

Master Planning Council Summary (MPC), July 2009 – July 2010

July 23, 2010

Introduction

The Master Planning Council (MPC) advises the President and Executive Vice President and Chief Operating Officer, through the Architect for the University, on mid-term and long-term physical planning for the University of Virginia. The Council reviews and comments on overall land use planning as to the best utilization of the existing buildings, landscape, and infrastructure; and participates as a general stakeholder in the development of precinct/area plans and general infrastructure plans, including those for circulation and parking.

During the development of the Grounds Plan, from 2005 – 2008, the MPC meetings were focused on the planning process for the campus plan. Since 2008, the MPC meetings address current planning initiatives for the University and cover a broad range of topic areas to keep MPC members apprised of planning efforts.

Master Planning Council includes the members below. Meetings are held quarterly, two in the Spring semester and two in the Fall semester. This summary represents the meetings that were held during the 2009 – 2010 fiscal year.

Committee Membership

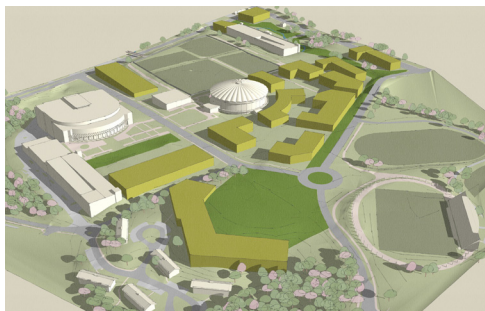
David J. Neuman, Architect for the University; Arthur Garson Jr, Executive Vice President and Provost; L. Cameron Howell, Assistant to the President; Ed Howell, Vice President and CEO, UVa. Health System; Pat Lampkin, Vice President and Chief Student Affairs Officer; Craig K. Littlepage, Director of Athletic Programs; Yoke San L. Reynolds, Vice President and Chief Financial Officer; Colette Sheehy, Vice President for Management & Budget; Kim Tanzer, Dean of the School of Architecture

Ex-officio

Wayne Cilimberg, Director of Planning, Albemarle County; Bill Edgerton, Albemarle County Planning Commission; Genevieve Keller, Chair, Charlottesville Planning Commission; Judy Maretta, Director of Space and Real Estate Management, Julia Monteith, Senior Land Use Planner, Office of the Architect; Donald E. Sundgren, Chief Facilities Officer; Jim Tolbert, Director of NDS, City of Charlottesville; Rebecca White, Director of Parking & Transportation; Ida Lee Wooten, Director of Community Relations;

Student Members

Zachary I. Manis, Graduate Representative; Brandi N. Cox, Undergraduate Representative



Meeting Agenda, September 16, 2009

Introductions by David Neuman

Overview and update on the Precinct Plans by Julia Monteith, Senior Land Use Planner and Jeff Herlitz, UVa Graduate Intern

Introduction

Mr. Neuman discussed the Environmental Footprint Reduction Plan that is currently under development in the Office of the Architect, in association with the President's Committee on Sustainability. This document will set concrete strategies for the University to meet a series of self-imposed

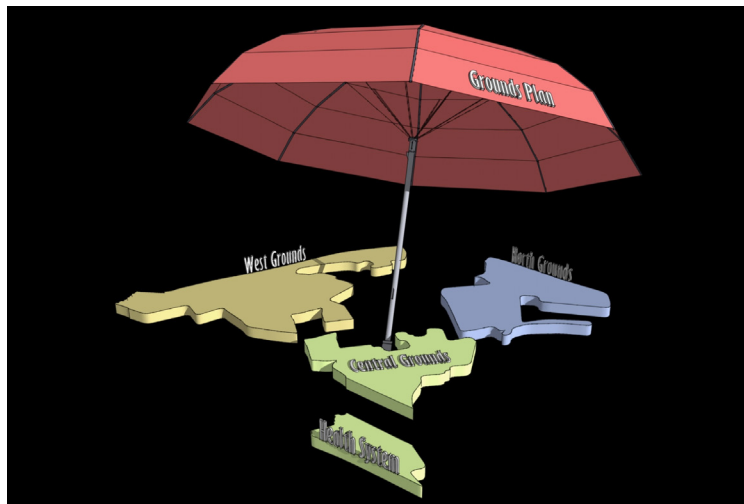
goals related to the use of specific resources on Grounds. The plan will be shared with Board of Visitors in the near future and will be presented to the Master Planning Council at the next meeting.

Precinct Plans

Julia Monteith and Jeff Herlitz

The Office of the Architect provided an overview of the Precinct Plans currently under development. The 2008 Grounds Plan established a planning framework for the University over long range planning horizons of 2015 and 2025. The Plan channels future growth into 'redevelopment zones' that were identified and evaluated during the course of the Plan's development. The zones were designated because they promote infill development and allow the University to grow in a sustainable manner. Also defined in the Grounds Plan are precincts of the University Grounds: West, Central, and North Grounds. The precincts are defined geographically and acknowledge the variation in academic function. Each precinct includes both academic and residential redevelopment zones.

Under the umbrella of the 2008 Grounds Plan, the precinct plans for Central, West and North Grounds provide more detailed physical planning analyses of these areas. In addition to the three precinct plans, the Office of the Architect has developed a Health System Area Plan. This plan was developed for the unique needs of the Health System district, and is separate from the precinct planning effort. In the future, district plans may be developed in a similar fashion as the Health System Area Plan for other areas of the University as needed (i.e. an Athletic District Plan.) The fieldwork for the precinct plans was completed primarily by a series of interns (from the Architecture School Planning department) over the course of the last year and a half. The final intern to work on the field work for the plans, Jeff Herlitz, also began putting the planning reports together into a single document. This included consolidating and standardizing maps and developing 3-D visualizations of redevelopment zones.



The precinct plans apply a form-based planning approach to the redevelopment zones. This is a departure from standard campus planning, where sites are often programmed for a specific use. In the case of form-based planning, conditions of desired building size, form and landscape within the redevelopment zone are established, while use is left open. This approach allows for flexibility of use in the case of changing future academic needs.

For each of the three precincts, a set of six maps has been created to convey the information developed in the precinct planning. The first three of these maps, Natural Systems, Linkages, and Green Space, catalogue existing conditions in each precinct and are the result of extensive fieldwork and GIS analysis. The final three maps, Proposed Green Space, Linkages and Development Volumes, draw on the planning completed and provide guidance for the character of future development within the precincts.



The intent of these maps is to identify key defining characteristics and the quality of space to be retained or achieved. They provide guidance on a number of basic but important matters, such as the location of primary building facades and service areas. They also address how a building should respond to its context in regard to green space, circulation and views. Reinforcing the principles of the Grounds Plan, buildings of historic significance are identified and protected based on their contribution to the campus at-large. The proposed condition maps illustrate the interrelationship

of proposed landscape and circulation initiatives to building development within the precincts.

These maps form the basis of the precinct planning document, along with a set of composite maps that show all three precincts; to provide an overview of the ideas and concepts behind the precinct plans. Following the presentation of the composite maps, each precinct and the Health System district are presented individually and specific opportunities and constraints are provided. The precinct plan includes enhanced visualization for three of the redevelopment zones. Using GIS and Sketchup, the redevelopment zones are visualized in 3-D, showing their existing conditions and the proposed future conditions.

The next step in the precinct planning process is to conduct update meetings for the three precincts with constituents in that area. The North Grounds Precinct Planning update is scheduled for early 2010.

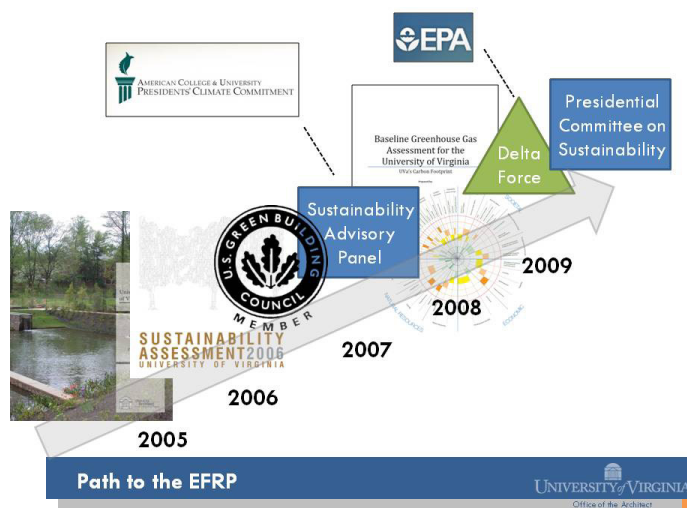
Meeting Agenda November 18, 2009

Introduction by Julia Monteith

Overview of UVa's Environmental Footprint Reduction Plan by Andrew Greene, Sustainability Planner;
UVa Energy & Utilities by Cheryl Gomez, Director of Energy and Utilities

Introduction

Ms. Monteith began the meeting with a short overview and timeline of sustainability initiatives at UVa since 2005. These include the 2006 Sustainability Assessment, the adoption by the BOV in 2007 of a commitment to Leadership in Energy and Environmental Design (LEED) Green Building Rating System certification for all new and renovation building projects, the creation of the Sustainability Advisory Panel, the completion of a greenhouse gas emissions inventory at UVa, the creation of the Presidential Committee on Sustainability and the current development of the Environmental Footprint Reduction Plan. A catalyst for action toward sustainability goals has also come from outside the University through the American College and University Presidents' Climate Commitment and from the EPA.



Environmental Footprint Reduction Plan Andrew Greene

Andrew Greene presented the draft Environmental Footprint Reduction Plan (EFRP) under development by the President's Committee on Sustainability. The plan seeks to establish carbon, water, waste and nitrogen reduction goals for University and outline a path for achieving these goals. The draft EFRP has three main objectives: 1) to show UVa leadership in sustainability 2) to define realistic goals for the University and 3) To detail specific strategies for meeting the defined goals.

In developing the draft EFRP plan, CO2 emissions from University operations have been categorized into one of three scopes. Scope 1 emissions include direct emissions generated by University-owned

equipment and activities. Examples include the heating plant, fleet, University Transit Service, airplane, fertilizer application and refrigerants. Scope 2 emissions are generated by the electricity purchased by the University and Scope 3 emissions are created by UVa sponsored activities such as commuting to and from work and as-yet unquantified activities like air travel, procured goods and services and construction activities.

The Office of Environmental Health and Safety, along with student assistants, catalogued the University's CO2 emissions for years 2000-2008. They found that scope 1 emissions account for 27% and scope 2 accounts for 56% of the University's carbon output. Not all of the scope 3 emissions are known, but they account for at least 17% of the total CO2 emissions of the University. Understanding the source of emissions is important when devising strategies for reducing CO2 output across Grounds. The draft EFRP proposes 3 strategies for reducing GHGs: 1) Minimize and mitigate emission's growth from new construction 2) Catalyze efficiency and conservation efforts and 3) Increase renew-

able energy generation and use. Using a combination of these three strategies, the proposed University's goal will be to reduce carbon emissions to their year 2000 levels by the year 2020. This is 20% less than the 2008 level. This is an ambitious goal, but it is less aggressive than many of our peer institutions. Cornell University has the most ambitious emissions reduction target of any major university in seeking to become carbon neutral by the year 2050.

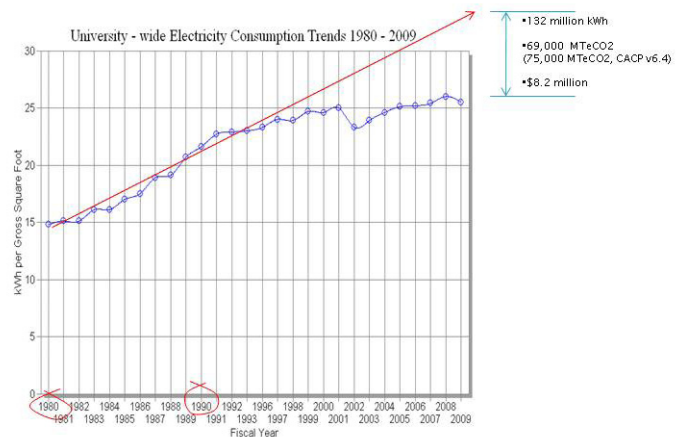
In the discussion following the presentation there were several important points made. The first was an acknowledgement that the goals of the draft EFRP are not always in line with the University's goals for future growth. To bring these two in line, there needs to be a serious discussion about how much we build in the years ahead. Space management of existing resources will play an increasingly important role in accommodating growth. Another important point made was that there has not been a definitive price tag put on the draft EFRP implementation strategy. It is always possible to buy Renewable Energy Certificates (RECs) to offset the University's carbon emissions, but this strategy would require an annual repeated expenditure of funds and have a less beneficial impact than the combination of strategies above. Before any implementation strategy is adopted, a series of cost/benefit analyses need to be completed. It was also noted that the University is already implementing many of the strategies for more energy efficient building design and efficiency improvements.

UVa Energy and Utilities

Cheryl Gomez

The 2008 Grounds Plan identified areas throughout Grounds for targeting infill and redevelopment. Though there are no plans to build-out each of these sites to their maximum potential, the future will undoubtedly see some level of new construction. Each new building leads to additional energy and utility use which makes achieving the goals of the draft EFRP harder. The current energy and utility usage of the University is immense: the University spends roughly \$60 million/year on utilities. This figure includes commodity costs (gas, water, electricity, coal, etc.) and the day to day maintenance of the utility system. Additionally there is deferred maintenance of the utility infrastructure. Currently, there is \$84 to \$93 million in deferred utility maintenance over the next two years, dependent on adequate funding.

Between 1980 and 2000, electricity consumption per square foot at the University was accelerating at a pace of 46% per decade. Since 2000 though, this metric has remained relatively stable. This was in large part due to efforts begun in the late 1990s. These efforts included an aggressive energy conservation program, a central approach to cooling and chilled water, and implementation of building guidelines for new construction. In effect, these efforts were akin to many of the strategies called for in LEED certification. Other utility usage rates have not increased quite as much as electricity since 1980. Heating has remained flat, on a per square foot basis. Water usage peaked in 1999, but has been declining since then and is now 142,800,000 gallons below the peak level. Trash generation has been increasing along with amount recycled, however total waste diverted from landfills is increasing.



University Electricity Consumption Trends 1980 - 2009

UVa Energy and Utilities has undertaken a number of conservation efforts in order to improve energy efficiency. These efforts have included taking a centralized approach to heating, cooling and electrical demand; installing energy management systems and controls; upgrading lighting to more energy efficient types; and installing insulation, steam traps and weather stripping to existing buildings. Energy and Utilities is also engaged in improving communication for efficiency initiatives. They have installed a sustainability kiosk 'dashboard' in Newcomb Hall and are planning a second one in Campbell Hall so occupants can monitor energy consumption.

The draft EFRP sets forth three strategies for reducing the environmental footprint of the University. The theme of conservation being the smartest way to achieve emission reductions right now is reinforced by evaluating the cost/benefit of existing renewable energy technologies. Of the existing renewable technologies solar thermal and deep well geothermal appear to offer the best potential, but an analysis is yet to be completed.

In the discussion that followed the presentation, a number of important questions were asked and interesting points were made. First, it was noted that UVa retro-commissioning does not currently include building envelope analysis; meaning that energy reductions and cost savings could be even greater if this analysis was done. Building envelope analyses are currently done as part of facilities condition inspections and included in the deferred maintenance list of deficiencies that need funding. Next, there was interest in knowing what supply of projects exists for retro-commissioning. Cheryl stated that the University has almost 15 million GSF of opportunities. In addition, changes in technology will lead to the development of more energy efficient products which UVa will want to implement in the future. It was asked if the University needed to make any organizational changes to support initiatives. The organization seems to be in place. In addition, it was stated that the University appeared to be at an inflection point similar to that experienced by recycling in the 1990's. With recycling, people initially resisted recycling materials. Then, the culture changed and people wanted to do more to support recycling. Similarly, few used to be interested in energy conservation and its environmental benefits. Now, everyone wants to do more to reduce. Specifically, communication efforts have been successful and the culture has changed. The amount of engagement has increased immensely, but we need to keep asking questions and engaging the University community about these issues. On a final, related note, it was stated that sustainability should be a top priority of the new President of the University. The new President will need to increase visibility of sustainability and the related efforts across Grounds. Equally important is that the Provost and the Deans of the University need to take ownership and be involved in the evaluation and strategy development of this issue.



February 17, 2010 Meeting Agenda

Summary of North Grounds Planning Update meeting
by David Neuman

IM-Rec Project Feasibility Study by Ed Rivers, Associate Athletics Director for Intramurals, Department of Intramural-Recreational Sports

Summary of North Grounds Planning Update David Neuman

Mr. Neuman provided a short explanation of the precinct update meetings that the Office of the Architect is conducting for the North, West and Central Grounds. These meetings bring together the stakeholders in each precinct to discuss planning and capital projects that

are occurring in their area. The first of these meetings was held in January, 2010 for the North Grounds precinct. Members of the precinct gave short presentations on the capital planning projects for their organizations. Meeting notes and the full presentations for the North Grounds update meeting are available on-line at the Office of the Architect website.

IM-Rec Planning Study

Ed Rivers

Over the last several months, Intramural-Recreational Sports (IRS) has conducted a needs analysis and developed a plan for expansion of their facilities over the next 10 years. This process began with a survey that was sent to students, faculty and staff. The results of the survey and subsequent analysis present several issues. These include determining a feasible location for additional aquatics; finding more parking for faculty/staff patrons; and finding a new location for the Outdoor Rec Center. It was also important to look at how space is used at existing facilities and how that space could be realigned. The study consultants (Cannon Design and Brailsford and Dunlavey) looked at all these issues and presented several development options for IM-Rec. IM-Rec will proceed with four phases which consist of additions and renovations to existing facilities and proposed construction of a new facility within the Health System.

Phase 1 would consist of an addition to the North Grounds Recreation Center that would add a new aquatic facility, multipurpose room and regulation squash courts. The existing racquetball courts would be renovated and two outdoor tennis courts would be constructed. In Phase 2, Slaughter Recreation Center would have a renovation and an addition. A new two-court multipurpose athletic court (MAC) space would be built and fitness space would be increased. Existing

racquetball and squash courts would be renovated and a space would be constructed to house the outdoor recreation programs. The third phase of the development plan will renovate Memorial Gym by repurposing the existing gym into a new fitness, strength and conditioning space. It was noted that the elevated running track will not be renovated, due to its historic value. The basement of Memorial Gym could be retrofit to accommodate the unique needs of power lifters. An additional component would be the construction of new facility in the Health System area. A suitable site is under study between the 11th Street Parking Garage and the CSX railroad tracks. This facility would likely be jointly developed by the Health System and IM-Rec and have a rehabilitation, as well as a health and wellness function. The program of this facility would consist of a lap pool and separate therapy pool on the ground floor and fitness, classroom, wellness and juice bar space on the second level. The third floor would accommodate more fitness space and multi-purpose rooms, while the fourth floor would contain rehab/therapy space as well as a children's therapeutic rooftop garden. There is no set timeline for the development plan, though Mr. Rivers stated that they are eager to start the next phase of planning for the North Grounds facility.



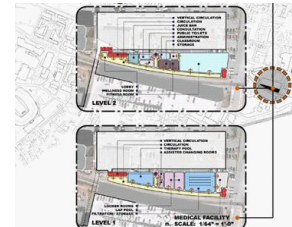
North Grounds



Slaughter Rec Center



Memorial Gym



Health System Facility

Mr. Neuman concluded the meeting by commenting that recreation centers are increasingly seen as “community centers”. The benchmarking that was done by the consultants showed that UVa is lacking social space in its recreation facilities, and there is an opportunity to create community hubs as these facilities are redeveloped. This could be extremely beneficial in North Grounds and in the Health System, as there are few opportunities for interaction among the various constituents of these precincts. The definition of recreation is increasing to include the arts. This places new demands on these facilities, but offers new opportunities for IM-Rec to enrich the experience of its patrons.

May 19, 2010 Meeting Agenda

Summary of the Transportation Demand Management (TDM) Phase II Program by Julia Monteith, Senior Land Use Planner and Rebecca White, Director of Parking and Transportation

Overview of Academical Village Restoration Master Plan/Building Information Model (BIM) by David Neuman, Architect for the University

Summary of 2009-2010 Grounds Improvement Fund (GIF) projects by David Neuman, Architect for the University

Summary of the Transportation Demand Management (TDM) Phase II Program

Julia Monteith, Rebecca White

Julia Monteith and Rebecca White began the meeting with a presentation on the University's recent Transportation Demand Management (TDM) analysis. TDM planning began at the University in 2007 in conjunction with the Grounds Plan, when Phase I of the TDM program was completed by Vanasse Hangen Brustlin (VHB). The Phase 1 program provided a matrix of TDM program components that were, or could be implemented by the University in order to achieve the TDM goals. The matrix included 24 TDM program measures, developed for the unique needs of UVa. The Phase 1 Steering Committee recommended implementation of the plan, and since 2007, 13 of the 24 TDM measures have been implemented.

In 2009, the University initiated Phase II of the TDM program, again using the services of VHB. Phase II was completed in 2010 and expanded on the work completed in Phase I by developing a 5-year implementation plan for the University to meet the aggressive TDM strategy that was adopted in 2007. A cost/benefit approach was taken in developing the 5-year implementation plan by analyzing the effects of future growth at UVa with and without TDM. In addition, the carbon savings of implementing TDM were calculated.

Early in the Phase II planning process, it was determined that the focus should be on faculty and staff commuting to Grounds rather than the student population which lives on or adjacent to Grounds. Through analysis, it was estimated that 95% of students come to Grounds by walking, biking or taking the bus. On Grounds, the student, faculty and staff

population generally circulate by walking, biking or using the bus. Conversely, the majority of faculty and staff, for both the University and the Health System, commute via single occupancy vehicle (SOV) and park in one of the many parking lots or structures on Grounds. With this understanding of commuting patterns, a strategy of focusing on reducing the number of SOVs through car-pooling and ride-sharing was adopted by the Phase II Steering Committee.

In order to rationalize the proposed Phase II TDM strategy, considerable effort was made to characterize the current UVa commuting population, project its growth over the next 10 years, and calculate the added cost to the University of absorbing a growing number of commuters. In addition to adding to the carbon footprint of UVa, greater numbers of SOV commuters would generate the need for additional parking structures at a significant cost to the University, in addition to impacting land use. For this reason, any effort to reduce the demand for parking at UVa will have the effect of delaying the need for additional parking structures, and encourage the highest and best use of University land.

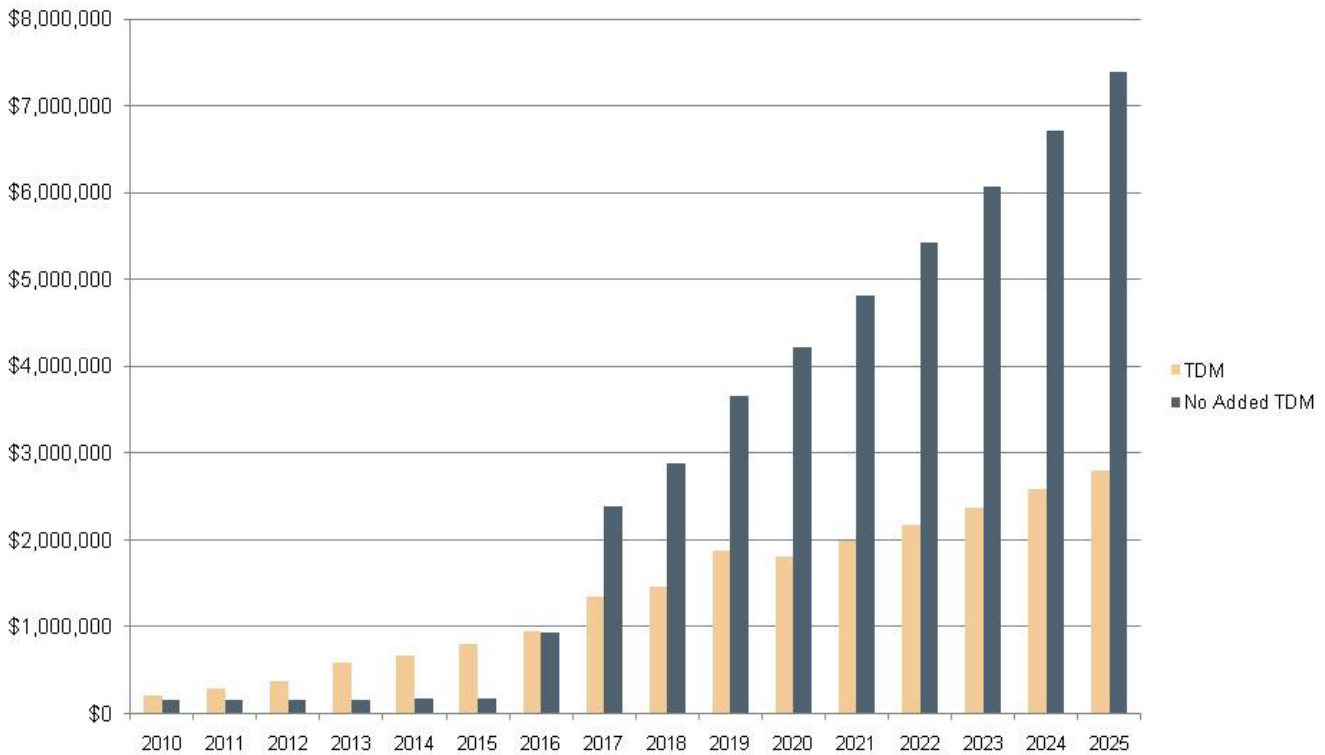
To estimate the costs associated with future parking demand, it was necessary to characterize the present parking situation. There is currently a surplus of parking on Grounds. Part of this surplus is a buffer that allows for UVa's flexibility to manage parking capacity on Grounds in support of event parking, parking availability, and operations. As such, the surplus buffer is not distributed equally across Grounds. North Grounds has a 1,000 space buffer at JPJ/U-Hall to provide a buffer for event parking and to avoid additional transit costs associated with increased use. Central Grounds, which includes the Health System, operates with a 5% surplus buffer (approximately 276 spaces), so that patrons can find a parking space. Similarly, West Grounds also operates with a 5% surplus buffer (121 spaces). Both population growth and Capital projects impact parking. For this reason, the 10-year capital plan was used to estimate the loss (or gain) of parking due to future construction. It was estimated that North Grounds will see the addition of 41 Spaces, Central Grounds will lose 120 Spaces and West Grounds will lose 467 Spaces.

With the baseline calculation of parking established, the next step in the analysis was to estimate the mode-split of commuters to UVa. Using a number of data points that included surveys and employee address geocoding, it was estimated that currently 78.1% drive alone to the University, 10% carpool and 11.9% use an alternative mode of transportation. The Phase II TDM strategy is designed to reduce the percentage of commuters that drive alone to 70.4% in 2015 and to 64% in 2020. The number commuters that carpool will increase to 17.7% in 2015 and 25% in 2020. These mode-split changes equate to an annual reduction of 1.3% among drive alone commuters and an increase of 1.3% per year for car poolers.

The final input in the future parking demand analysis is the overall growth rate of the University. The steady state growth rate that the University has agreed upon with the state of 150 students per year was used to determine the additional faculty and staff that would be employed by the University. It was assumed that 70% of these new employees would be SOV commuters.

The analysis showed that a considerable decline in surplus of parking will occur on Grounds if the TDM program is not implemented. The surplus parking currently in West Grounds will be utilized by 2012 and will be at a deficit of approximately 700 spots by 2020. Similarly, the surplus parking currently in the Central Grounds will be utilized by 2015 and will be at a deficit of approximately 600-700 spots by 2020. Finally, the surplus parking currently in North Grounds will continue, though it will drop to approximately 250 in 2020. Implementing the TDM program will lessen the deficit of parking considerably. West Grounds will have a deficit of less than 600 parking spots, Central Grounds will have a slight surplus of parking and North Grounds will continue to have a surplus of greater than 300 spaces. In total, by 2020, there will be a parking deficit on Grounds of nearly 300 parking spaces with the TDM program, but without TDM, the deficit would be nearly 1,100 spaces.

Annual Expenditures – 10-Year TDM vs. No Additional TDM



Reduction in the parking deficit means that fewer new parking spaces are needed and their need is delayed. This results in considerable cost savings, as shown in the figure above.

To conclude, it was emphasized that the Phase 2 TDM implementation plan is funded for the next five years, but the overall plan is a 10-year process. The projections and analysis show that TDM extends the availability of parking and reduces the amount of inventory shortfalls. Finally, while the TDM implementation is funded for 5 years, the University should be prepared to commit to another 5-years in 2015. In addition to the programs already in place, the next steps for implementation will be a car-pool matching service and the hiring of a full-time UVa transportation demand (TDM) coordinator.



Overview of Academical Village Restoration Master Plan/Building Information Model (BIM) by David Neuman, Office of the Architect

The Office of the Architect and Facilities Management are currently working with TEC Inc. to create a Building Information Model (BIM) tool for the Academical Village. The BIM can be based on a wide variety of input information. In this case, the inputs include detailed plans and elevations, as well as photos and field verification. Currently, TEC has modeled the architectural aspects of one building, Pavilion II, in BIM. It is envisioned that a fully functioning system will contain models for each building in the Academical Village, and be linked to University's GIS system and maintenance management system. The BIM of Pavilion II can be made accessible to the average user through a web application that is password protected and contains 4 levels of data access in order to maintain data integrity. The user of the application can access the BIM data, as well as other compiled materials (such as photos, scanned blueprints and historical documents) using a map interface. The BIM model that was created for Pavilion II was created in the program Revit. A realistic 3D model was achieved using the rendering capabilities of Revit. More than just a pretty picture, each component of the Pavilion (doors, windows, walls, moldings, etc) is recognized in the BIM as having unique attributes. Thus, characteristics of the components can be defined and managed within the BIM. Common characteristics could be age, material, and color.



BIM Rendering of Pavilion II

The next step in the development of the BIM is to model the Mechanical, Electrical and Plumbing (MEP) systems of Pavilion II. The long term goals for the system are 1) Create a fully functioning BIM for the Academical Village that incorporates architectural, MEP, landscape and other historic details. 2) Integrate the BIM with other UVa information systems (GIS, Maintenance Management System and Space Management 3) Develop methods for maintaining the BIM, so that the information remains accurate and up-to-date and 4) Utilize the BIM to further Academic Research and Public Outreach as well as careful upkeep of the World Heritage site.

Summary of 2009-2010 Grounds Improvement Fund (GIF) Projects by David Neuman, Office of the Architect

The Office of the Architect provided an overview of the Ground Improvement Fund (GIF). As background, GIF is financed by a 1.5% assessment to capital projects in the Academic Division, Medical Center and College at Wise not to exceed \$500,000. In the first year GIF apportioned \$1,000,000 for projects including improvements to pedestrian and bicycle facilities, lighting, site furnishing, plantings and public art. Projects are recommended annually by Executive Review Committee for approval by the President. Projects are evaluated according to the following criteria:

- Eliminates or prevents an existing health, environmental or safety hazard
- Satisfies a particular academic or auxiliary program need,
- Reduces operating budget expenses,
- Supports campus planning and sustainability objectives,
- Provides exterior infrastructure improvements; e.g. bicycle/pedestrian facilities, lighting, etc.
- Enhances the landscape and/or aesthetic quality of the public domain, including the addition of public art.

Since 2008, 26 projects have been initiated using GIF. Highlighted projects for 2009-2010 include:

A plaza and full ADA accessibility at the UVa Chapel
Vehicle screening between Hospital Drive and the Long Walk
Fixed bike parking on the lower Lawn in front of New Cabell Hall

Improvements to McIntire Amphitheater, including the construction of a crushed stone walkway at the base of the seating area and improvements to the alley behind the stage
Improvements to the McCormick Road Bus Stop in front of Alderman Library
Construction of a stairway at the Leake Building that improves access to the bus stop on McCormick Road
Improvements to the Hospital Drive turnaround and the Varsity Hall Landscape
Various Pedestrian Safety enhancements including reconfiguration of the crosswalk at Newcomb Road and University Avenue and installation of LED in-ground crosswalk lights on Leonard Sandridge Drive
Lighting replacement in Pavilion Alleys using historically accurate pole and globe light fixture



McIntire Amphitheater



UVa Chapel