. Even in densely populated Ballston, one of the recreation elements most often requested (and recently installed) was a basketball court to serve the many residents who play pick-up basketball games. It may well be attractive and useful to mixed-use development in the RCIG Metro station areas to provide indoor public facilities to serve recreational, cultural and/or leisure-time pursuits in proximity to office and retail elements.

Public/private agreements for operations of concerts, events and similar activities in these Urban Park settings is easier to facilitate due to controlled vehicle access and elimination of parking concerns present in other settings in Reston. Street performances in suitable weather can be scheduled at a variety of times to supplement the business life of the area and draw patrons to retail and commercial environments; these in turn have a symbiotic and positive impact on entertainment experiences by offering combined experiences in convenient, easily accessible locations. Features specifically designed to enhance performances, like band shells, utility access, and public restroom amenities at the street level that are appropriately maintained, should be included in the design of such environments.

Habitat/Nature Preserve Park: The Sunrise Valley Nature Park area at the Herndon Monroe station presents an interesting opportunity for a more unique park environment. Transfer of the property to Reston Association would provide for ongoing care and maintenance of the important wetland function this area provides. Furthermore, it would permit Reston Association ready access to a park ideally suited to environmental education activities that can be enhanced with appropriate permanent educational displays and signage, provide youth and adult groups with opportunities to learn about habitats and the flora and fauna found there, and provide views of indigenous plants and marshes that would enhance property values and provide buffers to the transit station impacts of this area.

Non-traditional "green-space": In his April 2009 monograph, *Creating Great Places – A Vision for Washington's Center City Public Realm*, author Cy Paumier and his partner in the publication, The Cultural Landscape Foundation, provide many views of city park spaces that range from traditional vast swaths of landscaped grounds for passive or spontaneous active recreation to small nooks of quiet tree plantings, tables, chairs and benches for relaxation and reflection. Tree groves situated in and around Bryant Park in New York City, for example,

suggest ways that streetscapes in and around TOD, especially at the Wiehle and Reston Parkway stations, can contribute significant environmental benefits, frame the station entry/exit zones, and allow for appreciation of seasonal changes.

Further exploration should be made of adding plants to roofs and garage sides where sustainable and appropriate, both for environmentally positive impacts and to create a better visual experience. Water features that are sustainable (for example rain gardens) should be added on a variety of scales to surrounding landscapes of both commercial and residential developments. Pedestrian experiences associated with wide streets and boulevards are greatly enhanced by and should incorporate, in their architecture and design, consideration of the natural lighting available to the sites and the appropriate native trees that can line such boulevards providing wide walkways with retail and restaurant features that complement the trees and plantings and accessibility features. As noted in this publication, “The design and development of generous sidewalks (25-30 feet) encourages property owners and merchants to activate their frontage and enliven the street experience. In Chicago, the street trees and café seating on Northern Michigan Avenue establish a high-quality image for the retail and commercial businesses on the street.” (Paumier, p. 26)

Rooftops are potential sites as well for active recreation such as fields and pools; the Comstock proposal in one of its iterations included such amenities. If such park/recreation environments are to be built in the property development, public/private agreements and appropriate public and ADA access should be incorporated in the proffer design.

Memorial Sculpture Garden: Reston needs a place to memorialize its people and provide for deep reflection: an oasis that offers contemplation of the continuity of the dignity of the individual even after death. Such a place should offer the opportunity to reflect upon the lives of loved ones, public art appropriate to the space and its purpose, and commemoration of contributions of community leaders. Although not a “traditional” park, the setting should be one of natural beauty complimented by artistic beauty and places to pause and be peaceful.

Temporary Parks: New York City has incorporated the option to “lend” open space from developers until parcels are built out completely for use as Temporary Parks. Such creative arrangements should be explored during times when economic conditions or other obstacles to completion of planned built environments prevent them but could be managed for the public benefit in the interim.

Challenges

Funding: As with the first objective, financing of parks and park-related improvements associated with all aspects of the RCIG and further Reston development represents the single greatest challenge to achieving the outcomes desired. Key to attaining the funding needed are several pillars of understanding imbedded in the Comprehensive Plan language:

1. Residential units in newly developed areas of the RCIG should be required (above and beyond the above requirements) to participate in the Reston Association on a par with all other community segments.
2. To the extent that new development in Town Center is not governed by existing relationships to Reston Town Center Association, new residences should be required to participate in the Reston Association on a par with all other community segments.
3. When economic benefits associated with expansion of the tax base in the RCIG and developed areas of Town Center derive to Fairfax County, a portion of those benefits commensurate with RMAG recommended transportation improvements, including the trails, should be returned to Reston in the way of dedicated funding for these improvements.
4. Where appropriate to enhancing the liveliness of urban park spaces with entertainment and/or events, Reston Community Center (Small District 5) resources should be directed to accomplishing such activities.
5. Occasionally development interests seek waivers of park requirements related to their site development activities, and language should be included that either precludes or severely limits the approval of waivers for such requirements.

Objective 3: Indoor and Outdoor Recreational Facilities

Existing Facilities: Public or Non-profit

The two primary public providers of recreation programs in Reston are the homeowners association, Reston Association (RA) and Reston Community Center (RCC), which is a sub-fund Fairfax County Government agency supported by tax revenues derived from residential and commercial properties in Reston combined with user fees. Fairfax County Government General Fund resources support RCC to an extent because the services of the County administrative departments are provided to RCC and its functions.

Reston Community Center provides, within two facilities, the Terry L. Smith Aquatics Center (25 meter pool and spa), photo and computer labs, woodshop, ceramics studio, community art gallery, the CenterStage (a 290-seat professionally equipped proscenium theatre), and a variety of general purpose meeting and activity rooms. Reston Association has limited indoor recreation amenities including meeting space for programs and rentals at Brown's Chapel, and the Nature House built at the Walker Nature Education Center.

In addition to RA and RCC, Fairfax County Government operates, with some program support from RCC, Southgate Community Center (SCC). Southgate Community Center was enabled by a partnership between RA, which provided the land on which it is located, and the County, which built and now operates the center. Southgate Community Center has a basketball court, computer tutoring lab, game room, meeting rooms, and a kitchen facility.

Within Reston zip codes, the Fairfax County Park Authority has no comprehensive indoor recreation facility. Through an arrangement between the Board of Supervisors and the YMCA of Washington, D.C., the Reston YMCA now operates a comprehensive indoor recreation facility and programs located within Reston. It is a private non-profit agency.

Outdoor recreation amenities are provided by Reston Association and Fairfax County Park Authority properties as previously described, and to a lesser degree, some cluster and condominium associations in Reston.

Note: Attached to this paper is the October 13, 2009 memorandum from Park Authority Planning Branch Manager, Sandy Stallman, to Fred Selden, DPZ. It provides a comprehensive overview of existing conditions in Reston and a Service Level analysis. Below is the link to the Park Authority's most recent Comprehensive Plan Policy, and most importantly, its Urban Parks Framework document, which is very much aligned with and parallel to our citizen recommendations and suggestions.

<http://www.fairfaxcounty.gov/parks/plandev/urbanparks.htm>

Existing Facilities: Private

Within Reston, according to the 2009 Final Report provided to Reston Association and Reston Community Center by the firm of Brailsford and Dunlavy, in addition to the private non-profit YMCA, there are Sport and Health Club, Bikram Yoga, Pure Joe Pilates Studios, Fitness First, Curves, Lady of America, and various private sector personal trainer services serving smaller segments of the community.

Existing Conditions

During the summer of 2009, Reston Association and Reston Community Center undertook exploration of a potential partnership to locate a new comprehensive indoor recreation facility to house tennis, aquatics, basketball and other sport courts, general fitness and well-being classrooms, and cardiovascular/weight room features. As a result of extensive engagement by the community in discussion of a proposed site of Brown's Chapel Park (RA property), the concept of locating a comprehensive facility on that property was dropped due to lack of community support. The 2009 Community Survey conducted by RCC also demonstrated that the preservation of open space is a high priority of the

community. Adding basic program elements of an indoor 50-meter aquatics venue, sports courts, and fitness classrooms in a consolidated facility would require approximately 100,000 square feet excluding parking.

Data provided to Reston Association suggests substantial demand for indoor tennis courts, and the user data from both RA and the Park Authority indicate that there is significant demand for outdoor recreation fields. These would be for both diamond and rectangular fields. Reston Association is exploring the potential for covering existing tennis courts as well as an existing 50-meter pool. It has maximized its available field space, but it might explore re-purposing existing fields and increasing usability on them by use of lighting and/or artificial turf.

Opportunities

Indoor and outdoor recreation: Given the community premium placed on green and open space amenities and the scarcity of available and appropriately zoned land within Reston (Small District 5), the opportunities for expanding public indoor recreation are limited. Establishment of a facility on any site should incorporate the highest standards of architectural design with environmentally sensitive building and storm-water management, in addition to maximizing the proximity to major ingress/egress points and/or public transportation.

A comprehensive facility should incorporate opportunities to provide for landscaping that offers educational outdoor components as well as existing and/or enhanced fields for active outdoor recreation pursuits. A complete recreation master plan for new comprehensive indoor recreation facilities should address indoor and outdoor recreation requirements, environmental education opportunities, and maximize efficiencies of scale to provide the community with complementary options for recreation. Such a plan should achieve a mix of public funding from County and Reston sources, as well as private resources, to minimize the financial burden on the Reston tax base.

Other options that could be pursued to bring new indoor or outdoor amenities to the community include such non-traditional approaches as situating artificial turf fields on the roofs of garages. Developers could propose to put public aquatic facilities within complexes as well. Redistribution and consolidation of parcels within the North Town Center area should consider the opportunity to support a consolidated indoor recreation facility that is funded by a similar combination of resources to those described above. Therapeutic recreation options in proximity to the public health facilities in North Town Center should be included in such a consolidated facility if the land parcels are redistributed in that area.

ADA Accessible and Comprehensive Playground: A playground large enough to be considered a major community asset that features a variety of ADA accessible attributes should be considered for RCIG development and a potential for the

North Town Center areas if they are consolidated. Another option would be to include such an outdoor amenity in the design of a comprehensive facility situated elsewhere.

Recreation amenities associated with public school buildings and grounds: Fairfax County has not had a policy to place community amenities within the building designs for public schools. In other jurisdictions, this is done for swimming, tennis, basketball and a variety of other recreation pursuits. There are numerous challenges related to cost and time sharing with respect to scheduling, maintenance and other administrative aspects. Until and unless the County adopts an approach to new school facility building that specifically addresses this type of model, it does not present much in the way of opportunity for added recreation amenities. If the present conditions are changed, however, other opportunities associated with school properties include upgrading of ball fields and multi-purpose courts, which may not be maintained to the standards required or desired by core user groups such as baseball and basketball leagues absent collaborative arrangements for their funding and use.

Challenges

Funding: As previously mentioned, new Comprehensive Plan language must support multiple funding resources that combine County and Reston assets as well as those that should be provided by developers if they enjoy new zoning with higher densities.

Land acquisition: The facility size features for the recreation amenities not yet available in Reston (indoor tennis, indoor 50-meter pool, and basketball and sport courts) require large land parcels to accommodate facility square footage and related parking. If development in the RCIG does not support these amenities, proffered financial offsets should be directed to mitigating costs associated with either land acquisition or building on appropriately zoned land; Baron Cameron Park, for example, or a consolidated parcel in North Town Center.

It is worth noting with regard to the Baron Cameron Park site that it is identified by Fairfax County Public Schools as the only property within Reston and currently owned by Fairfax County Government large enough to support a traditional middle/high school campus. It is currently operated by the Park Authority, with fields and related recreation features, under terms of an agreement with the Board of Supervisors.

Numerous challenges exist with respect to utilization of commercial areas associated with village centers. Some village center properties are held by corporations far-removed from Reston and with competing, not complimentary, priorities. Re-purposing existing space in village centers may be accomplished under the right circumstances, but the Comprehensive Plan language would

need to be amended as it was during the Lake Anne Revitalization process to support such use. Newly adopted language regarding Lake Anne, for example, states:

The existing mix of cultural, governmental, and religious uses on or near Washington Plaza includes the Reston Museum, the Reston Community Center, Fairfax County Human Services offices in the Lake Anne Professional Building, and two religious institutions. These uses should be maintained and enhanced as redevelopment occurs. In addition, new complementary non-residential uses, such as a boutique hotel, a cinema, or similar entertainment uses, which are compatible with the planned mixed-use developments in terms of character and scale, should be encouraged. Other desired uses also include the provision of performing arts space, educational and/or additional religious institutions, a library, recreation and/or park facilities.

Note: Conditions similar to those at Lake Anne Village Center have appeared in Tall Oaks Shopping Center to various degrees and similar revitalization and re-purposing of that village center or a substantial part of it may present an opportunity to place a consolidated indoor recreation facility there. It could incorporate some associated outdoor amenities and might extend to re-design of the RA outdoor pool across the street to include more “play” features. Such a “public anchor” there could replace the existing anchor grocery store pad and revitalize use of the outdoor community pool across the street from that location.

Objective 4: Public Facilities: Cultural, Educational, Health

Existing Public Facilities

Cultural

Reston Community Center houses the CenterStage, Jo Ann Rose Gallery, and a large “Community Room” that supports a variety of cultural uses. RCC also provides programming in the performing and visual arts, social and enrichment categories, crafts and artisan pursuits, and community events and rentals. Greater Reston Art Center, at Town Center, is home to a contemporary art gallery and associated educational programs. Reston Historic Trust is housed at the Reston Museum at Lake Anne Village Center and provides rotating historical exhibits, programs and lectures, as well as small artist exhibits to support the Museum through sales of their items.

A number of community-based arts and cultural organizations provide programming in a host of non-traditional settings that include performances, lectures, and exhibits.

Educational

In addition to the Fairfax County Public School system facilities in Reston, there are programs offered by Northern Virginia Community College (NVCC). The

Osher Life-Long Learning Institute has a Reston program. Fairfax County also provides the Reston Regional Library. A variety of other programs from other Fairfax County agencies are provided in Reston public education settings including after-School Age Child Care (SACC) programs and Rec-Pac (Park Authority youth programs during summer months). Numerous pre-school and child-care facilities and programs, including Lake Anne Nursery and Kindergarten, Reston Children's Center, and others are located in Reston. Reston Interfaith provides a child care program at Laurel Learning Center. Fairfax County Human Services and Reston Interfaith provide a number of life-skill programs to enhance career development and earning capacity to prevent homelessness and economic hardship-related outcomes that can be addressed by education and re-training opportunities.

Health

The North County Human Services programs are housed in North Town Center. Reston Interfaith provides limited health related services. Primary public health facilities are provided by Hospital Corporation of America's Reston Hospital Center, and Inova Systems, in its Urgent Care facility, in North Town Center. Other health related facilities and features include Sunrise Assisted Living and Cameron Glen Care facilities in North Town Center and the Lake Anne and Hunters Woods Fellowship Houses. While Inova Systems owns substantial property in North Town Center, Reston Hospital Center is the primary provider of current and anticipated full hospital located services. As described on its web site:

Reston Hospital Center offers a full range of medical services, including 24-hour emergency care. The hospital specializes in maternal/child health, surgical services on both an inpatient and extensive outpatient basis, urological services including lithotripsy, cancer care with state-of-the-art radiation therapy, rehabilitation therapy programs and a wide array of diagnostic imaging capabilities.

In 2009, the Board of Supervisors approved the Reston Hospital Center Master Plan. All parts of the plan that require state approval will be submitted to the Department of Certificate of Public Need (COPN) prior to the start of construction. Reston Hospital Center's most immediate priorities are to add on-campus offices for physicians as well as to expand its current obstetrical unit by 14 beds (the latter has already received COPN approval.) The master plan includes improvements such as new medical offices, expanded surgery capacity, more patient rooms (and associated parking), and a dietary department among others.

Opportunities

Cultural

Additional performing arts facility for community use: Reston should have an additional performing arts venue suitable to large performing ensembles such as

choral, orchestral, and dance companies that require a wider and deeper stage than afforded at the CenterStage in Reston Community Center Hunters Woods. This facility should support existing community-based arts organizations and school performers. Additional capacity could support other Fairfax County-based organizations or visiting artists. A performing arts facility should be placed in proximity to the Reston Parkway station and should be included in the architectural and design approach to development of related parcels. It should take advantage of robust pedestrian access and orientation, in addition to the vibrant nightlife already present at Town Center.

Outdoor Performing Venues: High-density development should include ample public plazas and parks that support a variety of uses as mentioned. Public places that support outdoor concerts and performances should incorporate appropriate power support, seating provisions, lighting to support public safety and extra lighting features to permit evening or nighttime performances. Band shells and/or artist weather protection should be incorporated in public performance environments or be easily provided from adjacent storage. Changing and restroom amenities should be planned in proximity to performance spaces to support multiple artists in festival settings. Smaller-scale environments that might support “street performers” should be planned to incorporate access to power outlets.

Public Art, Artist affordable housing: As stated in the July 2009 revision to the Comprehensive Plan Policy:

Public art has been a component of the effort to achieve quality urban design in Reston since the community’s inception. In order to realize the goal of making Reston a vibrant place to live, work and play, public art should be encouraged in future development in Reston.

The Reston community, under the leadership of the Initiative for Public Art in Reston (IPAR), developed a Public Art Master Plan which establishes a process for planning and commissioning public art including community roles as well as collection management. The Plan also suggests working zones on where to focus efforts. The IPAR Plan should be used as a guide for public art efforts in the establishment of public art and as a resource for the review of new development and redevelopment within the Master Plan area. (Area III, p. 161)

This policy should extend to areas in the RCIG and Town Center. Public art should not only be incorporated as distinct features of developed properties, but it should also be incorporated in the design and architecture of new construction to provide for buildings that are signatures of excellence in architecture and design and recognized beyond the community for these features. Even public amenities such as benches, bus shelters, sidewalks, call boxes and the like can and should incorporate public art features. When affordable housing is considered, specific housing options that include studios designed for use by artists, both visual and performing, should be incorporated.

Visual Arts: Enhancement and/or expansion of existing facilities and programming infrastructure at Lake Anne Village Center and Greater Reston Art Center in Town Center should be encouraged and included in redevelopment and new development.

Reston Historic Trust and/or similar museums: Places where Reston's unique history can be celebrated and exhibited should be encouraged in a variety of areas in proximity to transit stations. These might be small "storefront" museums such as the one in the Lake Anne Village Center, or locales oriented to self-directed tours of Reston that provide materials or video displays. Other types of facilities where historical materials might be co-located could include kiosks in public squares or within public art features of architecture and designed spaces that promote visitor experiences.

Educational

Reston Regional Library, Post-secondary education, Osher Life-long Learning Institute, Children's Science Center: New TOD opportunities associated with the Wiehle station should seek ways to incorporate and connect the public functions of a new library, a Children's Science Center and post-secondary and continuing education opportunities. Public/private partnerships and proffers should be encouraged to master plan a campus setting that allows for all these educational pursuits to be co-located and leveraged, providing the greatest levels of public access. Related lectures, performances by instructors and/or students in arts disciplines and connections to technologies, engineering, and science applications of the 21st century all logically inform one another. The existing presence of the NVCC campus and parcels suited to these types of infrastructure at the Wiehle station present the opportunity to pursue housing these enterprises there. They would feed after-rush-hour pursuits, support restaurant and retail activity, and provide economic opportunity to residents in the area as well as educational opportunities. Co-locating within a mixed-use setting would motivate more pedestrian and bicycle use as opposed to vehicle traffic.

Health

Aging in Place, Adult Day Care, and Hospice: A continuum of care should be considered in new facilities and an expansion of existing public health environments. Where possible, such facilities should be proximate to each other and to transportation resources. With an aging population, facilities that permit care, as well as respite for caregivers, should be planned in any public health environment. As earlier mentioned, access to therapeutic recreation environments should be promoted and provided.

Challenges

Planning: In addition to the issues previously discussed in relationship to funding collaborations, land acquisition and/or identification of suitable settings, the major

challenge to achieving the integrated vision of multiple amenities in easily accessed places throughout the community really is the core challenge of planning and policy development before the Task Force.

Note: Considering the variety of needs related to these topics, the limitations of funding in current economic conditions, and the length of time required for achieving all the outcomes described, it is clear that the community will need to prioritize and work with multiple partners within and outside of the boundaries and resources of Reston proper. Planning the outcomes should be accompanied by a plan for achieving them. Partnership in the short term with current property owners is essential to preventing barriers from being established through ignorance of longer-term projects. Reston was established as a planned community; there is no reason not to enshrine the elements of visionary planning toward community-wide outcomes within the revisions to the Comprehensive Plan that will come from the Task Force.

New Facility Location Recommendations: Summary

RCIG Transit Stations

Wiehle station and related transit oriented development projects as they relate to public outcomes should incorporate the elements suggested with an emphasis on “educational amenities” or a “campus” of related educational facilities, approaches, and multiple target age cohorts.

Reston Parkway station should incorporate a significant community performing arts venue for large-scale presentations associated with a true downtown nightlife scene.

Herndon/Monroe station should enhance and protect the opportunity to make the Sunrise Valley Nature Park a protected wetland and conservation environment with educational features and park amenities.

Throughout RCIG development, public art and public environments should enhance efficient circulation of pedestrians, bicyclers, *and* vehicles, with features that motivate drivers to park and then spend the majority of their time moving about on foot. It should be a common occurrence to be surprised by a public performance, an educational opportunity, or the chance to take a “time out” of the stress of getting to and from appointments. It should be possible to stop and shop, whether purposefully or on the spur of the moment. The streetscapes should be lively, fun and playful.

Town Center

Reston Town Center should be a seamless experience from its southernmost to its northernmost street. It should incorporate the very best standards and most innovative and beautiful of urban park and recreation features. Public art should be of signature quality; public performances should be commonplace. The North Town Center public facilities should be planned in concert with one another, even if co-locating (such as with the public safety facility) is not possible. Government and public facilities and spaces should be as beautiful and inviting as they are useful. There should be an effective circulator bus system that operates within and to/from Town Center.

Community-wide

Reston's aging village centers offer opportunities to explore new concepts of "anchor" functions; they could incorporate public recreation/leisure time pursuits and/or civic gathering facilities.

The community should plan for location of recreation facilities that serve an expanding, aging and diversifying population and add to aquatics, sports, fitness and well-being options currently available. Wherever located, these amenities should be master planned to provide an array of indoor and outdoor recreation features and should be done with architectural vision; they should take advantage of collaboration among public/private partners and the resulting combination of resources so that the most attractive and environmentally sensitive outcome is achieved. The community should create a memorial space that reflects the entire lifecycle. Such a place should celebrate the lasting impact of its people, and its celebration of art and nature in this community.

Conclusion

Reston's signature elements have always included natural beauty, great parks, and well-connected open spaces that are well-maintained. The community has long practiced creative partnering between private and public resources to promote community-building and a sense of belonging to this special place. Great civic plazas and gathering places are hallmarks of the first development in Reston, Lake Anne Village Center, and the most recent, Reston Town Center. There have been significant cultural and leisure-time amenities in Reston throughout its history. These essential community assets should be created, enhanced and preserved wherever development occurs.

Resources

Our recommendations are informed by *Creating Great Places* by Cy Paumier (with support from The Cultural Landscape Foundation), Reston on Foot (RA), the existing language and policy recommendations of the Reston Metrorail Access Group (RMAG), of the Fairfax County Park Authority's Urban Park

Development section of the Comprehensive Plan Policy on Parks and Recreation, the Comprehensive Plan Policy language adopted with respect to Public Art in Area III, Upper Potomac Planning District, the Comprehensive Plan Policy on Visual and Performing Arts, the Parks, Recreation and Open Space (PROS) study conducted on behalf of Reston Association (2005), the Feasibility and Market Analysis for Indoor Recreation completed for Reston Association and Reston Community Center by Brailsford and Dunleavy (Final Report, May, 2009), and the 2009 Community Survey conducted for Reston Community Center by the Center for Survey Research at the University of Virginia (Draft report, April 2010).

Fairfax Park Authority Documents link:

<http://www.fairfaxcounty.gov/parks/plandev/urbanparks.htm>

Attachments:

Reston Special Study Report v. 2 from Sandy Stallman to Fred Selden

Existing Conditions: Park Authority/Reston Association holdings map

Park Authority Urban Parks Framework document

FAIRFAX COUNTY URBAN PARKS FRAMEWORK

Background/Introduction

Fairfax County projects that an additional 245,000 jobs and 290,000 new residents will come to the county by 2030. The Comprehensive Plan for the County envisions concentrating this growth in areas planned for redevelopment and, seeks a balance between residential and employment uses. Such areas must be planned to accommodate future growth in a way that better utilizes available land and assists in the revitalization, redevelopment and reinvestment of our older commercial areas and transit station areas as they transform into mixed use activity centers, placing greater emphasis on pedestrian accessibility and mobility. Areas planned for more “urban-like” mixed use development include commercial revitalization areas, transit station areas, Tysons Corner Urban Center and suburban centers. Thus, over the next several decades, portions of the County will change to a more urban form that takes advantage of the synergy among integrated land uses and enables people to live, work, shop and play in close proximity.

The County’s strategy for managing its future growth and maintaining a high quality of life for its residents presents particular challenges and opportunities for park and recreation planning. The trend towards more mixed use development in our commercial activity centers brings with it new residents who add to the recreational demand in areas already underserved with park and recreational facilities. High land costs and diminished land availability are additional challenges to providing parks in many of the growth areas making it more difficult to assemble or set aside land for park and recreational facilities in these areas.

The county’s diverse park system contributes to its economic and social benefits by providing a high quality of life for residents. Currently, 80% of County households use County parks, are typically very active and participate in at least five leisure activities. Recreation demand and use trends in County households may shift over time and should be closely monitored so that park uses and user preferences are aligned.

The increasing urbanization of the County’s growth areas requires that the existing suburban park system in Fairfax County be supplemented by parks that are more suitable for the unique urban context and provide appropriate functions, uses, amenities, visual form, ownership, and accessibility to various users of an urban environment. Residents in these areas most likely will have little or no private yards due to more dense residential forms and will rely on publicly accessible open space for leisure pursuits, socializing, walking, jogging, biking, exercising, and enjoying natural and designed landscapes. Workers and visitors to these destinations similarly will seek safe and comfortable, publicly accessible spaces for leisure and social activities. Well defined and innovative urban parks can serve this diverse range of uses and users while also contributing to the placemaking of these newly urbanizing areas.

The urban park typology that follows develops a common terminology that can be used to plan for and develop parks in Fairfax County’s urbanizing centers. This typology also will serve to

clarify expectations for the community decision makers, and developers who seek to implement changes to existing development patterns and provide for park and recreation needs in these areas.

Urban Park Design Elements and Typology:

According to ULI, in its publication *Parks, People and Places*,

“Design has an enormous impact on how users experience a park. Good responsible design yields a beautiful green, safe, clean park that will exert a strong positive influence on the community. The design of the park should be integrated with surrounding uses and should be accessible and appealing for users with a wide range of ages, backgrounds, interests and abilities. Features such as lighting, seating (both movable and fixed), restrooms, and food and beverage sales all contribute to the comfort and appeal of a park. Aesthetic considerations should not stop at the park’s boundaries; the perimeter of the park and the adjacent sidewalks are gateways, and are also an important part of the users’ experience.

It is critical for park design to remain current and to accommodate diverse users. Design options should respond to changes in community needs and in recreation trends. For example, adaptations in park design can address changes in fitness trends or in the demand for facilities such as dog runs or skate parks.”

The need to define urban park design elements and an urban park typology is becoming more critical in Fairfax County as development patterns in the County shift from suburban centers to urban activity centers. The current Policy Plan categorizes urban parks as a type of “local park” and characterizes them generally in terms of their relationship to adjacent land uses and orientation, their size, and their administration and access. Urban parks, however, can be further defined by features that differentiate them from traditional suburban residential-serving parks. Specifically, urban parks can be qualified by their unique park elements and design.

A comprehensive listing of urban park design elements is contained in Table 1 below. These elements describe where urban parks should be located and accessed; how they should relate to their surrounding context and land uses; who may own and operate these parks; how they will function, look, and be used; and what kind of amenities may be found there. Finally, there is a general description of service area and size ranges. Context and location are particularly important for defining urban parks and will greatly influence the choice of the other elements. Collectively, these component elements define what is unique to urban parks in Fairfax County.

TABLE 1: URBAN PARK DESIGN ELEMENTS

Element or Aspect	Description
Context/Location	<p>Urban parks are generally integrated into mixed use developments or major employment centers in areas of the County that are planned or developed at an urban scale. Areas in the County that are generally appropriate for urban parks include Tysons Corner Urban Center, Transit Station Areas, Suburban Centers, Community Business Centers and identified “Town Centers” or mixed-use activity centers. The context and location of the urban park can result in activating public or private uses located nearby and vice versa. Well-conceived and executed design is critical to the viability of this type of park. To be successful urban park locations need high visibility, easy access, and lots of pedestrian traffic.</p>
Function/Purpose	<p>The purpose and function of urban parks is to provide public spaces for human interaction and outdoor enjoyment in the urban context. Urban parks should include facilities that are pedestrian-oriented and provide visual enhancement, a sense of identity, and opportunities for social interactions, enjoyment of outdoor open space, small-scale recreation and performing and visual arts. Short-term, informal activities and programmed events during lunch hours and after-work hours are intended to foster social interactions among users, provide leisure opportunities, and create a visual identity to strengthen a sense of place and orientation. From an urban design perspective, urban parks also assist in breaking up the building massing and in creating a rhythm for the development pattern. Urban parks help to establish the character and identity of an area. Urban park functions may vary with features and facilities that range from social interaction and enjoying the outdoors to more active pursuits related to recreation amenities that may be included. Urban parks can also function as central civic space for community building activities.</p>
Access	<p>A key aspect of the urban park paradigm is that they are always publicly accessible, regardless of ownership, and are generally integrated into other public and private uses. Accessibility from the public realm, such as streets and sidewalks, extends the public realm into urban park spaces. Access is generally by pedestrian, bicycle or other non-motorized means and universal accessibility should be ensured. Urban parks should be provided in locations that are near transit facilities, trail systems and high pedestrian traffic areas. Connectivity among urban public spaces is also desirable.</p>
Ownership, Management and Operation	<p>Urban parks can be owned, managed, and/or administered by private land owners, community groups, public agencies and authorities (such as Fairfax County Park Authority, other governing or managing authorities or organizations), or quasi-public agencies and authorities (such as business improvement districts) or through joint public and private sector agreements for public benefit.</p>

Element or Aspect	Description
Amenities	Typical amenities within urban parks include seating, tables, street furniture, public art, trails, visual elements, display space, signage, water features, casual food service, focal points, playgrounds, gazebos, lighting, bike racks, pedestrian connections, special landscaping, transit-oriented amenities, and/or security features. In larger urban parks, amenities may also include recreational facilities such as sport courts, fitness stations, athletic facilities, and/or open lawns (natural or artificial) that can be casually used or programmed for sports or events. Other amenities that may also be provided include off-leash dog areas, garden plots, demonstration gardens, restrooms, parking, food service, amphitheatres and picnic shelters.
Form/Visuals	Well-conceived and executed design is critical to the viability of urban parks. Generally, urban parks consist of one or more intimate spaces or rooms, smaller than typical suburban parks and should complement surrounding uses, context, design, natural features and architecture. These spaces should be constructed of high quality hardscape and landscape materials that are sustainable, durable and environmentally sound. Urban parks may range from a single “room” to multiple “rooms” in design. Design should be consistent with design guidelines adopted for an area and should support transient, short visits and consider its appeal to a range of users.
General Length of Stay	Depending on the context, surrounding uses and amenities offered, the length of stay will generally be less than two hours, but could last up to all day for special community events or festivals.
Size and Service Area	In urban areas, park size is typically less than five acres and often under ½ acre. Service area is generally within a 5-10 minute walking distance (or ¼ - ½ mile) from nearby offices, retail and residences. New developments should provide 1.5 acres per 1,000 residents and 1.0 acre per 10,000 employees. Within urban, mixed-use development areas, a full complement of urban park types is desirable to create robust park networks.

URBAN PARK TYPES

Urban park design elements may be combined in various ways to create a range of urban park types. Four distinct types of urban parks emerge from the urban park elements: pocket parks, common greens, civic plazas, and recreation-focused urban parks (see definitions and illustrations below). Urban park types range from the very small “pocket park” situated as a by-way on a pedestrian oriented travel way to a large civic open spaces that encompass many acres and diverse amenities and accommodates large community gatherings.

The four urban park types span a continuum of purposes, uses, sizes and features that can flexibly accommodate a broad spectrum of recreational and leisure pursuits in our urbanizing centers. Ideally, urban areas will contain a variety of urban park types in order to serve local leisure needs and support revitalization goals, and create or enhance an areas’ sense of culture, liveliness, and identity. The precise number, size and arrangement of the four park types in any

given urban commercial activity center should be determined as warranted by local conditions, adopted plans and in accordance with an urban park implementation process.

Ideally, urban areas will contain a complement of urban park types in order to serve local leisure needs; support revitalization goals; support environmental and sustainability goals; and contribute to the areas' sense of culture, liveliness, and identity. It is also important to pursue creative solutions to providing open space and recreation facilities in these areas. Creative urban park initiatives may include rooftop parks, unique programming areas, recreation facilities provided within commercial buildings, redevelopment at nearby existing parks and forging new park provider partnerships.

Pocket Park – Usually less than one acre, these urban parks are small-scale, open spaces incorporated into developments and designed for casual use by people working and living in the immediate area. A pocket park is designed as a single “room” to provide limited casual open space to enjoy individually or in social interactions. These spaces may consist of hardscape elements or lawn and landscaped areas, seating and visual amenities.



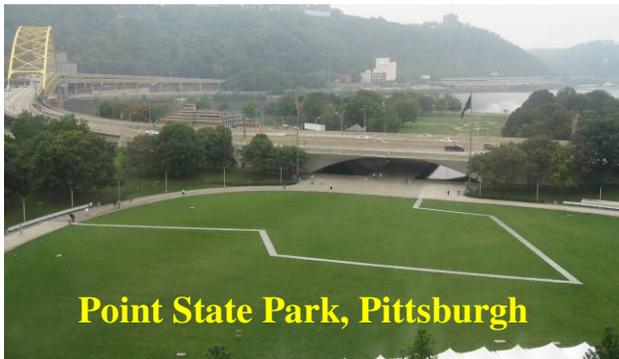
Arlington



Paley Park, New York City

Common Green – Larger than pocket parks, these urban parks include flexible open spaces with open lawn areas, serving as the recreation and social focus of a neighborhood or larger area. Size will generally depend on the context, function and area, but should be a minimum of one acre. Although a central lawn will be the main focus of this type of park, it may be designed with multiple “rooms” offering a mix of complementary uses and/or large enough to support multiple simultaneous activities. The Common Green could function as unscheduled open space for uses such as

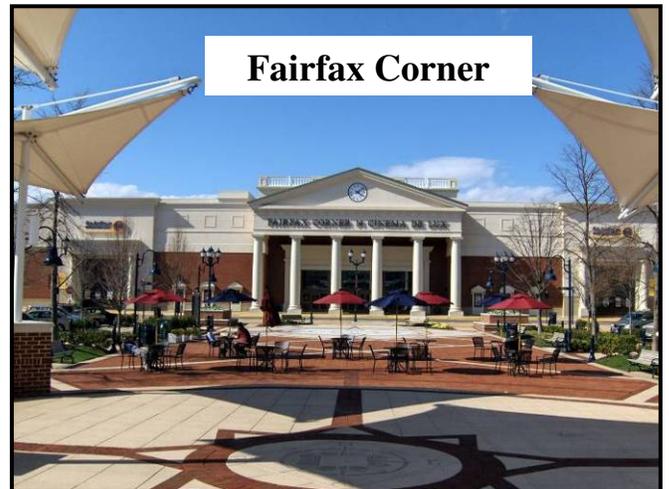
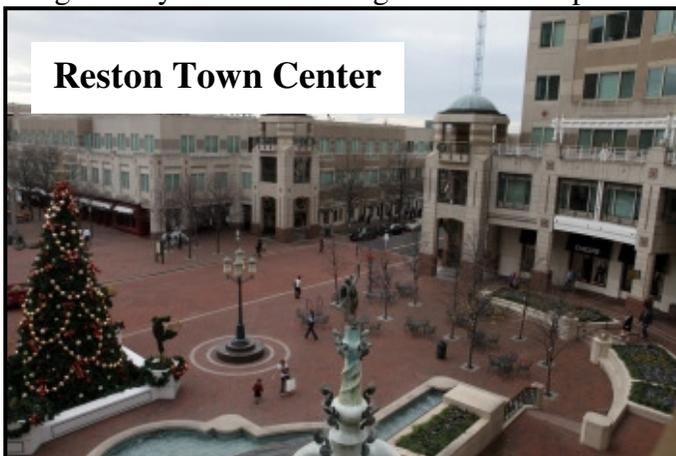
picnicking and unstructured play or be programmed for athletics, public gatherings, performances and special events. The Common Green may include facilities such as off-leash dog areas, community garden plots, landscaping, water features, shade structures, gathering areas, amphitheaters, space for public art, and/or hardscape areas. Recreational amenities may be incorporated as complementary facilities, but do not predominate. Examples of recreational



facilities include tot lots and playgrounds, small skate parks, fitness courses and paved trails, and sport courts.



Civic Plaza – This type of urban park includes public gathering spaces set aside for civic purposes and commercial supporting activities. Civic plazas are usually located at the intersection of important streets or other significant locations and serve as a focal point and unique placemaking feature. Public squares that are surrounded by public streets are also an example of this type of urban park. Flexible, programmable spaces in multiple rooms are generally included. Design will include primarily



hardscape elements, but may include trees or other landscaping, seating, public art or water features. Size will generally depend on the context, function and area, but should be a minimum of one acre. Depending on size, civic plazas could support open air markets, summer concerts, festivals, outdoor exercise classes or special events. Recreation

amenities may be incorporated as complementary facilities, but do not predominate.

Recreational Urban Park – In densely-populated urban areas, recreation needs should be addressed with the inclusion of recreation facilities in an urban park setting to serve local residents, workers and visitors. This park type is distinguished by its primary function to provide recreation facilities for nearby residents and workers. Facilities such as athletic fields, multi-use courts and skate parks should be provided. Facilities could be scheduled or casually used. Athletic fields



could have synthetic turf and facilities lit to maximize use. Support facilities and amenities such as trails, seating, tot lots, shade structures, water features, picnic areas, restrooms, landscaping or hardscape should be provided to complement the recreational component. The size of the park should be appropriate to accommodate the recreation facilities located there.

The preceding typology attempts to define and characterize the typical range of urban

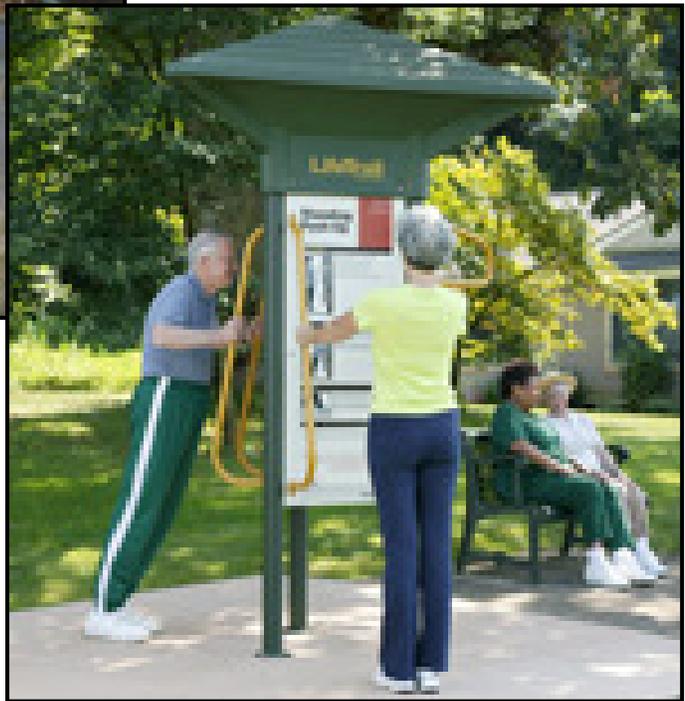
park types that have or will be developed as Fairfax County land use patterns and activities centers change and grow. Additionally, there are a number of supporting features that may share some common characteristics of urban parks, but which do not in and of themselves constitute an urban park. By themselves, supporting features should not be counted towards the urban park requirement when calculating the urban park contribution for an area.

LINEAR RECREATION SPACES

Linear recreation spaces are designed for recreational use and are continuous linear spaces with continuous lengths of outdoor trails that are a minimum of 8' wide and may include amenities and/or design features such as trailheads, orientation features and wayfinding signage. Outdoor linear facilities are popular for jogging, dog walking, biking, walking, and/or general exercising. Creation of continuous linear spaces for recreation provides an important amenity that can be linked with pedestrian and bicycle street elements. The most typical facility is a Fitness Trail. Fitness trails are paths or courses equipped with obstacles or fitness stations for exercising or sport. A course should be at least a one mile loop with a minimum of 10 stations. Design considerations should include limiting of entrances and intrusions on the course and locating the stations in areas that may be visible but not at hazard from vehicle traffic. Stations may be located singly or in clusters. Urban fitness trails tend to be flat, to permit participation by users of all abilities, and to accommodate cyclists, runners, skaters and walking. Other terms used for this type of facility are parcourse or outdoor gym.

Linear greenways that utilize urban stream valleys for trails and trail connections are another form of linear recreation space.

Examples of Outdoor Fitness Stations

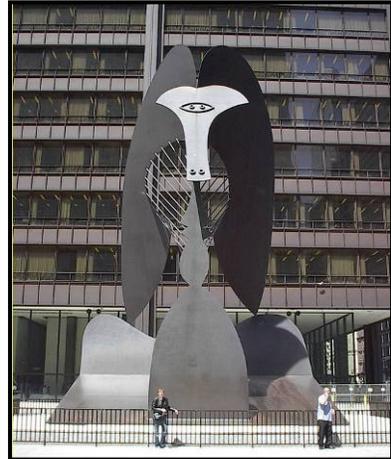


SUPPORTING FEATURES

Urban design features associated with urban development often support the urban park paradigm but do not in and of themselves constitute an urban park. These features include streetscape elements that enhance the aesthetic and functional nature of the public realm. They often serve to connect public and private spaces. These features are generally required to be provided in any development or redevelopment and should be considered supporting features to urban parks and open space. A sampling of supporting elements include the following:

FOCAL POINTS – An urban design element that serves to focus ones attention and add visual interest.

Visual Amenity – A single statue, fountain, sign, planter, or work of art that draws attention and adds to the character or identity of a place.



Gateway Feature – Space such as a median strip, traffic island, or landscaped corner that signals entry into an area, creates the first impression of an area and usually contains one or more Visual Amenities.

Building Entry – Highly designed building entrances provide an identity or amenity that relates to the building and may consist of hardscaped elements such as an entry plaza and

stairs, plantings, seating and visual amenities. These spaces primarily enhance the aesthetics of the building with limited provision of public open space. Overall, these building entry spaces enhance the overall urban design rather than provide public open space.



LINEAR SPACES -These spaces supplement and, in some cases, link the urban park spaces. Many of these linear spaces are required for development, redevelopment or public infrastructure and are important in connecting and supporting public open space.

Streetscape – Vehicle lanes, medians, bike lanes, pedestrian islands, sidewalks, planting strips, street furnishings, browsing area, and trees associated with streets.



Pedestrian Alley – Mid-block hardscape pedestrian-only connection between buildings.



Landscaped Connector – Inter-parcel non-motorized connection surrounded by landscape plantings.



GLOSSARY

To provide additional clarification of general terms used in this document, the following definitions are offered:

Private – Privately-owned and managed park or recreation facilities; open only to the owners/residents of that property.

Semi-private – Privately-owned and managed park or recreation facilities; open to members and/or paid visitors to a site.

Publicly Accessible – May be privately or publicly owned and managed; can be accessed by any member of the public directly from the public realm without a need for membership, keys, codes or access cards. Ideally, these spaces should be visible from the public realm and provided at grade for the greatest degree of accessibility. Can be provided on rooftops or in interior spaces, but careful attention must be paid to their design so that they remain fully visible to the public and it is clear through wayfinding features how they may be accessed.

Public – Publicly-owned, managed and accessible park.

Shared – Management and/or ownership responsibilities are shared between private and public entities.

Rooftop Park – Rooftops of buildings accessible to public that incorporate active or passive recreation space.

URBAN PARKS IMPLEMENTATION PROCESS

Successful implementation of urban parks in Fairfax County requires a proactive and collaborative process. This process begins with a common understanding by all stakeholders of the value of urban parks in future growth areas, urban park terms, elements, types and supporting features. This collaborative process has begun with the drafting of this urban parks framework document. Putting this common understanding into practice will be a joint responsibility. The START team provides a structure for coordination between the Department of Planning and Zoning (DPZ), the Office of Commercial Revitalization and Reinvestment (OCRR) and the Park Authority (FCPA) in dealing with commercial reinvestment areas of the County. For Tysons and Transit Station areas, interagency collaboration will be essential and there may be other facilitating groups or organizations formed that will share responsibility for implementing urban parks.

In regards to urban parks and recreation in revitalization areas, Fairfax County will need to take a two-pronged approach. First, development or redevelopment in commercial activity centers will be required to meet desired park/recreation service levels using a methodology that is easily understood and supportable. Second, plans and strategies need to be updated, created and implemented over time to support and ensure the achievement of desired park/recreation service levels in our urbanizing growth areas.

Implementation Strategies

The following implementation strategies are intended to facilitate a proactive and collaborative development review process; to facilitate defining and meeting urban park and recreation needs in urbanizing areas; and to explore additional financing mechanisms for urban parks. Strategies are grouped according to whether they can be addressed in the short, medium or long term

SHORT TERM (less than one year)

1. Gain consensus by agency stakeholders of the value, inclusion and understanding of urban parks.
2. Incorporate stakeholder input and finalize the urban parks framework document.
3. Using the agreed upon final urban park descriptive document, ensure common understanding of urban parks as they relate to the development review process by all stakeholders. This should include cross agency communication at various levels and with applicants, especially in the early stages of development proposals.
4. Cross agency participation in ongoing planning studies, plan amendments and rezoning proposals to identify urban park needs and how they should be addressed.
5. Formulate a flexible process or mechanism to measure park service levels and implement urban parks in urbanizing growth areas. Possible mechanisms may include a point or grading system for achieving urban park goals and service levels.

MEDIUM TERM (1-2 years)

6. Formulate a flexible process or mechanism to measure park service levels and implement urban parks in urbanizing growth areas. Possible mechanisms may include a point or grading system for achieving urban park goals and service levels.
7. The Park Authority should identify urban park needs in the commercial activity areas through various planning processes, including the Great Parks, Great Communities park master planning process, revitalization plans and special studies, Area Plans Review, and Out of Turn Plan Amendments.
8. Coordination via the START team will facilitate implementation of the agreed upon urban parks framework. Recognizing that commercial activity centers are more deficient in parks and park facilities than other areas of the County, the identification of park needs commercial activity centers may include identifying parkland and/or recreation uses to be integrated into the planned mix of uses and/or the designation of a central area that serves multiple civic uses including recreation and leisure functions. Such civic areas can serve as catalysts for revitalization.
9. Identify opportunities at existing parks where park needs can be met, supplemented or enhanced. Implement changes at existing parks through the proffer system.

LONG TERM (2-5 years)

10. The Park Authority may need to update Master Plans for existing parks that serve the revitalization areas so that appropriate improvements and facilities are planned.
11. Funding mechanisms for urban park implementation and maintenance should be determined.
12. The identification and funding of potential parkland acquisitions or public land transfers within commercial activity centers should be strategically coordinated among public agencies.



FAIRFAX COUNTY PARK AUTHORITY



M E M O R A N D U M

TO: Fred Selden, Director
Planning Division, DPZ

FROM: Sandy Stallman, Manager
Park Planning Branch, PDD

DATE: October 13, 2009

SUBJECT: Reston Master Plan Special Study

The Reston Master Plan is being reviewed for updating because of the proposed three Metro stations that will be located along the Dulles Toll Road. These stations are anticipated to be the catalyst for new development in this corridor. The areas around the stations are potential Transit Oriented Developments (TOD) and as such can be expected to generate high density office and mixed use developments with an emphasis on pedestrian and urban spaces. In response to your request for existing conditions relative to parks and recreation resources in the Reston area, we provide the following information.

Part 1: Existing Park and Recreation Facilities

The Reston Master Plan Special Study Area falls within the Upper Potomac Planning District. The area residents are served by parks managed by the Fairfax County Park Authority (FCPA) and the Reston Association (RA). The Reston area is served by 36 parks managed by the Fairfax County Park Authority. The Reston Association maintains 48 sites including open space and stream valleys totaling 1,300 acres. Currently the number and type of facilities within existing area parks do not meet service level standards established by the Park Authority in the 2004 Needs Assessment. Table 1 lists County parks and facilities that serve the Reston area.

In addition, four maps are attached that graphically illustrate the park resources in this area. These maps depict the following:

1. Existing Parkland
2. Parkland and Schools
3. Park Types
4. Park Facilities

Table 1: Existing Fairfax County recreation facilities serving the study area (Includes Town of Herndon)

Fairfax County Park Authority Site	Restrooms	GOLF	Mini Golf	TRAILS	PICNIC SHELTERS	Picnic Tables	PLAYGROUNDS	RECTANGLE FIELDS	DIAMOND FIELDS	Sand Volleyball Courts	TENNIS	MULTI-USE COURTS	RECenter	Garden Plots	HISTORIC FEATURE	WATER ACTIVITIES	Nature Center	Dog Park	SPECIALTY FEATURES
ALABAMA DRIVE				•		•	•	•	•		P	•							
BARON CAMERON SCHOOL SITE						•	•	•	•					•				•	
BRUIN	P				•	•	•		•		•	•							P
CHANDON							•		•		•							•	
CLARKE'S CROSSING						•	•												
COLVIN RUN MILL	•					•									•				
COLVIN RUN STREAM VALLEY				•											•				
COPPERMINE CROSSING SS																			
DIFFICULT RUN STREAM VALLEY				•											•				
DULLES CORNER									•										
FLORIS SCHOOL SITE						•	P					•			•				
FRANKLIN OAKS				•			•												
FRED CRABTREE	P			•		P	P	•	•		P	P			•		P		P
FRYING PAN FARM	•			•	•	•	•								•		P		•
FRYING PAN STREAM VALLEY				•			•												
HORSEPEN RUN STREAM VALLEY				•			•					•							
HUTCHISON SCHOOL SITE				•			P	•	P			P							
LAKE FAIRFAX	•		P	•	•	•	•	•	•						•	•		P	•
LITTLE DIFFICULT RUN STREAM VALLEY				•															
MERRYBROOK RUN SV																			
RESTON NORTH				•			•	•	•										
RESTON TOWN GREEN																			
SOUTH LAKES DRIVE				•		•	•	•	•			•							
STANTON				•	•	•	•												
STRATTON WOODS				•		•	•	•	•	•	•	•							
STUART ROAD				•	•	•	•				•	•							
SUGARLAND RUN STREAM VALLEY				•		•	•					•			•				
TAMARACK				•		P	P												
WINDERMERE				•															
EUDORA (VIENNA)																			
FOX HUNTERS (VIENNA)																			
LAHEY LOST VALLEY (VIENNA)	P			P											•				P
LAWYERS ROAD PARK (VIENNA)				P	P	P	P	P											
SYMPHONY HILLS (VIENNA)																			
WOLFTRAP STREAM VALLEY (MCLEAN)																			
DIFFICULT RUN STREAM VALLEY (FAIRFAX)				•											•				

Facilities Exist •

Facilities Planned P

Youth Softball Fields	8,800	26.0	24.8	1.2	105%	6
Basketball Courts	2,100	18.0	103.8	(85.8)	17%	14
Playgrounds	2,800	30.5	77.9	(47.4)	39%	14
Neighborhood Dog Parks	86,000	2.0	2.5	(0.5)	79%	7
Neighborhood Skate Parks	106,000	0.0	2.1	(2.1)	0%	14

Due to growth in the suburban centers, Upper Potomac has the largest population and non-residential gross floor area of all the planning districts. Upper Potomac is expected to continue its strong growth pattern over the next ten years mainly within the suburban centers and the Town of Herndon. Planned rail transit along the Dulles Toll Road and growth in the Dulles Corridor will spur the district's expansion.

Facility deficiencies in Upper Potomac are high, particularly rectangle fields and youth baseball fields, courts and playgrounds. Reston Association facilities contribute to offset the deficiency. Opportunities to provide additional local serving facilities and athletic fields should be identified. In addition, a recent study on indoor recreation by Brailsford and Dunlavey, Inc. for RA and Reston Community Center (Fairfax County Small Tax District 5) identified gaps in service for indoor facilities, including tennis and aquatics.

Additional parkland is needed to protect and buffer natural areas and historic sites and to provide room to develop new recreational facilities. Based on adopted service level standards and projected population growth, Table 3 shows the projected surplus or deficit of parkland in the Upper Potomac Planning District for the year 2020:

Table 4: Upper Potomac Planning District 2020 Park Land Needs Analysis

193,809	2007 Population						
218,082	2020 Population						
42,844	District Size (acres)						
	Parkland/Open Space Type	Service Level Standard	2007 Existing Acres	2020 Needed Acres	2020 (Deficit)/ Surplus	2020 Service Level	2020 District Rank (out of 14)
Fairfax County Parkland	Local	5 acres/1000	628	1090	(462)	58%	14
	District/Countywide	13 acres/1000	2,109	2835	(726)	74%	11
	Resource-Based	*	1,918				
	Parkland Total		4,656				
Private Open Space	Private Recreation		923				
	HOA Property		4,967				
	Private OS Total		5,579				
Public & Private Total			10,545				

* There is no service level standard for Resource-Based parkland. The amount of resource based parkland owned and/or protected is based on the existence and sensitivity of the resources.

Table 3 indicates that the Upper Potomac district is highly underserved by local parkland. However, it also shows that there is more homeowner association owned (HOA) open space than

public parkland in the district. About 1,350 acres of the HOA owned property is provided by Reston Association (RA) local parks. Although Reston parks are not public, they function like public parks and serve Reston's population of 58,000 at an overall level of 23 acres per 1,000 population.

The park system is comprehensive in Upper Potomac, providing numerous and varied types of recreation facilities as well as having substantial natural and cultural resources. The Park Authority provides proportionally less neighborhood and local parks compared to other planning districts. However, local parks are provided by the Reston Association and the Town of Herndon, which have the greatest proportion of population in the District. Additional parkland is needed for recreation facilities, especially athletic fields and facilities that support teen and senior activities. Parkland for trail networks and connections is highly desirable.

The study area encompasses part of the Reston Center of Industry and Government (RCIG). The properties within this designated area have been governed by a development restriction that allowed commercial and industrial development only. This restriction is due to expire in 2010 and it is expected that these properties will submit plans for redevelopment at higher densities that include a residential component. This will create a greater service level gap as this commercial area does not include existing or planned parkland. These service level deficits will impact the Park Authority's and Reston Association's ability to provide adequate recreational services.

The likely mixed-use development concepts that will be proposed in redevelopment efforts are generally urban in nature and therefore, the urban parkland service level standard is used. Under the urban parkland service level standards recently adopted by the Park Authority Board, 1.5 acres of land per 1,000 new residents and 1 acre per 10,000 employees is the standard for generating the requirements for new parkland.

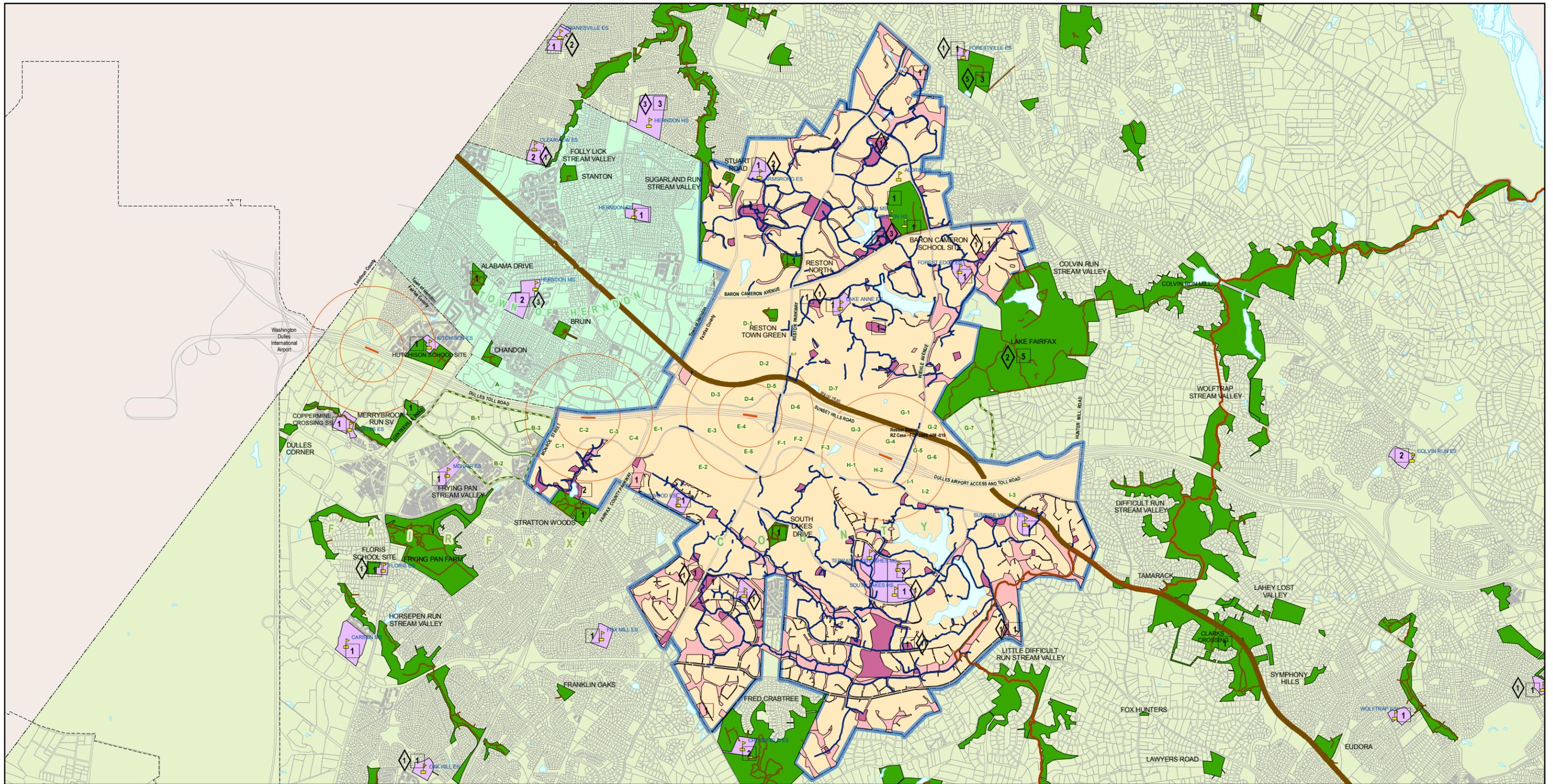
With no existing park sites within the RCIG, enhancing the facilities at the immediate surrounding parks and looking at regional facilities is a way to gain additional recreation services for the RCIG residents and workers. While increasing capacity at existing parks is one strategy for addressing park and recreation needs, the addition of new parkland that will support recreation facilities is also essential in offsetting the projected population and workforce growth in this corridor

Thank you for the opportunity to provide information on existing park and recreation resources. We have coordinated this information with Larry Butler at Reston Association and will continue to work with him to plan parks and recreation facilities as the Reston Master Plan is updated through this study. It is essential that a joint mechanism or process be coordinated to evaluate development proposals ,especially in the RCIG, where new residential uses were not envisioned as Reston was planned. Currently development proposals in Reston lack coordinated review for park and recreation impacts.

Please contact me or Pat Rosend for further information or clarifications.

cc: File Copy
Pat Rosend, Senior Planner
Fred Seldon, Director, Planning Division
Heidi Merkel, Planner III, DPZ
Larry Butler, Reston Association Parks and Recreation

P:\Park Planning\Long Range Planning\Comp Plan Review\Reston Plan Amendment-200910\Memos And Correspondence\Reston Special Study 2009 RPT.Doc



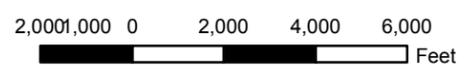
**Reston Master Plan Special Study
Park Analysis : Existing Conditions
Fairfax County, Virginia, 2009
EXHIBIT4 : Park Facilities**

Legend

- Reston Boundaries
- General Location Transit Station Platforms
Circles denote 1/4 and 1/2 mile distances from center of station platform
- Fairfax County Park Authority Park Land
- Reston Association Park Land
- Reston Open Space
- School Property
- School Facilities
- Diamond Fields
- Rectangle Fields
- W & O D RR Trail
- Cross County Trail
- Fairfax County Trails
- Reston Trails



Map prepared by FCPA
Planning & Development Division
April 2010
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Reston-Dulles_Special_Study_2009.mxd



Proposals for Parks North Town Center

Prepared for
The Reston Master Plan Special Study Task Force

By:

Guy L. Rando
Urban Designer
Landscape Architect
&
Kathy Kaplan

With
Residence, Urban Design and Livability Work Group
Reston 2020 Committee
Reston Citizens Association

June 2, 2010

Residence, Urban Design and Livability Work Group
Dick Rogers, Co-Chair
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Richard Newlon
Bill Penniman
Tammi Petrine
Terri Phillips
Holli Ploog
Wendye Quaye
Rob Whitfield

North Town Center Proposals

Plan A and Plan B

Guy L. Rando
Urban Designer
Landscape Architect

Proposed is a walkable galleria/atrium of varying heights and widths along the north-south axis of Town Center. The galleria will provide a climate-controlled space. It will be composed of residential units, hotels, offices, and retail. Residential units at the upper levels will have open balconies overlooking the galleria below.

The distance between Baron Cameron and Reston Parkway Station is about a mile. People will not walk that distance unprotected from the elements. An enclosed galleria will promote pedestrian connectivity between North Town Center and the station. People will come to the galleria for exercise and to walk the safe and clean mile-long space back and forth all year, 24 hours a day.

The new residents of Town Center will need open space and parkland. Both Rando Plans A and B provide open space and parkland and increased property values for the community.

The following are a few examples: the gallerias in Milan and Naples, Prudential Center in Boston (Boston Properties), and the public atrium at James R. Thompson Government Center in Chicago, and the atrium at the Bank of China in Beijing with a stone water garden designed by I. M. Pei. Please see photographs below.

In Town Center new school buildings will be attached to the gallerias/atriums and the adjacent parks will provide outdoor recreation for the students.

Fountain Drive is too wide for successful synergy for a retail street and increasing the traffic along Fountain Drive will further defeat a retail purpose, therefore Fountain Drive should be narrowed.

Cascades Park (Plan A)

Cascades Park will be composed of an expanded Reston Town Green and an additional parcel of equivalent size west of Library Street stretching to Town Center Parkway.

A watercourse will “cascade” downhill utilizing the existing topography with waterfalls over rocks down through the park providing peaceful sitting areas among the rocks for people to enjoy the sight and sounds of the water.

Existing tree cover will be preserved where appropriate to the overall design.

A wheelchair-accessible, winding walkway will cross the watercourse in several locations. Benches and other urban park features such as picnic, game tables, and play areas will add texture to the park.

The park will host Shakespeare-in-the-park and music concerts with an outdoor amphitheater. The park will have multiple small specialized gardens dedicated to horticulture, butterfly gardens, and a bird sanctuary.

At the northeast Fountain Street corner a restaurant will be located to provide south and west-facing terraces (“Sunset Deck”) with views over the park.

A climate-controlled galleria from Baron Cameron to Market Street and then on to Metro will be connected to civic uses, commercial, parks, and residences.

Cascades Park will draw people from all over Reston and beyond and those visitors will then be able to visit local restaurants and retail stores in Town Center and the galleria.

Please see Rando Plan A, Cascades Park, and the Diagrammatic Section of Plan A.

Lake Inova (Plan B)

The value of the property between Fountain Drive and Town Center Parkway will be greatly increased by a lake, by a park, and by an integrated, mixed-use community. Lake front properties are worth twice the value of those which are not on a lake. The two current property owners could engage in a PPEA agreement to redevelop this section of Town Center. Both Inova and Fairfax County will reap great financial benefits, but it is the community itself that will reap the greatest benefit with the creation of an elegant world-class development in the center of town.

Lake Inova will be surrounded by a public walkway and parkland open to the public. High-rise, mixed-use buildings housing condos, restaurants, hotels and retail will circumvent the lake. The space will include facilities for an elementary school with the park to be used for outdoor exercise.

The cascading waterfall feature can be inserted between the high-rise buildings along Fountain Drive, wind down through the park, and empty into Lake Inova.

Ground-level restaurants with outside seating areas and ground-level offices will be located inside the ring of high-rises.

The architect for the Lake Inova plan must be chosen by international competition to assure the highest level of design standards.

Please see Rando Plan B, Lake Inova, and the Diagrammatic Section of Plan B.



Galleria Vittorio Emanuele, Milan, Italy



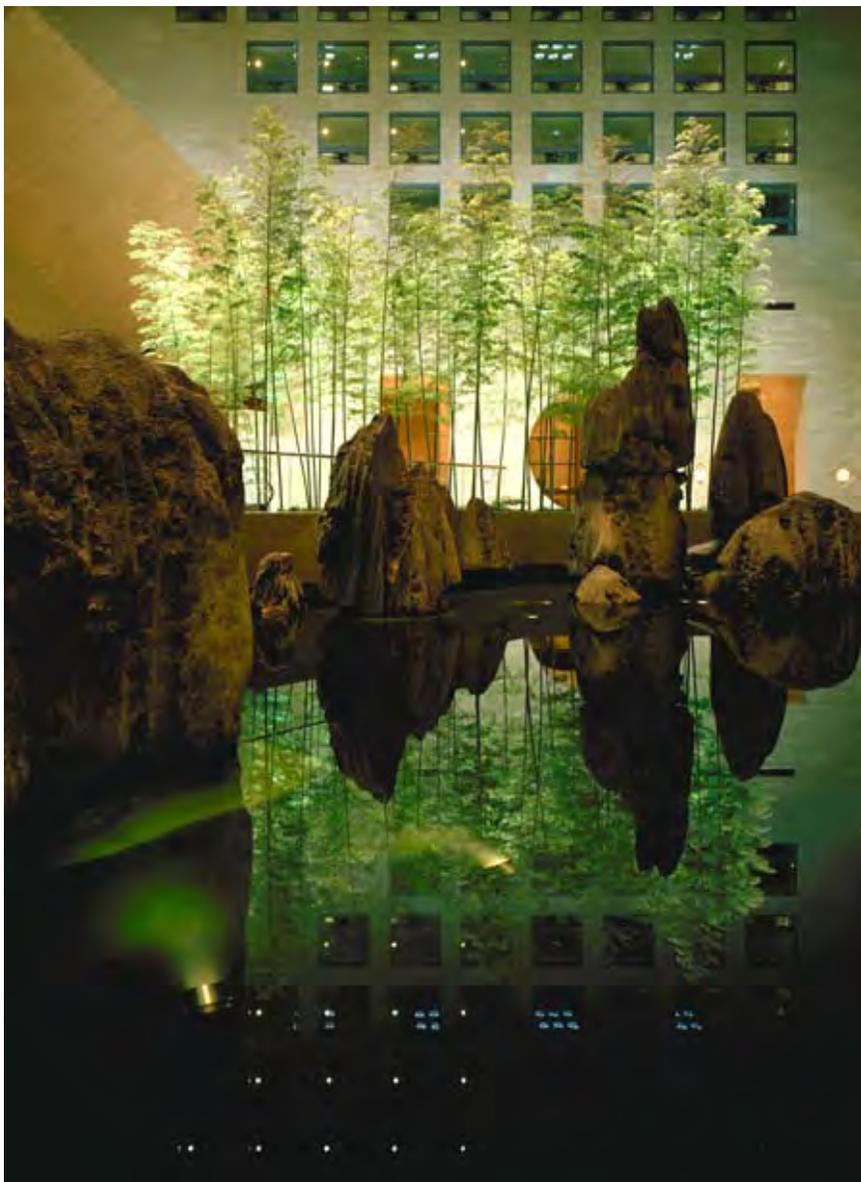
Galleria Umberto, Naples, Italy



Galerie Royales St. Hubert, Brussels, Belgium



Bank of China, Beijing. I.M. Pei



Bank of China, Beijing. I.M. Pei

RANDO PLAN A: Cascades Park

Diagrammatic Plan

Mixed-use along
climate-controlled
pedestrian galleria.

Pedestrian galleria (as
opposed to a shopping mall)
varies in height and width and
extends from Baron Cameron
to Market Street and south
to Metro/Civic Center
and International Center.

Complete separation of
pedestrian and
vehicular
traffic.

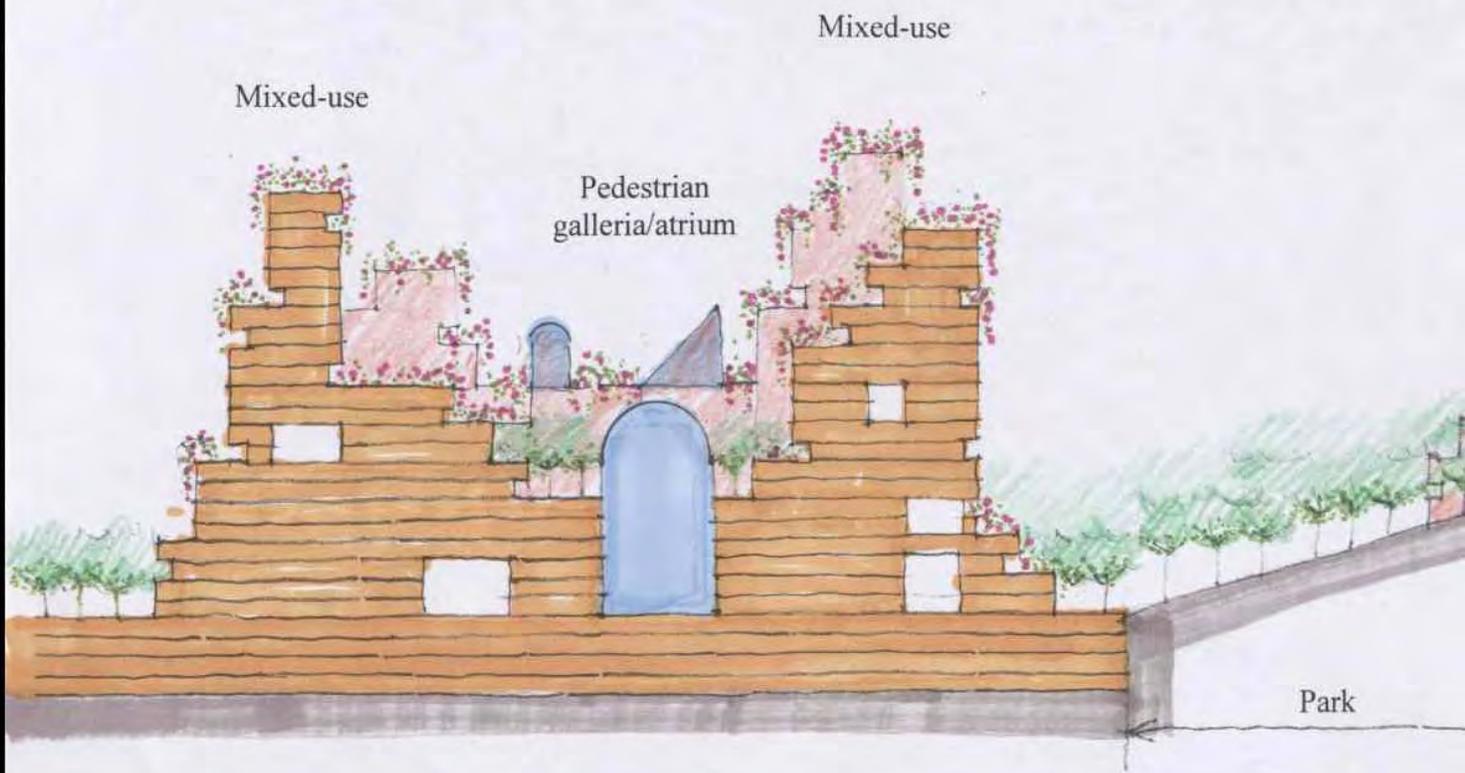
Urban parks connected
to galleria/atrium. All
uses directly connected
to pedestrian galleria—
residential, commercial,
schools, civic uses,
parks.

Narrowing width of
Fountain Drive increases
retail synergy between
east and west side of
street.

Continuous pedestrian
arcade from Baron
Cameron to Market
Street and Metro.

TCN is an extension
of Town Center and
should have the same
FAR, or more.





Mixed-use

Mixed-use

Pedestrian
galleria/atrium

Park

Diagrammatic Section

RANDO PLAN B: Lake Inova

Diagrammatic Plan

Vision:

Most of the site is planned for a park and a lake with the FAR as high or higher than Town Center.

The park would benefit the entire community including the core.

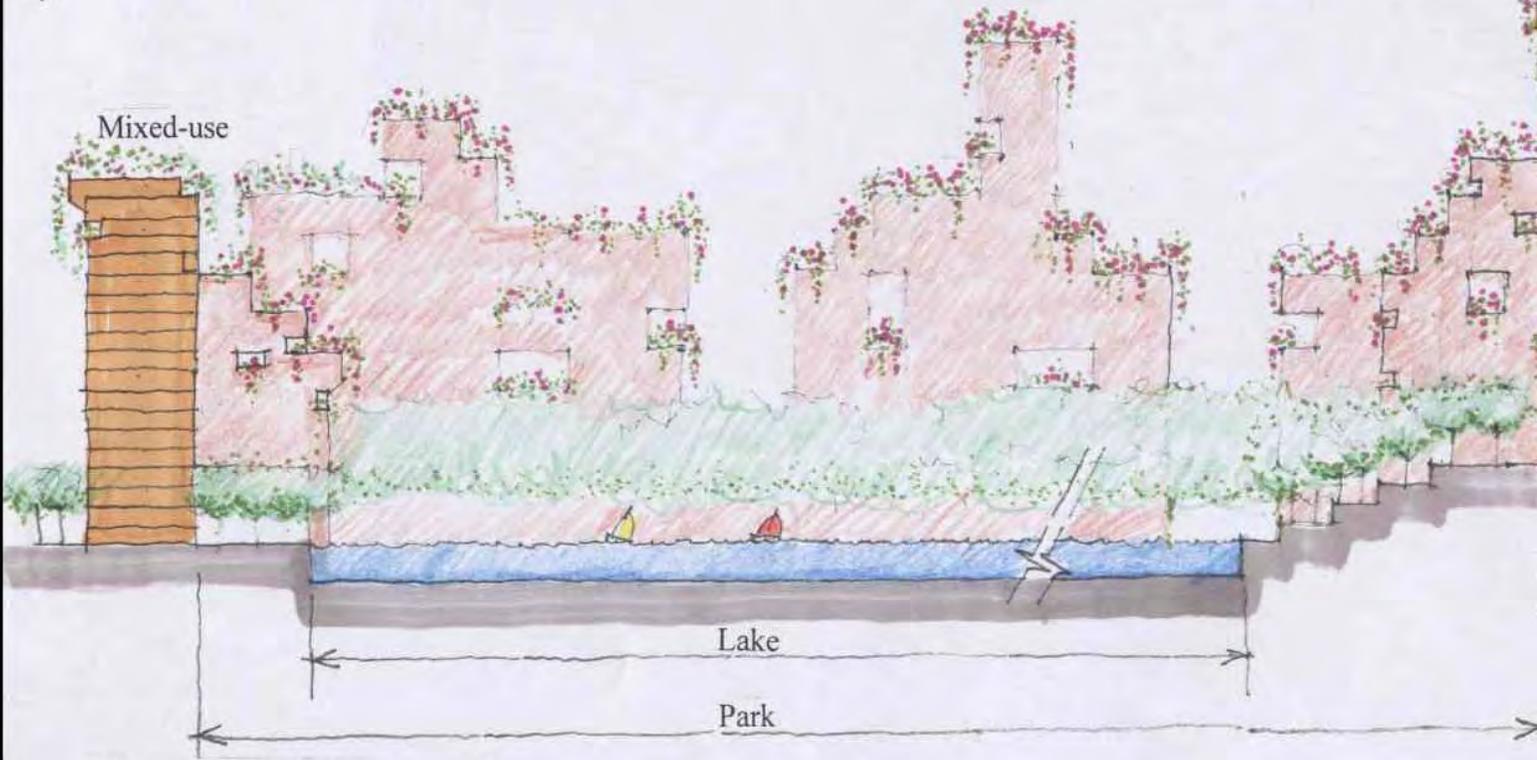
Property values on the lake would be at least twice than those fronting on a grass mall.

Fountain Drive should be narrowed to increase retail synergy between east and west sides of the street.

A continuous arcade along Fountain Drive from Baron Cameron to Market Street and Metro.



Town Center Parkway



Diagrammatic Section

A Strawman Proposal for: The Wiehle Transit Metro Station Area

Prepared for
The Reston Master Plan Special Study Task Force

By:

William Penniman
Alternate, RMPSSSTF
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Residence, Urban Design and Livability Work Group
Reston 2020 Committee
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Wendye Quaye
Guy Rando
Marion Stillson
Rob Whitfield

A Strawman Proposal for: The Wiehle Transit Metro Station Area

Executive Summary

Transit oriented development will dramatically alter the character of the Wiehle station area. Development must be channeled by a well-designed Comprehensive Plan in order to benefit Reston and its new residents and to maximize the value of the new transit system. The Comprehensive Plan should:

- increase the residential component of permitted mixed-use development;
- assure pedestrian and bicycle interconnectivity throughout the transit corridor;
- focus density increases on areas nearest the Wiehle station and more to the north of the toll road than to the south, particularly between Wiehle and Plaza America;
- implement mobility infrastructure improvements (including, but not limited to RMAG recommendations, interconnected pedestrian and bicycle paths) and transportation demand management strategies;
- provide attractive, publicly accessible open spaces (e.g., plazas, parks, pedestrian/bicycle pathways) throughout the corridor so that new and existing residents can enjoy nearby outdoor and recreational opportunities;
- develop enough restaurants, other retail establishments and other attractions to keep the area alive with people both during and outside working hours;
- endeavor to attract businesses and educational and cultural institutions;
- add or upgrade non-mobility infrastructure (fire and rescue capabilities, schools, indoor recreation, library) that will be needed to serve the growing population of residents and employees;
- reprogram the planned, Wiehle transit parking, primarily to serving local uses, rather than commuters, after transit stations to the west are opened; and
- protect Reston's established residential areas from disruptions.

This memo is intended to prompt thinking about the Wiehle transit station area. It does not attempt to define a final outcome. It reflects very constructive input by a number of members of the community including Reston 2020's RUDL Committee and some Task Force members.

The memo divided into two main parts: (A) General Thoughts and Goals and (B) Thoughts on Specific Areas and Sub-Units. Both need to be considered, *along with a vision of the larger Reston community*, in order to achieve a rational redevelopment of the RCIG area. The memo is accompanied by a table summarizing the ideas by sub-unit.

A. General Thoughts and Goals

1. **Central Goals**. The main objectives for development near the Wiehle transit station should be to create a well-balanced area that

- (a) is alive both day and night, on weekdays and weekends--not just an office area that fuels traffic and peak period activity but is a dead-zone the rest of the time;
- (b) evolves as an urban neighborhood and educational and cultural destination, where Restonians want to come for employment, restaurants, culture, recreation, shops, parks and pedestrian/bicycle trails, in addition to the Metro;
- (c) is visually attractive from the perspectives of first class architecture, art, plantings, street life, lighting, green spaces and openness;
- (d) has substantial residential development (at least 50% of planned occupancy) throughout and has enough human traffic to be safe, to convey a sense of community, and to support a busy subway stop (with as little automobile traffic as possible);
- (e) has convenient, safe interconnectivity by foot, bicycle and public transportation—both internally and to village centers and Town Center—so that people can comfortably move within, to and from the area without using cars;
- (f) is adequately supported by timely road improvements that protect the community from unacceptable congestion, including new crossings of the toll road for pedestrians, bicycles and vehicles, and that provide mobility within the land units; and
- (g) evolves as a part of the overall Reston community, not as a separate stand-alone place.

2. **Incentives**. The community's principal leverage to achieve desirable, mixed-use development lies in the facts that (a) RCIG property owners need to seek rezoning to a new zoning category in order to maximize the value of their property in light of the arrival of rail transit, and (b) application of consistently high standards to rezoning applications will enhance developers' investments and the community. Mixed use and higher densities are not matters of right under current zoning. A well-designed comprehensive plan is the necessary starting point to guide applications for zoning reclassifications. Absent a good individual application—which makes beneficial proffers

and satisfies a well-designed comprehensive plan—landowners should live with the existing zoning designations for properties in the RCIG. Consolidations or coordinated applications that beneficially integrate development of roads, parks, plazas and pedestrian/bicycle paths should be encouraged (though perhaps not if the result is a large, cookie-cutter development)..

Density credits should be considered as incentives for developers to attract important development characteristics that are not universally required.. *The following illustrates the kind of density incentives that might be offered:*

- 5% for LEED Gold or extraordinary architecture
- 15% for large consolidation (20+ acres) with a network of streets, well-distributed parks/plazas and below-grade parking
- X % (in proportion to cost of) for constructing a substantial public facility (e.g., a recreation center, neighboring street improvements, crossings of the toll road)
- 10% for substantial, high-quality educational campus as long-term tenant
- 5% for minimum financial participation in approved Community Development Authority
- 5% for entirely below grade parking

3. **Timing.** This is a long-term exercise. Given the current economy, the number of unfilled (but relatively young) buildings along the RCIG, and the number of office-condominium owners, development will not proceed as fast as might have been thought a couple of years ago. *The Task Force should craft sensible recommendations for changing the Comprehensive Plan based on the community's long-term goals and needs, without cutting corners either to expedite development in a bad market or to reflect guesses as to what will motivate builders 10-25 years from now.*

Ideally, redevelopment would occur first at sites closest to the new transit station both to maximize transit usage and because early development away from the station could sap the commercial real estate market before development occurs near the Wiehle station. A wedding-cake approach to density would provide one incentive for development closer to the station, though the Task Force may wish to consider whether additional incentives are appropriate.

Another option would be for the Comprehensive Plan to limit development to existing zoning classifications and densities (or to existing densities with mixed uses permitted) at locations away from the subway station and then revisit the possibility of mixed-use development in those areas in 10-15 years. *For example*, densities might be increased now only in selected areas—north of the toll road, only within ¼ mile of the station, in Isaac Newton Square, and between the station and Plaza America; and south of the toll road, only within ¼ mile of the station and only north of Sunrise Valley —with permission for densities elsewhere to be re-examined after 2020 or 2025. [Note that the current Comprehensive Plan has a form of staging tied to the nature of mass transit development, *i.e.*, it would increase density to one level for bus rapid transit and to

another for rail transit. This approach would allow time for necessary infrastructure to evolve.]

Other questions to consider include (i) *whether* approval of an individual rezoning application can be conditioned upon construction (at least construction of proffered improvements) being completed by a certain date or the property's zoning category reverts to the current low-density, non-mixed use zoning (subject to a new rezoning process)? (ii) *whether* enforceable commitments to build high-quality projects sooner could get a rezoning preference over proposals that do not make such commitments; (iii) *whether* rezoning could be conducted in a kind of competitive process with the rezoning granted to the best proposals while lesser proposals are rejected or deferred? The proffers and hopes for beneficial development will not have much meaning if the developers never implement the rezoning or if mediocre projects crowd out better ones.

4. **General land-use profiles.** It would be undesirable to have uniform FARs or building heights throughout the corridor for a number of reasons, including traffic, density, and aesthetics. In general, *the collective "profile" of new buildings should place the taller buildings and denser development closer to the stations themselves, with the height and density tapering off as one moves away from the stations.* Similarly, taller buildings should tend to be located closer to the toll road and Wiehle with shorter buildings closer to Sunrise Valley and Sunset Hills. And, in general, *greater density should be permitted north of the toll road than south of it.* These concepts are embodied in the current Comprehensive Plan's designations for sub-units, although this paper suggests a number of changes. One exception to a station-centric model might be to allow greater residential density and taller buildings near and at Plaza America.

Apart from building profiles, buildings should be required to be of high quality construction and to meet LEED (silver) or comparable standards. Truly extraordinary architecture that strongly adds to Reston's public image could also be rewarded with a density bonus.

5. **Mixing uses.** Mixed use is clearly called for, but the issue is what mix(es) should be encouraged both in general and for particular sub-units? (Open space is discussed separately.)

- (a) **Residential v. Office.** The current Comprehensive Plan contemplates different mixes of residential and office space for the various sub-units; office space generally predominates in that plan. To achieve a living community that has human activity at nights and on weekends, development should include a larger component of residential units than the Comprehensive Plan currently contemplates. Promoting pedestrian traffic should be a major goal. Consequently, the revised Comprehensive Plan should set relatively high residential minimums (at least 50% of expected occupancy, as opposed to GFA) throughout the Wiehle TOD area though the residential component may vary depending on the sub-unit's distance from the stations or other factors related to suitability.

(b) Retail. The Wiehle transit area, should include restaurants (*for varying budgets*), shops and cultural attractions so that the area (i) becomes a vital destination, (ii) promotes transit usage, (iii) provides sufficient retail to support nearby hotels, offices and residents as well as attract other patrons, and (iv) provides sufficient foot traffic to create a sense of safety. Consistent with Reston's image, it would be highly desirable to encourage local restaurants, not chains, and to encourage shops that have broader appeal than Gucci-type stores. Very large stores, such as Best Buy and Office Depot, belong in the Town Center area, not here. However, a binary distinction between "support" and "destination" retail is potentially misleading and harmful. By definition, a transit station is a destination, and it should be allowed to flourish as one, with an active human presence day and night. Retail should not be restricted in a way that either relegates the Wiehle station area to being just a commuter destination or forces residents to drive to meet their retail needs.

Relevant to future retail development, Bob Simon has questioned the idea of creating bands of first-floor retail that detract from the village center concept and that may not have sufficient economic activity to be viable. While this concern deserves careful consideration, strict adherence to such a view could defeat vital transit oriented development near the Wiehle station, whose existence and whose growing population were not contemplated when the original village centers were laid out. Providing retail and cultural options along key local streets in the transit area will encourage activity that does not require automobiles, a primary goal of transit oriented development.

Looking at existing retail options, Plaza America provides an existing retail center within the transit corridor, which is equivalent to a village center with a grocery store, pharmacy, eating establishments, and shops. It is walking distance (albeit a long walk, roughly one-half mile) from the Wiehle station, Isaac Newton Square and Reston Parkway. People may be willing to walk that distance for some needs *assuming* that (i) the pedestrian walkways are pleasant enough to attract people and (ii) pedestrian/bicycle bridges cross the major roads at suitable locations. Town Center is somewhat farther away (not a likely walk); there is a small, strip-retail area along Sunrise Valley between Soapstone and the golf course; and the South Lakes, Hunters Woods and Tall Oaks village centers are short drives.

Of these, only Plaza America is close enough for people to walk from the station area (though Tall Oaks might also be walkable from Isaac Newton Square and Chestnut Groves if there were a pleasant pedestrian connection instead of the current narrow sidewalk along Wiehle). However, Plaza America is already busy from Reston's current residents, and no one is going to ride Metro to Wiehle just to walk to Plaza America (though a retail-lined, pedestrian friendly streetscape between the Wiehle station and Plaza America might help draw people through the area including to Plaza America). Consequently, while Plaza America may

satisfy near-term needs for a grocery and pharmacy to serve new residents near the Wiehle transit station, attractive retail, including restaurants and shops, will be needed closer to the station and east of Wiehle in order to make the area work. Ultimately, even a new grocery store (perhaps in G-6 or G-7) may be justified by a growing population.

6. **General character of the area.** It may not be possible to dictate the character of the Wiehle TOD, but *the community may benefit from promoting a unique character for development in the area.* The idea of encouraging development that emphasizes educational institutions and cultural attractions has considerable support. It would also be appropriate to try to attract professionals (including professional associations) and high-tech businesses, which would fit well with the educational theme and with existing businesses in the corridor. The corridor's overall reputation for high-tech should be a strength we play to.

To this end, the county and community should attempt to attract one or more significant educational institutions to the Wiehle area, ideally at least one of which would offer graduate-level courses in the sciences (e.g., computers, medical research) or engineering or business. Such an institution would benefit from the transit station and mixed uses, and it would potentially benefit the community by providing a magnet to attract other educational entities and high-tech businesses. The community should set its sights high and try to attract a prestigious entity like University of Virginia or Virginia Tech or one of the major private universities based in the District of Columbia or Maryland. Establishing a significant campus for Northern Virginia Community College could also provide significant economic benefits to Reston, though it might not act as a magnet for high-tech businesses. Density bonuses could be offered to attract developments that are anchored by substantial educational or research institutions. The size of the bonus could be directly linked to the size of the campus and duration of the commitment. Sites in the G-2, G-5, G-6 and G-7 areas might be particularly well-suited to a large educational presence, though other areas could also be possible.

Establishing a government-funded incubator for new businesses, in the Wiehle station area, would also be very attractive. Such a space could offer potential entrepreneurs (a) temporary, low-cost office space with some office support (copying machines, for example), (b) training or mentoring, and (c) possibly assistance in finding private financing. By helping new businesses get off the ground, Fairfax County could help boost the local economy both within and beyond Reston. Locating such an incubator near a transit station would help broaden the range of people who might benefit from the assistance. "Graduates" from such a program might be drawn to office space in the corridor and contribute to Reston's economic engine.

Other cultural attractions that have been suggested, so far, for the Wiehle area, include a Fairfax County library branch (or the Reston regional library if it moves from its current location at Town Center), a theater, art galleries (possibly with workshops like the Torpedo Factory), community meeting spaces, or a children's science museum.

7. Traffic must be addressed from the beginning. Both government funds and proffers will be needed. The traffic problems will begin with construction near Wiehle; get worse when the Wiehle station and related parking open; and get worse still when new buildings are developed. The RMAG study provides an excellent starting point, but it is not an ending point. The county and state must commit to work with the developers to address these problems before the problems create a negative traffic reputation that kills quality new development in the Wiehle transit area. *Vehicle, bicycle and pedestrian traffic will all need attention.* In addition to local roads and pedestrian/bicycle pathways within the corridor, a transportation demand management plan will be needed to keep traffic under control and to discourage reliance on private vehicles.

There needs to be a *circulator/shuttle bus system* to connect the transit station(s) both (i) to businesses and residences along the RCIG, and (ii) to the village centers and Town Center (the latter being less important after the Reston Parkway station opens). This will promote use of the transit system and reduce traffic in the area. To succeed, the system will have to run constantly with frequent stops, especially during rush hour, at locations close to businesses and apartments. Usage should be subsidized by the county and businesses that will benefit. Consideration should be given to converting the parking lots along the power lines west of Sunset Hills to dedicated bus lanes.

The parking lot at Wiehle is a near-term certainty, which will bring significant traffic problems, especially during rush hours. However, *over time, reducing traffic congestion will be helped if the large parking lot planned for the Wiehle station can be partially reprogrammed from Metro to serving on-site and nearby buildings once the Wiehle station ceases to be the end of the line.* Commuters from farther west of Reston should be encouraged to use parking at Herndon-Monroe and the station to be built near Route 28, once those transit stations open. *Substantial parking should be built at the Route 28 station for this purpose. To encourage a shift of commuting practices, weekday parking prices at the Wiehle station lot should be raised after the western stations open.*

On the other hand, consistent with practices elsewhere, use of the transit parking lot at Wiehle should be free of charge at nights and on weekends. This will both help encourage transit usage in off-peak periods and help support the restaurants and shops that develop near the Wiehle transit station.

More generally, the parking goals should be to reduce the amount of needed parking (along with the level of vehicle traffic) associated with new buildings and to shift parking from ground-level lots that now dominate the area to structured lots, which are either below ground or screened (e.g., by offices, ground floor retail or other screening), so as to mitigate the aesthetic impact of parking structures.

Provision should be made for locating taxi stands, rental cars (e.g., Zip cars), and rental bikes near the transit station.

Streets will need to be developed to move people to and among the buildings to be developed in the transit corridor. *Networks of connected streets* should be designed

primarily to serve the building users and patrons and selectively to provide connections to larger arteries, such as Wiehle, Sunset Hills and Sunrise Valley. Low speeds and attractive streetscapes should be the focus of a network of streets within the corridor, though circulator/shuttle buses and emergency equipment will need to be accommodated. The narrowness of the corridors between the toll road and Sunset Hills/Sunrise Valley place limits on the potential street layout, but there should be at least one “main street” with wide sidewalks, trees and outdoor seating, running through the new development on each side of the toll road.

Safe and attractive pedestrian and bicycle paths are essential, as discussed elsewhere in this document. Given the already heavy and expected increases in traffic on Sunrise Valley, Sunset Hills and Wiehle, few bicyclists would dare to use those roads, and painting “bike lanes” on the roads would not provide a safe alternative. The corridor needs dedicated bicycle pathways or joint pedestrian/bicycle pathways (e.g., 10'-12') on both sides of the toll road. *All offices and residential buildings in the corridor should be linked to the stations by such pathways.* To the extent possible, these paths should be located among the buildings to maximize their utilization.

8. Crossings of the toll road and nearby roads.

- (a) *Additional roads and pedestrian/bicycle routes across the toll road are essential* if Reston is to avoid the RCIG's becoming a sharp line dividing our community. There need to be as many ways as possible for pedestrians, bicycles and cars to cross the toll road. The Soapstone extension bridge proposed by RMAG should be matched by a similar crossing east of Wiehle, possibly extending South Lakes Drive across the toll road. Pedestrian/bicycle bridges across the toll road should be built as well.
- (b) Apart from new roads and bridges, *the walkways across the toll road at the three Reston-Herndon subway stations* (which we know will be built) *should be designed and managed so that they are open, 24 hours/day, to use by pedestrians and bicyclists* whether or not they plan to use the Metro. These pedestrian/bicycle paths should be open even though entrances to the tracks may be closed.
- (c) Pedestrians and bicyclists need to be able to safely cross Wiehle Avenue and Sunset Hills at a number of locations, including (i) where W&OD crosses Wiehle, (ii) from Isaac Newton Square area to the Metro station, (iii) across Wiehle at Sunrise Valley and at Sunset Hills, and (iv) across Sunset Hills east of Wiehle. Grade-separated crossings should be carefully considered, particularly where the W&OD crosses Wiehle.
- (d) Developing “air rights” over the toll road could provide urban space as well as interconnectivity. However, there is considerable question about the economic viability of using air rights for substantial development. Perhaps the initial

attempts to use “air rights” should involve wide, pedestrian/bicycle crossings of the toll road with some landscaping and resting points.

9. **Recreation and Cultural Amenities.** There will be a need for more recreation space, including year-round, indoor recreation, as the population of residents and office workers grows.

- (a) **Bicycle/Pedestrian along Sunrise Valley.** There should be a continuous pedestrian/bicycle trail along the Sunrise Valley side, running from the Hunters Woods Rd (or at least from the W&OD crossing of Sunrise Valley) to the Reston Parkway station (or, better, the Herndon/Monroe Station or the bicycle trail along the Fairfax County Parkway). *The trail should be set among the buildings, back from traffic and should be as visually attractive as possible* in order to attract users from the nearby buildings and beyond. *Rights of way should be obtained through existing parking lots within office developments along the RCIG in order to create a pedestrian/bicycle trail, which could be created with only minimal construction to link currently paved areas.* Businesses along the RCIG would benefit from such a trail because office workers and clients would gain better, non-motorized access to the Wiehle Metro station and the shops/restaurants to be developed in the that area.
- (b) **Bicycle/Pedestrian along Sunset Hills.** On the Sunset Hills side of the toll road, the W&OD already provides a bicycle and pedestrian path, which needs to be enhanced by building an overpass or underpass to allow safe, convenient crossing of Wiehle (comparable to Reston Parkway). The W&OD, however, is not enough. It will also be important to provide attractive, safe route for pedestrians and bicycles between Sunset Hills and the toll road, extending from east of Wiehle to Reston Parkway (or at least to Plaza America, initially).
- (c) **Other Outdoor.** In addition to user-friendly plazas (see open-space discussion below), well-located parks, perhaps with urban recreation options (e.g., basketball, bocce ball, chess/checker tables) and picnicking, are needed to enhance the experience and attract users. *Public accessibility to open spaces is critical. Private* pools, rooftops and enclosed areas for residents of particular developments (as opposed to community pools run by RA or RCC, for example) will not address the larger community needs or the needs of employees in the area. Such private spaces should not be counted when considering whether a developer’s proposals meet its open-space obligations.
- (d) **Indoor Recreation.** Reston’s year-round recreation facilities are already very busy, and the addition of thousands of new residents and office workers will further burden existing facilities. Reston will need additional indoor recreation space (swimming and multi-use courts), as well as additional community meeting rooms, as the population along the corridor grows. The facilities should be centrally located (e.g., in the in or near the transit corridor or Town Center area or in an underused village center, like Tall Oaks) so they are convenient to as many

people in Reston as possible. Quality public recreational opportunities for residents and employees will be a draw for businesses and people. The Comprehensive Plan's definition of mixed use and its incentive structure for proffers should encourage development of such facilities.

- (e) Cultural. Community support has been expressed for making the Wiehle TOD area a cultural center, as well as promoting an educational focus. This is consistent with Reston's overall identity as a place that supports the arts. While public art is a minimum component, the varieties of cultural attractions to be encouraged remain to be seen. For example, while Reston would clearly benefit from construction of an arts center/theater along the transit corridor or in Town Center, it can be argued whether it would be best to locate such a facility closer to the Wiehle station (creating a magnet for utilization of that area) or the Reston Parkway transit station (providing better access to restaurants at Town Center in addition to those built near the transit stations). While the better argument favors locating a major cultural center near the Reston Parkway station, that should not foreclose development of other theaters or cultural venues in the transit corridor closer to Wiehle.

10. Open space. A central feature of Reston is the presence of publicly accessible open space within all developments and close to all residences. Spaces emphasizing natural beauty and trails are integral parts of clusters and neighborhoods. The Reston Association maintains a large network of open areas. The RCIG has few remaining natural areas, but at least it has been developed over the years with many trees, much landscaping, and substantial setbacks particularly along Sunrise Valley Drive.

Transit oriented development must continue Reston's open-space pattern, albeit as appropriately adapted to a more urban setting. There should be publicly accessible open spaces as part of every development with parks, plazas and sinews of pedestrian/bicycle paths and trees woven among the buildings along the corridor. Developers of neighboring parcels should be able (and encouraged) to combine spaces to create larger open spaces and linked spaces (especially linked, green sinews and bicycle/pedestrian paths extending throughout the corridor). Contributing to an open-space fund might be considered if an acceptable, nearby, adequately-funded project has been defined. However, developers should not be able to buy out of their open-space obligation by contributing space (or money to buy space) at remote locations which will not benefit occupants of the corridor.

A minimum percentage of publicly accessible open space (e.g., 20-25%) should be considered as both an aggregate goal and a requirement for each developer. Moreover, each developer's 25% *open-space obligation should be satisfied at a location close enough to benefit the occupants of the development. One way to do this, while providing some flexibility to develop larger plazas and parks, might be to require that half the open-space commitment be located within one-eighth of a mile (roughly a city block) of the developer's site and the rest within one-quarter of a mile.*

Open spaces can take many forms. Apart perhaps from the few remaining natural areas in the RCIG and some visually attractive landscaping (e.g., preservation of the wide buffers that now exist along Sunrise Valley), *qualifying open spaces should be designed so they are actually used*. Here are a few thoughts:

- (a) Attractive pedestrian and bicycle paths that are bordered by trees and are separated from traffic are needed along the length of the transit corridor.
- (b) Plazas and parks should be user-friendly for adults and children. Large, bare plazas are cheap for the developer but not user-friendly. Parks and plazas will be cooler and more attractive if they have trees, other vegetation, fountains, comfortable benches and other low-key facilities where kids and adults can sit or play. (Consider the contrast between Freedom Plaza in Washington, DC. and Pershing Park, which is just across 14th Street from Freedom Plaza—which would you rather have lunch in?)
- (c) Urban open spaces, including plazas or plaza-like pedestrian streets, will be more likely to attract people if they have places to sit and are bordered by restaurants with outdoor seating (or with carryout to available tables), coffee houses, kiosks, and other amenities.
- (d) In addition to natural light during the day, well-designed night-time lighting is important in urban open spaces in order to attract people at night and to convey a sense of safety.
- (e) Existing trees, streams and wetlands located in or adjacent to the transit corridor should be protected.
- (f) The pipeline right-of-way that passes near Plaza America may be usable as a place for sports, a playground, or community gardens.
- (g) To count, open spaces should, in fact, be open to use by the public and should not include roads, driveways, parking lots or similar areas.

11. **Nearby neighborhoods must be protected.** *Development near the Wiehle transit station must not harm established residential areas.* (a) A bright line should be drawn along Sunrise Valley from Hunter Mill Rd. to Reston Parkway clearly assuring the community that there will not be commercial buildings and or greater residential development on the south side of Sunrise Valley. (b) Traffic calming and parking management steps (such as speed humps and parking permits) will be needed in neighborhoods on the south side of Sunrise Valley. (c) RA and the nearby neighborhoods will need to consider the potential impacts of greater density on usage of existing pools, tennis courts, paths and docks. New RCIG residents who are not paid members of RA should not be allowed free use of RA pools, tennis courts, paths and docks though enforcement will be difficult for some of those facilities. (d) Some or all of

the neighborhoods should get street lighting as a safety measure. (e) Similar protections are appropriate for the Chestnut Groves apartments.

12. **Other infrastructure issues.** Apart from the need for new roads, attention must be paid to the likely need for *additional fire and rescue capabilities*, and there will likely be a need for *additional schools and libraries* to meet growing demands from residents both in the corridor and in established neighborhoods as younger couples replace older residents. Wide sidewalks should be built on both sides of existing and new roads. Above-ground electricity and phone lines should be buried throughout the transit area. If possible, the large Dominion power line that runs along Sunset Hills should be buried or at least made less ugly. Consideration should be given to converting the parking lots under the existing power lines along Sunset Hills to a dedicated shuttle bus lane or to open green space (if anyone would use it) or some other useful purpose.

B. Comments on Specific Sub-Units in the Wiehle TOD Area **(See attached table.)**

1. North of Sunset Hills Near Wiehle

- a. **Isaac Newton Square** (Sub-unit G-1) is a prime location for a residential village within walking distance of the transit station. It is next to the W&OD and a golf course, and it is a short walk to the Wiehle transit station. With the exception of two mid-rise office buildings along Wiehle, the current buildings are low (1-2 stories) and old. Its large, parking lot already has a grid layout that might form the basis for a network of connected streets with short blocks. Unfortunately, it is currently listed in the Comprehensive Plan as mixed use with 35% -50% residential GFA (which would result in a small percentage of residents occupants compared to office workers given their relative requirements for floor area).

The revised Comprehensive Plan should call for a residential occupancy density of 80% or more, with office or support retail in the remaining space (not counting the two existing mid-rise offices if they remain in place). A treed buffer should remain between the buildings and the W&OD and golf course, with the wooded area now surrounding dish antennae preserved. A large, central park (or pair of parks) should be included, with attractive pedestrian/bicycle paths throughout and linked to a covered overpass across Sunset Hills near the Wiehle station. At least 25% of the land area should be open space. If restaurants and other retail are developed next to the transit station, there may be less need for such facilities in this residential neighborhood. It will be essential to have safe pedestrian/bicycle crossings of Sunset Hills to the transit station area. They should include traffic lights with crosswalk lights and possibly a median as a half-way point. Consideration should be given to a grade-separated crossing. A grade-separated crossing by the W&OD over or under Wiehle (like at the Fairfax County Pkwy or Reston Pkwy) for the benefit of pedestrians and bicycles should be installed. There should be a grid of streets within G-1 and at least one road

connection to Sunset Hills, possibly two. A more user friendly pedestrian/bicycle connection is needed along Wiehle to Tall Oaks.

- b. Across Wiehle from Isaac Newton Square (Sub-unit G-2), there are some mid-rise office space and some fast food outlets, with the Chestnut Grove low-rise apartments west of the office buildings. There is a wooded area behind the buildings, which should be protected if possible. There are no TOD recommendations in the current CP. However, development of this sub-unit could benefit nearby sub-units and benefit from the new transit station. It is far enough from the station to warrant less dense development than closer locations. Accordingly, consideration should be given to whether a higher FAR is appropriate at this time at G-2 (possibly 1.0 or 1.25 for the portion closest to the W&OD), provided that the new development is predominantly residential. As elsewhere, there should be a minimum level of publicly accessible open space, which may include preservation of woodland behind the properties. There should be a landscaped buffer between the buildings and W&OD. The unit is small but there is a potential for one or more internal street(s) with perhaps one street linked to G-7. As noted, a grade-separated crossing of the W&OD over Wiehle for the benefit of pedestrians and bicycles is needed. There is also a need for a safe crosswalk across Sunset Hills from G-2 to G-5. If development occurs, there will be a need to protect the Chestnut Grove apartments, which are just outside G-2. In any event, occupants of G-2 and Chestnut Grove should get good pedestrian/bicycle access to Tall Oaks, as well as the Wiehle station.

2. Between Toll Road and Sunset Hills

- a. Between Sunset Hills and the toll road from Wiehle to Reston Parkway (Sub-units G-4 (including Comstock proposal), and G-3 (next to Plaza America) in the Wiehle station area). Development in these areas will have significant impacts on traffic but no direct impacts on established residential areas. These are good locations for taller buildings, greater density and mixed use. The mix of uses should have enough residential (at least 50% of occupancy) to encourage transit usage, pedestrians, and bicyclists, as well as restaurants and shops within walking distance. Fairly dense development could extend from the station all the way to Plaza America. On this side of the highway, there is already access to a grocery store, pharmacy, coffee shop and numerous other amenities at Plaza America, but developing restaurants and some commercial activity close to the Metro station is important. Locating retail along two sides of a “main” internal street with pleasant streetscapes and adding a couple of parks or plazas between the station and Plaza America could benefit both. (The pipeline right of way near Plaza America) also creates a possible open space for recreation or gardening.) It is important to add attractive pedestrian/bicycle interconnectivity and a network of streets with short blocks for internal movement for connections to Sunset Hills. RMAG calls for significant road changes, including a new bridge across the toll road from Soapstone. It is important to bury the existing electric

and telephone lines in the area, lest the eyesore discourage high quality development.

- b. Development along Sunset Hills east of Wiehle (Sub-units G-5, G-6). Here, there is a very good opportunity for development that will make use of the transit station, at least if crossing Wiehle on foot or by bike can be accomplished safely and, particularly, if a decent circulator/shuttle bus system extends among the buildings along Sunset Hills. There should be a network of connected streets, including one that extends across Wiehle to G-4. Construction of a grade-separated pedestrian/bicycle crossing of Wiehle is needed. Reasonable development should be encouraged, including residential (50% or more of occupancy), office, and possibly ground-floor retail. This would be a good area for one or more educational institutions. If an educational theme is going to be encouraged, one should be careful not to encourage development that prices such institutions out of the market.
- c. Farther from the Wiehle station, Sub-unit G-7 has a complex mix of office, commercial (including an ice rink) and residential. The current Comprehensive Plan makes minimal recommendations for permitting revised zoning. Maintaining existing densities seems reasonable for the foreseeable future, though consideration might be given to permitting mixed uses after the Wiehle station opens. However, this area might provide a good location for a large campus provided there is an adequate circulator/shuttle bus system, and that might justify an exception from existing zoning constraints.

3. Between Toll Road and Sunrise Valley

- (a) On the Sunrise Valley side of the toll road, the potential for adverse impacts to established residential areas is greatest. For that reason, no development should occur along the south side of Sunrise Valley (except possibly an update to the small strip shopping center next to the golf course, but not a high-rise development); taller buildings should be closer to the toll road; and there should be a good buffer along Sunrise Valley. There should be a good layout of streets that are connected internally and to Sunrise Valley, but the narrowness of the land area between Sunrise Valley and the toll road may restrict the network to one continuous street paralleling those roads. Currently, the office buildings and landscaping (trees along drives and parking lots) along Sunrise Valley are fairly attractive. They are rather “Restonian” in appearance: mid-to-low density; many trees; no long, straight views along roads; and set back from Sunrise Valley with a reasonably green buffer. The impact of adding traffic along Sunrise Valley needs attention, and early action is needed to extend Soapstone across the toll road. Apart from the sites closest to the Metro station (e.g., H-2, H-1 and I-1), there should be no rush to allow rezoning or construction of taller buildings.

- (b) As previously noted, a pedestrian/bicycle trail (possibly with an under-Wiehle tunnel), should extend east from the Metro station to Hunters Mill Rd. (or at least to the W&OD where it crosses Sunrise Valley); and it should extend west from the Wiehle transit station at least to the future Reston Parkway station (or, better still, to the Herndon-Monroe station or beyond). If rights of way can be obtained through the existing parking lots (e.g., for a 10'-12' combined path or two separate paths), this could be accomplished without damaging the buffer between Sunrise Valley and the current buildings and with minimal laying of new asphalt. Such access to the subway would benefit the office workers, as well as create a recreational pathway. Sunrise Valley is too heavily trafficked and most of the sidewalk too narrow to be a safe bike route or a pleasant pedestrian route. (The RMAG proposal to put such a path along the toll road has apparently been rejected by the toll road operator and, in any event, would be less beneficial to office workers interested in walking to the station.) Attention is also needed to improving ways for pedestrians and bicycles to cross the toll road either on the Wiehle bridge or on a dedicated bridge for pedestrians and bicyclists. Currently, the only link is a sidewalk along the Wiehle bridge which is used by both pedestrians and bicyclists. One link will be established if the Wiehle station's pedestrian bridge is available for use by pedestrians and bicyclists whether or not they are using the train. Widening the bridge sidewalk to accommodate both bicycles and pedestrians would also help.
- (c) East of Wiehle (Sub-units I-1, I-2, I-3) the current Comprehensive Plan does not seem to contemplate changes along Sunrise Valley outside of I-1, *i.e.*, once you go a modest distance from Wiehle. This makes sense because of the potential adverse impacts of intense development on stable residential areas. A prudent course may be to propose no change to the Comprehensive Plan with respect to I-2 and I-3, but at some date in the future (e.g., after 2020 or 2025), the Comprehensive Plan for I-2 or I-3 could be reconsidered for future development in these areas. Another possibility would be to permit mixed use development, but not to increase the maximum permitted density. Before such expanded development were to occur at any sites, there should be a good pedestrian/bicycle pathway extending from the transit station to at least the W&OD and, ideally, there should be a new crossing of the toll road (for vehicles, bicycles and pedestrians), possibly from South Lakes Drive to Sunset Hills.
- (d) Sub-units H-1 and H-2, which are located west of Wiehle between Sunrise Valley and the toll road, have a good potential for development. Construction of a new bridge from Soapstone across the toll road (per RMAG) would provide more convenient access to Plaza America, though Hunters Woods and South Lakes village centers are nearby as well. Both sub-units have substantial office development currently and the developments are fairly attractive. As discussed above, it will be important to develop an attractive, continuous pedestrian/bicycle pathway to the Wiehle station and, eventually to Reston Parkway and beyond. (i) Sub-unit H-2's proximity to the station makes it a very good candidate for greater density mixed use development with a significant residential component (at least

50%). Given the current quality of development, a significant increase in the FAR or permission for infill building closer to the toll road may be needed to trigger investment. (ii) Sub-unit H-1 lies west of H-2 toward the hotels. It is also a good candidate for development with a significant residential component given its closeness to the Wiehle station. However, further development of H-1 should perhaps await construction of the Soapstone extension and bridge across the toll road.

- (e) The small strip mall across Sunrise Valley near the golf course is the only commercial development on that side of the street between Hunter Mill and Reston Parkway. It looks old and in need of an update. However, a high-rise building would be inappropriate there.

**Strawman for Wiehle Transit Area
Comprehensive Plan Now and As Suggested for Consideration
William Penniman**

Sub-Unit Transit	Current Zoning etc.	Current CP for Transit Oriented Development¹	Recommended CP for Oriented Development²
G-1 (Isaac Newton Square)	0.5 FAR office use or residential up to 30 dwelling units per acre (DUA); Currently - low offices, 2 midrise, surface parking	1.0 FAR. Mixed use: 35-50% GFA residential; office up to 50% GFA; support retail (on ground floor facing pedestrian paths or streets) up to 15% GFA	[1.0?1.5?]FAR. Not counting two existing mid-rise offices: 80% or more residential occupancy; 1 st floor support retail up to 10-15% of GFA facing pedestrian paths or streets; grid of streets with traffic calming plan. 25% publicly accessible open space, which should include a central park or pair of parks, and attractive walkways with trees throughout. ³ Taller buildings toward Sunset Hills with shorter buildings (up to 45 feet) along edges. Preserve treed buffers between the development and the W&OD and golf course, including the trees that now surround the dish antennae. A large development may need more than the lone current vehicle crossing of the W&OD to Sunset Hills. It will need more than one safe (grade-separated?) pedestrian/bicycle

¹ Subject to Urban Design Guidelines

² Subject to Urban Design Guidelines, as amended per recommendation of Task Force, and RMAG recommendations.

³ Reston should continue to have trees and publicly accessible open spaces within all developments and close to all residences. Transit oriented development should have publicly accessible parks, plazas, remnant natural areas, and sinews of green with pedestrian paths and bikeways woven among the buildings to the transit station. Developers of neighboring parcels should be able (even encouraged) to combine spaces to create larger open spaces and linked spaces throughout the corridor, provided they are close to the developments. Developers should not be able to buy out of their open-space obligation by contributing land (or money to buy land) at remote locations which will not directly benefit occupants and neighbors of the development.

			crossings of Sunset Hills to the transit station area. A grade-separated crossing by W&OD over or under Wiehle for the benefit of pedestrians and bicycles is needed. Burying power lines would be highly desirable. Consider converting the parking under the existing power lines to dedicated shuttle bus lane or to green space.
G-2 (Across Wiehle from Isaac Newton Sq)	0.5 FAR office use or residential up to 30 DUA. Currently-mid-rise offices, fast food. (Apartment development begins to north)	No TOD recommendation. General language about conforming to Urban Design Guidelines, pedestrian walkways to facilitate circulation, providing active recreation on-site or by agreement; permitting one parcel (1775 Wiehle) to be considered for infill office development up to 0.7 FAR	[.5 FAR? 1.0 -1.25?] FAR for area closest to Wiehle. At least 50% residential; up to 50% office; up to 15% first-floor support retail facing streets and walkways. 25% publicly accessible open space, which may include preservation of woodland behind the properties. Need for landscaped buffer between the buildings and W&OD. Internal street(s) with at least one street linked to G-7. As noted elsewhere, a grade-separated crossing by W&OD over or under Wiehle is important. Also need a safe way for pedestrians to cross Sunset Hills from G-2 to G-5. Burying power lines would be highly desirable. Need to protect the Chestnut Grove apartments and be sure that its residents get good pedestrian/bicycle access to the Wiehle station and to Tall Oaks.
G-3 (East of Plaza America)	0.5 FAR office use or residential up to 30 DUA. Currently, offices.	1.0 FAR. Mixed use: 35-50% GFA residential; office up to 50% GFA; support retail (on ground floor facing pedestrian paths or streets) up to 15% GFA	[1.0?1.5?] FAR. Mixed use: 60% residential; office up to 40%; retail (on ground floor facing pedestrian paths or streets) up to 20% GFA. Network of connected streets with at least two streets

			<p>paralleling the toll road and a “main” street with wide sidewalks connected to G-4 and D-7 and to smaller streets to Sunset Hills. The “main” street should be lined with trees and retail and linked to at least a couple of parks/plazas to draw people from the station toward Plaza America. Need continuation of attractive pedestrian/bicycle paths linked to Wiehle station and neighboring sub-units. Taller buildings should be located closer to the toll road than to Sunset Hills. There should be a 25% publicly accessible open space requirement, possibly linked to open spaces in neighboring units . Plaza America should be allowed to redevelop to include residential and office space in addition to retail that is similar to what it currently has, <i>provided that</i> Plaza America is opened to the east to link to the streets from the station and to a pedestrian/bicycle pathway from the transit station (and beyond). Building heights should probably not exceed buildings currently on west side of Plaza America,</p>
G-4 (includes Comstock)	0.5 FAR office use or residential up to 30 DUA. Currently, multiple offices and parcels, some condo-ownership.	2.5 FAR, declining to 1.5 FAR closer to Sunset Hills, 40-75% residential; a combination of office, hotel and retail may comprise 25%-50% with office up to 40%. Consolidation encouraged; direct pedestrian access to station, preferably grade-	[Continue current FAR recommendation?] The tallest buildings and greatest densities should be allowed at and perhaps immediately adjacent to the Comstock site. Mixed use: at least 50% residential; office up to 40%; retail (on ground floor facing pedestrian paths or streets) up to 20%; attractive

		separated; 140 foot max building height; retail facing pedestrian walks, drives; Transportation Demand Mgmt (TDM); 2 nd point of access to Sunset Hills. Comstock proposal pending.	pedestrian/bicycle paths linked to Wiehle station and neighboring sub-units; buffer between buildings and Sunset Hills; 25% open space. Needs a continuation of internal streets with wide sidewalks linked to G-3 and to G-5 with a safe way for pedestrians to cross Wiehle. At least one of those streets should have ground floor retail.
G-5 (Across Wiehle from G-4)	0.5 FAR office use or residential up to 30 DUA. Currently office buildings.	1.5 FAR, 40-75% residential; a combination of office, hotel and retail may comprise 25%-60% with office up to 40% of total and retail on ground level facing pedestrian paths or drives. Both parcels should be consolidated; bridge or tunnel across Wiehle; TDM plan;	[1.5? FAR.] Residential of at least 50%; office/hotel/retail up to 50%; first-floor retail facing streets and sidewalks up to 15%. Offer increased FAR if higher educational institution or cultural institution is a major, long-term tenant of the project. 25% publicly accessible open space. Network of connected streets, including a central street with wide sidewalks extending from Wiehle through G-6 to Sunset Hills, and linking G-5 to a corresponding street in G-4. Principal street through G-5 should have ground floor retail. Need a grade-separated pedestrian/bicycle crossing of Wiehle to G-4 and transit station and a safe way to cross Sunset Hills to G-2 area.
G-6 (East of G-5)	0.5 FAR office use or residential up to 30 DUA. Currently, office buildings.	Mixed use up to 1.0 FAR, 35-50% residential; up to 50% office/hotel; retail up to 15% to located on ground level facing pedestrian paths, drives.	Mixed use [up to 1.0? FAR], at least 50% residential; office/hotel up to 50%; retail up to 15%. Offer increased FAR if higher educational institution is a major, long-term tenant of the project. Continue streets from G-5.
G-7 (Both sides of Sunset Hills east)	Mixed office, industrial, residential	Complex mix. No overall TOD plan; a few parcel-specific incentives suggested.	Revisit after 2020 or 2025, but grant a density bonus sooner if a campus is built for a higher educational institution, it is

of G-2,G-6			linked to the transit station by interconnected streets, attractive pathways, and a shuttle bus, and there is 25% publicly accessible open space.
H-2 (Bet. Sunrise Valley and toll road closest to Wiehle station)	0.5 FAR office or residential up to 30 DUA. Currently, mid-rise office buildings with large parking lots and a garage.	1.25 FAR declining to .5 FAR closer to Sunrise Valley, 40-65% residential; 35%-60% office/hotel/support retail; 100' height closest to toll road; 35' height closest to Sunrise Valley; substantial consolidation should be achieved; direct pedestrian access to Wiehle station; quality site layout with consolidated vehicular access, parking structures that do not front on pedestrian areas, shared parking; TDM plan.	[Should FAR be higher than 1.25 next to station?] Mix of uses should include at least 50% residential, and, at most, 15% first floor retail. Taller buildings and offices should be closer to toll road, with lower residential buildings closer to Sunrise Valley. 25% publicly accessible open space. Treed buffer of at least 100 feet along Sunrise Valley. Need network of connected streets. Need excellent pedestrian and bicycle access to the transit station. ⁴ An existing parking structure may present interfere with maximizing the value of the transit station.
H-1 (Bet. Sunrise Valley and toll road immed. West of H-2)	0.35 FAR office or residential up to 30 DUA. Currently, low or mid-rise office buildings.	0.75 FAR, 35-50% residential, up to 50% office and support retail up to 15%	[FAR of .75? 1.0? keep at .5 FAR until Soapstone bridge built or 2020/2025?]. Mixed use with at least 50% residential, office up to 40% and first floor retail up to 15%. Need network of connected streets linked to H-2, possibly with one linking buses from Wiehle to transit station. Need excellent pedestrian and bicycle access to the transit station (per footnote 4). 25% publicly accessible open space. Need to fulfill RMAG's recommendation for Soapstone extension and bridge, which

⁴ Must include a continuous pedestrian/bicycle path between Sunrise Valley and the toll road, extending among the buildings from Hunter Mills to Reston Parkway (or, better, Herndon-Monroe), possibly with a wide, grade-separated passage under Wiehle. This enhanced access to the Wiehle transit station will benefit residents, office workers, and businesses.

			should be constructed to include a wide pedestrian/bicycle pathway. Need a treed buffer of 100' or more along Sunrise Valley.
I-1 (immed. East of Wiehle bet. Sunrise Valley and toll road)	0.35 FAR office or residential up to 30 DUA. Currently developed as low, mid-rise offices.	0.75 FAR, 35-50% residential, up to 50% office with support retail up to 15%. Needs pedestrian walkways throughout and connecting to walkways/trails in adjacent units.	[.75? 1.0 near toll road and .5 near Sunrise Valley?] FAR. Residential at least 50%; office up to 50%; support retail up to 15%. If additional development occurs, there should be additional roads and wide sidewalks. Need excellent pedestrian and bicycle access to the transit station (per footnote 4). 25% publicly accessible open space. Density and building heights greatest close to toll road, with much lower buildings closer to Sunrise Valley. 100-150-foot green buffer between development and Sunrise Valley.
I-2 (Bet. Sunrise Valley and toll road and two ends of Upper Lake Dr.)	0.35 FAR office or residential up to 30 DUA. Currently developed as low, mid-rise offices.	No change proposed	–Leave FAR as is [?] or raise to .5 FAR[?] , but permit mixed use, including at least 50% residential in connection with new buildings. Density may be revisited after 2020 or 2025. Under either option, need excellent pedestrian and bicycle access to the transit station (per footnote 4). Preserve existing buffer between buildings and Sunrise Valley with ultimate goal of 100-150-foot green buffer in the event of new construction.
I-3 (Bet. Sunrise Valley and toll road east of Upper Lake and	0.35 FAR. Currently almost fully developed as office use.	No change proposed	Leave density as is for now. Density and issue of mixed use may be revisited after 2020 if TOD area closer to station is substantially built out, and if a new crossing of the toll road is built (possibly connecting to

Sunrise Valley			South Lakes Drive). Need excellent pedestrian and bicycle access to the transit station (per footnote 4). Preserve existing buffer between buildings and Sunrise Valley with ultimate goal of 150-foot green buffer.
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Brief Overview of FCPS in Reston: Planning for Tomorrow

Prepared for
The Reston Master Plan Special Study Task Force

By:

The Residence, Urban Design and Livability Work Group
Reston 2020 Committee
Reston Citizens Association

June 1, 2010

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Brief Overview of FCPS Schools in Reston

Current Conditions

Per the planning office of FCPS, by the 2015-16 school year, about one half of the current elementary schools in the Reston area, Herndon and Hughes middle schools and Herndon and South Lakes high schools will all be over capacity. That is the estimate EXCLUSIVE of any approved new development not yet built as of now (June, '10) as well as all of the development this task force is studying.

The current demographics of the area are changing as existing neighborhoods throughout Reston are welcoming younger families as previous occupants, mostly older residents, die or move. Other factors spiking enrollments above those projected in the last 3 years include the down economic cycle, social changes in ethnic and family structure, as well as enrollment in public school of students who may have previously attended private schools. Also, generally schools with all day kindergartens experience larger enrollments which include 7 of the 10 elementary schools serving Reston children.

FCPS also discussed a tendency of the county to approve additional development without first considering the impact on public facilities. To counter this frustrating pattern, they are proposing a school faculty advisory body to channel citizen input. This would seem especially appropriate in Reston where the pre-existence of good schools and other public facilities is a basic tenant of our planning principles and an expectation of our existing population.

According to FCPS, planning for additional and non-traditional schools is paramount to a successful Revised Reston Master Plan as potential school sites for addressing the projected student enrollment deficits are scarce given the lack of available, affordable, buildable land in the Reston area for traditional school sites.

Urban Schools Serving Reston TOD Areas

To date, no firm information is available for projecting accurate enrollments in TOD areas per se as they are a relatively new phenomenon. FCPS has studied TOD's in Atlanta, Pittsburg, San Francisco, Toronto and Arlington among others in an effort to get statistics on this type of development but none are available. Arlington's experience is relatively new but so far additions to existing facilities has been sufficient to handle TOD enrollment as most of Arlington's population appears to be singles, young married and older persons. But planners there admit that this could change as family patterns change and existing communities evolve.

One point emphasized by FCPS planners is that as neighborhoods age, more school age children move in than were there when the area was new. They have seen this pattern repeatedly.

Elementary Schools:

FCPS is willing to consider alternatives to the traditional elementary school sites in newly urbanized neighborhoods provided that all safety, security and specific requirements are met. With non-traditional school sites, the probability is that grades K – 3 would be housed in one facility and grades 4 – 6 in another.

High Rise Building:

In the urban planning process, staff stated that locating a school on the first two floors of a specifically pre-planned school-friendly high rise is much easier than trying to retro-fit an existing structure. They suggested that co-locating a school in high-rise building next to a park area for recreational and PE use was ideal but that providing a large enough pre-planned outdoor area at street level would also work. Another possibility suggested is using fenced roof-top outdoor areas for some outdoor additional activities for elementary students.

Municipal Building:

Co-locating elementary schools in a larger municipal building that also houses social services, a library and/or county offices is another possibility for a non-traditional site.

Recreational / Community Building:

A third suggestion from FCPS planning staff was for a more traditional school set-up to share space with after-hours recreational and community use functions.

It would appear from the task force work done so far that one site for a new elementary school could be the North Town Center area adjacent to any planned park. A school in this location could be part of the library-civic center being discussed by the Town Center sub-committee.

Secondary schools:

The planning staff emphasized that their requirements for junior and senior high schools still require a campus setting due to all of the activities, sports, etc. attendant to older age educational requirements in Fairfax County. Currently, the only available county owned property suitable for an upper school campus located in Reston is the Baron Cameron site which should be held open for this probability. In the meantime, it should continue in its current use as playing fields and outdoor recreation capacities but not be considered for a large indoor rec. facility until an alternative upper school campus is identified and purchased.

One interesting observation made by the planning staff re: high schools is that parents who have enrolled their children in private schools for the elementary grades tend to re-enroll in FCPS for high school. Since this tendency has occurred during good economic times as well as bad, they attribute it to the excellent reputation of Fairfax schools.

Projecting the Future

Obviously this cannot be done until the TF establishes its recommendations to the Planning Commission and BOS as to what specific densities and residential housing styles are recommended. It is noteworthy that many developers seem to be thinking of small high-rise apartment units mostly suitable for families without children. However, this assumption goes in the face of the draft planning principle and Robert Simon's existing values of a diverse demographic community. The student mix will change to the degree that town houses and low rise apartments are included in new residential development.

Whatever the residential mix, at least some new schools will likely be necessary in Reston on all levels. In view of the scarcity of potential school sites, planning for their locations and features will be paramount as the TF considers what proffers to require of participating developers.

Visitability

Prepared for
The Reston Master Plan special Study Task Force

By:

The Residential, Urban Design and Livability Working group
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May 31, 2010

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Visitability for New Residential Construction

The need for visitability arises because most houses have steps at all entrances, with the result that if mobility-impaired relatives want to visit, they cannot enter unassisted, nor can they stay overnight. Similarly, mobility-impaired friends cannot stop by, whether to attend a meeting or borrow a cup of sugar.

It is a contradiction to the ubiquity of steps that most older Americans want to stay in their own homes as they age.

Visitability, when supplied in a moderate percentage of newly-constructed homes, fills these needs.

Features required for Visitability are arguable, but the Reston Citizens Association (RCA) Board and RCA's Reston 2020 committee have adopted the definition of the American Association of Retired People (AARP), which has only three, unambiguous features:

- A zero-step entrance
- Wide doorways with 32" clear passage space on the main floor
- A half-bathroom on the main floor

RCA's Reston 2020 recommends that the Reston Master Plan Task Force adopt the (AARP) concept of visitability, which is limited, easy to understand and easy to cost. These features are inexpensive when incorporated during construction, but can be prohibitively costly for retrofitting. Reston 2020 also recommends that the Reston Master Plan Task Force apply the concept of visitability, using the AARP definition, to all the relevant new and replacement housing in Reston which will be built under the Fairfax County Comprehensive Plan.

The visitability movement targets housing units not otherwise covered by existing laws. This includes new single-family homes, duplexes, triplexes and townhouses (which are not covered by the Fair Housing Act). It includes housing not covered by Section 504 of the Rehabilitation Act, because housing covered by Section 504 already mandates a percentage of accessible houses when federal funds are used.

AARP conducted a nationwide survey in 2008 of how many visitable houses were built under programs which were mandatory and programs which were voluntary. They found that in all the areas with voluntary programs, only 1300 visitable houses had been built during the year. For areas with mandatory programs, however, 30,000 visitable houses were built. AARP's research revealed that both the construction industry and the general public were unaware of the concept of visitability, but once they saw houses which embodied it, they liked them. In the resale market, visitable houses were in high demand and produced good purchase prices.

All styles of housing on all types of sites can include visitability. For example, the zero-step entrance does not have to be at the front door--it can be a side door or back door. The zero-step entrance can also be accessed from the garage. Having a basement is not an impediment. Experience in other communities across the United States has shown that even difficult home sites can, with creativity, incorporate AARP Visitability.

Reston has always striven to be innovative and inclusive. As far as inclusivity is concerned, however, the preponderance of townhouses and multi-level condos in Reston has made Reston extremely inhospitable to people with mobility impairments. Many residents are forced to move out as they age not only of the home they love, but also of the community they love. It is now possible to remedy this situation to some extent, as we contemplate the next twenty or thirty years of Reston's development and re-development.

Now is an excellent time to implement the concept of visitability. Supervisor Hudgins, adding this to the concept of Universal Design already recommended by Fairfax County, stated that "visitability is an idea whose time has come." Other local non-profits which advocate for affordable and accessible housing can be expected to support the move. Fairfax County currently does not have a community within its borders which could showcase visitability, and has to cede to Loudoun and Prince William Counties for cutting edge accessible design.

RCA's Reston 2020 committee recommends that the Reston Master Plan Task Force mandate that a percentage of new housing built in Reston under the Comprehensive Plan be visitable. Other communities have used percentages, in certain circumstances, as high as 25%. In Maryland, bills requiring 100% accessibility have been introduced but not yet passed. Virginia is not a friendly environment for a mandatory program. If a mandatory program is not feasible, incentives can be devised. In other communities, builder and consumer incentives have been used, as well as certificate programs.

Visitability pays off for everyone in the long run as demand and resale prices will both increase. Let's do what we can for Visitability here, and make Reston notable again for its inclusivity, sustainability and good planning

Vision for Herndon Monroe Metro Station Area

Prepared for
The Reston Master Plan Special Study Task Force

By:

The Residence, Urban Design and Livability Work Group
Reston 2020 Committee
Reston Citizens Association

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Vision of Herndon Monroe Metro Station Area

The Herndon-Monroe station area provides a unique configuration of landmarks which will enable the transit-oriented community constructed there to achieve a complete integration of the community and the natural world. The Sunrise Valley Nature Park augmented with native plantings of wildflowers and flowering shrubs, with a new gazebo built on the site of the boardwalk to be used for bird watching, nature classes and weddings, well-designed pathways that connect the area to Polo Fields and to new TOD developments to the east and west, will create a place where Restonians can live graceful lives.

A small, green residential TOD village will replace the garage of the current park and ride. The village will house approximately 1,750 or more residents and will provide restaurants and support retail for those residents, for those using the station, and for Polo Fields neighbors. As planned for Comstock Wiehle, the parking will be underground. With the Dulles Toll Road on the north and with a southern exposure, design of sun-washed plazas will be possible. Plantings in the plazas and surrounding open spaces will feature native plants to celebrate the flora of Virginia and will reinforce the environmental focus at Herndon Monroe.

A Bridge City connecting Reston and Herndon could be built with air rights over the Dulles Toll Road and might include commercial, retail, residential units and be connected north and south with pedestrian and vehicular roadways into Herndon. The Bridge City will abound with parkland and public plazas.

The storm water management swale and pond east of the station will be re-configured, to the extent possible, to provide outdoor recreation for residents at the TOD village and other nearby neighbors.

The station area itself will be connected with new access roads from Monroe Street and Fairfax County Parkway that run parallel and contiguous to the Dulles Toll Road. Several different schemes to minimize traffic through the Sunrise Valley Drive station entrance have been proposed. Please see attached maps by Guy Rando and Terry Maynard (from Transportation Work Group Paper). Herndon Monroe will be a true pedestrian community.

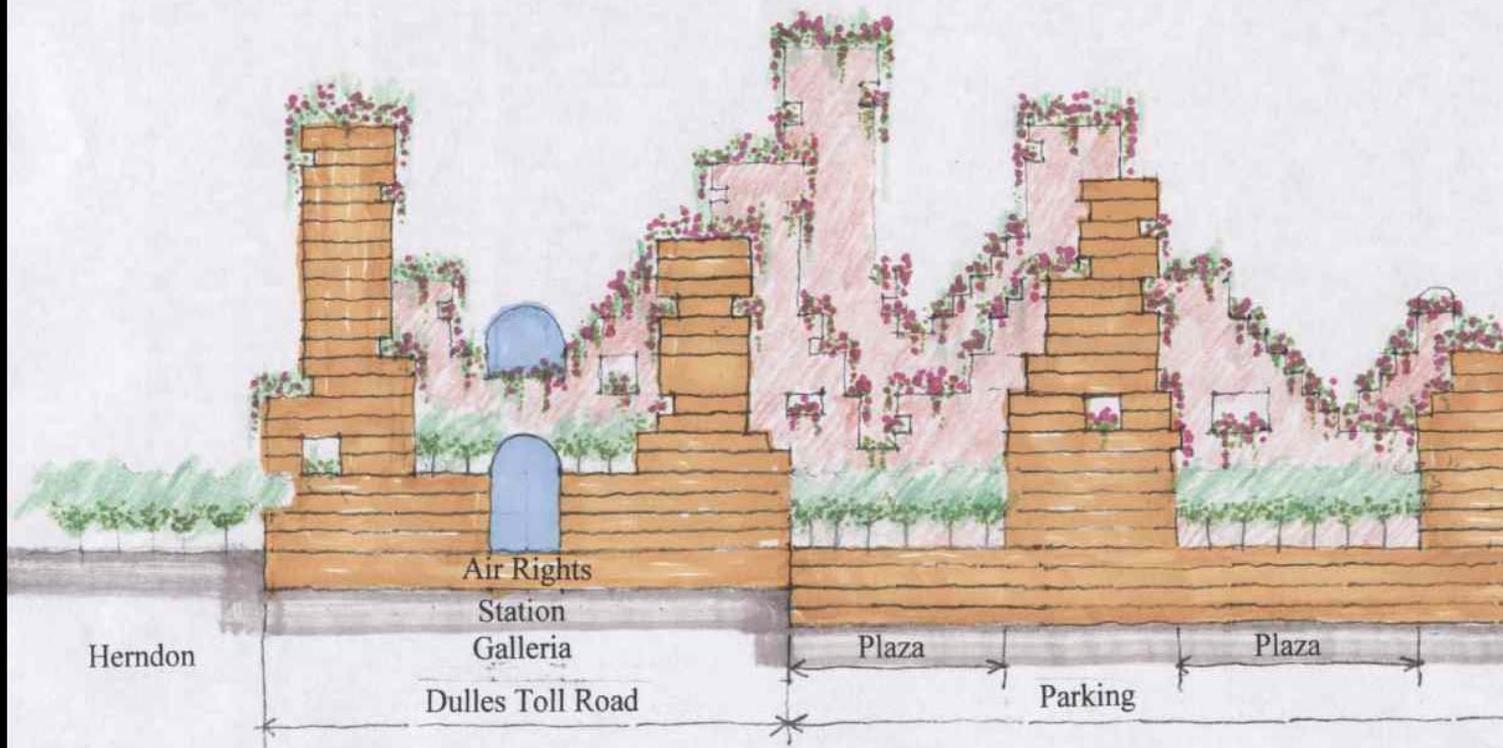
Fairfax County Economic Development Authority, Reston Association, and the Town of Herndon will encourage environmental industries to move into the area. The new residents in the green village of Herndon-Monroe will be able to get to work using a system of connected pathways and a new trolley system north of the Dulles Toll Road.



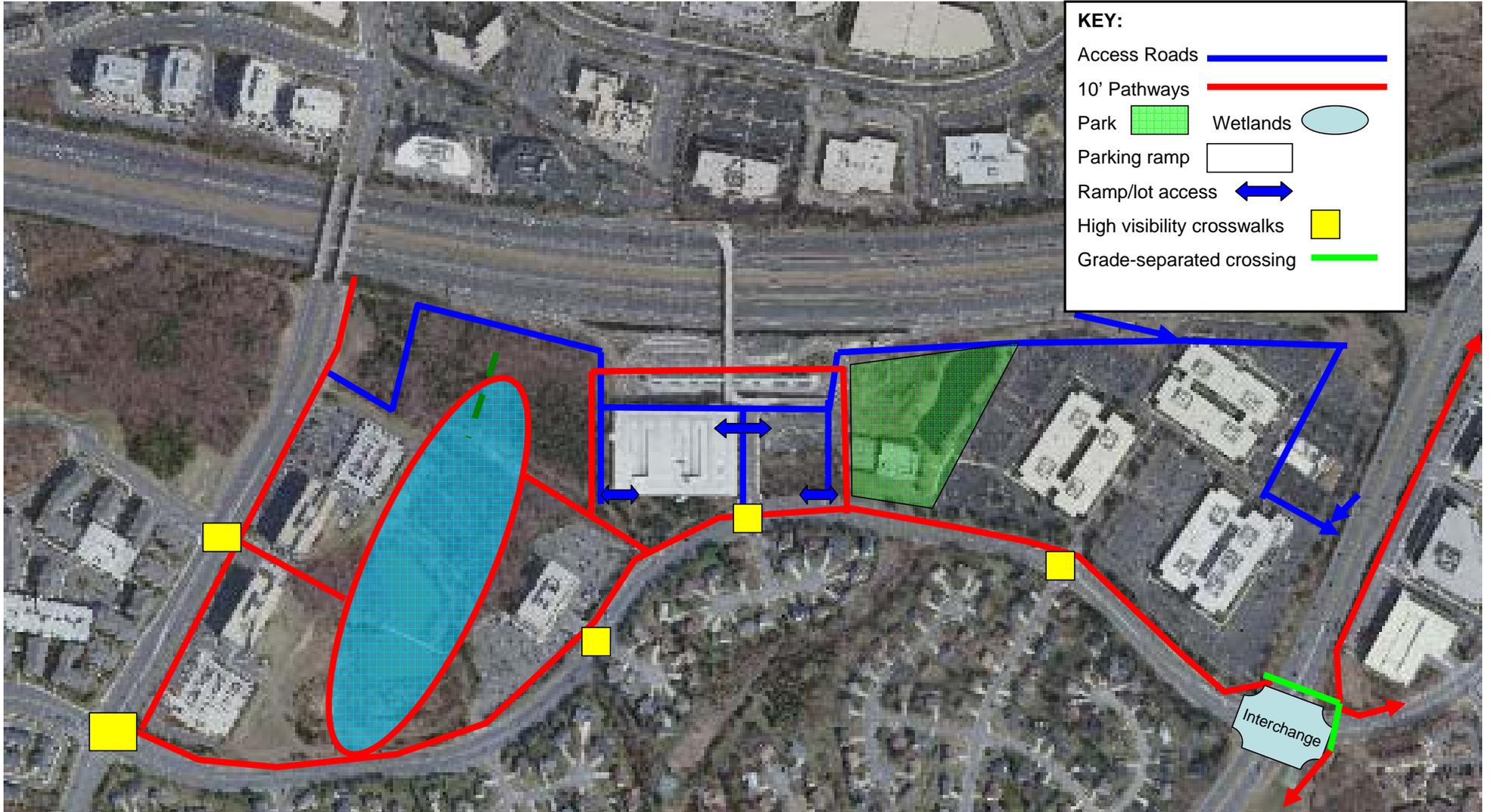
Gazebo designed by Guy Rando at Occoquan Regional Park. Suggested addition to boardwalk at Sunrise Valley wetlands for nature classes.

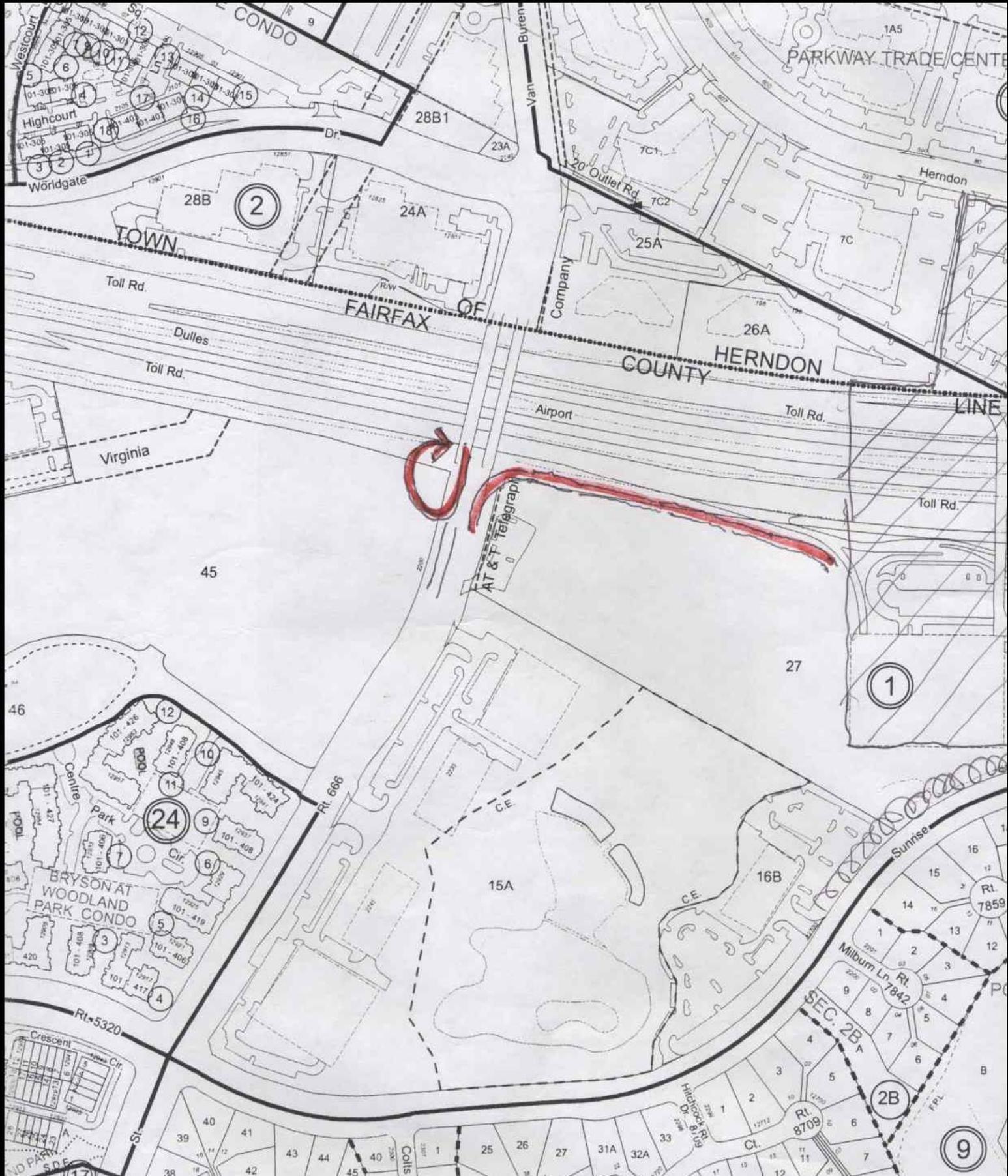


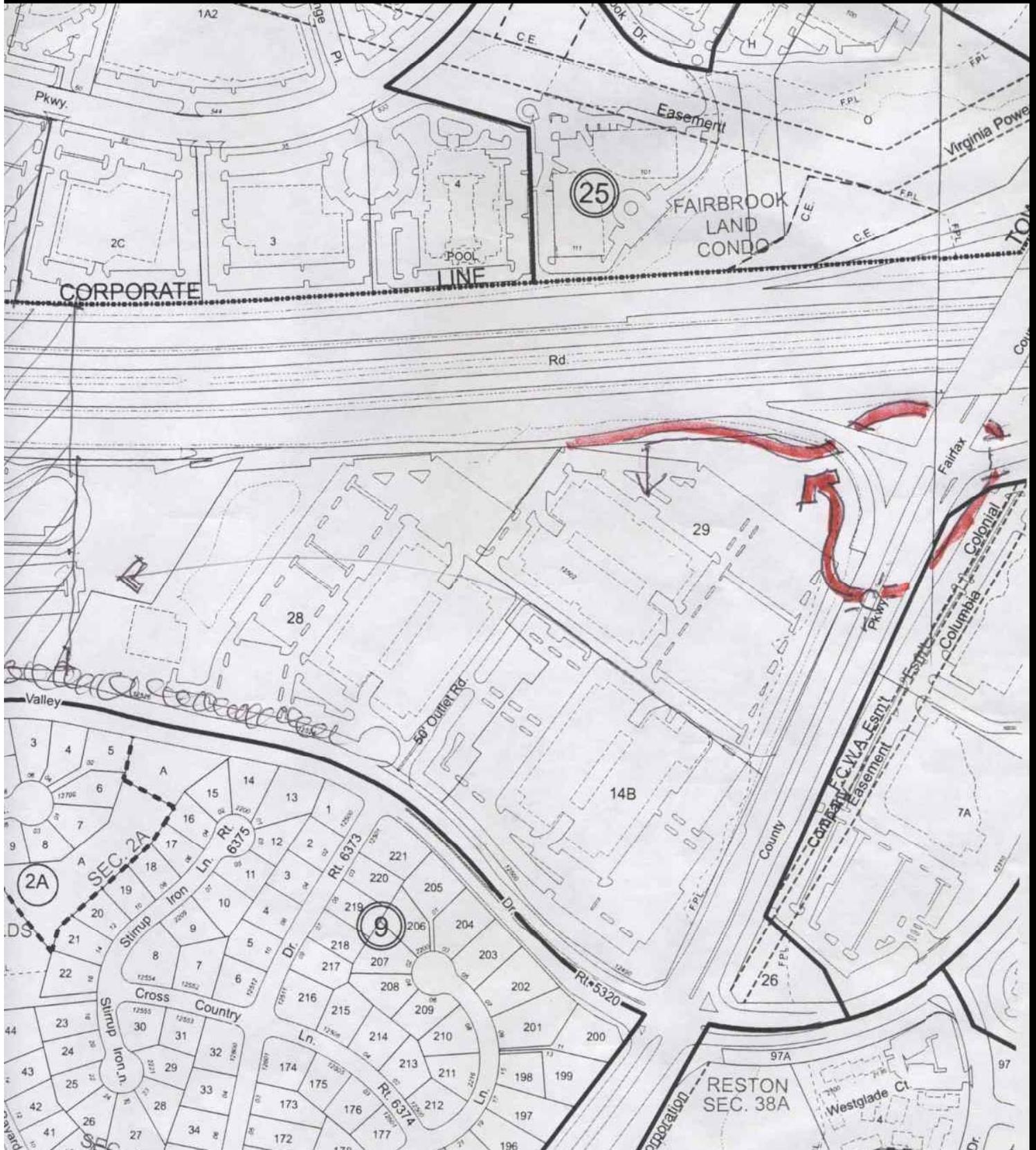
Woodland garden as example of augmented plantings at the wetlands with site-appropriate native flowering plants.



Diagrammatic Section
for Herndon-Monroe







Vision for Herndon Monroe Metro Station Area

Prepared for
The Reston Master Plan Special Study Task Force

By:

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This memo is divided into two main parts: (A) General Thoughts and Goals and (B) Thoughts on Specific Areas and Sub-Units. Both need to be considered in order to achieve a rational redevelopment of the RCIG area. The memo is accompanied by a table summarizing the recommendations by sub-unit.

A. General Thoughts and Goals

1. **Central Goals**. The main objectives for development near the Herndon-Monroe transit station should be to create a well-balanced area that
 - (a) is alive both day and night, on weekdays and weekends--not just an office area that fuels traffic and peak period activity but is a dead-zone the rest of the time;
 - (b) evolves as an urban neighborhood and natural destination, where Restonians want to come for employment, restaurants, culture, recreation, shops, parks and pedestrian/bicycle trails, in addition to the Metro;
 - (c) is visually attractive from the perspectives of first class architecture, art, plantings, street life, lighting, green spaces and openness;
 - (d) has substantial residential development (at least 50%) in every sub-unit and has enough human traffic to be safe, to convey a sense of community, and to support a busy Metro stop (with as little automobile traffic as possible);
 - (e) preserves and exploits the unique asset this area has in the Sunrise Valley Nature Park (the wetlands) as well as the other habitats;
 - (f) has convenient, safe interconnectivity by foot, bicycle and public transportation—both internally and to Herndon and Reston Town Center—so that people can comfortably move within, to and from the area without using cars;
 - (g) does not negatively impact the neighboring established residential community (Polo Fields);
 - (h) is adequately supported by timely road improvements that protect the community from unacceptable congestion, including new crossings of the toll road for pedestrians, bicycles and vehicles, and that provide mobility within the land units; and
 - (i) evolves as a part of the overall Reston community, not as a separate stand-alone place.

2. **Incentives**. The community's principal leverage to achieve desirable, mixed-use development lies in the facts that (a) RCIG property owners need to seek rezoning to a new zoning category in order to maximize the value of their property in light of the arrival of rail transit, and (b) application of consistently high standards to rezoning applications will enhance developers' investments and benefit the community. Mixed use and higher densities are not matters of right under current zoning. Absent a good individual application—which makes beneficial proffers and satisfies a well-designed comprehensive plan—landowners should live with the existing zoning designations for properties in the RCIG. Consolidations or coordinated applications that beneficially integrate development should be strongly encouraged with the potential for more generous rezoning. Likewise, density credits should be considered as incentives for developers who attract other employers and otherwise benefit the community.

3. Timing. This is a long-term exercise. Given the current economy, the number of unfilled buildings along the RCIG, and the number of office-condominium owners, development will not proceed as fast as might have been thought a couple of years ago. *The Task Force should craft sensible recommendations for changing the Comprehensive Plan based on the community's long-term goals and needs, without cutting corners either to expedite development in a bad market or to reflect guesses as to what will motivate builders 10-25 years from now.*

Ideally, redevelopment would occur first at sites closest to the new transit station both to maximize transit usage and because early development away from the station could sap the commercial real estate market before development occurs near the Metro station. However, encouraging early development nearest the transit station should not foreclose other beneficial development within a half-mile radius of the station. A wedding-cake approach to density would provide one incentive for development closer to the station, though the Task Force may wish to consider whether additional incentives are appropriate. Timing of development should be explored further.

[Relevant *questions* to consider include (i) *whether* approval of an individual rezoning application can be conditioned upon construction (at least construction of proffered improvements) being completed by a certain date or the property's zoning category reverts to the current low-density, non-mixed use zoning (subject to a new rezoning process); (ii) *whether* enforceable commitments to build high-quality projects sooner could get a rezoning preference over proposals that do not make such commitments; (iii) *whether* rezoning could be conducted in a kind of competitive process with the rezoning granted to the best proposals while lesser proposals are rejected or deferred? The proffers and hopes for beneficial development will not have much meaning if the developers never implement the rezoning or if mediocre projects crowd out better ones.]

4. General Profiles. It would be undesirable to have uniform FARs or building heights throughout the corridor for a number of reasons, including traffic, density, and aesthetics. In general, the collective "profile" of new buildings should place the taller buildings and denser development closer to the stations themselves, with the height and density tapering off as one moves away from the stations. Similarly, taller buildings should tend to be located closer to the toll road and Fairfax County Parkway with shorter buildings closer to Sunrise Valley Drive and Monroe Street. The buildings should be such that the wetlands receives sufficient direct sunlight and is visible from Monroe and Sunrise Valley Drive. Building lights and other developmental characteristics should protect the neighboring community from negative impacts, such as light, sound, or visual pollutants.

5. Mixing uses. Mixed use is clearly called for, but the issue is what mix(es) should be encouraged both in general and for particular sub-units? (Open space is discussed separately.)

- (a) Residential v. Office. The current Comprehensive Plan contemplates different mixes of residential and office space for the various sub-units; office space generally predominates in that plan. To achieve a living community that has

human activity at nights and on weekends, development should include a larger component of residential units than the Comprehensive Plan currently contemplates. Consequently, the revised Comprehensive Plan should set relatively high residential minimums (at least 50% GFA) throughout the TOD area though the residential component may vary depending on the sub-unit's distance from the stations or other factors. To achieve a balance between jobs and residences, the GFA of residences should be two times that of offices¹.

- (b) **Retail.** The Herndon-Monroe transit area should include restaurants (*for varying budgets*), shops and cultural attractions so that the area (i) becomes a vital destination, (ii) promotes transit usage, (iii) provides sufficient retail to support nearby hotels, offices and residents as well as attract other patrons, and (iv) provides sufficient foot traffic to create a sense of safety. Consistent with Reston's self-image, it would be desirable to encourage local restaurants, not chains, and to encourage shops that have broader appeal than Gucci-type stores. "Big Box" stores, such as Best Buy and Office Depot, belong in the Town Center area, not here. However, the binary distinction between "support" and "destination" retail is misleading and potentially harmful. By definition, a transit station is a destination, and it should be allowed to flourish as one, with an active human presence day and night. Retail should not be restricted in a way that either relegates the Herndon-Monroe station area to being just a commuter destination or forces residents to drive to meet their retail needs.

Relevant to future retail development, Bob Simon has questioned the idea of creating bands of first-floor retail that detract from the village center concept and that may not have sufficient economic activity to be viable. While his point deserves consideration, strict adherence to such a view could defeat vital transit-oriented development near the Herndon-Monroe station, whose existence and whose growing population were not contemplated when the original village centers were laid out.

People may be willing to walk to the grocery store for some needs *assuming* that (i) the pedestrian walkways are pleasant enough to attract people and (ii) pedestrian/bicycle bridges cross the major roads at suitable locations. Consequently, while the Harris-Teeter store may satisfy near-term needs for a grocery store and pharmacy to serve new residents near the Herndon-Monroe transit station, attractive retail, including restaurants and shops, will be needed closer to the residences in order to make the area work. Ultimately, even a new grocery store may be justified by a growing population.

6. General vision. It may not be possible to dictate the character of the Herndon-Monroe TOD, but the community may benefit from promoting a unique character for development in the area. The idea of encouraging development that emphasizes the environment has considerable support. It would also be appropriate to try to attract

¹ 800 sq.ft. per residence divided by the product of 1.6 office workers per residence and 250 sq.ft per office worker.

professionals (including professional associations) and high-tech businesses related to the environment, which would fit well with the theme of the station. This station, should, however, provide mostly residential development, to balance the mostly commercial development at the other stations in Reston and at Tysons Corner.

To this end, the county and community should attempt to attract one or more significant energy-conservation and renewable-energy corporations and associations to the Herndon-Monroe area. Density bonuses could be offered to attract developments that are anchored by substantial environmentally-friendly institutions. A nature center would surely benefit the area.

7. Traffic. Traffic must be addressed from the beginning. Both government funds and proffers will be needed. The traffic problems will begin with construction near Herndon-Monroe; get worse when the Herndon-Monroe station and related parking open; and get worse still when new buildings are developed. The county and state must commit to work with the developers to address these problems before the problems create a negative traffic reputation that kills quality new development in the Herndon-Monroe transit area. Vehicle, bicycle and pedestrian traffic will all need attention. To aid the flow of traffic, left turns should be minimized.

There must be a Station Access Road that is parallel to and alongside the toll road that permits shuttles, buses, automobiles, bicycles, and pedestrians to access the station so that use of Sunrise Valley Drive is minimized, thereby minimizing the impact on the Polo Fields community. Several schemes for achieving this minimization are illustrated below. All are designed so additional left turns are not required. A scheme with one-way traffic accomplishes the goal at minimum cost, having one-way into the station in the morning and one-way out of the station in the evening, with the Sunrise Valley gateway having an opposite one-way system.

The parking lot at Herndon-Monroe should retain its current capacity of 1750 automobiles if the agreement with the Federal government can be renegotiated from the planned 3500 on the basis that the additional development will provide the other 1750 riders. Additionally, the parking lot planned for the Herndon-Monroe station should be partially reprogrammed from Metro to serving on-site and nearby buildings once the Route 28 station is completed.

On the other hand, consistent with practices elsewhere, use of the transit parking lot at Herndon-Monroe should be free of charge at nights and on weekends. This will both help encourage transit usage in off-peak periods and help support the restaurants and shops that develop near the Herndon-Monroe transit station.

Provision should be made for locating taxi stands, rental cars (e.g., Zip cars), and rental bikes near the transit station.

Streets will need to be developed to move people to and among the buildings to be developed in the transit corridor. The grids of streets should be designed primarily to serve the pedestrians and bicyclists, but also to provide connections to larger arteries,

such as Monroe, Fairfax County Parkway and Sunrise Valley. Creating dedicated bicycle pathways is critical.

The traffic situation in the at the Southside of the Herndon Monroe station will be made worse if the town of Herndon does not establish effective kiss and ride and bus access to the station on the North side. At present, the town of Herndon has not established a clear policy regarding the station although it does have a consultancy contract under way. It is important for the Task Force, the Reston community, Fairfax County and the Metropolitan Washington Airports Authority to closely monitor developments on the Herndon side. If necessary, these groups should bring pressure to bear on the town of Herndon to establish an effective policy on metro access.

8. Crossings of the toll road and nearby roads.

- (a) Additional roads and pedestrian/bicycle routes across the toll road are essential if Reston is to avoid the RCIG's becoming a sharp line dividing our communities. There needs to be as many ways as possible for pedestrians and bicycles to cross the toll road. The crossing at the station should serve this purpose.
- (b) Developing "air rights" over the toll road could provide urban space as well as interconnectivity. Perhaps the initial attempts to use "air rights" should involve wide, pedestrian/bicycle crossings of the toll road with landscaping that creates a park-like feel.

9. Recreation and Cultural Amenities. There will be a need for more recreation space, including year-round, indoor recreation, as the population of residents and office workers grows.

- (a) Bicycle/Pedestrian along Sunrise Valley. There should be a continuous pedestrian/bicycle trail along the Sunrise Valley side, running from Fairfax County Parkway to Centreville Road, with a connection to the W&OD path east of Fairfax County Parkway, connecting to the bicycle trail along the Fairfax County Parkway. The trail should be set back from traffic and be as visually attractive as possible in order to attract users from the nearby buildings and beyond. *Rights of way should be obtained through existing parking lots within office developments along the RCIG in order to create a pedestrian/bicycle trail, which could be created with only minimal construction to link currently paved areas.* Businesses along the RCIG would benefit from such a trail because office workers and clients would gain better, non-motorized access to the Herndon-Monroe Metro station and the shops/restaurants to be developed in that area.
- (b) Other Outdoor. In addition to user-friendly plazas (see open-space discussion below), well-located parks, perhaps with urban recreation options (e.g., basketball, bocce ball, chess/checker tables) and picnicking, are needed to enhance the experience and attract users. Private pools, rooftops and enclosed areas for residents of particular developments (as opposed to community pools run by RA or RCC, for example) will not address the larger community needs or the needs of employees in the area. They should be discounted when considering a developer's proposals to meet open-space needs.

- (c) Indoor Recreation. Reston's year-round recreation facilities are already very busy, and the addition of thousands of new residents and office workers will further burden existing facilities. Reston will need additional indoor recreation space (swimming and multi-use courts), as well as additional community meeting rooms, as the population along the corridor grows. The facilities should be centrally located so they are convenient to as many people in Reston as possible. Quality public recreational opportunities for residents and employees will be a draw for businesses and people.
- (d) Cultural. Community support has been expressed for making the Herndon-Monroe TOD area a nature center. This idea is consistent with Reston's overall identity as a place that supports the arts. While public art is a minimum component, the varieties of cultural attractions to be encouraged remains to be seen.

10. Open space. A central feature of Reston is the presence of publicly accessible open space within all developments and close to all residences. Spaces emphasizing natural beauty and trails are generally integral parts of clusters and neighborhoods. The RCIG has few remaining natural areas, but it has been developed with many trees and much landscaping. Transit oriented development must continue this pattern: publicly accessible open spaces as part of every development with parks, plazas and sinews of pedestrian/bicycle paths and trees woven among the buildings along the corridor. Developers of neighboring parcels should be able (and encouraged) to combine spaces to create larger open spaces and linked spaces (especially linked, green sinews and bicycle/pedestrian paths extending throughout the corridor). Contributing to land funds might be considered if an acceptable, adequately funded project has been defined, but developers should not be able to buy out of their open-space obligation by contributing space (or money to buy space) at remote locations which will not immediately benefit the occupants of the developments. A minimum percentage of publicly accessible open space (e.g., 25%) should be considered as an aggregate goal. Open spaces can take many forms. Here are a few thoughts:

- (a) Apart perhaps from the few remaining natural areas in the RCIG, open spaces need to be designed so they are actually used.
- (b) Attractive pedestrian and bicycle paths that are bordered by trees, are separated from traffic, and run the length of the RCIG provide useful open space.
- (c) Plazas and parks should be user-friendly. Large, bare plazas are cheap for the developer but not user-friendly. Parks and plazas will be cooler and more attractive if they have trees, other vegetation, fountains and low-key facilities where children and adults can sit or play.
- (d) Urban open spaces, including plazas, will be more likely to attract people if they have places to sit and are near restaurants with outdoor seating or carryout to available tables, coffee houses, kiosks, and other amenities.
- (e) In addition to natural light during the day, well-designed night-time lighting is important in urban open spaces in order to attract people at night and to convey a sense of safety.

- (f) Existing trees, streams and wetlands located in or adjacent to the RCIG should be protected.
- (g) To count, open spaces should, in fact, be open to use by the public and should not include roads, driveways, parking lots or similar areas.

The Sunrise Valley Nature Park is a distinct asset in the area and should be protected and improved. These wetlands are a Reston wide asset since it attracts unique wildlife. There are a variety of habitats on this site. There is a meadow, an upland woods, the wetland, a briar shrub border and a thicket. Although small, it still provides homes to numerous species of wildlife--including the 122 bird species that have been seen here. It is regularly visited by school and wildlife oriented groups as well as individual Reston residents. It provides distinctive open space, around which could be grouped residential developments.

The area, which should be under the control of RA, could be improved with better maintenance and limited improvements. It could have features such as an additional board walk, a circumferential trail and a central gazebo. It does not need extensive parking since surrounding parking area could be utilized but it could profit from better access from Sunrise Valley.

11. Nearby neighborhoods must be protected. Development near the Herndon-Monroe transit station must not harm established residential areas. (a) A bright line should be drawn along Sunrise Valley from Fairfax County Parkway to Centreville Road clearly ensuring the communities that there will not be commercial buildings and or greater residential development on the south side of Sunrise Valley. A buffer zone on the north side of Sunrise Valley Drive will be needed to shield the single-family neighborhood (Polo Fields) from the high-density development on the north side. (b) Traffic and parking management steps (such as speed humps and parking permits) may be needed in neighborhoods on the south side of Sunrise Valley. (c) Some or all of the neighborhoods should get street lighting as a safety measure. (d) Natural sound barriers should be developed around these communities to protect them from the resulting increase in traffic-related noise.

12. Electric and phone lines should be buried throughout the transit area.

B. Comments on Specific Sub-Units in the Herndon-Monroe TOD Area (Also see attached table.)

1. West of Monroe Street

- a. Woodland Park West (Sub-unit A-1) is a prime location for a mixed-use village. There are no TOD recommendations in the current CP. It measures approximately ¼ mile by one mile, extending a little over one mile from the transit station; therefore, a shuttle bus, perhaps privately owned, will be needed to transport people along the Station Access Road to and from the station. Although a grid of streets may not be helpful, several streets should link Sunrise

Valley Drive to the Station Access Road. The walk and bicycle paths along the access road would be used primarily by those living closer to the station. This sub-unit would be suitable for a grocery store and other retail stores as well as office buildings. The architecture should blend with the existing buildings in Sub-unit B and the streets to the Station Access Road should have continuations in Sub-unit B.

The revised Comprehensive Plan should call for approximately 25% open space, 20% right of way, and the remaining 55% having 15% of the sub-unit's GFA as retail. The 85% GFA remaining should provide a balance between jobs and residences: 28% office and 57% residential. The balance, and the need for retail, should include Sub-units A-2 and B. A large, central park (or pair of parks) should be included, with attractive pedestrian and bicycle paths throughout and linked to the Station Access Road. If restaurants and other retail are developed next to the transit station, there may be less need for such facilities in this residential neighborhood, but that should be studied.

- b. Woodland Park East (Sub-unit A-2), being less than ½ mile from the station and measuring less than ¼ mile by ¼ mile, is ideal for residential development. The current Comprehensive Plan calls for approximately 50% residential and 50% retail; however, the balance between office and residential, and the need for retail, should use the 28%, 57%, and 15% cited above in conjunction with Sub-units A-1 and B. The 25% open space should retain much of the existing trees. A walkway along Monroe Street should be retained. Some of this land will be needed to provide for the Station Access Road under the Monroe Street bridge.
- c. Woodland Park South (Sub-unit B), which is between ½ and one mile from the station, is almost completely developed as a low-density urban area. Its north-south streets should be made more grid-like in connecting to Sub-unit A-1. Walkways and bicycle paths are needed to people in Sub-unit A-1 can more directly access the retail stores in this unit.

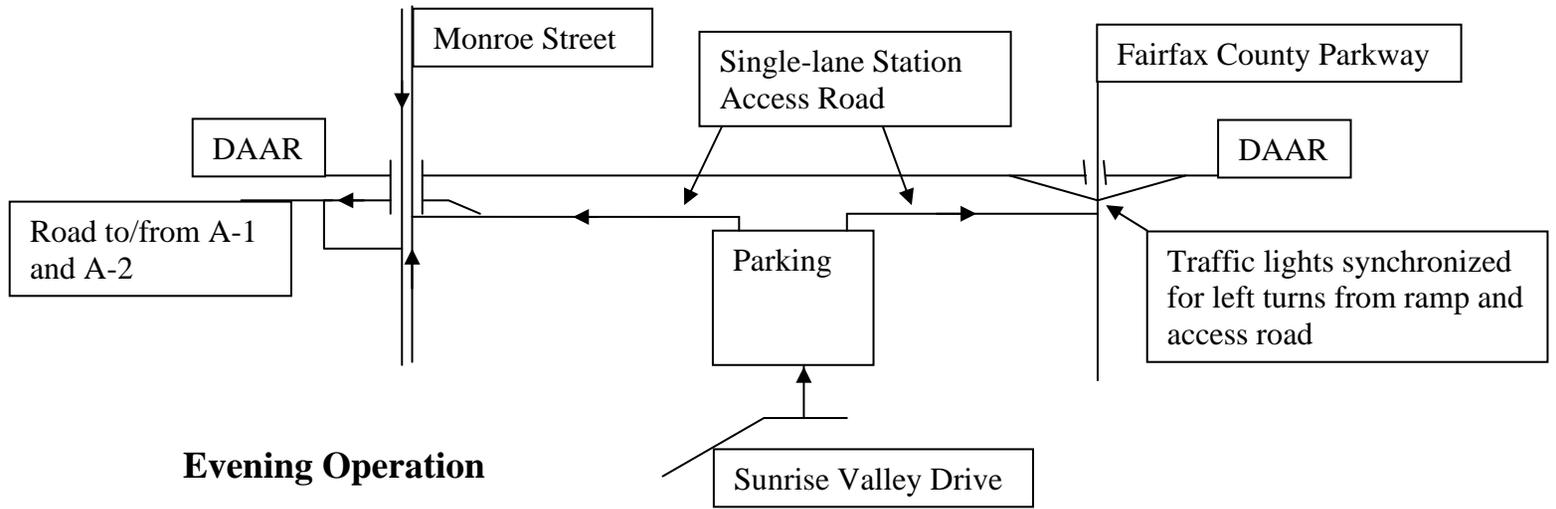
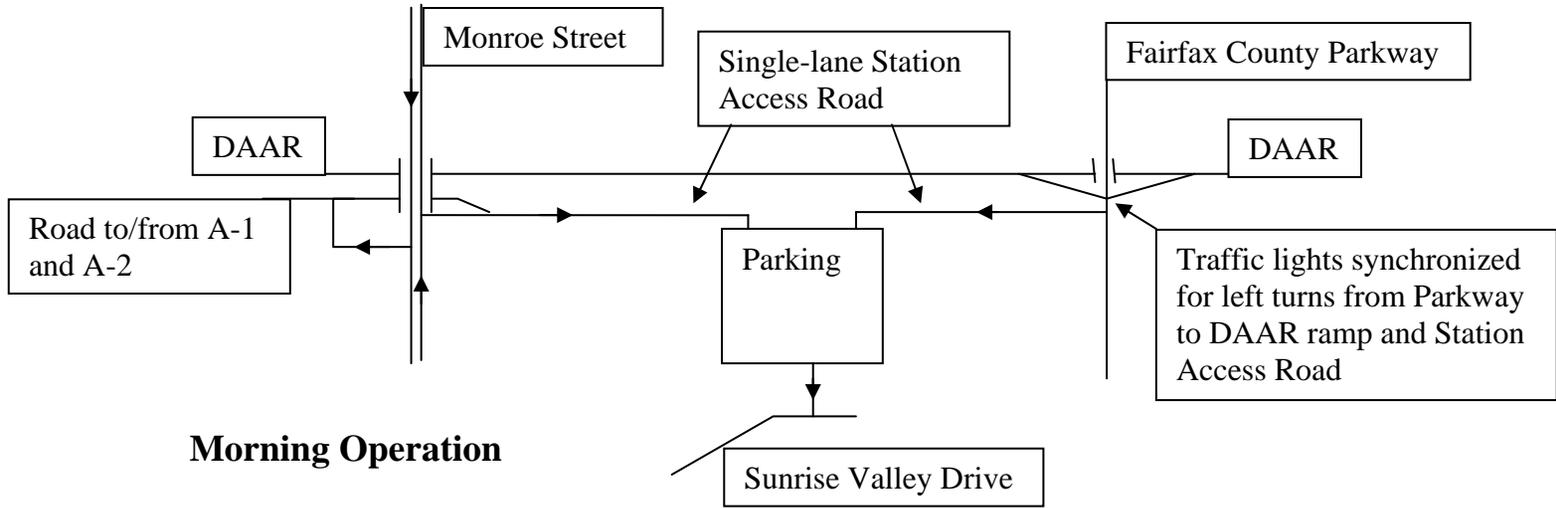
2. East of Monroe Street

- a. Reston Arboretum South (Sub-unit C-1) measures ¼ mile by ¼ mile and is within ½ mile of the station at its farthest point. The natural area, the wetlands, should be protected and enhanced with perimeter walkways and restful observation areas. The current Comprehensive Plan calls for 100% office development in the other areas, with a FAR of 0.5. This FAR should be retained, because residential areas are across the bordering roads of Monroe Street and Sunrise Valley Drive.
- b. County Land (Sub-unit C-2) measures 1/8 mile by 3/8 mile and encompasses the 1750-space parking garage. The other parts of this sub-unit should be used for the Station Access Road.
- c. Sprint West (Sub-unit C-3) measures ¼ mile by 1/8 mile and is within ¼ mile of the station – ideal for residential development. The current Comprehensive Plan

calls for 1.5 FAR near station with 55% to 65% residential and 35% to 45% office and retail. Because C-1 will remain primarily office and access to C-3 requires the use of the semi-residential Sunrise Valley Drive, this sub-unit (C-3) should not include office space but rather residential with, perhaps, some convenience retail stores along the Station Access Road. Open space should occupy 25% of the land area. Building heights and the FAR should be less along Sunrise Valley Drive than elsewhere in this sub-unit.

- d. Sprint East (Sub-unit C-4) measures $\frac{1}{4}$ mile by $\frac{1}{8}$ mile and is within $\frac{1}{2}$ mile of the station, which, like Sub-unit C3, is ideal for residential development. Some of this land may be needed to provide for the Station Access Road from the Fairfax County Parkway, depending on which scheme is selected for this Road. Possible schemes are illustrated in the following diagrams. No through streets are needed in this Sub-unit; however, walkways and bicycle paths will be required to connect to similar paths along the Station Access Road. The current Comprehensive Plan calls for 1.5 FAR near station with 55% to 65% residential and 35% to 45% office and retail; however, this sub-unit (C-4) should not include office space but rather residential with, perhaps, some convenience retail stores along the Station Access Road. Open space should occupy 25% of the land area. Building heights and the FAR should be less along Sunrise Valley Drive than elsewhere in this subunit.





Low-Cost Design (no fly-overs)

**Herndon-Monroe Transit Area
Comprehensive Plan Now and As Recommended for the Future**

Sub-Unit	Current Zoning, Use	Current CP for Transit Oriented Development	Recommended CP for Transit Oriented Development
A-1 (Woodland Park – west of Monroe)	PDC: Primarily 4-story apartments	0.7 FAR. Mixed use: 33% residential; open space concentrated into park space; 0.4 FAR to 0.92 closest to station, except 2.4 for small section.	0.7 FAR mixed use. 33% residential GFA. Access including roadway next to DAAR ¹ . Open space ² .
A-2 (Woodland Park east, west corner of Monroe and DAAR)	Vacant land	0.7 FAR. Mixed use.	1.5 FAR in 12 acres near Monroe St; 1.0 elsewhere. Mixed use. 40% to 60% residential; 50% to 60% retail facing walkways, hotel, office; 0% publicly accessible open space. Need for landscaped buffer between the buildings and DAAR. Pedestrian and bicycle paths throughout area.
B (Woodland Park south of Sunrise Valley, west of Monroe)	PDH-12 and PDH-30	12 to 30 du/acre	0.5 FAR; mixed use; 33% high-quality residential. Active recreational facilities, walkway connectivity.
C-1 (Arboretum, east of Monroe, at Sunrise Valley and Monroe)	PDC; four office buildings	0.27 to 0.45 FAR; office and retail	0.5 FAR; office use only
C-2 (Wetlands and station parking)	I-4; 1700 parking-space garage; station	Retail, child care	Government and institutional; 1750 to 3500 parking spaces. Screening from local residential area. Measures needed to reduce traffic on Sunrise Valley
C-3 (Sprint west, adjacent to station on east)	I-4; 0.7 FAR; one 1-story office building	0.29 FAR; 70% Office and 15% retail; 100 ft height limit near DAAR, 35 ft elsewhere	1.5 FAR near station, 55% to 65% residential; 35% to 45% office and retail. Access including roadway next to DAAR ¹ . Open space ² . 150 ft height limit near DAAR.
C-4 (Sprint east, at Fairfax County Parkway)	I-4; 0.7 FAR; two 2-story office buildings	0.34 to 0.5 FAR	1.0 FAR; 35% to 50% residential, less than 50% office; 15% retail. Access including roadway next to DAAR ¹ . Open space ² .

¹ Grid of streets with traffic calming plan. Connector road to Metro station next to and parallel to DAAR, under existing bridge(s), including pedestrian/bicycle lane with landscaped buffer from DAAR. Pedestrian and bicycle paths throughout area.

² 25% publicly accessible open space, including a central park or pair of parks, and attractive walkways with trees throughout.

**Sunrise Valley Nature Park:
A suburban wetlands park**

Prepared for
The Reston Master Plan Special Study Task Force

By:
The Environmental Work Group
Reston 2020 Committee
Reston Citizens Association

June 1, 2010

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Sunrise Valley Nature Park: A suburban wetlands park

Sunrise Valley Nature Park (SVNP) is a 15.75 acre privately owned wetlands located within ½ mile from the future Herndon-Monroe metro station in the northeast quadrant of the Sunrise Valley Drive/Monroe Street intersection, bordered by Sunrise Valley Drive, County land, the Herndon Monroe Park and Ride and office buildings fronting onto Monroe Street. In view of the unique environmental and ecological value of this park, the updated Comprehensive Plan should include language which requires dedication of this property to Reston Association for maintenance and preservation. Additionally, development around this ecologically important site should adhere to LEED for Neighborhood Development standards and guidelines for wetland areas.

History:

SVNP was developed as offsite mitigation for all remaining parcels of land in Reston in 1993. The site consists of approximately 3.3 acres of created wetlands, a restored farm pond, natural wetlands and natural upland buffers. It is an environmentally and ecologically significant site, fulfilling the environmental functions of water purification and filtration, some storm-water management and sediment reduction. SVNP is a sanctuary for plants and animals found only in this type of uncommon habitat. The site is home to a myriad of wildlife ranging from small insects to medium to large mammals; it supports a rich food web providing sustenance for these inhabitants, including migratory birds. It is, perhaps most significantly, host to 122 bird species, some permanent residents, others migratory species. At least 50% of the site's wetlands are shallow marshes containing plant and animal species found nowhere else in this part of the County. Although there are several ponds in the Reston/Herndon area, this is the only significant marsh. The only other comparable site in the County is Huntley Meadows Park, some 30 miles away.

SVNP is protected by a conservation covenant managed by the Army Corps of Engineers. Initial plans to turn this property over to Reston Association (RA) were never realized; the property has changed hands several times since it was developed as a wetland nature park. Reston Association, which uses the park as an outdoor classroom for nature programs, has expressed an interest in this property and making a long term maintenance commitment to keep this asset in a natural state.

Economic value:

SVNP holds a good deal of economic value in its current state, particularly if one views it as a natural park for future residents of the Herndon-Monroe metro station area. SVNP, if retained in a largely natural state, can fulfill the following functions:

- a. Recreation area for residents (both as a destination and as a pass through en route to the metro station – “feel the stress of work melt away as you stroll home through a forested upland buffer surrounding a unique wetland park”
- b. A buffer between the established Polo Fields neighborhood and more dense development to the north of Sunrise Valley Drive and west of Monroe Street
- c. Outdoor classroom for RA, Osher Life Long Learning Institute at GMU, local schools and the Fairfax County Park Authority
- d. Filtration of storm-water runoff (which will become increasingly important with increased development in the area)
- e. Water purification and sediment removal
- f. Habitat for numerous species of insects, small and large mammals and birds – both residents and migrants

It is indisputable that access to natural areas and parklands increases the value of residential property.

Current Comprehensive Plan Treatment of Environmentally Sensitive Areas:

The current Fairfax County Comprehensive Plan for the Upper Potomac region provides guidance for planners dealing with SVNP; this guidance can be found in the environmental and parks/recreation sections of the comprehensive plan.

The environmental section of the Upper Potomac plan calls for the implementation of County Environmental Quality Corridor (EQC) policy to ...”protect steep slopes, problem soil areas and wetlands.” This section goes on to recognize the ecological and water quality benefits of large undeveloped parcels. The Environmental section of the overall Comprehensive Plan discusses the desirability of dedicating EQC parcels to the Fairfax County Park Authority where such dedication is in the public interest. Although County staff has decided that SVNP does not meet the requirements for designation as an Environmental Quality Corridor, it is an environmentally significant area worthy of continued protection.

The parks and recreation section of the Upper Potomac plan points out the sensitive nature of lands within the nearby Sugarland Run Stream Valley system and goes on to state: “A variety of resource protection mechanisms, including acquisition of conservation/open space, scenic, and historic preservation easements, land dedication and purchase by the County should be utilized to protect identified resources not currently in public ownership. The intrusion of non-recreational development should be restricted and the impacts of offsite development should be mitigated.” Although SVNP

is not part of the Sugarland Run Stream Valley System, it is an ecologically sensitive area within UP 5 and should be afforded the same protections as other environmentally sensitive lands in UP 5. Indeed, if preserved and enhanced by modest improvements, such as an educational gazebo or pavilion, additional benches and improved pathways, SVNP would remain a significant natural resource for the Herndon-Monroe station area, Reston and other neighboring communities, similar to Huntley Meadows Park.

Conclusion and Recommendation:

The Reston community places a high value on its open spaces and natural areas, as evidenced by citizens' use of these areas for passive recreation and activities such as bird watching and environmental education. Citizen participation in the variety of nature programs offered by RA and community involvement in the preservation and improvement of the Walker Nature Center and the new Nature House are further evidence of Reston's desire for these kinds of areas. Given the community interest in natural areas and the economic value of SVNP in its current state, we urge the Reston Master Plan Special Study Task Force to place the following language in the comprehensive plan which specifically addresses this ecologically significant area by recommending dedication of the area covered by the conservation covenant to Reston Association for preservation and maintenance as a community-wide natural recreation and educational park:

Sub-unit C-1 (part of Herndon-Monroe Transit Station Area)

Sub-unit C-1 is located in the southeast quadrant of the DAAR and Monroe Street. The land unit includes office uses and the Sunrise Valley Park Wildlife Habitat and Nature Preserve. It is planned for office use up to .50 FAR.

In view of the unique environmental and ecological value of the Sunrise Valley Nature Preserve, this 15.75 acre park, which is currently covered by a conservation covenant with the Army Corps of Engineers, should be dedicated to the Reston Association to be preserved and maintained in perpetuity as a community natural recreation and educational park. Pedestrian access to the park should be improved by maintaining the current network of paths and adding a surface pathway and/or boardwalk just to the north of the wetlands in the area of the boundary between sub-unit C-1 and sub-unit C-2, thus permitting easy pedestrian and bicycle access from Monroe Street to the future Herndon-Monroe Metro Station area.

Appendix 1

LEED for Neighborhood Development

In order to protect the Sunrise Valley Nature Park from the impact of surrounding TOD, we suggest the LEED for Neighborhood Development guidelines be used for development at the Herndon-Monroe Metro Station. Specifically, program guidelines pertaining to wetlands should be followed by developers.

See attachment: Excerpt from the LEED for Neighborhood Development Rating System, Copyright © 2009 by the U.S. Green Building Council, Inc. All rights reserved, pages 12-13.

SLL Prerequisite 3: Wetland and Water Body Conservation

Required

Intent

To preserve water quality, natural hydrology, habitat, and biodiversity through conservation of *wetlands* and *water bodies*.

Requirements

Limit development effects on wetlands, water bodies, and surrounding buffer land according to the requirements below.

OPTION 1. Sites with No Wetlands, Water Bodies, Land within 50 Feet of Wetlands, or Land within 100 Feet of Water Bodies

Locate the *project* on a site that includes no wetlands, no water bodies, no land within 50 feet of wetlands, and no land within 100 feet of water bodies.

OR

OPTION 2. Sites with Wetlands, Water Bodies, Land within 50 Feet of Wetlands, or Land within 100 Feet of Water Bodies

a. Locate the project such that *preproject* wetlands, water bodies, land within 50 feet of wetlands, and land within 100 feet of water bodies is not affected by new development, unless the development is minor improvements or is on *previously developed* land.

OR

b. Earn at least 1 point under GIB Credit 8, Stormwater Management, and limit any impacts beyond minor improvements to less than the percentage of buffer land listed in Table 1.

Table 1. Maximum allowable area of impacts within buffer zone, by density

Residential density (DU/acre)*	Nonresidential density (FAR)*	Percentage of buffer land** where impacts beyond minor improvements are allowed
> 25	> 1.75	≤ 20%
> 18 and ≤ 25	> 1.25 to ≤ 1.75	≤ 15%
> 10 and ≤ 18	> .75 to ≤ 1.25	≤ 10%
≤ 10	≤ .75	≤ 5%
DU = dwelling unit; FAR = floor-area ratio.		
* For this option, a mixed-use project may use either its residential or its nonresidential <i>density</i> to determine the percentage of allowable impacts, regardless of which is higher.		
** For this option, buffer width may vary as long as the total buffer area is equal to the area within 50 feet of wetlands and/or within 100 feet of water bodies, minus excluded features (see below). The minimum buffer width, however, is 25 feet for wetlands and 50 feet for water bodies, measured from the edge. In the minimum buffer, only minor improvements and/or improvements that result in no ecological impairment of the wetland or water body, as determined by a qualified biologist, are allowed.		

AND

FOR ALL PROJECTS

Comply with all local, state, and federal regulations pertaining to wetland and water body conservation.

The following features are not considered wetlands, water bodies, or buffer land that must be protected for the purposes of this prerequisite:

- a. Previously developed land.
- b. Man-made water bodies (such as industrial mining pits, concrete-lined canals, or stormwater retention ponds) that lack natural edges and floors or native ecological communities in the water and along the edge.
- c. Man-made linear wetlands that result from the interruption of natural drainages by *existing* rights-of-way.
- d. Wetlands that were man-made incidentally and have been rated “poor” for all measured wetland functions. Wetland quality assessment must be performed by a qualified biologist using a method that is accepted by state or regional permitting agencies.

Minor improvements within the buffer may be undertaken to enhance appreciation for the wetland or water body, provided such facilities are open to public access. Only the following improvements are permitted:

- a. Bicycle and pedestrian pathways no more than 12 feet wide, of which no more than 8 feet may be impervious.
- b. Activities to maintain or restore native natural communities and/or natural hydrology.
- c. One single-story structure not exceeding 500 square feet per 300 linear feet of buffer, on average.
- d. Grade changes necessary to ensure public access.
- e. Clearings, limited to one per 300 linear feet of buffer on average, not exceeding 500 square feet each, for tables, benches, and access for nonmotorized recreational watercraft. Off-street parking is not considered a minor improvement.
- f. Removal of hazardous trees; up to 75% of dead trees; trees less than 6 inches diameter at breast height; trees under 40% condition rating; and up to 20% of trees more than 6 inches diameter at breast height with a condition rating of 40% or higher. The condition rating must be based on an assessment by an arborist certified by the International Society of Arboriculture (ISA) using ISA standard measures.
- g. *Brownfield* remediation activities.

Direct impacts to wetlands and water bodies are prohibited, except for minimal-impact structures, such as an elevated boardwalk, that allow access to the water for educational and recreational purposes. Structures that protrude into wetlands or water bodies may be replaced, provided the replacement structure has the same or smaller footprint and a similar height.

Environmental Planning Principles for Reston

“Living in Reston is like living in a park.”

The Nature of Reston, Charles A. Veatch

Prepared for

The Reston Master Plan Special Study Task Force

June 1, 2010

By

The Environmental Work Group
Reston 2020 Committee
Reston Citizens Association

Environmental Work Group

Diane Blust, principle author
CJ Basik
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Fran Lovaas
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Environmental Planning Principles for Reston

Executive Summary

- All future development within Reston and the RCIG area must be carried out in a manner which protects and complements Reston Association's renowned natural areas, one of the key assets of the community. Future development provides an opportunity to preserve and enhance natural areas and open space by concentrating residential, retail and office spaces in vibrant TOD areas. New construction should be built to achieve LEED gold certification for commercial and LEED silver certification for residential buildings, employ state of the art stormwater management features, and be surrounded by sustainable landscaping composed of native plants.
- The Comprehensive Plan section dealing with Reston should include a separate environmental section addressing preservation of natural areas and open space, green building technology and stormwater management specific to Reston and the RCIG.
- Sunrise Valley Nature Park, located near the future Herndon Monroe Metro Station, is the site of a wetland/marsh habitat unique in this part of Fairfax County and should be preserved as a feature of the Herndon-Monroe Metro Station.

Key Findings and Recommendations

Open Space and Natural Areas:

Reston Association's (RA) open spaces and natural areas, which comprise approximately 33% of RA's common land, are one of the key assets of the community. These areas, including the renowned trail network, provide essential recreational opportunities to residents. More importantly, Reston's natural areas perform critical environmental and ecological functions for Reston as a whole (planned residential community –PRC – and the Reston Center for Industry and Government - RCIG): trees provide shade to cool our buildings and pathways, reduce air pollution, reduce levels of stormwater runoff; stream valleys and natural areas provide important wildlife habitats and provide additional stormwater control, improving water quality. The privately owned Sunrise Valley Nature Park (subject of a separate paper) is a unique wetland/marsh habitat used for birding and educational programs.

The paved pathway network in Reston is an important element of the community's multi-modal transportation system, allowing residents to reduce reliance on cars.

1. The area covered by Reston Association should continue to be comprised of approximately 33% open space. Future development in the RCIG and non-RA PRC should contain 25% open space.
2. There should be no incursions, with the exception of pathways, benches, small children's recreation areas, and small educational signs, into Reston's natural areas.
3. Approvals for future development or redevelopment should be granted only after environmental impact studies demonstrate that there will be no negative impacts on surrounding open space and natural areas.
4. Stands of mature trees must be preserved in the development or redevelopment processes. Reston's tree canopy should be maintained at current levels and increased where possible.
5. Trails linking new neighborhoods in the RCIG and non-RA PRC to RA's established trail network should be built concurrently with new residences to ensure trail connections prior to the arrival of new residents.
6. In order to ensure adequate funding levels for RA's open space and natural areas management programs, all new residential units in newly developed areas of the RCIG should be required to participate in the Reston Association on a par with all other community segments. All new residential units the Town Center that are not governed by existing relationships to Reston Town Center Association should be

required to participate in the Reston Association on a par with all other community segments.

Green Building Technology and Site Considerations:

Transportation in the U.S. accounts for approximately 50% of greenhouse gas emissions. It is crucial, therefore, to develop true TOD neighborhoods where people can work, shop and find recreation within walking distance of their homes, thereby cutting down significantly on single occupancy vehicle trips. Additionally, the latest green building techniques can help reduce the carbon footprint of new construction. Use of site and landscaping techniques outlined in the Sustainable Sites Initiative can further protect the environment by preserving or restoring ecosystems.

1. New commercial buildings within Reston and the RCIG must be built to a minimum of LEED gold certification. Residential buildings should, at a minimum, meet LEED silver standards. Ideally, buildings will include features such as green roofs, small solar or wind systems and rain water capture systems to allow for use of gray water; these features will further lessen the environmental impact of new construction. New neighborhoods should be developed in a manner that allows residents to reduce single occupancy vehicle trips.
2. Landscaping for new developments and redeveloped areas should be informed by guidelines found in *The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009*. It is especially important that plants on RA's list of banned invasive exotic plants not be used in Reston; landscaping should include a high percentage of native plants.
3. Wherever possible, pervious surfaces should be used to replace impervious surfaces in order to lessen stormwater runoff.
4. Redevelopment should be carried out in a manner that lessens the environmental impact of new development as measured against previous development on the site, e.g., increased pervious surface when measured against pre-existing conditions, decreased stormwater runoff, decreased energy consumption, etc.

Stormwater and Water Quality:

The severe degradation of Reston's streams over the years was the direct result of use of stormwater techniques that moved runoff as quickly as possible into the stream valleys. Degraded streams resulted in habitat disruption and elimination as well as increased sediment load in Reston's lakes. Reston is currently in the midst of a multi-million dollar stream restoration project designed to improve the local environment and water quality as well as downstream water quality.

1. Stormwater management should be evaluated for Reston as a whole, not only individual development by individual development. Future development should follow stormwater best practices to ensure that no additional stormwater runoff is generated as a result of new development.
2. The County should not grant stormwater waivers when approving individual developments.
3. When redevelopment occurs, such as is currently being proposed for the Fairway Apartments, the new development should be required to generate less stormwater runoff than the previous development.
4. All new construction in Reston, whether redevelopment (e.g., Fairway Apartments) or new development (e.g., Comstock at Wiehle), must employ stormwater best management practices (BMPs) and follow low impact development (LID) guidelines. Buildings should include green roof technology, stormwater catchment facilities to facilitate use of gray water in buildings where allowed by code, and site features such as rain gardens, swales and other features that contain stormwater on site and allow for gradual release into the water table. These guidelines should be applied regardless of the size of the development or structure.

Discussion

“Living in Reston is like living in a park. Stream valleys, meadows, lakes, ponds, woodlands, and roadside buffers blend with privately owned natural areas to form a diversified and interdependent ecosystem where wildlife and plants are not circumscribed by property lines.” From *The Nature of Reston*, Charles A. Veatch

The planned community of Reston has placed a high value on environmental excellence and innovation since the community was founded over 40 years ago. Reston was developed as a community where people could “live, work, play” long before the phrase came to symbolize the new urbanism and sustainable communities. The arrival of Metro in Reston presents this ground breaking planned community with the opportunity to continue its tradition of environmental excellence by supporting transit oriented development around the future Metro stations, preserving and improving Reston’s renowned natural areas and open spaces, and becoming a show place for cutting edge green building and sustainable building sites which incorporate on-site renewable energy production and state of the art stormwater management facilities. Over the next 40 years, developers, officials and citizens engaged in the development and redevelopment of Reston should ensure that Reston meets or exceeds all Fairfax County, State and Federal regulatory guidelines in the key environmental areas of natural areas/open space, water quality and stormwater management, and air quality.

The Fairfax County Board of Supervisors has adopted two goals relating to the conservation of the natural environment:

“Environmental Protection – The amount and distribution of population density and land use in Fairfax County should be consistent with environmental constraints inherent in the need to preserve natural resources and to meet or exceed federal, state and local standards for water quality, ambient air quality and other environmental standards. Development in Fairfax County should be sensitive to the natural setting, in order to prevent degradation of the County’s natural environment.

“Open Space – Fairfax County should support the conservation of appropriate land areas in a natural state to preserve, protect and enhance stream valleys, meadows, woodlands, wetlands, farmland, and plant and animal life. Small areas of open space should also be preserved in already congested and developed areas for passive neighborhood uses, visual relief, scenic value, and screening and buffering purposes.”¹

¹ Fairfax County Comprehensive Plan, Policy Plan, Environment, Amended through 2/25/2008

Environmental protection is also cited in three other County goals: quality of life, land use and transportation. Future development in Reston must fulfill established County environmental goals.

The current Comprehensive Plan dealing with Reston does not contain much detail on the environment; it does not have a separate environmental section. In view of the importance of environmental issues and environmental protection for Restonians, the revised Comprehensive Plan should contain a separate environmental section with goals applicable to the entire Reston area, both the PRC and RCIG. The Environmental Section of the Comprehensive Plan covering Reston should focus on open space and natural areas, green building technology and sustainable site development, and stormwater management.

Open Space and Natural Areas

“Beauty – structural & natural- is a necessity of the good life and should be fostered.”² Natural areas and open spaces were not an option in 1962; today and in the future, Reston’s natural areas and open spaces will play a critical role in the life of citizens and a key role in overall environmental protection in Reston and Fairfax County as a whole. Reston has set itself apart from other suburban developments since its inception with its philosophy of embracing diversity in its citizens, variety of housing, types of transportation, and other aspects of a modern lifestyle. The one common denominator is that Reston has always emphasized the importance of its open space and natural areas. People move to Reston and stay here because of this aspect of the community. Open spaces and natural areas are truly important in our concept of making Reston an ideal place to live, work, and play, even more so now in the twenty-first century. Reston is a model in regard to open spaces and natural areas; Restonians want it to remain so for themselves and for future generations.

For the purposes of this paper, public open space should include areas such as public plazas, parks, outdoor recreational facilities, bikeways and trails; it does not include paved areas for vehicles. Natural areas are areas managed by Reston Association and left in a largely natural state with minimal intrusions such as pedestrian and bike paths, benches and limited recreational sites such as small tot lots.

² Robert Simon, Seven Principles for Reston, 1962

Land use in Reston includes approximately 33% open space³ managed by RA's professional staff; this open space is comprised of 1300 acres of common open space which includes 800 acres of forested natural areas and 200 recreational acres, lakes, streams and stream valleys, and a 55 mile network of paved pathways running throughout the open spaces and natural areas of the community.

In addition to the obvious recreational uses for Reston's open spaces and natural areas, these resources contribute significantly to the health of the local environment. Trees in the natural areas and open spaces provide shade and cool our suburban and urban landscape; trees also contribute to improved air quality by filtering the air we breathe. Trees are natural machines that help to clean our environment of air pollution, water pollution, and noise pollution. Stream valleys, especially the recently restored areas of Snakeden Branch and the Glade, provide habitats for a diverse range of wildlife, from the smallest insects to birds and mammals. The privately owned Sunrise Valley Nature Park, located within ½ mile of the future Herndon-Monroe, is a unique wetland/marsh home to a variety of creatures, including, at various times of the year, 122 bird species. (Sunrise Valley Nature Park is the subject of a separate paper, which recommends dedication of this property to RA for preservation and maintenance.)

Acting on goals established by RA Board of Directors over the years, RA staff has done an excellent job of preserving, protecting and maintaining RA's natural areas and open spaces. RA's stream restoration project has restored a healthy habitat in previously degraded stream valleys and natural areas. RA's open spaces and natural areas are the cornerstone of outdoor recreation and environmental education programs available to all RA members.

Reston's network of paved trails is perfectly suited for walking, running and non-motorized biking, both for recreation and internal transit. The trail network connects neighborhoods and provides residents with easy access to schools and village centers, helping to reduce the need for cars in Reston. As new residential areas are added in the RCIG and the North Town Center, new trails must be built to provide connections to the extant trail network. This will ensure that Reston's new residents can access

³ Watershed Management Plan for Reston, Virginia, Seth Brown et al, 2002, Project Engineer, GKY & Associates, Inc., 5411-E Backlick Road, Springfield, VA 22151, (703) 642-5080, sbrown@gky.com

Reston mature natural areas on foot or bike. Suggestions for additional pedestrian walkways contained in the RMAG report should be implemented.

On April 24, 2010, Reston celebrated its 16th year as a USA Tree City, a designation awarded by the Arbor Day Foundation. The tree canopy in Reston is a natural resource that needs to be nurtured and protected. Reston's impressive tree canopy should be increased where possible. (Note: At publication, we were still attempting to determine a figure for Reston's tree canopy; this figure will be provided to the Task Force when available.) Public open spaces with appropriate tree plantings should be provided for all new developments in the RCIG and any redeveloped areas such as the Fairway Apartments.

Open Space and Natural Areas Recommendations:

1. Reston (RA) should continue to be comprised of approximately 33% open space. Future development in the RCIG, Reston Town Center and Town Center North should contain 25% open space.
2. There should be no incursions, with the exception of pathways, benches, small children's recreation areas, and small educational signs, into Reston's natural areas.
3. Approvals for future development or redevelopment should be granted only after environmental impact studies demonstrate that there will be no negative impacts on surrounding open space and natural areas.
4. Stands of mature trees must be preserved in the development or redevelopment processes. Reston's tree canopy should be maintained at current levels and increased where possible.
5. Trails linking new neighborhoods to RA's established trail network should be built concurrently with new residences to ensure trail connections prior to the arrival of new residents.
6. In order to ensure adequate funding levels for RA's open space and natural areas management programs, all new residential units in newly developed areas of the RCIG should be required to participate in the Reston Association on a par with all other community segments. All new residential units the Town Center that are not governed by existing relationships to Reston Town Center Association should be required to participate in the Reston Association on a par with all other community segments.

Green Building Technology and Site Considerations: Leadership in Energy and Environmental Design (LEED) and Sustainable Sites Initiative

Development around future Metrorail stations in Reston provides the community with the opportunity to develop neighborhoods within the greater Reston area that are true transit-oriented development (TOD) communities: mixed use neighborhoods where the proximity of residences, jobs and retail and other support facilities make it possible for residents to cut back on single occupancy vehicle trips. According the U.S. Green Building Council “LEED 2009 for Neighborhood Development program,” transportation in the U.S. accounts for roughly one-half of U.S. greenhouse gas emissions. It is critical, therefore, to design new neighborhoods and redevelop neighborhoods in a manner which encourages residents to leave their car in the garage or to do away entirely with privately owned cars in favor of walking, biking, public transportation and the occasional car rental from companies like Zip Car. While neighborhood/community design can contribute greatly to reduced vehicular traffic, the environmental goal of limiting single occupancy vehicle trips within the Reston area can only be achieved if a robust, convenient and affordable public transit system is developed throughout the entire community.

Open/green spaces with bike trails around the future Metro stations can be a positive force to ease a transition (for a very automobile oriented population) into a new mode of transportation – i.e. walking or biking to Metro Stations. These new trails need to be connected to the existing trail network in Reston making it possible for residents to move on foot or bicycle through the community. Where distances are too great for pedestrian travel, internal connector or circulator bus systems should provide affordable and convenient bus service designed to reduce single occupancy vehicle travel. This will be particularly important in the out years when Reston’s population is expected to increase by at least 30,000 residents.

The Leadership in Energy and Environmental Design (LEED) is an internationally green building certification program designed to ensure that buildings and communities are built in an environmental responsible and sustainable manner which has the least negative impact on the environment in which they are built. The program allows developers and builders to build communities and buildings with improved building performance in key areas: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and environmental site stewardship.

The Sustainable Sites Initiative, a joint project of *American Society of Landscape Architects*, *the Lady Bird Johnson Wildflower Center*, and *the United States Botanic Garden*, provides excellent guidance to communities and developers in the area of sustainable landscaping practices on a site by site basis. The program is designed to

inform the development process resulting in restored or enhanced “ecosystem services”: “The term “ecosystem services” describes the goods and services provided by healthy ecosystems—the pollination of crops by bees, bats, or birds, for example, or the flood protection provided by wetlands, or the filtration of air and water by vegetation and soils. Ecosystem services provide benefits to humankind and other organisms but are not generally reflected in our current economic accounting. Nature doesn’t submit an invoice for them, so humans often underestimate or ignore their value when making land-use decisions. However, efforts to determine the monetary value of ecosystem services have placed that figure at an estimated global average of \$33 trillion annually (in 1997 dollars).”⁴

While all of the principles of the Sustainable Sites Initiative are important and should be followed, a few are especially applicable to Reston and its future development:

1. Do no harm: Make no changes to the site that will degrade the surrounding environment. Promote projects on sites where previous disturbance or development presents an opportunity to regenerate ecosystem services through sustainable design.
2. Design with nature and culture: Create and implement designs that are responsive to economic, environmental, and cultural conditions with respect to the local, regional, and global context.
3. Use a decision-making hierarchy of preservation, conservation, and regeneration: Maximize and mimic the benefits of ecosystem services by preserving existing environmental features, conserving resources in a sustainable manner, and regenerating lost or damaged ecosystem services.
4. Foster environmental stewardship: In all aspects of land development and management, foster an ethic of environmental stewardship—an understanding that responsible management of healthy ecosystems improves the quality of life for present and future generations.⁵

Green Building and Site Considerations Recommendations:

1. New commercial buildings within Reston and the RCIG must be built to a minimum of LEED gold certification. Residential buildings should meet LEED silver standards. Ideally, buildings will include features such as green roofs, small solar or wind systems and rain water capture systems to allow for use of gray water; these features will further lessen the environmental impact of new construction. New neighborhoods should be developed in a manner that allows residents to reduce single occupancy vehicle trips.

⁴ The Case for Sustainable Landscapes, © 2009, The Sustainable Sites Initiative, page 6

⁵ Ibid, page 9

2. Landscaping for new developments and redeveloped areas should be informed by guidelines found in *The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009*. It is especially important that plants on RA's list of banned invasive exotic plants not be used in Reston; landscaping should include a high percentage of native plants.
3. Wherever possible, pervious surfaces should be used to replace impervious surfaces in order to lessen stormwater runoff.
4. Redevelopment should be carried out in a manner that lessens the environmental impact of new development as measured against previous development on the site, e.g., increased pervious surface when measured against pre-existing conditions, decreased stormwater runoff, decreased energy consumption, etc.

Stormwater and Water Quality

Reston is at the headwaters of three watersheds that are part of the larger Chesapeake Bay Watershed: Difficult Run, Sugarland Run and Horsepen Run. Given the location of Reston at the headwaters of these watersheds, the water quality in Reston is wholly dependent on local residents and businesses. The severe degradation of the streams in Reston was the result of application of stormwater management practices that are no longer valid: rapid movement of stormwater from developed impervious surfaces into the surrounding stream valleys.⁶ RA is in the midst of a multi-year, multi-million dollar project designed to restore stream valleys to a healthy condition. A significant portion of this project is completed and planning is underway for the remainder of the project.

Given Reston's position in the Chesapeake Bay Watershed and the major infrastructure investment in the community's stream valleys made during the stream restoration, it is imperative that new development and redevelopment in Reston employ stormwater best management practices (BMPs) and utilize low impact development (LID) strategies to protect the larger Chesapeake Watershed and the Bay and protect and preserve Reston's natural areas. As outlined in the Reston Watershed Masterplan, effective stormwater management can lead to improved water quality; decreased sediment and pollutants in streams, lakes, the Potomac River and the Chesapeake Bay; and, improved habitats for wildlife ranging from insects to amphibian to birds and mammals.

⁷

⁶ Watershed Plan, Reston, Virginia, GKY and Associates, Inc., 2002

⁷ Ibid

Stormwater Recommendations:

1. Stormwater management should be evaluated for Reston as a whole, not individual development by individual development. Future development should follow stormwater best practices to ensure that no additional stormwater runoff is generated as a result of new development.
2. The County should not grant stormwater waivers when approving individual developments.
3. When redevelopment occurs, such as is currently being proposed for the Fairway Apartments, the new development should be required to generate less stormwater runoff than the previous development.
4. All new construction in Reston, whether redevelopment (e.g., Fairway Apartments) or new development (e.g., Comstock at Wiehle), must employ stormwater BMPs and follow LID guidelines. Buildings should include green roof technology, stormwater catchment facilities to facilitate use of gray water in buildings where allowed by code, and site features such as rain gardens, swales and other features that contain stormwater on site and allow for gradual release into the water table. These guidelines should be applied regardless of the size of the development or structure.

Conclusion

Environmental protection and management of environmental resources should continue to guide and inform development in Reston during the planned development in the RCIG and redevelopment in Reston PRC. Reston's natural areas and open spaces, which provide all the environmental and ecological benefits associated with such areas and provide passive recreation opportunities to all residents, must be protected so that all residents can continue to benefit from these valuable community resources. In order to provide adequate funding levels for RA's environmental resource management programs, residents of new developments in the RCIG and the North Town Center area should be required to be members of RA. A robust, affordable and convenient public transit system linking all parts of Reston will be required to support a multi-modal transportation network and help to limit the number of single occupancy vehicle trips. In the next phase of its development, Reston should continue to be a place where everyone truly can "live, work and play" in an atmosphere of environmental excellence and innovation.

Reston Transportation: Meeting the Needs of a 21st Century Planned Community

Prepared for
The Reston Master Plan Special Study Task Force

By:

The Transportation Work Group
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June 1, 2010

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**Reston Transportation:
Meeting the Needs of a
21st Century Planned Community**

Executive Summary

Reston currently has substantial traffic congestion during peak periods along its main north-south thoroughfares near the Dulles Corridor, and the prospect of increased development in these transit-oriented development (TOD) areas creates a major challenge in planning Reston's future transportation needs. Our estimates suggest that traffic in these areas will increase about 25% under the current Comprehensive Plan and as much as 45-85% in alternative high-density, mixed-use development scenarios absent changes in behavior.

Possibly the single most important improvement in transportation could come from creating a balance in residential, office, commercial, and other land uses in Reston TOD areas. Both academic research and real world experience show that people are far more likely to use public transit—and not personal vehicles— when there is a balance of uses in TOD areas.

Even with balanced development, major improvements will be needed to achieve our stated goal of achieving an overall Level of Service grade of “C” for Reston's streets, including Reston's urban core during peak periods. We must develop an alternative infrastructure for local transportation, including improved bus transit, pedestrian and bicycling capabilities, and some strategic improvements in road and parking capabilities. These improved capabilities must be capped by a strong transportation demand management (TDM) strategy that provides inducements to move away from personal vehicle use.

Our analysis indicates that the key area of needed improvement must be an expanded bus transit service that moves people out of their vehicles. This system must serve not only Restonians, but also those well beyond, especially north and south, to limit driving to Reston's Metrorail stations. This includes:

- Building satellite parking garages at key intersections beyond Reston's boundaries that provide express bus service to Metro stations.
- Expanding full-day bus access to Reston Town Center, including circulator buses among the TOD areas and within Town Center.
- Expanding neighborhood bus service to the extent that Village Centers and residential areas are re-developed,
- More frequent service throughout the day, especially during peak periods, than proposed by RMAG and in the County's Transit Development Plan.

Reston is blessed with an extensive array of pathways and sidewalks, but these pedestrian and bicycling capabilities need expansion to assure access to the Town Center and TOD areas. We believe the RMAG final report and RA's

“Reston on Foot” report capture most of the needed improvements, although we believe some additions are needed to extend and improve the safety of these capabilities. Some of these improvements include meeting the specific needs of bicyclists on Reston’s streets.

Reston’s streets are not adequate to handle current peak period vehicular traffic, especially in the Dulles Corridor area, as County and Virginia analyses show. A few major road improvements would help ease that problem, including:

- Widening Reston Parkway to three lanes from Baron Cameron to Fox Mill,
- Linking north and south Reston with three new Dulles Corridor crossings,
- Improving clogged roads around redeveloping Village Centers, such as Lake Anne, and residential properties, such as Fairway Apartments.

On the other hand, we recommend against the building of parking garages in TOD areas that would only encourage additional driving.

Managing traffic use through a vigorous transportation demand management (TDM) strategy will be essential in inducing Restonians and others to move by means other than personal vehicle in Reston. Reston needs a Plan that discourages driving by limiting parking availability and charging market rates in its urban areas. On the other hand, the Plan must encourage the use of transit through subsidies and easier access, and it must promote walking and biking through improved supporting facilities and marketing.

We know that implementing these transportation needs will take decades of commitment. Of immediate concern are the transportation needs in the TOD areas, both for the interim between the phases of Metrorail’s development and those of a strategic nature with Silver Line completion. We envision phasing investment to link closely with development in the TOD areas, north Reston Town Center, and re-development in the rest of the Reston.

Our basic sense of the capital investment required to meet these needs is about \$600 million over the next 30 years. Although this is a large investment, it is about 40 percent of what the County has said the costs will be in Tysons over the next 20 years in capital spending (\$1.5 billion). On an annual basis, the investment we project for Reston’s transportation improvements would be about one-quarter that projected for Tysons.

Even if all these needs are met, we expect significant growth in Reston traffic in the near-term as Metro arrives before new transportation investment can be completed. We believe, however, that implementing these needed capabilities will facilitate a reduction in Reston over time traffic consistent with the proposed Fairfax County standard for reducing PM peak hour traffic of 35-45%. If Reston accomplishes this goal through inducing more people to move to transit, biking, and walking in much larger numbers, we believe the limited additions roadway and parking infrastructure we propose would enable Reston to achieve an overall LOS grade of “C” on its roads, including peak periods.

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Foreword

This report is the product of the efforts of the members of RCA's Reston 2020 Committee Transportation Work Group. It borrows heavily from excellent work already done by the Fairfax County Department of Transportation, the Reston Metrorail Access Group, and Reston Association. It tries to incorporate "best practices" evident in the urbanizing areas of other communities, draft plans for development at Tysons Corner, and the results of academic and policy studies. The Work Group also walked the Herndon-Monroe area to understand its peculiar transportation situation, and reached out to local bicycle and pedestrian experts, County staff, a few Task Force members, and other Reston 2020 members for comment in its preparation. We greatly appreciate the contributions of all those who have helped us put together this statement of Reston transportation needs. Their ideas have significantly improved this product, but, in the end, this is a product of the Transportation Work Group and any mistakes in it are ours.

Planning Principles for Reston's 21st Century Transportation Needs

We envision a future Reston in which everyone—residents, workers, businesses, visitors, and others—have rich multi-modal options for access to all places in Reston without undue delay. Our goal is to achieve an overall Level of Service grade of “C” for Reston, including its TOD areas during peak periods.

- ***We must provide a rich mix of transportation options to and within Reston Town Center (RTC) to make it more accessible and usable by Restonians and others.***
 - *Provide a robust internal north-south circulator bus service to assure easy movement throughout Town Center and to Metrorail.*
 - *Provide robust transit service and pedestrian/bicycling access to Town Center from all of Reston.*
- ***We must expand the connectivity between north and south Reston across the Dulles Toll Road corridor to preserve our community and better serve Reston Town Center and the TOD areas.***
 - *Provide vehicular connectivity from south to north at Edmund Halley, Soapstone, and South Lakes drives.*
 - *Provide pedestrian and bicycle connectivity across the toll road about mid-way between Wiehle and Reston Parkway stations.*
- ***We must provide robust transportation alternatives for people in Reston's Village Centers and neighborhoods to reduce personal vehicle use.***
 - *Expand neighborhood transit service to and between Village Centers.*
 - *Construct walks/pathways on both sides of every TOD area through street with provisions for safe and prompt crossing at intersections.*
- ***We must discourage driving in and around TOD areas and set a 35-45% reduction in PM peak hour traffic there as our goal.***
 - *Provide frequent, extensive transit service within and beyond Reston, especially north and south, supplemented by satellite parking garages.*
 - *Limit and control parking in TOD areas for employees and residents, and incentivize their use of public transit, walking, and biking.*
 - *Protect surrounding neighborhoods by implementing special parking districts and traffic calming programs.*
 - *Improve road infrastructure sufficiently to meet the needs of those who must drive to, from, or through TOD areas.*

**Reston Transportation:
Meeting the Needs of a
21st Century Planned Community**

June 1, 2010

Introduction

Reston faces the prospect of a 34 percent increase in its population and 21 percent increase in employment over the next 30 years according a transportation analysis zone (TAZ) level analysis of the latest forecast by the Metropolitan Washington Council of Governments (MWCOG) Cooperative Forecast Round 7.2A. This forecast, based on the adopted Fairfax County Comprehensive Plan, does not consider fully the likely urbanization of the Dulles Corridor and in Reston Town center and some redevelopment of its Village Centers and established neighborhoods as is being contemplated by the Reston Master Plan Special Study Task Force (the Reston Task Force—RTF). Some believe both population (which MWCOG estimates at 68,000 now) and employment (currently about 71,000 per MWCOG) could double MWCOG's current projections in the same timeframe under a new Comprehensive Plan for Reston.

The prospect of major increases in traffic tied to projected increases in Reston's population and workforce on already busy streets, especially near prospectively urbanizing areas, requires a re-thinking of Reston's future transportation needs over at least a generation. RCA's Reston 2020 Transportation Work Group has attempted to articulate current and future Restonians' needs for an integrated Reston transportation program to prevent a massive deterioration in mobility in, through, to, and from Reston.

The Transportation Work Group's basic approach to understanding and articulating Reston's transportation requirements has been to build out from the excellent work done by the Reston Metrorail Access Group (RMAG) and its consultant in 2007-2008. The work group has extended RMAG's analysis and recommendations to the entirety of Reston and beyond to commuters who may use Metrorail or visit Reston. It has visited key areas of transportation concern, it has studied the experience of other urbanizing communities and counties (especially Arlington and Montgomery County), and it has consulted with experts in the field, including County officials. It has also reviewed some of the research literature in the field. In short, the Group has tried to take a reasonably systematic and holistic look at Reston's transportation requirements over the next 30 years.

In its broadest sense, this statement highlights an imperative to move transportation from a single-occupancy vehicle focus to multi-modal transportation through both restrictions and incentives while creating an infrastructure, policy, and programs that will limit and adequately manage the traffic growth that will inevitably occur. We cannot build enough roads to accommodate all the traffic on cost, environmental consequences, and space constraints alone. On the other hand, some individuals will still have no option other than driving and they must be accommodated without straining Restonians' quality of life. Moreover, major improvements will be required in car/van pooling, public transit, bicycling, and pedestrian infrastructures, policies, and programs to accommodate those who shift transportation modes.

Figure 1: Expanding RMAG's Analysis & Recommendations

The Transportation Work Group endorses the analysis and recommendations made by the Reston Metrorail Access Group (RMAG) in its final report. The recommendations are well considered and cost-effective and they are based on first-rate analysis of both current and prospective traffic and other transportation conditions in Reston under the current plan. We have tried to apply the same type of analysis with similar types of recommendations across the totality of Reston's future transportation needs. Our key considerations are identified below.

Herndon-Monroe Metro station area. Our review of Reston traffic suggests that congestion growth may be expected to be as bad or worse around the Herndon-Monroe Metrorail station area as in the two areas studied by RMAG in light of: (a) easy access from the adjoining major north-south Fairfax County Parkway, (b) slow (or lacking) Herndon adoption of Metro-related road and parking improvement measures north of the station, and (c) the planned doubling of the parking capacity at this Metro station.

Reston Town Center. Reston Town Center is a major urban destination, complete with diverse shopping, dining, and entertainment options. These are likely to produce a doubling in population and workforce, especially as the less developed areas of north RTC are filled out. As a result, RTC will have transportation needs well beyond links to Metrorail, including serving potential visitors from north and south of Reston as well as the many Restonians who will work, live, and play there.

The Village Centers. Depending on the scope of redevelopment in the Village Centers, some new transportation capabilities may be needed to serve the surrounding neighborhoods as well as links to the rest of Reston beyond the Metrorail stations.

Residential Areas. Besides links to Reston's Metrorail stations, existing and re-developed residential areas will need improved transportation capabilities to Reston's Village Centers and town center as well as to centers of employment beyond Reston not served by Metrorail (Fair Oaks, Vienna, Oakton, etc.).

Beyond Reston: The Reston Metrorail station and the filling out of Reston Town Center as a shopping, business, government, and cultural center will mean Reston's transportation needs will expand well beyond its boundaries to serve incoming commuters, shoppers, and others.

Projected Population and Employment Growth

The growth in Reston’s population and workforce over the next 30 years will be the predominant driver in its need for new and expanded transportation alternatives. Unfortunately, there is a wide divide in understanding the rate of that growth. MWCOG’s projections, massaged through its own growth model as well as County models, are based on standing County plans and formulations.¹ Meanwhile, an informal estimate (Figure 2 below) anticipates steeper increases due to the increased Reston PRC authorized density and prospective intense mixed-use development under a revamped Comprehensive Plan.

Figure 2: Projected Reston Population and Employment Growth, 2010-2040

Population:						
	TOD Areas	Reston Town Center	The Rest of Reston	Total	Growth	
MWCOG 7.2A* 2010	1,619	5,227	61,561	68,407		
Increase: 2010-2040						
MWCOG 7.2A* 2040	17,948	1,307	4,297	23,552	34.4%	
New Comp Plan 2040:						
High	35,000	5,000	10,000	50,000	73.1%	
Low	25,000	3,000	5,000	33,000	48.2%	
Employment:						
	TOD Areas	Reston Town Center	The Rest of Reston	Total	Growth	
MWCOG 7.2A* 2010	52,005	9,051	10,182	71,238		
Increase: 2010-2040						
MWCOG 7.2A* 2040	8,579	5,252	1,172	15,003	21.1%	
New Comp Plan 2040:						
High	40,000	10,000	5,000	55,000	77.2%	
Low	25,000	5,000	2,000	32,000	44.9%	

*These MWCOG 7.2A projections are based on TAZ data for the Reston area. Details may be found in Appendix A, p. 34.

¹ MWCOG’s Transportation “Land Use Coordination” website (<http://www.mwcog.org/transportation/activities/land/>) says, “[The Cooperative Forecasting Program](#) at COG enables local and regional planning to be coordinated by using common assumptions about future growth and development. The program combines regional data, which are based upon national economic trends and regional demographics, with local projections of population, households and employment. These local projections are based on data about real estate development, market conditions, *adopted land-use plans* and planned transportation improvements. (emphasis added)” The Cooperative Forecast 7.2A data in this report was collected at the TAZ level for a “best fit” to the area studied by the Task Force. It is available at [Round 7.2A Cooperative Forecasting: Employment Forecasts to 2040 by Traffic Analysis Zone](#), MWCOG, November 2009.

The population and workforce growth projected in the MWCOG forecast for the Reston area is significantly below the average annual growth rate (AAGR) the County has experienced over the last 20 years.² Data posted on the [Fairfax County demographics webpage](#) indicates that:

- The county's population has grown at an AAGR of 1.28% over the last 20 years and only 0.96% in the last decade. The current MWCOG estimate for Reston projects a 1.15% AAGR over the next 30 years whereas our estimates suggest population AAGR will be between 1.61-2.44%.
- Similarly, the county's non-agricultural employment growth has been on an AAGR of 2.34% over the last 20 years and 1.60% the last decade. In a separate recent report sponsored by the 2030 Group, GMU's Center for Regional Analysis projects Metro area employment growth at 1.69% AAGR over the next 20 years.³ In contrast, MWCOG forecasts that Reston's employment will grow at only 0.70% AAGR over the next 30 years while we anticipate employment growth between 1.54-2.57% AAGR over the same timeframe.

Given the record of MWCOG underestimating population and employment growth, the important role the Dulles Corridor (including Reston) has played in driving the County's economic growth over the last two decades, and the prospect of a new Plan encouraging more rapid Reston employment and population growth, we believe our population and employment forecasts are workably realistic for a long-term projection.

An important element in our alternative forecasts of future Reston development is a reasonable *balance between population and employment in TOD development*. Decades of academic research as well as real world experience has shown that a diversity of land uses—including residential, office, and commercial as well as entertainment, dining, and other uses--optimizes the effectiveness of transit use in transit-oriented development. In citing Arlington County—where the residential-office balance is roughly 55%-45%--as one of the country's most successful TOD experiences, Robert Cervero, University of California (Berkeley) professor and leading thinker on TOD wrote⁴:

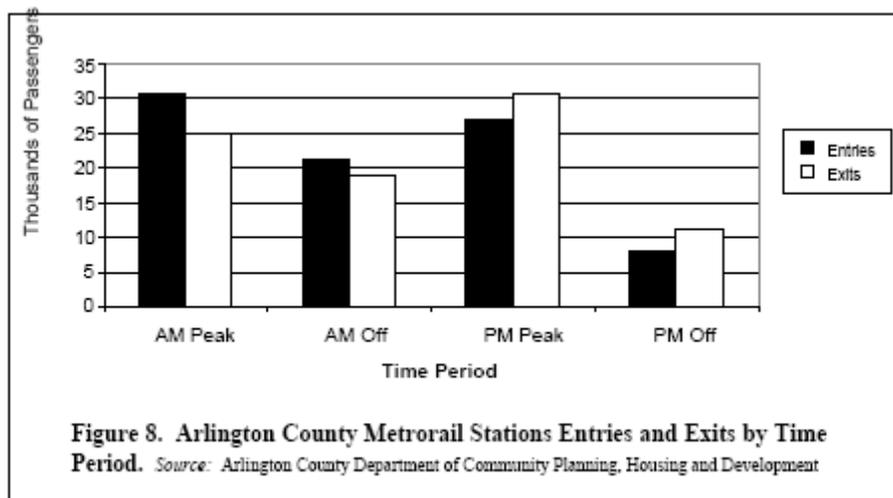
The pay-off of concentrated growth along rail corridors is revealed in Arlington County's transit ridership statistics. The County today boasts one of the highest percentages of transit use in the Washington, D.C. region, with 39.3 percent of Metrorail corridor residents commuting to work by public transit. This is twice the share of County residents who live outside of Metrorail corridors. Self-selection is evident in that around two-thirds of

² No Reston TAZ information is available on workforce and population growth over the last 20 years.

³ p. 5, Table 1, [The Washington Metropolitan Area 2030 Economic Outlook: Standard Forecast](#), Stephen S. Fuller and Ellen Harpel, GMU CRA, March 2009.

⁴ Robert Cervero, University of California (Berkeley), "Transit Oriented Development in America: Contemporary Practices, Impacts, and Policy Directions," pp. 20-22, 2004. It is available at: http://www.smartgrowth.umd.edu/InternationalConference/ConferencePapers/Cervero_AmericanTOD_DataeNA.pdf

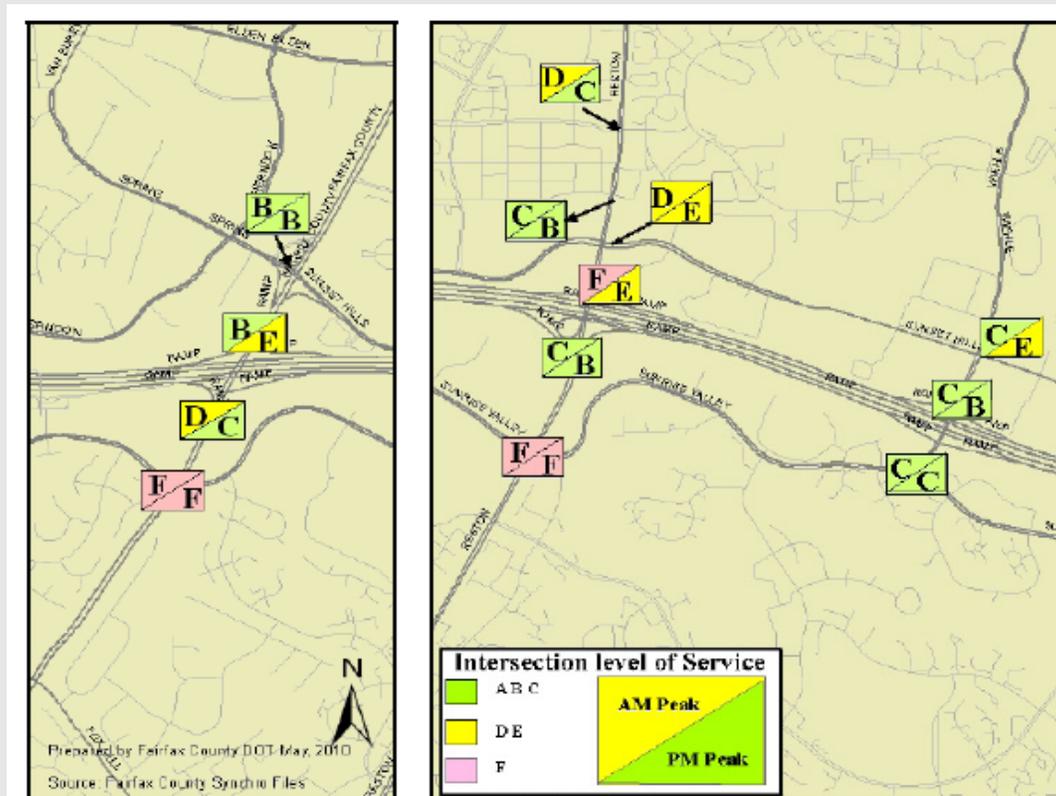
employed-residents in several apartments and condominium projects near Rosslyn and Ballston stations take transit to work. **An important outcome of promoting mixed-use development along rail corridors has been balanced jobs and housing growth which in turn has produced balanced two-way travel flows.** Figure 8 (below) shows that counts of station entries and exits in Arlington County were nearly equal during peak hours as well as the off-peak. During the morning rush hours, many of the county's Metrorail stations are both trip origins and destinations, meaning trains and buses are full in both directions. The presence of so much retail-entertainment-hotel activities along the County's Metrorail corridors has further filled trains and buses during the midday and on weekends. Arlington County averages higher shares of transit boardings and alightings at its stations in off-peak hours than other jurisdiction in the region with the exception of downtown Washington, D.C. **Balanced, mixed-use development has translated into as close to 24/7 ridership profile as any U.S. setting outside of a CBD (central business district).** (Emphasis added.)



Growth Implications for Transportation

Fairfax County Department of Transportation (FCDOT) analyses, as presented to the Task Force in May 2010, indicate that Reston has major traffic congestion along the Dulles Corridor—the area of greatest proposed development—already. Twelve of the twenty-two Level of Service (LOS) grades for peak period traffic at intersections between Wiehle Avenue and Fairfax County Parkway in the three TOD areas currently earn LOS “D” or worse.⁵

Figure 3: Current Peak Period Level of Service (LOS) at Reston Intersections along the Dulles Corridor



Source: *Dulles Corridor Special Study, Current Conditions—Interim Report*, presented to Reston Master Plan Task Force, FCDOT, May 11, 2010, pp 12-13.

Reston’s roadway system, especially along the Dulles Corridor, cannot handle the traffic increases associated with the range of projected Reston

⁵ Results vary depending on the timeframe, etc., although all raters use ITE standards one way or another. The recent Comstock-sponsored traffic impact analysis by Gorove/Slade Associates (November 2, 2009) indicated the *peak hour* grades Wiehle Avenue intersections currently are “D” (AM) and “E” (PM) overall at Sunset Hills, “C” or “B” at the Route 267 ramps, and “C” (AM) and “C” (PM) at Sunrise Valley Drive. A number of specific lanes/turns receive “F” grades. (See Table 4, Pages 39-40.) The Virginia LOS average annual daily and workday (AADT and AAWDT) grade for Wiehle Avenue—regardless of intersection--was “F” in 2005, according to state traffic count data.

population and workforce increases. Indeed, RMAG reported in 2008 that Reston streets around its prospective Metrorail stations could not handle the traffic projected in 2030 under an earlier MWCOG forecast (Round 7.0) with modestly smaller projected population and employment increases. The RMAG consultant's analysis of peak period traffic around the Wiehle and Reston Parkway stations in 2030, even with "robust" road improvements at a projected cost of \$70 million, said:

*For both (AM and PM) peak periods, the internal roadway network is congested. A number of intersections cannot process the demand, which causes queue spillback to adjacent upstream intersections. **For the AM peak period, 60% of the demand would be served – meaning that of all the vehicles that would like to drive through the key intersections during the AM peak period, only 60% of those will be able to. . . For the PM peak period, 43% of the demand is served. (Emphasis added.) This would cause an even longer lengthening of the peak period compared to the demand of the AM peak period.**⁶*

In short, Reston's critical chokepoint intersections in the two TOD areas studied by the RMAG will, on average, be designed to handle only about half the traffic projected in 2030 under the existing Plan even with significant road improvements.

In order to better understand the implications of potential peak period traffic congestion growth under a revamped Comprehensive Plan, we have extended that projection of traffic around Wiehle and Reston Parkway Metro stations to 2040 in two simple, but reasonable ways (See Figure 4 below):

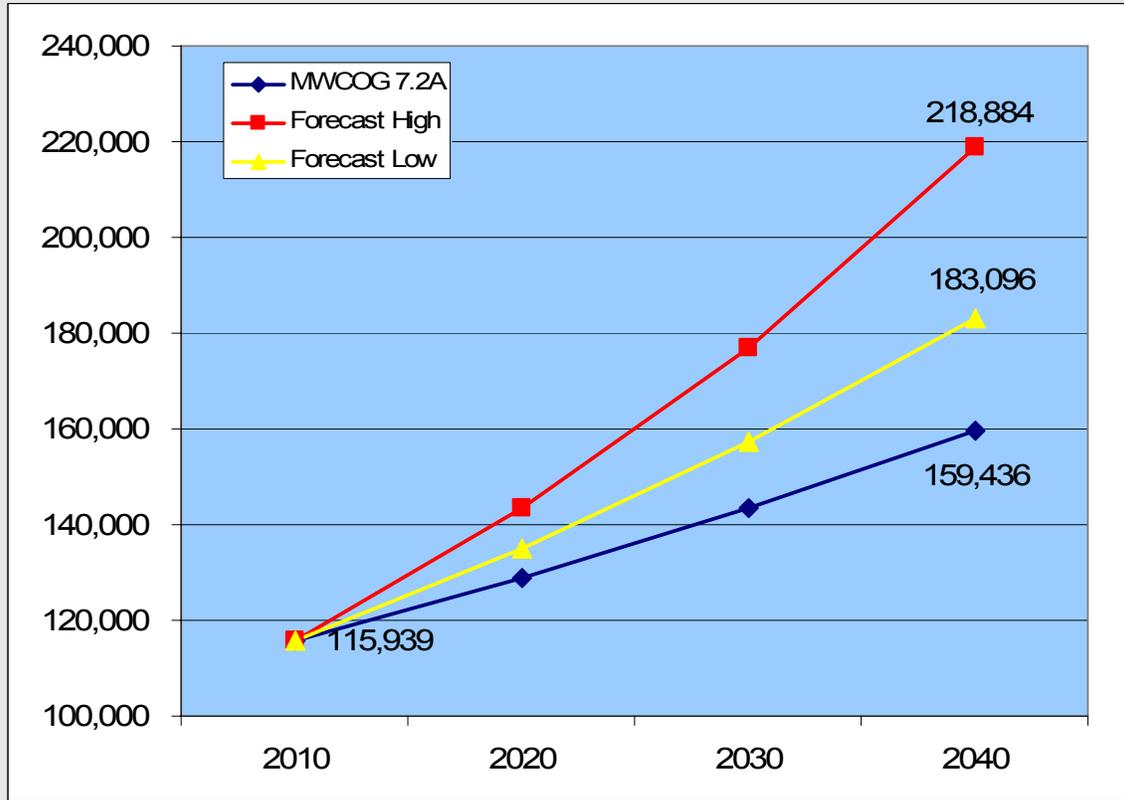
- RMAG existing Plan projection extrapolated: RMAG's final report infers that Reston (the study area) peak period traffic will grow about 37.5% in the 30-year period from 2000 to 2030.⁷ Moreover, it infers that *peak period vehicle usage will go up* from 81% in 2000 to 87% of commuters in 2030. Extending that growth another decade to 2040 suggests that traffic could increase from 116,000 in 2010 to 159,000 peak period vehicles in the TOD areas in 2040, or 37.5%.
- Growth under a new Comprehensive Plan: Our estimate under conditions of greater planned population and workforce density in Reston over the next 30 years as estimated above (Figure 2, p. 4) for these two locations suggests that TOD area *peak period traffic could increase by 67,000 to 103,000* vehicles in peak periods over the next 30 years. Under our

⁶ Wiehle Avenue/Reston Parkway Station Access Management Plans, Final Report (RMAG Final Report), submitted to Fairfax County, Department of Transportation, Vanasse Hangen Brustlin, Inc., April 15, 2008, p. 39.

⁷ See Table 2.2—Comparison of Study Area Trips Excluding DIAAH Through Trips, p. 29, RMAG Final Report. The table projects a 36% increase in AM trips and a 38% increase in PM trips between 2000 and 2030, with a weighted average of 37.5%. This projection generally assumes the current Plan and the MWCOG Constrained Long Range Plan (CLRP) for 2030, and no change in driving habits.

forecast of greater population and employment growth in Reston, peak period traffic at these two chokepoint intersections would likely increase by nearly three-fifths (58%) to nine-tenths (89%) under the new mixed-use, high-density Plan.

Figure 4: Alternative Projections of Average Peak Period Traffic Count at Wiehle and Reston Parkway, 2010-2040, With No Behavior Change



As the population and workforce projections in Figure 2 above (p. 3) suggest, we do not expect major residential or employment growth beyond Reston’s TOD areas; therefore, traffic increases there are likely to be less even in the absence of changed commuting behavior. Still, the RMAG report does not address potential needed road improvements beyond the TOD areas caused by redevelopment in the Village Centers or in existing residential neighborhoods. A current example, JBG’s proposed near tripling the number of housing units in its re-development of the Fairways Apartments complex along North Shore Drive, highlights the inadequacy of existing neighborhood streets in handling significant additional traffic. Besides congestion, these concerns include basic vehicular, bicyclist, and pedestrian safety tied to safe street access and lines of sight.

Redevelopment of Village Centers could add an even more significant congestion and safety problem in their immediate vicinity.

These potential outcomes suggest that a major transformation in Reston transportation is required or all Reston stakeholders, current and future, will suffer.

- Developers, property owners, and property managers will be unable to find office, retail, or residential tenants or buyers for their properties when prospective clients and customers understand the traffic paralysis they will likely face.
- Professional services and retail businesses will find their business eroded by the increasing inability of customers to get to their offices and stores. Customers and clients will find other, more easily accessible places to conduct their business.
- Residents will have great difficulty in carrying out the simplest of tasks requiring driving: taking kids to soccer practice, shopping beyond the neighborhood, and—of course—driving to and from work. As a result, residential property values could shrink, at least in comparison with values in the rest of the county.
- County revenues will suffer because of a failure to realize the potential of robust sales, property value growth, and other revenue sources driven by a healthy Reston economy.

To avoid this outcome, we believe that everyone involved with the urbanizing of Reston, especially those who will benefit financially, will have to share the cost in improving Reston's transportation capabilities over the next several decades.

Bus Transit Service

The Reston Metrorail Access Group (RMAG) did an excellent job in establishing the need and providing recommendations for bus transit service focused on the two Reston Metrorail stations it examined. Fairfax County's Department of Transportation has followed up on RMAG's work with an equally excellent ten-year [Transit Development Plan](#) (TDP). Nonetheless, our assessment of likely population and workforce growth over the next three decades suggests auto traffic will increase dramatically, especially from potential customers north and south of Reston who already account for some 60% of the Reston core's daily traffic before Metrorail's arrival according to Fairfax Department of Transportation. We believe Reston needs an even more aggressive bus transit effort to induce people to abandon their personal vehicles during peak traffic periods, including this decade. To address this risk, we have identified several overall Reston bus transit needs:

- Increase the frequency of bus transit service linking Restonians to Metrorail and Reston Town Center beyond the recommendations described in the RMAG final report. In particular, we agree with the TDP that synchronizing bus headways with rail headways is unlikely to work.
- Add Metrorail/RTC-linked bus routes to those identified in the RMAG report and TDP to serve the outer areas of Reston and beyond to flesh out Reston's commuter-linked transit service.
- Establish express bus service from satellite parking garages serving the Metrorail stations in Reston (and elsewhere).
- Establish a circulator bus system with 10-minute headways within the Reston Town Center.
-

Figure 5: The Metrorail Interim Period—Caught Between Two Phases

None of these proposals addresses the vital near-term issue of bus transit and other transportation service to the Wiehle station area during the interim period between the completion of Phases I and II and the Silver Line. We anticipate a *massive peak period surge* in traffic at this already congested location from the Dulles Toll Road, Restonians, and commuters well beyond Reston. The County has included some bus route expansions and diversion to serve the station during this interim period in its current Transit Development Plan. We believe, however, that more needs to be done by the time Phase I is completed to prevent gridlock. We detail these needs in [Appendix B \(p. 38\)](#).

The expected growth in Reston's population and workforce under a new Plan will require a boost in the service levels proposed in the RMAG study both to handle the additional growth and to create an incentive for Restonians and others to leave their vehicles, especially for commuting. The RMAG report

envisioned peak period headway service to the Metro stations between 14-28 minutes within Reston linked to the planned seven-minute headways of Metrorail. We share the TDP's concern that this is not a particularly realistic way to schedule Reston's buses.⁸ The TDP recommends more traditional minimum 15-minute headways for Reston, yet FCDOT's draft recommendations for Tysons transit service calls for 10-minute peak period headways for buses serving Tysons' Metrorail station.⁹ We believe that 10-minute headways on all buses during the peak period would meet Reston's needs, and that level of service should be sufficient to induce more Restonians to leave their cars at home.

- Need BT1: Reston's Metrorail-linked buses as described in the final RMAG report should operate on 10-minute headways.
- Need BT2: Operate most of these routes at 20-minute headways during weekday non-peak periods, and 30-minute headways on Sundays/holidays.

Reston will also need new bus service to the areas at Reston's periphery beyond that which is proposed in the Transit Development Plan. In particular, Reston needs:

- Need BT3: Fairfax Connector peak period bus service from communities north of Route 7 using the Algonkian Parkway, Georgetown Pike, and Springvale Road to proceed along Fairfax County Parkway, Reston Parkway, and Wiehle Avenue respectively and south to their respective Metro stations.

This service will need to be extended to non-peak periods as Reston fills out beyond 2030. On the other hand, completion of the Silver Line will enable the County to end Fairfax Connector bus service to West Falls Church and Tysons Corner.

We believe the Route 959 circulator loop bus service connecting the TOD areas as proposed in the County Transit Development Plan (TDP) (p. 93) and the RMAG final report (p. 182) is inadequate for Reston's future needs on two counts. First, it is a very long route extending from Hunter Mill to Centerville roads that travels some of Reston's busiest thoroughfares and will take too much time to attract riders. Second, it does not link to the heart of Reston Town Center, which is likely to be the primary destination or origin of most circulator users.

- Need BT4: Reston needs two Dulles Corridor circulator bus routes.
 - BT4A: The first route, traveling counterclockwise, originates at Wiehle station and proceeds to Reston Town Center (Market Street) then to the south entry to the Reston Parkway station (via Halley-Town Center underpass when built) before returning via

⁸ p. 42, Fairfax County Transit Development Plan, DRAFT Final Service Recommendations, Ch. 7, September 2009.

⁹ Fairfax County Department of Transportation Development Plan, DRAFT Final Service Recommendations for Tysons Corner, September 2009, p. 2.

Sunrise Valley Drive to Wiehle station. This may later be extended east to Hunter Mill Road.

- BT4B: The second route begins from Herndon-Monroe station, proceeding clockwise to mid-Town Center and the south Reston Parkway station entrance before returning to Herndon-Monroe.
- Both circulators operate on 10-minute headways daily during Metro operating hours.

The other major unfilled bus transit need is for a circulator bus system linking the entirety of a filled out Reston Town Center from Baron Cameron to the north side Reston Parkway Metro station. This system would be used by visitors arriving at the Reston Parkway station to reach shopping or work locations. For those already in the RTC, it would facilitate their access for shopping, recreation, or other uses from one end to the other.

- Need BT5: Reston Town Center needs a circulator bus system operating from the AM peak period through the close of evening entertainment and/or Metrorail service. It should at operate at 10-minute intervals throughout the day. Figure 7 below (p. 14) illustrates a possible RTC circulator bus route based on the “revised Sasaki Option” being considered by the Reston Town Center Committee of the Task Force.

In addition, we expect residents in the growing communities north of Route 7 in Fairfax County to want to use Metrorail when it becomes available.

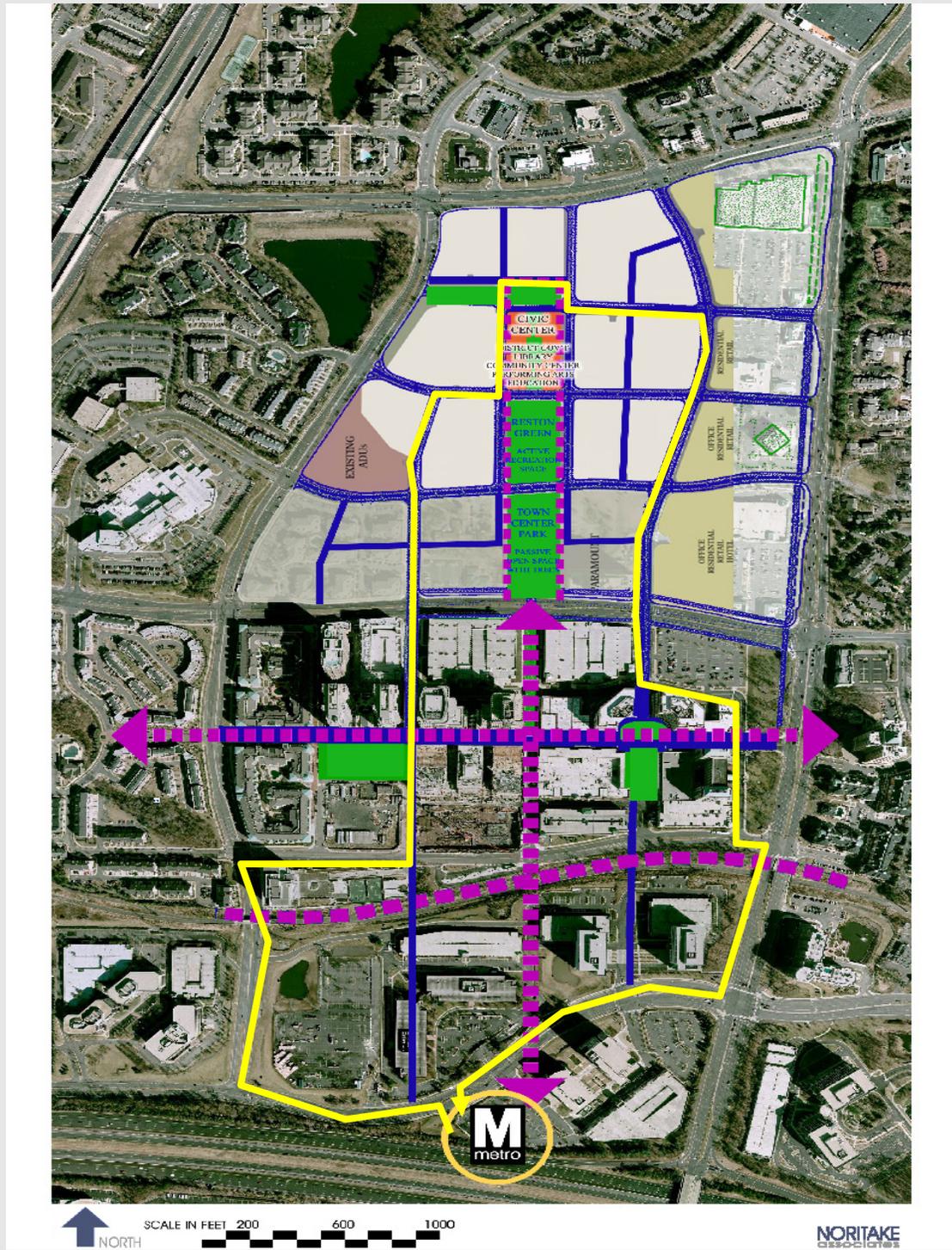
- Need BT9: Fairfax Connector peak period bus service (10-minute headways) from communities north of Route 7 using the Algonkian Parkway and Georgetown Pike to proceed to the Fairfax County Parkway and south to Herndon-Monroe station.

Figure 6: Some Unmet Reston Bus Transit Needs

We explored a number of additional options for bus transit, usually involving commuters from north or south who are not well served by Metro’s wheel and spoke structure, that we decided not to include in our statement of needs. These include:

- * Express bus service for Reston area commuters who work in the Pentagon/Crystal City area. Their express bus service will be cut with Metro’s arrival and they face a longer transit commute.
- * A bus rapid transit link along Fairfax Parkway from Route 7 via Reston (and possibly other intervening stops) to Ft. Belvoir, including the VRE line connections, to facilitate the cross-county commute.
- * Bus rapid transit linking Reston and Tysons with the key population centers of Montgomery County, including Bethesda, Rockville, and Gaithersburg.

Figure 7: Possible Reston Town Center Circulator Bus Route



Pedestrian and Bicycling Capabilities

Reston is blessed with an extensive network of pathways to serve the walking and, to a lesser extent, the bicycling needs of Restonians. In its report, RMAG suggested a number of improvements in the pathways to facilitate access to Metro stations, improvements in street crossings to protect pedestrians and bicyclists, and other measures that we endorse. Moreover, Reston Association's Pedestrian and Bicycling Advisory Committee has prepared a study, "Reston on Foot," that suggests additional extensions to Reston's walks, various improved crosswalks, and curb cuts.¹⁰ We endorse these as well, but propose a somewhat different set of priorities and some further additions.

In general, we believe the highest priority improvements in Reston's pathways and sidewalks should be focused on the TOD areas, since Metrorail will arrive there within the next six years. Improvements in pathways and walkways offers a relatively inexpensive way to encourage biking and walking, rather than driving, to the Metro stations. The RMAG report, quoted in the RA report, had this to say about sidewalks near Metrorail stations:

The sidewalk recommendations in this (RMAG) report include improvements and guidelines to help pedestrians move around the area safely and easily. Throughout the pedestrian sphere of influence (between ¼ and ½ of a mile from the station entrance), the following recommendations can generally be expected:

- *Wherever possible, there should be sidewalks on both sides of major thoroughfares. (Comment: The Transportation Work Group would add that these sidewalks should be 10-feet wide to allow for easy and safe pedestrian and bicycle bi-directional use. These sidewalks should be continuous across the Dulles Toll Road and separated from vehicular traffic.)*
- *Sidewalks on major paths should be at least 6-feet wide wherever possible and 8-feet on major pedestrian pathways including sidewalks adjacent to commercial frontage zones (5-foot minimum clear width). Wider paths are necessary where bicyclists are expected to share the trail. These recommendations are minimums, and wider facilities should be considered wherever warranted by volumes.*
- *Sidewalks should be separated from the roadway by a landscaped buffer of at least four feet wherever possible.*

¹⁰ Reston on Foot: Improving the Pedestrian Experience in Reston, Pedestrian and Bicycling Advisory Committee, Reston Association, 2008, available at https://www.reston.org/Portals/3/Parks-Recreation-Events/Parks%20and%20Facilities/Pathways/Reston-On-Foot/Reston_On_Foot.pdf. For the complete list of more than 80 proposals, including priority and mapping, go to <http://maps.google.com/maps/ms?hl=en&ie=UTF8&msa=0&msid=101237083277678481979.00043b0c728866c4d6536&om=1&ll=38.951733,-77.341948&spn=0.048459,0.11467&source=embed>

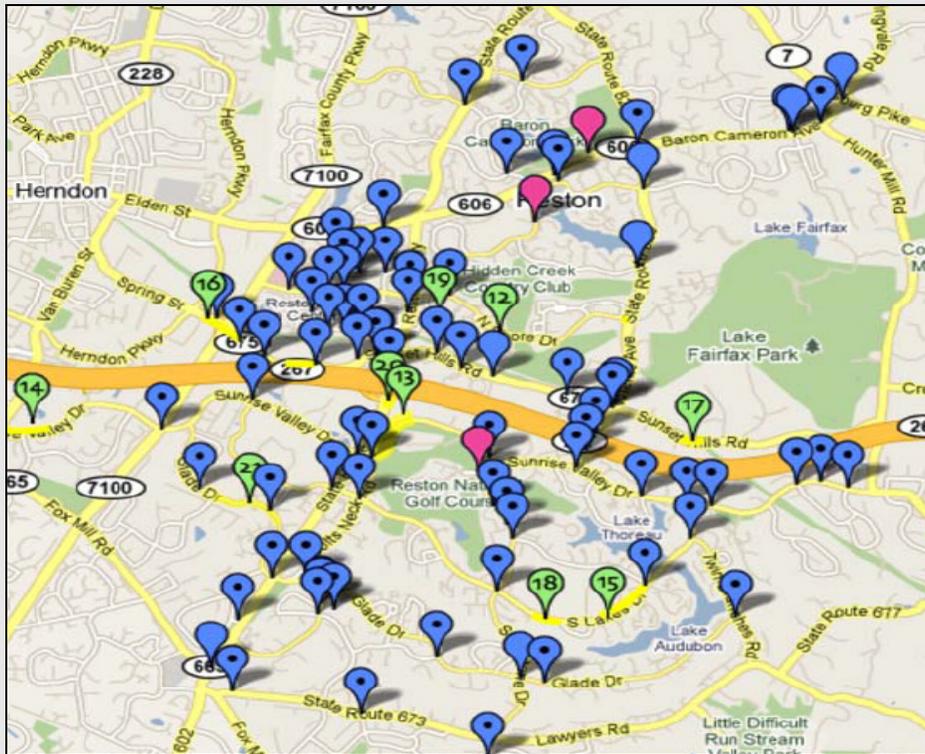
- *Sidewalks and trails should connect to adjacent communities wherever possible to provide additional connectivity throughout the region, not just within Reston.*

Both the RMAG and RA reports continue by offering a substantial number of specific recommendations and, in the case of the RA report, these recommendations are prioritized. We believe implementation of the pedestrian and bicycling improvements recommended in the TOD areas should be managed as follows:

- Need PB1: Implement all proposed improvements in pathways and sidewalks suggested in the RMAG final report and RA's "Reston on Foot" report within a half-mile of the Wiehle Avenue Metro station not later than the arrival of Metrorail, including grade-separated crossings at Wiehle and Reston Parkway.
- Need PB2: Create a network of pathways and sidewalks serving the Herndon-Monroe Metro station as depicted in Appendix C (p. 40). These include:
 - PB2A: Grade separated pedestrian and bicycle access across Sunrise Valley Drive and Fairfax County Parkway at the corner of Sunrise Valley Drive from the RMAG-recommended pathway to a continuation of that pathway to Monroe Street and then north to the bridge.
 - PB2B: A pathway linked to the Sunrise Valley, Monroe St., and parking garage pathways around the Sunrise Valley wetlands.
 - PB2C: Pathways from Sunrise Valley Drive, Monroe Street, and Fairfax County Parkway sides of the TOD area to Metro station.
 - PB2D: Improvement of the existing pathway along the east side of Fairfax County Parkway through Reston.
 - PB2E: High-visibility crosswalks at all major intersections in the Herndon-Monroe TOD area.
- Need PB3: Implement all the proposed improvements in pathway and sidewalks recommended in the RMAG and RA reports within a half-mile of the Reston Parkway station and Reston Town Center south of New Dominion not later than the opening of the Reston Parkway station.
 - PB3A: Build a pedestrian overpass across Sunrise Valley Drive from the Metro station that links north with a second overpass over the W&OD trail to give pedestrians/bicyclists direct access to Reston Town Center.
 - PB3B: The overpass across the W&OD Trail should include a trail access ramp for bicyclists and pedestrians.
- Need PB4: Implement all other proposed pedestrian and bicycling improvements.
- Need PB5: Although the planned layout for the north Reston Town Center has not yet been defined, ensure that all major intersections include strong pedestrian safety protections, including high visibility crosswalks and pedestrian countdown signals.

- Need PB6: Beyond the recommendations in the RMAG and RA reports, Restonians need the following grade-separated pedestrian/bicyclist links:
 - PB6A: A grade-separated crossing over Sunset Hills on the west side of Wiehle.
 - PB6B: A grade-separated crossing across Wiehle Avenue at Metrorail Boulevard.
 - PB6C: A grade-separated crossing across Wiehle over the north side of Sunset Hills.
 - PB6D: A grade-separated crossing over Sunrise Valley Drive on the west side of Wiehle Avenue.
 - PB6E: A grade-separated crossing over Sunrise Valley at the Reston Parkway Metrorail station entrance.
 - PB6F: A grade-separated crossing over Reston Parkway from Reston Heights to the Metro station.
 - PB6G: A pedestrian bridge across the DTR half way between the Soapstone extension and Reston Parkway crossings to link the high-density residential communities south of the DTR with basic shopping—essentially a Village Center—at Plaza America.

Figure 8: Locations of “Reston on Foot” Pathway Improvement Recommendations



The RMAG report also addressed the unique needs of bicyclists in reaching the two Reston Metrorail stations it studied. These needs will expand as the Silver Line is completed and individuals use bicycles more not only for commuting, but also for reaching Reston Town Center and the Village Centers. In particular, besides their access to Reston pathways, they need access to roadways with three sets of features:

- Need PB7A: *Bike lanes*, usually 5' wide on each side of the road where space is adequate. In Reston Town Center, these should be created along Fountain Drive, New Dominion Parkway, and Town Center Parkway as part of a traffic calming program. They should also be created along the length of Soapstone Drive, which has ample width and is a direct link to Wiehle Metro station. A phased approach to bike lanes along Sunrise Valley Drive, as recommended by RMAG, is also needed.
- Need PB7B: *Shared lane markings* where it would be difficult to build bike lanes, but bicyclists can use the outside lanes. These lanes are marked by symbols placed in the road indicating they are used by bicyclists. These markings should be applied to Wiehle Avenue, South Lakes Drive, and Colts Neck Drive to Glade Drive. (Wiehle Avenue, with a narrow right of way and steep slopes, presents a challenge for creating safe bike facilities. The existing pathway is poorly designed and unsafe, but there is little room for expansion.)
- Need PB7C: *Signed bike routes*, on roads that have wide lanes and low speeds, are appropriate for bicyclists without any special facilities other than signs indicating these are bike routes. We believe these signs would be sufficient on Glade Drive, Twin Branches Road, North Village Road, North Shore Drive, Bennington Woods Road, Browns Chapel Road, Steeplechase Drive, and Old Reston Avenue.

Where feasible, each of these routes should be marked with bicycle wayfaring signs. Precedence should be given to those routes providing access to Reston's Metrorail stations.

Parking and Road Infrastructure

Few people living or working in Reston now would say that Reston's roadway infrastructure is adequate everywhere to handle traffic, especially near the Dulles Corridor during peak commuting periods. Many are outspokenly concerned that the development of the TOD areas and filling out of Reston Town Center will bring already difficult commutes to complete gridlock. This statement of needs tries to establish a way to avoid undesirable deterioration in traffic conditions in two ways: Encouraging drivers to move to other modes of transportation wherever possible, and providing an adequate infrastructure for those whose circumstances do not permit a modal shift. This is especially true for those who will work, live, play, or shop in Reston's new TOD areas and the expanded Reston Town Center.

Parking Facilities

Our first statement of need, then, is to *limit the construction of parking facilities in TOD areas*. It is well established that the construction of parking facilities, especially near commuting facilities, encourages new traffic to fill them. We are pleased that no parking garage construction is contemplated at the Reston Parkway station area. We also believe the following:

- Need PRI1: The Metro-related parking garage at Wiehle Avenue station needs to be re-purposed to support the above ground development on that site when Phase II of the Silver Line construction is completed.
- Need PRI2: Parking at Herndon-Monroe station should not be expanded, unless that expansion occurs on the north (Herndon) side of the transit station. To do so would not only bring unnecessary traffic to Reston, but also erode further the transit-oriented development potential of this station area.

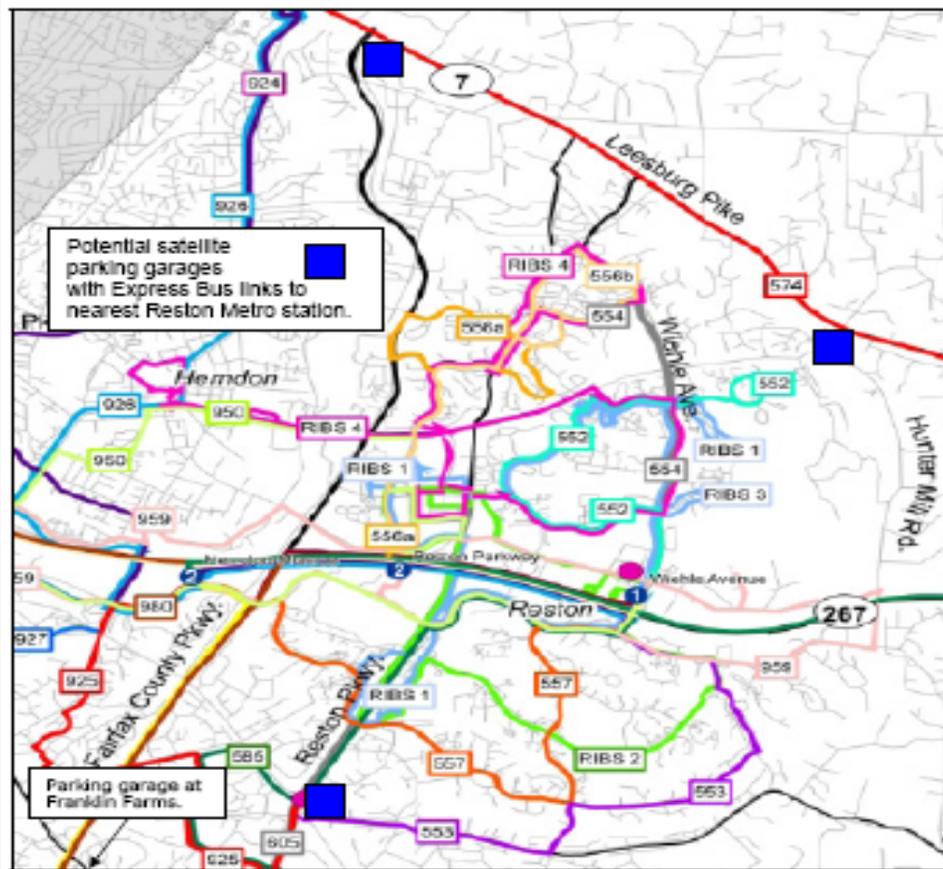
These parking facilities should have at least 25 percent of the available parking spaces reserved for strictly monitored HOV parking to discourage single-occupancy vehicles.

We recognize that many people beyond Reston who want to use Metrorail to commute to work may not have access to a Metro-bound bus service within easy walking distance of their home. Rather than driving to the center of Reston, we believe that creating a series of satellite parking garages at the edges of Reston or beyond served by express buses to the nearest Metrorail station will best suit their needs. We need satellite-parking garages:

- Need PRI3: Near the intersection of Route 7 and Fairfax County Parkway to serve potential Metro riders from points north and west of Reston. (The large County sewage treatment plant area at Wiehle and the Parkway would be an ideal site, if not fully utilized.)
- Need PRI4: Near the intersection of Route 7 and Baron Cameron Avenue to serve potential Metro riders from north and east of Reston.

- Need PRI5: At the current south Reston Park & Ride to serve Metro riders from south of Reston.
- Need PRI6: Near Franklin Farms Road and Fairfax County Parkway to serve Metro riders from south and west of Reston.
- Other parking lots or garages as needed in more distant Fairfax County communities where demand for access to Metro in Reston warrants. Some possible areas include Chantilly, Great Falls, and Oakton.
- Fairfax County officials should continue to work with Loudon County officials to establish express bus served commuter-parking garages beyond Fairfax County to ease Dulles Toll Road and Metrorail station area traffic congestion.

Figure 9: Proposed Locations for Reston Metro Express Bus Satellite Parking Links



Roadway Improvements

The diversion of traffic to outlying parking garages will not solve the entirety of the transit-related traffic problem in Reston, however, and some major roadway improvements need to be made, especially in the Dulles Corridor area.

- Need PRI7: We endorse the RMAG's recommendation for the construction of an extension of Soapstone Avenue over the Dulles Corridor to Isaac Newton Square.
- Need PRI8: We also endorse the County Transportation Plan recommendation for an underpass across the Dulles Toll Road from Edmund Halley Drive to Town Center Drive.
- Need PRI9: As the TOD areas are filled out, Reston needs at least one additional overpass across the Dulles Corridor east of Wiehle Avenue station, probably as an extension of South Lakes Drive to Business Park Drive.
- Need PRI10: Reston Parkway must be widened to three through lanes in each direction from Sunset Hills Drive to Fox Mill Road, including the bridge, to limit additional traffic congestion around the Reston Parkway Metro station and access to Reston Town Center. Some of this may be covered by outstanding proffers.
- Need PRI11: The Parkway must also be widened to three through lanes from New Dominion to Baron Cameron to accommodate the substantial additional traffic associated with the Spectrum redevelopment.
 - Outstanding proffers to perform a significant portion of this work going back to the development of Reston Town Center should be implemented.
- Need PRI12: The Dulles Toll Road interchange at Hunters Mill Road must be upgraded to safely handle traffic entering/exiting the toll road and provide four north-south through lanes of traffic.
- Need PRI13: An interchange must be built at the corner of Fairfax County Parkway and Sunrise Valley Drive sufficient to handle the increased traffic at the Herndon-Monroe station as recommended in the County Transportation Plan.
 - In building this interchange, special care must be taken to protect nearby neighborhoods from light and noise pollution, such as downward pointed lighting and eight-foot high sound barriers on the overpass.

Other than changes in roadways necessitated by fulfilling the transportation needs noted above and planned Metro construction, we generally believe that existing access cuts into the TOD areas are adequate. The key exception is the Herndon-Monroe station area where three additional road cuts are required (See Attachment B for graphic):

- PRI14: Access to the Herndon-Monroe area from Monroe Street between 100'-150' south of the Monroe Street bridge, preferably at the boundary between the County and The Arboretum development. This cut would

- provide access to and from development north and west of the wetlands, the parking garage, and eastern portions of the TOD area. It would include a southbound left-turn lane and three-way traffic light system (possibly a four-way system with development west of this intersection).
- PRI15: A “right in, right out” access from/to the Fairfax County Parkway that would access development in the eastern portion of the TOD area as well as the parking garage, and limit additional traffic on Sunrise Valley Drive opposite Polo Fields. A comparable access exists on Reston Parkway south of Rt. 267.
 - PRI16: Access to the eastern parcels of the Herndon-Monroe TOD area from the DTR on-off ramp that would permit vehicles coming east on the DTR to enter the north side of the TOD area directly without using Fairfax County Parkway.

These steps are essential to prevent excessive traffic growth on Sunrise Valley Drive, traffic that already interferes with local east-west residential traffic and now causes gridlock (“F” level of service) congestion during peak periods according to the County.

Figure 10: The TOD “Grid of Streets”

TOD literature highlights the role of the “grid of streets” within a TOD area to create an attractive pedestrian environment for residents, shoppers, entertainment, and employment. We believe this is integral part of TOD urban design and have deferred analysis of internal TOD transportation arrangements to RCA Reston 2020’s Residential, Urban Design, and Livability Work Group. Our goal has been to identify transportation needs that will make those TOD areas as well as the rest of Reston easily accessible for all the opportunities they may offer residents, employees, and visitors.

We are concerned, however, that application of the traditional block-like grid of streets to Reston’s three TOD areas will be difficult because they are bisected, if not divided into quadrants, by major thoroughfares that obstruct pedestrian traffic. We have proposed grade-separated crossings, high visibility intersections, and other means to help make these TOD areas more pedestrian friendly and the Metro stations more accessible. We have also proposed measures separately that we believe will help limit traffic congestion in these important places.

The additional road and parking needs of the rest of Reston—its Village Centers and residential areas—remain clouded by uncertainty about planned redevelopment in those areas. Our own estimates suggest that population could grow approximately 10-20 percent and employment increase 5-10 percent in these areas over the next 30 years.

Still, the specific intention to re-vitalize the Lake Anne area through high-density, mixed-use development suggests that traffic congestion could become a major transportation issue near Village Centers without significant improvements in roads and parking. A recent County request for proposal (RFP) highlighted that it was looking for consulting advice on how to build some 1,755 dwelling units and 247,000 SF of commercial space on 35 acres within less than a quarter-mile of the Lake Anne Historic District.¹¹ At current minimum parking requirements, these redevelopment levels suggest that at least 3,600 parking spaces would be built there, replacing the fewer than 1,000 spaces currently in this area. That higher level of parking points to more congestion on area streets. A 2005 presentation to the Lake Anne Charrette stakeholders suggested that a much lower level of redevelopment would generate 3,000 additional vehicle trips daily from the redevelopment of the Crescent Apartment area alone.¹² This would increase traffic on Village Rd, which links Baron Cameron to North Shore Drive, by more than a third (36%) over 2005 average annual workday traffic (AAWDT), which already earned an “F” LOS grade for that small section of road for daily, workday, and peak period counts.

On a smaller but still significant scale, the proposal to re-develop Fairway Apartments west of Lake Anne is indicative of the potential impact of redeveloping low-rise apartments and condominiums into high-rise developments. The redevelopment proposal, including a 20-story high-rise apartment building, now in County review would nearly triple the number of dwelling units to about 940 with access only on to North Shore Drive. (See Figure 11 below.) To date, JBG—the site’s developer—has proposed minor proffers for entry/exit improvements and traffic lighting at a nearby intersection. According to Virginia level of service grading, North Shore Drive in this area already earns “F” grades for daily average, workday average, and peak period traffic. It can not reasonably absorb the additional traffic generated by more than 1,000 new residents in this single apartment complex.

¹¹ Department of Purchasing and Supply Management, Fairfax County, Request for Proposal Bid RFP10-163967-32, Feasibility Analysis for the Redevelopment of the Lake Anne Village Center, http://www.planning.org/uploads/consultants/requests/5852_1016396732-Issued%20Solicitation.pdf, p. 11.

¹² The Lake Anne Plan Design Charrette: Plan and Program Options Presentation, June 18, 2005, p. 34.

Figure 11: Fairway Apartments Area Redevelopment Schematic



In short, redevelopment of Village Centers as suggested in the County Plan for Lake Anne would substantially increase traffic on neighboring streets that were never built with high-density multi-use development in mind.

- PRI17: Improve through roads within at least a half-mile of redeveloping Village Centers or residential complexes, where necessary, to permit a period PM period LOS grade of at least “D.”
- PRI18: Limit parking availability for residents and employees consistent with the draft Tysons standards (Figure 12, p. 22, below) while sustaining parking levels for retail customers.

Transportation Demand Management

Besides aggressive development of an improved multi-modal transportation infrastructure to handle the movement of the population to work, live, and play, Reston will need a bold transportation demand management (TDM) strategy that:

- Limits additional traffic congestion, especially peak period commuting traffic.
- Encourages easy and cost-effective multi-modal movement of Restonians throughout their community.
- Limits, if not reverses, damage to the air, land, and water environment in Reston.

We believe that a Reston TDM strategy needs to be broadly inclusive of all transportation modes and aggressive from the outset to help assure no loss of quality of life for Restonians and preferably improvement in Restonians' ability to move within their community. The plan must include anticipated future developments throughout Reston throughout the project Plan period. What follows is a statement of Restonians' TDM needs, in addition to those already well articulated in the final RMAG report.

TDM Needs for Vehicles

We believe the focus on TDM for vehicles should be to move people out of single occupancy vehicles (SOVs) as quickly as possible. The development of transit-oriented high-density, multi-use communities around Reston's planned Metro stations can help that transition, but alone it is far from sufficient. The following are Reston's key needs related to discouraging additional use of vehicles:

- Need TDM1: Reduce the number of required parking spaces in residential, office, and retail development in TOD areas and redeveloping Village Centers, and establish maximums consistent with those proposed in the draft Tysons Plan.

Figure 12: Parking Ratios in Draft Tysons Plan, March 24, 2010

Parking Ratios for Tysons Corner										
Use	Parking Spaces Per Unit or Spaces Per 1,000 sq. ft.								Non-TOD	
	Previous (2009)	< 1/8 mile Metro Station		1/8 - 1/4 mile Metro Station		1/4 - 1/2 mile Metro Station		Min.		
	Min.	Min.	Max.	Min.	Max.	Min.	Max.			
Townhouse	2.7	1.75	2.2	1.75	2.2	2.0	2.5	2.0	2.7	
Multifamily										
0-1 bedroom	1.6	1.0	1.3	1.0	1.3	1.1	1.4	1.1	1.4	
2 bedroom	1.6	1.0	1.6	1.0	1.6	1.35	1.7	1.35	1.7	
3+ bedroom	1.6	1.0	1.9	1.0	1.9	1.6	2.0	1.6	2.0	
Hotel/Motel	1.08	none	1.0	none	1.0	none	1.05	0.85	1.08	
Office	2.6	none	1.6	none	2.0	none	2.2	2.0	2.4	
Retail/ Services ^{1,2}	varies	none	See notes	none	See notes	none	See notes	See notes	See notes	

- Need TDM2: Establish a parking space tax on all office parking spaces in TOD areas, payable to a County fund for use in the development, operation, and maintenance of alternative transportation modes in Reston.
 - We envision an initial parking space tax on the order \$5-10 per day for each parking space.
 - Property managers may recover this tax by charging for parking on their properties.
- Need TDM3: Establish a meaningful parking fee for prolonged parking in retail parking spaces, payable to a County fund for use in the development, operation, and maintenance of alternative transportation modes.
 - We envision a parking fee of \$3 for the first three hours and \$2 per hour thereafter daily with a maximum set at the employee daily parking charge.
 - The initial three-hour fee may be offset by a retailer stamping the shopper's parking stub.
- Need TDM4: Require that office-building owners/renters set aside a minimum of 25 percent of their available parking spaces for 3-person or larger car and van pools. These may be monitored by employee registration sheets, parking placards, and parking staff.
- Need TDM5: Increase County auto registration/property taxes by \$10 annually to add to a County alternative transportation fund for use in developing, operating, and maintaining other transportation capabilities.
- Need TDM6: Supplement driving opportunities for TOD residents by establishing an onsite "flex car" rental program to meet additional residential transportation needs.
- Need TDM7: Establish a peak period bus lane on Fairfax County Parkway and Reston Parkway from Baron Cameron to Fox Mill.

- Need TDM8: Establish traffic calming and special parking districts in neighborhoods near TOD areas, Reston Town Center, and (as their development intensifies) Village Centers. Every measure should be taken to limit, if not prevent, commuting through or parking in neighborhoods to reach employment centers or Metro stops.
- Need TDM9: Apply Intelligent Transportation Systems (ITS) throughout Reston's road system to relieve congestion and improve safety. This includes intelligent traffic light synchronization, weather-related data acquisition and management, corridor management systems, etc.¹³

TDM Needs for Public Transit

The need for a substantially more robust bus public transit system to, in, and around Reston as part of its urbanization will be essential to moving people away from SOVs and managing the projected doubling in population and employment. The arrival of Metrorail will help in that transition, but a variety of policies, programs, and capabilities are needed to enhance the use of public transit. Among the most important TDM public transit needs are:

- Need TDM10: Provide a subsidy to businesses in Reston that offer their employees public transit passes equivalent to those provided by the US Government.
- Need TDM11: Provide all-weather shelters at all bus stops to protect riders from the elements.
 - If feasible, shelters should include a well-protected digital display of the next real estimated and scheduled arrival time for all buses stopping at the shelter.
- Need TDM12: Promote the use of public transit—rail and bus—highlighting cost-effectiveness, environmental friendliness, and reliability.
 - This promotion needs to include local TV and radio advertising, outreach programs to local employers and residential managers, etc.
 - Develop and distribute to all Reston employers/employees and residents a comprehensive Reston transit use guide.
 - Establish a transit information center at Reston Town Center and in each TOD area.
- Need TDM13: Expand transit capabilities to be handicap accessible and handle bicycles, especially during peak commuting periods.

TDM Needs for Bicyclists and Pedestrians

Bicycling and walking can be two of those most environmentally friendly and healthy means of transportation for Restonians. Besides a more robust

¹³ For an extensive array of ideas, visit the US Department of Transportation's Research and Innovative Technology [Intelligent Transportation Systems](#) website.

infrastructure to handle increased bicycling and walking, the following steps need to be taken to encourage their use:

- Need TDM14: Aggressive promotion of the scope, accessibility, and safety of Reston's pathways and County sidewalks.
 - Preparation of a pedestrians' guide, including an online website.
 - County- and Reston-sponsored bike and walking tours using local paths and walks.
 - Bike/walk to work day/week, including prizes of bicycle accessories, etc.
- Need TDM 15: Establish bicycle parking facilities detailed in the RA report as follows:

1) Location: Whenever possible, bicycle racks should be placed within 50' of the entrance to stores and buildings in a location that permits the transition from bicyclist to pedestrian. On plazas and centers where bicycling is prohibited racks should be provided at the point where paths enter the area. On larger sites such as Village Centers, several racks should be provided through the area. Care should be taken to minimize conflicts with cars or pedestrians. For playing fields and other outdoor destinations, racks should be placed near paths and on the side near parking or the entrance.

2) Site: The racks should sit on a paved area, and have enough clearance around them to maneuver the bicycles to and away from the rack. Space should be allowed to either side of a rack so that a bicycle can be secured to both sides – 36" between racks. The rack should be anchored so that it cannot be stolen with the bikes attached or removed so that the locks can be slid off the rack. (Note: Where possible, the work group believes these racks should be located in covered areas.)

3) Visibility: In order to allow the bicyclist to easily locate the rack and to deter vandalism, bicycle racks should be placed in locations that are easily visible from within the facility, and to people approaching, entering and leaving the facility.

4) Type: It is recommended that bicycle racks provide two points to secure a bicycle to the rack. A good example is the inverted "U" rack. Racks should be made of material that resists being cut, disassembled or detached using common hand tools.

- Need TDM16: Require locker and shower facilities at TOD and Town Center buildings to accommodate two individuals for every 10,000GSF of office space.
- Need TDM17: We believe an abundant number of bicycle parking racks should be provided in Reston's urban core and, later, at Reston's

redeveloped Village Centers. The standards proposed in the draft Tysons Plan (Figure 13 below) are adequate to meet Reston’s needs.

Figure 13: Bicycle Parking Requirements for TOD areas, Reston Town Center, and Redeveloped Village Centers

Table 5
Bicycle Parking Ratios for Urban Mixed Use Centers

Type of Use	Requirement
Multi-Family Residential (per unit)	1 space for every 5 residential units and 1 visitor space for every 25 residential units or to the satisfaction of the Director of Transportation. Minimum is 2 spaces.
Commercial-Retail (per 1,000 sq. ft.)	1 employee space per 10,000 sq. ft. and 1 visitor space per 5,000 sq. ft. or to the satisfaction of the Director of Transportation. Minimum is 2 spaces.
Office (per 1,000 sq. ft)	1 employee space per 7,500 sq. ft. and 1 visitor space per 20,000 sq. ft or to the satisfaction of the Director of Transportation. Minimum is 2 spaces.

Conclusion

Reston's evolution into a 21st century planned community offers unprecedented opportunities to grow economically, culturally, demographically, architecturally, and in many other ways if we take appropriate measures to facilitate people's movement throughout and beyond the community. We believe the essence of that future mobility lies in inducing people to abandon their personal vehicles for buses, bicycles, and walking wherever feasible, especially within Reston's urban core. The transportation needs we have identified, building on the work of many others, will help achieve that transition to robust multi-modal mobility in Reston if implemented fully. In the process, we expect traffic congestion to ease in the most urban parts of Reston with the addition of infrastructure and the diverse incentives to shift to other modes of transportation.

We know that implementing these transportation needs will take decades of commitment by many parties. We have tried to lay out how we see that investment in Reston's transportation future unfold in Appendix D (p. 41). Of immediate concern are the transportation needs for the TOD areas, both for the interim between the two phases of Metrorail's development (Appendix B, p. 38) and those needs of a strategic nature. We believe our decennial schedule for phasing in these transportation improvements reflects in a general way the evolution of the Reston community over the next 30 years.

We are also distinctly aware that satisfying the transportation needs we have articulated, especially the infrastructure requirements, will not be inexpensive. Our rough order of magnitude estimate of that capital cost is about \$600 million over 30 years. This contrasts with the RMAG final report that puts the 2007 price tag of its recommended improvements at more than \$100 million, most of which was the recommended investment in the Soapstone Drive extension over the Dulles Corridor (\$67 million). We would note, however, that the expenditures the RMAG proposed were over a twenty-year period, covered a much smaller geographic area, and did not envision the intense development now projected for the community.

The projected \$600 million transportation investment for Reston over the next three decades is a fraction of the \$1.5 billion the County projects transportation capital improvements will cost in Tysons over the next 20 years, as reported by County Transportation Planner Dan Rathbone at the May 12, 2010, meeting of the Tysons Committee.¹⁴ In an earlier presentation to the Tysons Committee, FCDOT reported that, in addition to capital costs for Tysons area road improvements, the County expected county-wide transit project capital and operating costs supporting Tysons to add nearly \$200 million to that sum, a total of about \$1.7 billion.

¹⁴ "[Tysons Future Density Debated](#)," Mike DiCicco, McLean Connection, May 19, 2010.

In the 20-year period covered by those estimates, planners see Tysons moving from some 40 million square feet of development to 84 million SF. In contrast, Reston TOD areas and Reston Town Center together have 64 million SF of space authorized under the *current* Comprehensive Plan, according to recent County staff presentations to the Reston Task Force, of which about 30 million SF is built.

In comparison to the cost of transportation investment in Tysons, Reston would appear to offer a relative bargain: Transportation capital investment projections for Reston are some \$20 million per year over 30 years, versus \$75 million per year for 20 years in Tysons. As with Tysons, we would expect many of these costs would be shared in public-private partnerships. In short, fulfilling Reston's transportation needs should cost about a quarter of the projected costs for Tysons over the next twenty years while the community achieves at least three-quarters of the same development potential.

Developing Reston around its evolving urban core balanced with the transportation infrastructure, policies, and programs to support it can go a long way to ensure Reston's continued success as the model of a successful planned community in the 21st century. We hope that this statement of Reston's transportation needs in an urbanizing community can serve as an important steppingstone in that planning process.

Selected Bibliography

Key Documents

Local Governments and Organizations

Wiehle Avenue/Reston Parkway: Station Access Management Plans, Final Report, Reston Metrorail Access Group, April 15, 2008

[Round 7.2A Cooperative Forecasting: Employment Forecasts to 2040 by Traffic Analysis Zone](#), Metropolitan Washington Council of Governments (MWCOC), November 2009

Reston on Foot: Improving the Pedestrian Experience in Reston, Pedestrian and Bicycling Advisory Committee, Reston Association, 2008.

[Transit Development Plan](#), Department of Transportation, Fairfax County, 2009.

- [Background and Existing Conditions](#)
- [Final Service Recommendations](#)

Draft Tysons Corner Urban Center, Areawide Recommendations, Fairfax County Comprehensive Plan, March 24, 2010, "Transportation," pp. 50-91.

Best Practices Elsewhere

2007 State of the Commute Study: Arlington Perspective--The Factors of Success in Reducing Drive Alone Commuting in Arlington, January 31, 2010.

Boulder Transportation Demand Management (TDM): Strategies and Program Options, (Matrix), Transportation Master Plan Update, June 28, 2002.

Transportation Demand Management: Implementation, Funding, and Governance (Montgomery County), Office of Legislative Oversight, Maryland, Report 2009-6, December 9, 2008.

Best Practices: Transportation Demand Management, Seattle Urban Mobility Plan, January 2008.

Research Papers & Studies

“Vehicle Trip Reduction Impacts of Transit-Oriented Housing,” Robert Cervero (University of California, Berkeley), G. B. Arrington (PB Placemaking), *Journal of Public Transportation*, Vol. 11, No. 3, 2008.

“Office Development, Rail Transit, and Commuting Choices,” Robert Cervero (University of California, Berkeley), *Journal of Public Transportation*, Vol. 9, No. 5, 2006.

“Transit Oriented Development in America: Contemporary Practices, Impacts, and Policy Directions,” Robert Cervero, University of California (Berkeley), presented at an international planning conference in the Netherlands, September 30-October 1, 2004.

Mitigating Traffic Congestion: The Role of Demand Side Strategies, Federal Highway Administration, Department of Transportation, October 2004.

Websites

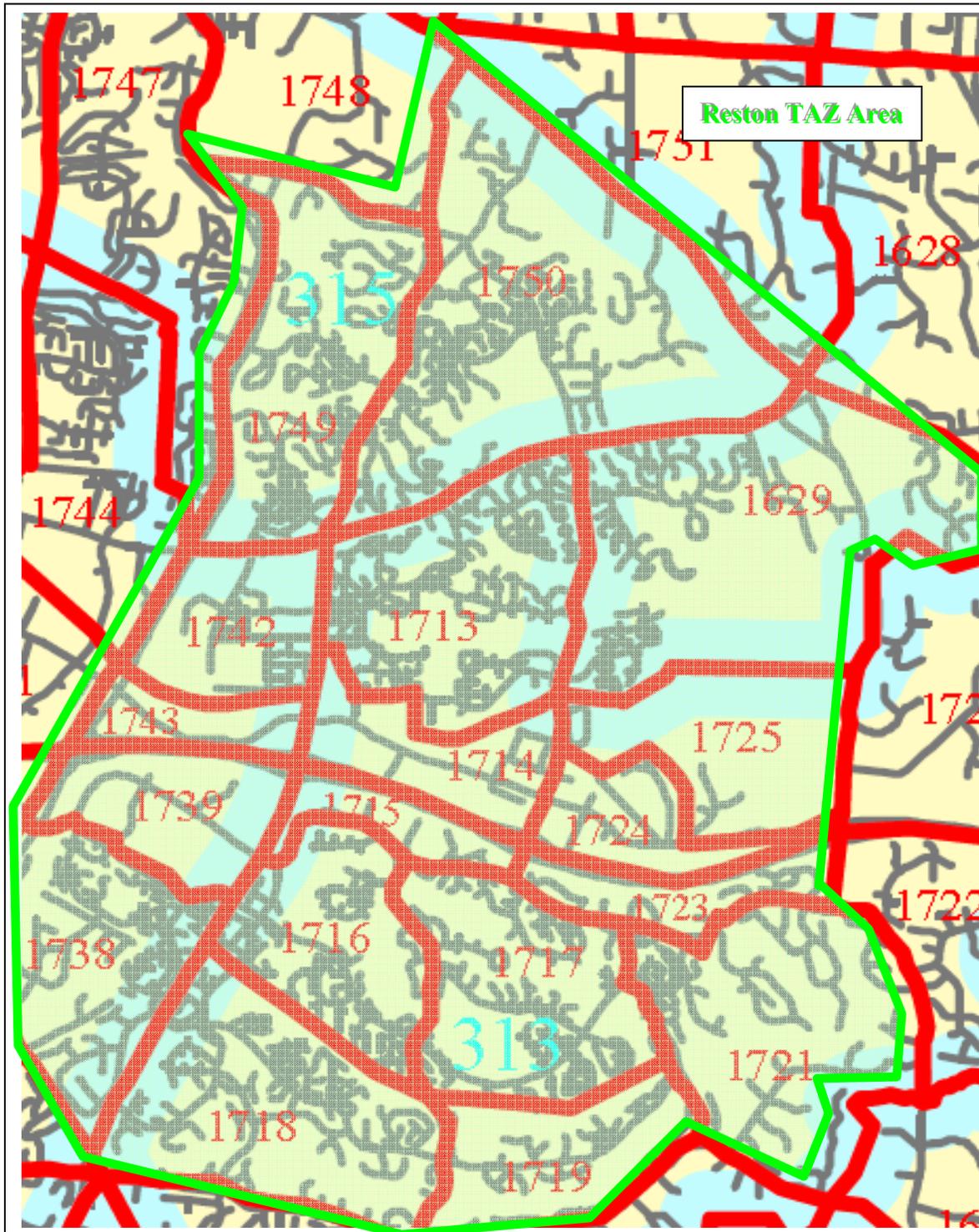
[Metropolitan Washington Council of Governments: Transportation](#)

[Fairfax County Department of Transportation](#)

[Victoria Transportation Policy Institute](#)

[Changing Seattle’s Transportation Template](#)

Appendix A: Reston Area TAZ Map and MWCOG 7.2A Population, Household, and Employment Forecast, 2010-2040



MWC OG Cooperative Forecasts for Reston Area, 2005-2040
 Round 7.2A Cooperative Forecast

Rest of Reston
 TOD Areas
 Reston Town Center

EMPLOYMENT

TAD	TAZ	Acres	2005	2010	2015	2020	2025	2030	2035	2040	
303	1629	1,203.0	547	550	558	568	575	579	579	579	
313	1713	703.7	1,331	1,363	1,369	1,377	1,385	1,389	1,877	1,877	
313	1714	307.7	10,907	12,236	12,528	12,610	12,641	12,674	12,924	13,174	
313	1715	163.9	4,523	5,339	5,795	5,854	5,942	6,030	6,580	7,130	
313	1716	461.2	229	262	262	262	262	262	262	262	
313	1717	588.4	1,079	1,392	1,416	1,418	1,419	1,420	1,420	1,420	
313	1718	747.9	599	601	609	622	629	632	632	632	
313	1719	385.5	47	57	58	59	60	61	61	61	
313	1720	1,218.3	201	210	218	222	222	222	222	222	
313	1721	780.8	213	222	229	239	248	253	253	253	
313	1723	219.3	6,632	7,563	7,747	7,747	7,747	7,747	7,947	8,147	
313	1724	238.2	6,266	6,774	7,435	7,917	8,548	9,078	9,328	9,578	
313	1725	459.4	73	74	75	75	77	78	78	78	
314	1738	631.1	561	693	718	723	732	734	734	734	
314	1739	344.3	13,139	14,208	14,546	14,789	15,124	15,418	15,418	15,418	
314	1740	130.9	2,784	3,153	3,227	3,263	3,330	3,404	3,404	3,404	
314	1742	328.5	8,818	9,051	9,857	11,603	12,103	12,603	13,453	14,303	
314	1743	165.0	5,644	5,885	6,039	6,167	6,392	6,637	6,887	7,137	
315	1749	704.8	1,093	1,199	1,235	1,287	1,306	1,320	1,320	1,320	
315	1750	1,318.8	368	406	437	497	508	512	512	512	
Total		11,100.7	65,054	71,238	74,358	77,299	79,250	81,053	83,891	86,241	AAGR
Growth					4.4%	8.5%	11.2%	13.8%	17.8%	21.1%	0.70%
TODs		1,438.4	47,111	52,005	54,090	55,084	56,394	57,584	59,084	60,584	0.55%
					4.0%	5.9%	8.4%	10.7%	13.6%	16.5%	
RTC		328.5	8,818	9,051	9,857	11,603	12,103	12,603	13,453	14,303	1.93%
					8.9%	28.2%	33.7%	39.2%	48.6%	58.0%	
Urban Core		1,766.9	55,929	61,056	63,947	66,687	68,497	70,187	72,537	74,887	0.76%
					4.7%	9.2%	12.2%	15.0%	18.8%	22.7%	
Rest of Reston		9,333.8	9,125	10,182	10,411	10,612	10,753	10,866	11,354	11,354	0.38%
					2.2%	4.2%	5.6%	6.7%	11.5%	11.5%	

POPULATION

<u>TAD</u>	<u>TAZ</u>	<u>Acres</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>	<u>2040</u>	
303	1629	1203.0	5,853	5,852	5,870	5,901	5,937	5,961	5,979	6,089	
313	1713	703.7	8,267	8,873	8,873	8,873	8,873	8,873	8,873	9,063	
313	1714	307.7	1,153	1,199	2,267	3,928	5,546	6,897	7,874	8,404	
313	1715	163.9	0	399	790	1,420	2,032	2,543	2,914	3,109	
313	1716	461.2	6,308	6,322	6,322	6,322	6,322	6,322	6,322	6,453	
313	1717	588.4	4,993	4,993	4,993	4,993	4,993	4,993	4,993	5,086	
313	1718	747.9	5,282	5,282	5,340	5,433	5,524	5,600	5,655	5,781	
313	1719	385.5	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,786	
313	1720	1,218.30	2,653	2,660	2,660	2,660	2,660	2,660	2,660	2,705	
313	1721	780.8	3,269	3,269	3,272	3,277	3,282	3,286	3,288	3,359	
313	1723	219.3	0	0	96	250	399	524	615	661	
313	1724	238.2	5	5	218	561	894	1,173	1,374	1,477	
313	1725	459.4	585	590	648	702	721	741	760	785	
314	1738	631.1	5,366	5,366	5,412	5,476	5,540	5,595	5,632	5,755	
314	1739	344.3	16	16	387	980	1,558	2,042	2,391	2,567	
314	1740	130.9	71	71	304	678	1,041	1,346	1,566	1,678	
314	1742	328.5	3,437	5,227	5,600	5,825	6,041	6,220	6,355	6,534	
314	1743	165	0	0	486	1,264	2,022	2,656	3,114	3,349	
315	1749	704.8	6,456	6,471	6,477	6,484	6,491	6,491	6,491	6,610	
315	1750	1,318.8	10,058	10,057	10,121	10,230	10,332	10,414	10,479	10,708	
<i>Total</i>		<i>11,100.7</i>	<i>65,527</i>	<i>68,407</i>	<i>71,891</i>	<i>77,012</i>	<i>81,962</i>	<i>86,092</i>	<i>89,090</i>	<i>91,959</i>	<i>AAGR</i>
<i>Growth</i>					<i>5.1%</i>	<i>12.6%</i>	<i>19.8%</i>	<i>25.9%</i>	<i>30.2%</i>	<i>34.4%</i>	<i>1.15%</i>
<i>TODs</i>		<i>1,438.4</i>	<i>1,174</i>	<i>1,619</i>	<i>4,244</i>	<i>8,403</i>	<i>12,450</i>	<i>15,835</i>	<i>18,282</i>	<i>19,567</i>	
					<i>162.1%</i>	<i>419.0%</i>	<i>669.0%</i>	<i>878.1%</i>	<i>1029.2%</i>	<i>1108.6%</i>	<i>36.95%</i>
<i>RTC</i>		<i>328.5</i>	<i>3,437</i>	<i>5,227</i>	<i>5,600</i>	<i>5,825</i>	<i>6,041</i>	<i>6,220</i>	<i>6,355</i>	<i>6,534</i>	
					<i>7.1%</i>	<i>11.4%</i>	<i>15.6%</i>	<i>19.0%</i>	<i>21.6%</i>	<i>25.0%</i>	<i>0.83%</i>
<i>Urban Core</i>		<i>1,766.9</i>	<i>4,611</i>	<i>6,846</i>	<i>9,844</i>	<i>14,228</i>	<i>18,491</i>	<i>22,055</i>	<i>24,637</i>	<i>26,101</i>	
					<i>43.8%</i>	<i>107.8%</i>	<i>170.1%</i>	<i>222.2%</i>	<i>259.9%</i>	<i>281.3%</i>	<i>9.38%</i>
<i>Rest of Reston</i>		<i>9,333.8</i>	<i>60,916</i>	<i>61,561</i>	<i>62,047</i>	<i>62,784</i>	<i>63,471</i>	<i>64,037</i>	<i>64,453</i>	<i>65,858</i>	
					<i>0.8%</i>	<i>2.0%</i>	<i>3.1%</i>	<i>4.0%</i>	<i>4.7%</i>	<i>7.0%</i>	<i>0.23%</i>

HOUSEHOLDS

<u>TAD</u>	<u>TAZ</u>	<u>Acres</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>	<u>2040</u>		
303	1629	1,203.0	2,003	2,003	2,006	2,013	2,020	2,025	2,029	2,045		
313	1713	703.7	3,770	4,087	4,087	4,087	4,087	4,087	4,087	4,117		
313	1714	307.7	606	630	1,191	2,066	2,917	3,628	4,143	4,353		
313	1715	163.9	0	191	378	679	972	1,217	1,394	1,467		
313	1716	461.2	2,773	2,776	2,776	2,776	2,776	2,776	2,776	2,796		
313	1717	588.4	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,892		
313	1718	747.9	2,003	2,004	2,032	2,076	2,119	2,155	2,181	2,206		
313	1719	385.5	589	589	589	589	589	589	589	593		
313	1720	1,218.3	814	816	816	816	816	816	816	822		
313	1721	780.8	1,154	1,154	1,155	1,157	1,158	1,159	1,160	1,172		
313	1723	219.3	0	0	46	119	191	251	294	312		
313	1724	238.2	1	1	113	293	469	615	721	763		
313	1725	459.4	251	251	264	275	279	283	287	292		
314	1738	631.1	2,002	2,007	2,021	2,040	2,060	2,077	2,088	2,109		
314	1739	344.3	5	5	182	466	743	974	1,141	1,208		
314	1740	130.9	22	22	133	312	486	632	737	779		
314	1742	328.5	1,558	2,500	2,705	2,839	2,967	3,073	3,153	3,199		
314	1743	165	0	0	256	665	1,064	1,398	1,639	1,735		
315	1749	704.8	2,368	2,374	2,375	2,377	2,378	2,378	2,378	2,395		
315	1750	1,318.8	3,071	3,071	3,084	3,105	3,126	3,142	3,155	3,190		
<i>Total Growth</i>		<i>11,100.7</i>	<i>24,868</i>	<i>26,359</i>	<i>28,087</i>	<i>30,628</i>	<i>33,095</i>	<i>35,153</i>	<i>36,646</i>	<i>37,445</i>	<i>AAGR</i>	
						<i>6.6%</i>	<i>16.2%</i>	<i>25.6%</i>	<i>33.4%</i>	<i>39.0%</i>	<i>42.1%</i>	<i>1.40%</i>
<i>TODs</i>		<i>1,438.4</i>	<i>612</i>	<i>827</i>	<i>2,166</i>	<i>4,288</i>	<i>6,356</i>	<i>8,083</i>	<i>9,332</i>	<i>9,838</i>		<i>36.32%</i>
					<i>161.9%</i>	<i>418.5%</i>	<i>668.6%</i>	<i>877.4%</i>	<i>1028.4%</i>	<i>1089.6%</i>		
<i>RTC</i>		<i>328.5</i>	<i>1,558.0</i>	<i>2,500.0</i>	<i>2,705.0</i>	<i>2,839.0</i>	<i>2,967.0</i>	<i>3,073.0</i>	<i>3,153.0</i>	<i>3,199.0</i>		<i>0.93%</i>
					<i>8.2%</i>	<i>13.6%</i>	<i>18.7%</i>	<i>22.9%</i>	<i>26.1%</i>	<i>28.0%</i>		
<i>Urban Core</i>		<i>1,766.9</i>	<i>2,170</i>	<i>3,327</i>	<i>4,871</i>	<i>7,127</i>	<i>9,323</i>	<i>11,156</i>	<i>12,485</i>	<i>13,037</i>		<i>9.73%</i>
					<i>46.4%</i>	<i>114.2%</i>	<i>180.2%</i>	<i>235.3%</i>	<i>275.3%</i>	<i>291.9%</i>		
<i>Rest of Reston</i>		<i>9,333.8</i>	<i>22,698</i>	<i>23,032</i>	<i>23,216</i>	<i>23,501</i>	<i>23,772</i>	<i>23,997</i>	<i>24,161</i>	<i>24,408</i>		<i>0.20%</i>
					<i>0.8%</i>	<i>2.0%</i>	<i>3.2%</i>	<i>4.2%</i>	<i>4.9%</i>	<i>6.0%</i>		

Appendix B: Phase I Interim Transportation Needs

The arrival of Metrorail at Wiehle Avenue in 2013 creates a substantial near-term risk of outright massive traffic gridlock from Sunset Hills to Sunrise Valley at the minimum during traffic peak periods. Commuters who already travel the Dulles Corridor will be arriving and departing in large numbers whether by bus or car trying to take advantage of the new rail connection to Tysons and downtown Washington. New commuters will also try to take advantage of the new rail link, adding to the congestion. The massive traffic influx also risks clogging nearby commercial parking lots as well as flooding adjacent neighborhoods both north and south of the station.

An interim transportation plan needs to be effected by the time Metro arrives at Wiehle station that prevents gridlock, inappropriate parking, and commuter and resident outrage at County unpreparedness to handle the transition.

We believe the following transportation initiatives need to be in place before the opening of the Wiehle Avenue Metrorail station in addition those outlined in the County ten-year Transit Development Plan (TDP):

- Establish two circulator bus routes to link the Wiehle station east and west to office and residential destinations from Reston Town Center to Hunter Mill Road. These bus routes operate at 10-minute intervals during peak period, 20-minute headways the rest of every day throughout the hours of Metrorail operation, especially to Reston Town Center.
 - The westbound circulator goes west on Sunrise Valley Drive to Reston Parkway, then north to the Reston Town Center transit station, and returns to Wiehle via Sunset Hills.
 - The eastbound circulator goes east on Sunrise Valley to Hunter Mill and returns via Sunset Hills.
- Sustain, if not enhance, the frequency of express bus headways to Wiehle station from the Herndon-Monroe parking garage.
- Create or expand bus service from Fairfax County locations north and south of Reston to the Wiehle Avenue station, including north of Route 7 and south to Route 50.
- Besides re-focusing existing Reston-area bus routes on Wiehle station as proposed in the TDP, increase peak period service headways to 10 minutes, balance of the weekday headways to 20 minutes, and 30-minute headways on Sundays and holidays.
- To the extent feasible, complete all sidewalk, road crossing, and pathway improvements in the Wiehle TOD area recommended in the RMAG final report and RA's "Reston on Foot" before the Wiehle Metro station opens.
- Parking:
 - Establish a minimum \$12 per day per vehicle fee for parking in the Wiehle Metrorail parking garage. Designate and enforce at least 25% of the garage for HOV parking.

- Parking remains free at the existing Herndon-Monroe parking garage until completion of Phase II.
- Establish special restricted parking districts for the neighborhoods north of Sunset Hills and south of Sunrise Valley within one-half mile of the station, and farther if the situation warrants. Rigorously enforce these restricted parking areas.
- Encourage (or require) businesses within a half-mile to issue parking passes for employees, establish identifiable 3-hour daytime customer parking areas, and enforce towing in their complexes.
- Establish a police presence in the area during traffic peak periods to reduce tie-ups and respond to accidents quickly.
- Work closely with Loudoun County transportation officials to encourage their creation of parking lots, if not garages, near the Greenway that would provide express bus service to Wiehle Avenue station.

Some of these initiatives may be reduced or eliminated when the Phase II section of the Silver Line opens. Others need to remain as part of a continuing County policy to encourage multi-modal commuting and discourage driving to TOD areas, such as the \$12 or more parking fee, restricted parking controls nearby, etc. Decisions to reduce other efforts should be linked to the degree traffic moves away from Wiehle station to one of the other stations on the Silver Line extension, especially west of Reston.

Appendix C: Road and Pathway Improvements in the Herndon-Monroe TOD Area



Appendix D: Reston Transportation Needs Plan Schedule

Bus Transit

<u>Need</u>	<u>Description</u>	<u>Timeframe</u>					
		<u>2010</u>	<u>Phase I (2013)</u>	<u>Phase II (2016)</u>	<u>By 2020</u>	<u>2021-2030</u>	<u>2031-2040</u>
BT1	Operate Reston peak period bus service to Metro stations as described in the RMAG final report at 10-minute headways.		W	RP, HM			
BT2	Operate Reston bus routes at 20-minute headways daily and 30-minute headways on Sundays/holidays.		W	RP, HM			
BT3	Express bus service from north of Rt.7 along Algonkian Parkway, Georgetown Pike, and Springvale Rd. to Herndon-Monroe, Reston Pkwy, & Wiehle stations.		W	RP, HM			
BT4A	Circulator bus service from Wiehle station to RTC and Reston Pkwy station		W				
BT4B	Circulator bus service from Herndon-Monroe station to RTC and Reston Pkwy station			RP, HM			
BT5	Circulator bus service within Reston Town Center on 10-minute headways all day.					RTC	
Key	Description						
X	Applicable as described.						
W	Wiehle TOD area						
RP	Reston Parkway TOD area						
HM	Herndon-Monroe TOD area						
RTC	Reston Town Center						
VC	Village Centers						
Res	Residential neighborhoods						
LA	Lake Anne						

Pedestrian and Bicyclist Improvements

Need	Description	Timeframe					
		2010	Phase I (2013)	Phase II (2016)	By 2020	2021- 2030	2031- 2040
PB1	Implement RMAG & Reston on Foot recommendations in the Wiehle TOD area by the time Metro arrives.		W				
PB2A	Grade-separated crossings from NE corner of FC Pkwy & Sunrise Valley Drive west across FC Pkwy and south across Sunrise Valley Drive.					HM	
PB2B	A pathway linked to the Sunrise Valley, Monroe, and parking garage pathways around the Sunrise Valley wetlands.				HM		
PB2C	Pathways along Sunrise Valley Drive, Monroe St., and FC Pkwy in the Herndon-Monroe area				HM		
PB2D	Improvement of the existing north-south pathway on the east side of Fairfax County Pkwy through Reston.						
PB2E	High-visibility crosswalks at all major intersections in the Herndon-Monroe TOD area.			HM			
PB3	Implement RMAG & Reston on Foot recommendations in TOD areas by the time Metro arrives.			RP, HM			
PB3A	At Reston Pkwy station, build an overpass north over Sunrise Valley Drive and the W&OD trail.			RP			
PB3B	Build a trail access to the W&OD overpass above			RP			
PB4	Implement all other RMAG and Reston on Foot recommendations within a half-mile of RTC.					RTC	
PB5	Insure that major intersection in north RTC have strong pedestrian/bicyclist safety protections.					RTC	
PB6A	Build grade-separated ped/bike crossings over Sunset Hills on the west side of Wiehle.				W		

PB6B	Build a grade-separated crossing over Wiehle at Metrorail Boulevard.					W	
PB6C	Build a grade-separated crossing over Wiehle on the north side of Sunset Hills Drive.				W		
PB6D	Build a grade-separated crossing over Sunrise Valley west of Wiehle.		W				
PB6E	Build a grade-separated crossing over Sunrise Valley at the Reston Parkway Metrorail station entrance.				RP		
PB6F	Build a pedestrian bridge across Reston Parkway from Reston Heights.			RP			
PB6G	Build a pedestrian bridge across the Dulles Corridor half way between Reston Pkwy and Soapstone extension.					X	
PB7A	Establish <i>bike lanes</i> along Fountain Drive, New Dominion Parkway, Town Center Parkway, Soapstone Drive, and Sunrise Valley Drive.				RTC	Res	
PB7B	<i>Apply shared lane markings</i> to Wiehle Avenue, South Lakes Drive, and Colts Neck Drive to Glade Drive.						X
PB7C	<i>Create signed bike routes</i> on Glade, Twin Branches, North Village, North Shore, Bennington Woods, Browns Chapel Road, Steeplechase Drive, and Old Reston Avenue.				X		

Key	Description
X	Applicable as described.
W	Wiehle TOD area
RP	Reston Parkway TOD area
HM	Herndon-Monroe TOD area
RTC	Reston Town Center
VC	Village Centers
Res	Residential neighborhoods
LA	Lake Anne

Road and Parking Improvements

<u>Need</u>	<u>Description</u>	<u>Timeframe</u>					
		<u>2010</u>	<u>Phase I</u> <u>(2013)</u>	<u>Phase II</u> <u>(2016)</u>	<u>By 2020</u>	<u>2021-</u> <u>2030</u>	<u>2031-</u> <u>2040</u>
PRI1	Re-purpose the Wiehle station parking garage to support above-ground development by Comstock.				W		
PRI2	Do NOT expand parking garage at Herndon-Monroe Metro station area.	X					
PRI3	Build satellite parking garage at Rt. 7/FC Pkwy with express bus service to Herndon-Monroe Metro station.			HM			
PRI4	Build satellite parking garage at Rt. 7/Baron Cameron with express bus service to Wiehle station.					W	
PRI5	Build satellite parking garage at the south Reston Park&Ride with express bus service to Reston Pkwy station.			RP			
PRI6	Build satellite parking garage at FC Pkwy/Franklin Farms with express bus service to Herndon-Monroe station.				HM		
PRI7	Build Dulles Corridor overpass linking Soapstone with Isaac Newton Square.				W		
PRI8	Build an underpass across the Dulles Corridor linking Edmund Halley Drive and Town Center Drive.					RP	
PRI9	Build an overpass across the Dulles Corridor linking South Lakes Drive with Business Park Drive.						X
PRI10	Widen Reston Parkway to three through lanes from Fox Mill Rd. to the north side of Dulles Corrido bridge.					X	
PRI11	Widen Reston Parkway to three through lanes from New Dominion to Baron Cameron.					X	
PRI12	Upgrade the Hunter Mill/Dulles Toll Road interchange to handle four through lanes of traffic						X

PRI13	Build an interchange at the intersection of FC Parkway and Sunrise Valley Drive.					HM	
PRI14	Herndon-Monroe: Build three/four-way intersection on Monroe at the County/Arboretum property line for access road to station parking.					HM	
PRI15	Herndon-Monroe: Build "right in, right out" access to TOD area from FC Parkway southbound with access road to station parking.					HM	
PRI16	Herndon-Monroe: Build access to eastern portion of TOD area directly from DTR on-off ramp.					HM	
PRI17	Improve roads within a 1/2 mile of Village Centers to accommodate LOS "D" peak period traffic as they are re-developed.						VC, Res
PRI18	Limit parking availability for residents and employees in redeveloped Village Centers.		VC				

<u>Key</u>	<u>Description</u>
X	Applicable as described.
W	Wiehle TOD area
RP	Reston Parkway TOD area
HM	Herndon-Monroe TOD area
RTC	Reston Town Center
VC	Village Centers
Res	Residential neighborhoods
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Transportation Demand Management

<u>Need</u>	<u>Description</u>	<u>Timeframe</u>					
		<u>2010</u>	<u>Phase I</u> <u>(2013)</u>	<u>Phase II</u> <u>(2016)</u>	<u>By 2020</u>	<u>2021-</u> <u>2030</u>	<u>2031-</u> <u>2040</u>
TDM1	Reduce the minimum number of required parking spaces and establish maximums in TOD areas and Village Centers	X					
TDM2	Establish daytime parking fees for office parking in TOD areas and RTC.		TOD, RTC, VC				
TDM3	Establish daytime parking fees for retail parking beyond three hours.		TOD, RTC, VC				
TDM4	Require office buildings to set aside 25% of available parking for car and van pools.		TOD, RTC, VC				
TDM5	Increase County auto registration/property tax by at least \$10 annually to fund County alternative transportation mode programs.		X				
TDM6	Create "flex car" ("Zip car") programs in TOD areas for residents/office workers.		TOD				
TDM7	Establish a peak period bus lane on FC Pkwy and Reston Pkwy from Baron Cameron to Fox Mill.					X	
TDM8	Establish traffic calming and restricted parking districts in neighborhoods near TOD areas		W	RP, HM			
TDM9	Apply Intelligent Transportation Systems technologies, including traffic light synchronization, to Reston's major streets				X		
TDM10	Provide County subsidy to businesses to pay employee public transit costs.				X		
TDM11	Provide all-weather shelters at all bus stops.				X		
TDM12	Promote the use of public transit through media, users guide, and transit information centers.	X					

TDM13	All buses are handicap accessible and able to handle bicycles.				X		
TDM14	Promote the scope, accessibility, and safety of Reston's pathways and County sidewalks	X					
TDM15	Establish bicycle parking facilities as detailed in the Reston on Foot report				X		
TDM16	Require locker and shower facilities at TOD, RTC, and redeveloped Village Centers to accommodate 2 people per 10,000GSF of office space.	X					
TDM17	Provide bicycle parking facilities in TOD areas, RTC, and redeveloped Village Centers as stipulated in the proposed Tysons Plan.	X					

<u>Key</u>	<u>Description</u>
X	Applicable as described.
W	Wiehle TOD area
RP	Reston Parkway TOD area
HM	Herndon-Monroe TOD area
RTC	Reston Town Center
VC	Village Centers
Res	Residential neighborhoods
LA	Lake Anne

Planning Without Implementation is Empty

Prepared for

The Reston Master Plan Special Study Task Force

By:

The Implementation Working Group

Reston 2020 Committee

Reston Citizens Association

May 27, 2010

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Planning Without Implementation is Empty

Executive Summary

If the Plan is not implemented, then the careful thinking going into how to revise the Plan is an empty exercise. This paper discusses issues related to implementation, and makes recommendations regarding implementation policies. Most importantly, the report urges the Task Force to consider seriously the issues of implementation and include recommendations with respect to implementation in their Plan revisions.

The paper considers four important implementation issues.

- Phasing is an important element of maintaining the look, feel, and land use as the Plan is implemented and can be crucial to achieving the Plan's final vision. The Reston Task Force's sub-committee on the North Town Center also recognized the importance of phasing and is including a discussion of phasing in their report. Aspects of the strategy could include parcel consolidation and density trading.
- A phased implementation strategy should include coordinating private development and public infrastructure. The most obvious coordination is between residential and office growth and changes in the transportation infrastructure, but it should include consideration of all public facilities. In order to achieve this coordination, there should be a mechanism in which financing for public infrastructure in Reston is adequate and the timing is predictable. This report recommends several ways to achieve this including tax increment financing, a new parking tax, and the creation of a Reston Infrastructure Fund administered by a Community Development Authority appointed by the county.
- An implementation entity should be in charge. This paper recommends the creation of an implementation entity similar to the Tyson's Task Force concept of a "Keeper of the Vision." In addition to promoting cooperation among developers, and between developers and the public sector entities, the implementation entity would provide a single architectural and land area review for the PRC areas, including the Town Center, and the RCIG.
- A new zoning category is necessary for effective implementation. Reston 2020 agrees with the Tyson's Task Force's that a new zoning category is necessary for areas of the Dulles Corridor. Reston is not Tyson's, however, and the draft zoning ordinance for Tysons (PTC), would have to be adapted to Reston. We recommend a new zoning category for Reston based on our planning principles and broken down in to three sub-areas: the current PRC area minus the Town Center, the Town Center, and the RCIG.

Planning Without Implementation is Empty

Introduction

Reston residents and the Task Force have been told many times that the Comprehensive Plan is a guide to actual development. The Plan language reinforces this frequently by making only recommendations for land use. The Plan has no legal authority to implement its recommendations. Implementation is done through zoning which, although always referring to Plan recommendations, is an independent process. Zoning is done at a different time than planning, is geared to developments on individual parcels rather than the larger sub-land units on which the Plan is based, and is subject to market and political pressures that the planners do not face in the same way. For those reasons there can be, and have been, substantial differences between the recommendations of the Plan and what is implemented.

Reston's original development followed Robert Simon's Reston Master Plan closely because one developer owned almost the entire area of the Master Plan and the area was mostly undeveloped. A new zoning category, the Planned Residential Community (PRC) recognized this unique situation and allowed flexibility to implement the vision of the Master Plan. Essentially, the parcel-by-parcel zoning process was relaxed to allow Simon's Plan to be implemented. In some respects, however, the original 1964 plan was not adhered to, mostly due to market conditions. A significant example is along North Shore Drive, roughly connecting Lake Anne and the Town Center, which the original plan designated as a relatively high density mixed-use area, but which was built instead with medium density neighborhoods of conventional townhouses and garden apartments.

Reston today is in a different situation. Almost all the land area that the original Plan allowed for development has been developed and there is a multitude of owners of various parcels and structures. Also, given the flexibility of PRC zoning, many of the owners now seek the right to re-build on the basis of the original development plan, and the community and the county are considering substantial changes to the plan. In the Reston Center for Industry and Government (RCIG), which was within the original Reston Master Plan, but not zoned PRC, large scale changes are being studied because of Metro, and the partial disconnect between planning and zoning presents further challenges to implementing the vision of the Plan. If these challenges are not met, the careful thinking going into to how to revise the Comprehensive Plan is an empty exercise.

Traditionally, the Comprehensive Plan says little about implementation. Given the difficulties and importance of implementation, however, we would urge the Task Force

to consider seriously and make recommendations about implementation, and recommend Plan language that provides these recommendations. The Tyson's Corner Task Force has done some of this by including a chapter on implementation in their report. We feel that Reston's Task Force should build on their discussion, not only to adapt some of their ideas to Reston's situation, but to extend and develop the ideas in more detail and with more forcefulness. The Task Force can play a leadership role to help ensure that Reston's unique planned community is actually implemented on the ground.

This paper is intended to stimulate discussion on four inter-related aspects of implementation: phasing; infrastructure coordination and financing; establishment of an implementation entity including an architectural and land use review board; and design of a new zoning category for Reston.

Phasing

The Comprehensive Plan provides a long-term vision for the planned area. Actual development, however, proceeds in fits and starts depending on market conditions, financial constraints, and developers' willingness to take risk. One of the benefits of comprehensive planning from the developers' or prospective home owners' points of view is that it provides a view of the future of an area and thus reduces one type of uncertainty. But the value of this view of the future is reduced if it is only a view of some hoped for distance time, say 30 or 40 years away, and there is little idea of how development will occur during that time period. The look, feel and use of land areas during the planning period are important because people live, work and play in the area during that period, not only at the end.

Phasing is an important element of achieving the Plan's final objectives. It is a basic premise of the Plan that "the staging of development be in a manner which can be accommodated by the timely provision of public utilities, facilities and services." The most obvious coordination through time is between private development and public infrastructure. Probably the clearest example is that of a new town, such as Reston in 1962, where public sewers, water, schools, power and roads must be in place before private development can begin. It is more difficult to plan for expansion of these public facilities as private re-development occurs, the situation of Reston today. An imbalance between expansion of public facilities and private growth results in stressed sanitary facilities, over-crowded schools, and congested roads. If the timing imbalance were very bad, it would endanger the final result.

An imbalance between types of private development in an area during the course of the plan period can also endanger achieving the Plan's final objectives. For example, an

excessive amount of office development can change the market for other types of development in an area, for example residential or retail property. In this case, the ultimate plan goal of mixed use can be compromised. Good planning, therefore, provides a vision of how the plan goals develop as well as what a place should look like at the end of the planning period. This, in turn, requires attention to how the plan is to be implemented, and when various aspects of the plan are put in place.

The Tyson's Task Force clearly recognized the need for phased planning, and their report emphasized "a phased strategy to grow, monitor that growth, and adjust the implementation strategy based on experience and performance." Although the report does not amplify these ideas, they are important. First, there should be a phased strategy to grow. Although it may not be appropriate for the Comprehensive Plan to project the precise dates of development in each section, a strategy of phased growth would include how different aspects of development should fit together through time. For example, certain road improvements must be in place before increased density is allowed in a sub-land unit dependent on those roads. Another example might be that in a sub-land unit planned for mixed use, only a certain number of office projects would be allowed until residential projects are proposed and approved. Thus, a developer's project for an office building that is fully acceptable would have to be delayed until another developer commits to build a residential project.

Another important aspect of the Tyson's statement about phased growth is the reference to an implementation strategy. Such a strategy should provide a mechanism to promote cooperation among developers and cooperation between developers and public entities. Underlying these types of cooperation should be realization among developers that projects will not be approved unless they fit into the phased development plan, and among public agencies that there will be political pressure to complete infrastructure projects that are necessary for the next phase of development to occur.

Another important aspect of an implementation strategy is to promote developer cooperation, parcel consolidation and density trading. Developers should be encouraged to cooperate in planning projects within a sub-land unit. For example, a developer would get a "density credit," or bonus above the base density permitted, if he could trade or purchase the density from another project in the same sub-land unit. In other words, within limits, a project could be approved even if it exceeds the Plan's maximum FAR or maximum building height limitations, if other projects have lower densities and building heights, and the entire sub-land unit is within the proscribed limit. This requires that all the projects within the sub-land unit are reviewed together.

Infrastructure Coordination and Financing

The need for public infrastructure during the course of development is obvious, yet the constraints on providing this infrastructure in a timely way are equally clear. The need to phase transportation infrastructure with private development is perhaps the clearest challenge to phased development planning. The various non-Metro transportation infrastructure improvements necessary for the envisaged growth is enormous (see our paper on transportation). Transportation, however, is not the only infrastructure that must be phased with private development.

- Schools are another challenge to development in Reston. Although the urban type of development envisaged for much of the residential growth in the RCIG and the Town Center would indicate smaller family sizes than in the standard suburban model, clearly a substantial Reston population increase will increase the school-aged population. Also, according to FCPS officials, Reston schools are already pressing their maximum capacity. Schools for Reston's children must be provided as the school population grows.
- Police, Fire, and Emergency services will have to be increased with increasing population and the change in residential and office structures that will emphasize high rise buildings more than standalone suburban structures. The police station and the fuel depot in the north Town Center should be replaced, and re-located, and this change must be phased with the development of the north Town Center.
- The Reston Regional Library is an extremely popular facility and with increased population will become increasing over utilized. The standalone building of Reston Regional Library should be replaced in the future Town Center, and the new facility must be planned and financed in concert with overall growth and the new development of the north Town Center.
- A county office center has been suggested for the north Town Center containing the Supervisor's office and acting as a local government, health, and social services center for western and northern Fairfax County. The timing of such a structure must be planned in accordance with both the needs of the County and the re-development of the north Town Center.
- A cultural center containing a performing arts facility and gallery has been mentioned as a possible addition to either the Reston Parkway Station area or the Wiehle Ave station. Again, the timing of this facility should be planned with the implementation of transportation infrastructure and population growth.

- The provision of urban parks has been a major aspect of making the transition from a predominately suburban area to Transit Oriented Development (TOD) urban areas such as the Town Center and around the Metro stations. There has been a lot of thinking about the concept of urban parks in Fairfax county (see Reston 2020's paper on parks) but little planning on how and when they should be developed as the TOD areas of Reston are established and begin to grow.

For each of these public facilities, and probably more that will be recommended in the Reston area, the timing and financing of the facilities should be coordinated with private development, the increase in population, and the provision of essential supporting transportation infrastructure. The challenge of providing these facilities at the time when they will be needed as Reston develops along the lines of the Master Plan emphasizes the importance of an implementation strategy.

One of the biggest challenges of the implementation strategy is to devise and implement the financing mechanisms to build the facilities when they are needed. Currently there is not a direct connection between the phasing of the County's land use planning and the County's Capital Improvements Program. Typically, financing large public facilities such as roads, public transportation networks, schools, libraries, and parks, depend on separate bond issues that are planned in accordance with county-wide needs for each type of facility and the political climate. This allows for little coordinated planning for the various facilities needed in a particular area.

An implementation strategy for Reston would attempt to coordinate planning, financing, and phasing of public facilities with the planned growth of private development and population increases as foreseen in the Master Plan. First this requires some idea in the Plan of the timing of planned development. Second, it requires financing mechanisms that are geared toward the needs of the Reston area as envisioned in the Plan. Fairfax County has studied ten such funding mechanisms and they are mentioned in the Tyson's Corner Task Force Report. We would like to emphasize three of these having particular relevance to financing infrastructure in Reston.

- Tax increment financing is a mechanism in which the private developers, who will profit from increasing property values resulting from the Metro and the planned public facilities around the Metro stations, would pay a portion of the cost of these facilities. The idea is that some proportion of the increase in property tax due to the Metro and the TOD growth around Metro stations would go into a special fund reserved for financing public facilities in these areas (call it the Reston Infrastructure Fund, or RIF). This mechanism would not increase overall property tax rates. The funds would be in addition to the capital expenditures that the county would have made in the absence of the Metro and TOD. The idea

is to have a larger and more predictable amount with which to finance transportation and other public facilities in Reston than is currently available.

- The Tyson's Corner report mentions parking fees from county parking garages as a source of money for public infrastructure. Reston 2020's transportation report goes one step further and recommends a parking tax, to be levied on all parking in TOD areas. Such a tax not only would raise money for Reston area transportation facilities and services, but would encourage people to economize on the use of their cars. It would increase the incentive to use public transportation.
- Cash proffers, parking fees and taxes, County, State and Federal funding, and other grants would go into the RIF. This fund could be administered by a Community Development Authority. Reston businesses, landowners, and residents, along with the county, should have a key role in developing and administering the authority. Their primary objective would be to ensure the financing of phased implementation of transportation and other public infrastructure along with the phased plan objectives.

At this stage in the planning exercise, it is not possible to project the amount and timing of additional resources required to provide the public facilities needed to support the Plan's vision. It is very likely that measures additional to those suggested above will be necessary. What is crucial now is that the Task Force discussions include the financing needs of the phased implementation strategy and that it recommend to the County ways to meet those needs.

Implementation Entity

One of the ideas in the Tyson's Corner Task Force report is the establishment of an implementation entity that they call a "Keeper of the Vision," or a Community Development Authority. The report, however, says very little about how this entity should be structured, what powers it should have, whether it must be consulted on rezoning applications, and whether it would be able to review the architecture and urban design of the various land units on which the Plan is based. The report devotes only three sentences to the idea and only suggests that the entity be established by the Board of Supervisors, works with county agencies and other stakeholders, and should focus on "ensuring that the new Comprehensive Plan, and associated regulations and recommendations are effective."

In Reston, there are currently several boards and committees that review projects and changes of land use or structures. All have severe limitations:

- Within areas subject to Reston Association (RA) jurisdiction, the RA Covenants Committee, particularly through their Design Review Board (DRB), has a broad responsibility to “foster and preserve an aesthetic balance among the variety of residential, public use, commercial and recreational properties in the community.” It is composed of volunteer members of the community, some of whom have professional design credentials, and is supported by RA staff. It has the legal authority to put a lien on a property that violates RA Covenants. In general, the DRB looks at the details of specific proposals rather than the look of larger land units, although it does consider some very large projects, such as Fairways Apartments, in which the look and feel of large areas are important to their review. Its reach is only within areas subject to RA covenants and thus does not extend to the Town Center or the RCIG.
- The Reston Planning and Zoning Committee (P and Z), although roughly associated with RA, reviews development and re-development projects in all parts of Reston. The P and Z has no statutory or legal authority but makes recommendations to the Planning Commission and the Reston County Supervisor on behalf of the Reston community. The influence of its recommendations is dependent on the time, personalities and connections of its members, all of whom are also volunteers from the community. At times this influence has been substantial, but it is not consistent.
- Within the Town Center there is a Design Review Board (TCDRB) that reviews and gives recommendations about projects within the larger Town Center area. This area is bounded by the Toll Road on the south, Reston Parkway on the east, Baron Cameron on the north, and the Fairfax County Parkway on the west. The TCDRB is an entity of the Town Center Association (TCA) and through the Association has a considerable legal power to enforce its covenants. The TCA, however, is dominated by the commercial interests of the Town Center; by deed, 7 of the 9 TCA Board members represent non-resident land owners.
- The RCIG also has at the moment an Architectural Review Board based on covenants for land owners in that area and the current “industrial” zoning. These land owners have voted to vacate these covenants and they will not be in effect after January 1, 2011. After that date, there will be no architectural review in the area. The landowners will then have to decide on joining the Reston Association and become subject to RA covenants, or to establish a new association.

In the view of the Working Group and Reston 2020, the area of the Reston Master Plan should have one entity that oversees the implementation of the Plan, including reviewing the architecture of individual projects and the broader urban design quality within larger sub-land units. Ideally, it would replace all three review bodies that now exercise the variety of controls over parts of the Plan area. It would work closely with, or be a part of, the community development authority. In carrying out its responsibilities for implementing the Plan, the entity would work with the Reston Association, The Town Center, and whatever association eventually controls the RCIG to enforce their future covenants. It should be composed of volunteers from residential and non-residential land owners, and have a small professional staff paid for by contributions from the three associations within the Master Plan area. RA, TCA, and, if it is created, the future RCIG association, would be freed from the expense of running their own review boards.

The plan implementation entity should have the responsibility and authority to enforce compliance with the various covenants, as the review boards do now, but just as importantly, review development in larger terms to ensure consistency with Plan objectives. Such an entity would review and recommend phasing of planned development. For example, if a development or re-development project were proposed that does not violate any covenants but would create an imbalance of uses within a sub-land unit that is slated for mixed-use, the implementation entity would point this out and recommend delay in project approval until other projects providing that balance are proposed. The plan implementation entity would work with property owners to cooperate in fulfilling the broader objectives of the Plan while realizing their individual projects. Similarly, the entity would work with public agencies to ensure that infrastructure projects are planned and financed before development in areas that would depend on the infrastructure.

The Working Group realizes that such a proposal would change significantly the current balance of responsibilities and powers to guide and implement development in the Reston area. It feels, however, that if one is to take seriously the comprehensive planning of large areas, there should be comprehensive implementation of the plan over the planned area. The suggested community entity would be a big step forward in this direction.

A New Zoning Category

The zoning ordinance is the primary tool to implement plan goals. As mentioned above, Reston, except in the RCIG, is zoned a Planned Residential Community which allowed a large amount flexibility for implementing the original Master Plan.

This worked well in part because most of the land was undeveloped and there was one developer for the entire large area. These conditions no longer hold. As Reston re-develops, and particularly as new land uses and densities are contemplated for the TOD and Town Center areas, the previous zoning categories should be reconsidered.

The Tyson's Corner Task Force has proposed a new zoning category for Tyson's re-development which they call the Planned Tysons Corner Urban District (PTC). Its purpose is

to implement the mix of uses, densities and intensities under the redevelopment of the adopted comprehensive plan for the Tysons Corner Urban Center. The PTC District regulations are designed to provide the necessary flexibility to transform the designated 1700 acre area from a suburban office park and activity center into an urban, mixed-use transit, bicycle and pedestrian oriented community.

The proposed zoning ordinance amendment divides the Tysons area into TOD and non-TOD districts with different regulations, land use constraints, and densities. The proposed amendment ties the two types of areas together by stipulating that "development should be designed in an integrated manner that will enhance the urban character" of the districts. It then lists eight objectives that development projects should further in their applications for re-zoning to this category. Most of these are criteria that Reston 2020 and the Task Force discussed for planning principles, including:

- A tiered intensity of development emanating from the Metro stations;
- A network of open space and urban parks;
- Environmental stewardship and green building design;
- An urban grid of streets for the TOD areas;
- Reduction of single occupant vehicle trips, transportation demand management, and limiting parking;
- Public facilities to support projected job and population growth;
- Streetscape and urban design guidelines;
- Workforce and affordable housing at or above County standards.

Reston is fortunate that the Tyson's Corner Task Force has thought through many of the elements of re-zoning necessary to implement their vision of a new Tyson's Corner. Much of what they recommend is applicable to Reston, which is also transforming developed areas into a more transit oriented, urban mixed land use. It is also important that these zoning amendments be recommended at the same time as and with frequent references to the recommended amendments to the Comprehensive Plan. RCA's

Reston 2020 Committee strongly suggests that the Reston Task Force follows the lead of the Tyson's Task Force and discusses and proposes a new zoning category for Reston along the lines of the Tyson's zoning amendments.

Reston is not Tyson's Corner, however, and recommended zoning changes cannot slavishly follow the Tysons example. A major difference is that Reston is a settled residential area with established neighborhoods; Tyson's is predominately a series of suburban office parks and retail malls. In Reston, more than in Tysons, it is crucial that established neighborhoods are protected by the zoning ordinance. Also, densities within the neighborhoods are relatively low, and residents are concerned that excessive density in the suburban areas will adversely affect their quality of life. Finally, the Town Center in Reston is an identified central area that has developed a character of its own that is likely to continue to be distinct from the suburban and the TOD areas around the Metro stations.

Reston 2020 agrees with the Tyson's concept of one new zoning category to provide an implementation mechanism that integrates development in the whole of Reston. The Reston planning principles can be listed as objectives for the whole area in a similar way as the Tyson's zoning proposal lists their objectives. We envisage, however, three zoning sub-districts: the suburban areas (essentially the current PRC areas minus the Town Center); the Town Center (as defined in the TCA covenants); and TOD areas (the currently designated RCIG). Each would have different restrictions on land use, density and building heights, but each would adhere to the planning principles. A major responsibility of the implementation entity would be to ensure that as each area re-develops, the integrity of Reston as a whole would be maintained.

The specifications for each sub-area would have to be discussed by the Task Force and the county zoning staff. The Reston 2020 Committee will provide its views on these specifications at the appropriate time. At this time, we only wish to recommend that the Task Force include zoning ordinance amendments as part of its charge, and consider the idea of a new single zoning category with sub-units defined for the different parts of Reston. As mentioned in the introduction to this paper, implementation problems occur in part because in Fairfax County, planning and zoning are done at different times and by different staff who face varying market constraints and political pressures. We feel that it is crucial that zoning amendments are considered concurrently with planning amendments.

Conclusion

The Reston 2020 Committee strongly urges the Reston Task Force to consider, discuss, and make recommendations concerning implementation of the Reston Master Plan sections of the County's Comprehensive Plan. This should include

- The phasing for achieving the planning vision and an implementation strategy for realizing that vision during the planning period as well as at the planning horizon;
- A mechanism in which the financing of the implementation strategy can be realized for public infrastructure, including the establishment of a community development authority and new revenues sources which the authority would administer.
- An implementation entity which would guide the phasing of the plan as well as enforce the covenants of RA, TCA, and, if necessary, the future RCIG authority.
- A new zoning category for all of Reston that identifies and specifies zoning restrictions for the suburban, Town Center, and TOD areas.