West Virginia University

Transportation and Parking Plan

Prepared by the West Virginia University
Transportation and Parking Advisory
Committee

February 27, 2012





February 16, 2012

To Members of the University Community:

In October 2007, West Virginia University adopted a Transportation and Parking Plan that created the first comprehensive vision for improving mobility for our campuses and community. Since that time there have been significant advances in transportation options including PRT improvements, increased Mountain Line and other regional transit system services, and the WE Go! Campaign for Alternative Transportation. Today the results can be seen in historic ridership increases for Mountain Line, completed construction of the Mountaineer Station intermodal transportation center, and record utilization of the Zipcar car sharing service and Zimride online carpool program.

The implementation of the 2007 Transportation and Parking Plan recommendations were monitored by the WVU Transportation and Parking Advisory Committee comprised of administrators, faculty, staff, and students. In order to continue the focus on creating transportation and parking alternatives, during the fall term of 2011 the Advisory Committee undertook an update of the 2007 Plan.

The themes from 2007 still have relevance, particularly coordination with local transportation providers and officials, effective communication with our customers, development of efficient and environmentally friendly transportation services, and promotion of all modes of transportation to get to and around our campuses. The Committee's service has ensured that transportation and parking initiatives are promoted for the benefit of students, employees, and visitors. While their work is impressive, there is much yet to be done. Because of increased growth in our community and due to limits for possible expansion of transportation and parking infrastructure, it is essential that we continue to initiate programs that reduce traffic and meet the mobility needs of everyone who commutes or travels to our historic and scenic University.

My thanks go to the Transportation and Parking Advisory Committee for the work they have done in revising the 2007 Plan, especially to its Chair, Dr. Nancy Lohmann. I also would like to thank those who provided comments to the revised 2012 Plan. As you move around our unique collegiate community, I hope that you will consider ways that you too can promote the Plan for a better WVU and Morgantown.

Sincerely,

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WVU Transportation and Parking Plan

West Virginia University is a large university in a relatively small town. Students, faculty and staff need access to the campus to attend classes and perform their jobs. However, the absence of an extensive transit system means that much of that access is through use of a private automobile and generally confined to a few roads that are undersized for the amount of traffic carried. The congestion and pollution resulting from the use and concentration of so many automobiles as well as the cost to the individual commuter and cost of providing parking creates challenges for the University, its employees and students and the community of Morgantown.

A parking and transportation plan for the University cannot solve all of the problems resulting from the size of WVU and limited community transportation infrastructure. The cooperative working relationship that exists between WVU and local governmental bodies is important in identifying more complete solutions. It is also important that WVU make explicit its assumptions about its institutional role in addressing transportation and parking issues and its plan for dealing with these issues. Considerable progress has been made in addressing transportation and parking issues since the adoption of the 2007 Transportation and Parking Plan. However, there is still much that can be done.

WVU's efforts to improve transportation and parking further the goals of the University's 2020 Strategic Plan. Realization 2 of the Plan refers specifically to parking and transportation: "Improve campus facilities and services, such as ...parking, transportation infrastructure and innovation." (http://strategicplan.wvu.edu/r/download/90223)

Among the more general assumptions that influence a parking and transportation plan are these.

WVU student enrollment will continue to grow. While an increasing number of students will be enrolled in online courses and at off-campus sites, student enrollment on the campuses in Morgantown will continue to place demands on the transportation and parking infrastructure. Some of the new students will be graduate and international students, whose transportation and parking expectations may differ from those of undergraduate students.

WVU's faculty and staff will also increase in number although not at the same rate of growth as students. While 100 new state-funded faculty positions will be filled during the time span of this plan, much of the other faculty and staff growth will be dependent on external funding. A higher growth rate is expected on the Health Sciences Center campus than on other campuses.

The number of visitors to campus will continue to increase, especially as the patient-load at the Health Sciences Center and Ruby Memorial Hospital increases.

Transportation, congestion and parking are components of the quality of life for students, faculty and staff. In addressing these areas, the implications of changes for the quality of life should be considered.

It is the collective responsibility of the WVU community to help mitigate the problems that the campus and community face with traffic congestion. Such mitigation may require that individual faculty, staff and students choose alternative means of transportation to reduce congestion.

The assumptions that guided development of the specific recommendations of the Transportation and Parking Committee follow. They often refer to actions taken since the last plan was adopted in May 2007. It is our sense that much progress has been made in the last five years but still further progress must be made.

Transportation Assumptions and Recommendations

1. WVU supports an integrated multi-modal transportation system where all modes of transportation (transit, motor vehicles, bicycles, and pedestrians) and transportation impacts are considered in campus decision-making.

- a. When planning a change in one mode of transportation, the impact of that change on other modes be specified and reviewed by the appropriate University body prior to making the proposed change.
- b. Whenever possible, modes of transportation should be integrated. Thus, the construction of new roads on campus should include bike lanes, sidewalks, appropriate signage, safe crossings, adequate lighting, etc. that comply with the Manual on Uniform Traffic Control Devices (MUTCD).

- c. Motor vehicle trip generation should be evaluated/assessed in the location of new WVU facilities or the relocation of existing facilities.
- 2. Reliable, effective and user-friendly mass transit systems are required to reduce congestion on campus and in Morgantown and to reduce the demand for parking. Information about transit alternatives needs to be clear and easily available to students, faculty, staff, and the public.

- a. Over the last five years, WVU officials have worked with Mountain Line and other appropriate transit systems to further develop transit schedules that meet the needs of students and employees. We recommend that these collaborative efforts continue.
 - 1) In developing transit schedules, the needs of students and employees who live some distance from campus as well as those who live closer to campus merit consideration. Bus routes that may serve or link with other bus lines serving the needs of those living in Pennsylvania or West Virginia counties around Greater Morgantown have been suggested and should continue to be developed.
 - 2) The communication of ways to access information about existing transit schedules should be further enhanced. For example, transit riders may be unaware that a video board inside a Tower entrance provides information about Mountain Line routes. Bar codes readable by smart phones may be another way to communicate useful information about transit routes. It is important that communication modes stay abreast of those used by students and employees.
 - 3) WVU officials work with Mountain Line, City of Morgantown and other local regulatory entities in the development of bus stop standards that provide ease for boarding and alighting buses while minimizing the impacts to traffic buses may create when loading passengers along bus routes. This may include the construction of bus pull-offs or consolidation of bus stops along heavily travelled streets to minimize dwell times for both buses and surrounding vehicular traffic.
- b. The appropriate WVU officials continue to work with local, state and federal officials to support the funding of transit expansion in the greater Morgantown area.

- c. The Department of Transportation and Parking has developed an increasingly effective marketing capacity since the time of the 2007 Transportation and Parking Plan. Marketing is a recurrent theme in our assumptions and recommendations, and it is important that transportation and parking alternatives continue to be marketed and publicized.
- d. A transportation video developed since the adoption of the last plan be periodically updated and shared with appropriate audiences. The video highlights the different transportation options available on campus. Marketing options should continue to be explored including making the video available through New Student and New Faculty Orientation Programs, the New Student Convocation and other appropriate venues. The video is available online (http://transportation.wvu.edu/wego).
- e. The creation of a transportation and parking website (transportation.wvu.edu) recommended in the 2007 Plan has occurred. The content of the website should be periodically reviewed by the transportation and parking staff and with users to assure that the information is current and meets user needs.
 - An effective job has been done of using social media to provide users with information about new services, schedule changes, etc.
 Transportation and Parking should continue to make use of new forms of media that communicate effectively to users.
- f. Brochures be developed and printed that contain information about transportation and parking options on campus. The brochures could be distributed to students and/or employees at New Student Orientation, Benefits Orientation, New Faculty Orientation, campus fairs, and may be appropriate to e-mail in a pdf form to all students and employees. Departments should be encouraged to distribute the brochure to incoming graduate students who may not attend an orientation session
- g. User-friendly features that be considered include "smart stations" that advise readers of the time before the arrival of the next PRT car or bus, signs noting the time required by bike or foot to reach a destination, etc.
- h. Periodic surveys of user satisfaction with existing transit systems and with transit information dissemination should continue to be conducted as a means of assuring that the transit systems are user-friendly.

- i. Explore the complete integration of transit systems. Integration of transit systems like the Mountain Line with the PRT would allow all travelers to use one card to access both the transit systems. This is currently available for WVU students and employees with Mountain Line but is not available to non-WVU affiliated persons.
- 3. Mass transit systems need to be accessible to disabled students and employees as well as to the able-bodied.

- a. Existing mass transit methods should be periodically reviewed to assure their accessibility, especially regarding disability transportation for employees through the Mountain Line services.
- b. Proposals for additions to existing mass transit be reviewed to assure their accessibility and compliance with Americans with Disabilities Act (ADA) requirements.
- c. The review should include persons with expertise in services to the disabled such as the WVU Office of Disability Services, Occupational and Physical Therapy, etc.
- d. When appropriate, referrals may be made to the Mountain Line, which has arrangements for accessible transportation (see "Accessible Services" link at http://www.busride.org/).
- 4. The PRT is among the mass transit alternatives currently available on the WVU campus and a portion of Morgantown. The PRT should be maintained at a level where it will continue to provide reliable transportation among campuses.

- a. PRT fees increase as needed to support the PRT infrastructure in support of the plan for PRT maintenance and improvement.
- b. The recently developed twenty-year strategic plan for the PRT be periodically updated and shared with the appropriate bodies including the advisory committee whose formation is recommended below (see 6c). The strategic plan should include the planned use of funding and the areas of greatest need.

- c. Grant funds and other external funds should be sought for both maintenance and improvement of the PRT.
- d. The operational hours of the PRT should be reviewed. Such review should include a cost-benefit analysis of extending the daily hours of the PRT as opposed to increasing the frequency with which buses run selected routes. It should examine the need for Sunday hours during the semester. The age of the PRT fleet impacts the ability to add additional operational hours as some down-time is required for repair and maintenance of the fleet.
- e. The PRT review should examine the needs of faculty, staff, graduate students, and community members for PRT services or replacement bus service during holidays and semester breaks when classes may not be in session. As the number of graduate and international students increase, alternative transportation, especially when the PRT is down for holidays or semester breaks, will be increasingly important.
- f. Shuttles from park-and-ride parking lots or the Caperton Trail to PRT stations be explored as a means of reducing the number of cars on campus by providing ease of access to the PRT. The effectiveness and utilization of the shuttle from the Coliseum to the Engineering PRT station should be included in this review. The need for continued shuttle service when classes are not in session but when employees are still working should be included in the review.
- g. Lighting around and leading to PRT stations should be periodically reviewed to assure the safety of those using the PRT. Signage for the PRT and maintenance of the platforms should also be periodically reviewed.
- h. The availability of the PRT through the use of WVU ID cards should continue to be publicized to faculty and to graduate students paying full fees. Many faculty and graduate students may not realize that they may use the PRT without charge.
- Improved coordination with the Mountaineer Card should be explored to assure that nine-month employees and employed students have access to the PRT during the summer.
- 5. Because parts and other components for the PRT are increasingly difficult to locate due to the PRT's age, maintaining the PRT may require the development of alternative guidance mechanisms, new vehicles, and aesthetic improvements.

- a. The PRT staff continues to work with industry representatives and others, including WVU's faculty, staff and students, who may be able to suggest and/or develop the alternatives needed.
- b. Information about the PRT's reliability needs to continue to be frequently shared with the campus community. There is the perception among some that the PRT is not a reliable form of transportation, although the data about the PRT indicates that it is.
 - 1) A monthly report of reliability data available online and through the media may be a way to address this issue.
 - 2) When the PRT does experience breakdowns in service, faster communication with patrons and more rapid arrangements for alternative service is sought by many who use the PRT. Customer service training to assure that communication is clear and polite should be continued as well as the continued use of social media to contact users of the service during downtime events.
- 6. While the PRT student fee should continue to provide significant support for the operations of the PRT, the costs of major upgrades to PRT equipment will need to be supported by grant funds and other sources.

- a. Expansion of the PRT to serve additional areas of the campus and community should be pursued if grant funding is available for such expansion. However, the cost of such expansion is so significant that we do not recommend that it be solely or primarily funded by student fees. The fees that would need to be charged would likely be disproportionate to the benefit that students would receive.
- b. Should funding to support expansion of the PRT be obtained, careful consideration needs to be given to the impact new stations would have on all modes of transportation. The goal of such expansion should be to reduce congestion. That may mean that new stations may have parking garages attached and be located at sites that would result in cars not coming to campus as their drivers use the PRT.

- c. An advisory committee that includes student, faculty and staff users be created for the PRT/Mountain Line. Such a committee could be a subcommittee of the advisory committee described below under recommendation 30. Given the important role that student fees play in the support of the PRT and University support for Mountain Line, it is appropriate that students be provided with an opportunity to offer advice and feedback about services.
- d. There should be continued exploration of a transit pass for community members that would allow them to ride both a Mountain Line bus and the PRT for one monthly fee.
- 7. Increases in student enrollment and the development of park-and-ride options will require supplemental bus transportation.

- a. The creation of park-and-ride lots should be explored by WVU and with the various governmental bodies that have an interest in such lots. The Metropolitan Planning Organization, Mountain Line and the Morgantown Parking Authority have expressed interest in the creation of such lots. WVU's efforts should complement and supplement their activities.
- b. Transportation from and to park-and-ride lots be provided for students and employees. WVU's efforts to provide such transportation should complement and supplement services provided by the Mountain Line.
- c. Transportation from and to park-and-ride lots be frequent enough to meet the needs of students and employees and that the transportation be available at times that correspond to class and work schedules.
- d. The appropriate siting of park-and-ride lots should be carefully studied. The lots need to reflect the commuting patterns of students and employees and provide easy access to transit to campus. It may be that surveys and/or the analysis of possibilities by WVU geography faculty and students could help identify desirable alternatives.
- e. The existing Morgantown Parking Authority spaces for long-term parking should be publicized to serve the needs of residential students who may only need access to a car on weekends. If governmental and private efforts are not sufficient to meet the long-term needs, WVU should investigate the creation of WVU-managed and maintained lots to meet this need.

8. Mass transit systems will continue to play a role in transportation to and among campuses. Additional limited bus routes through and among campuses may be needed to supplement the PRT and existing transportation services.

In support of this assumption, we recommend that:

- a. The appropriate University officials recommend to the Mountain Line the creation of an advisory committee that includes students and employees and current users of the Mountain Line. Since WVU is the Mountain Line's main customer, frequent communication through a more formal mechanism may help the Mountain Line to better meet the needs of those associated with WVU and help WVU constituencies better understand any limitations faced by the Mountain Line.
- b. WVU officials and the advisory committee periodically review the usage of existing routes and suggestions for additional routes.
- c. The costs of WVU-provided transportation services should be compared to those provided by other organizations. There may be times when WVU can provide mass transit services more cheaply.
- 9. Transportation needs to be available to students during the hours that they may reasonably be expected to be involved in University-associated activities. An increase in non-traditional students, growing research programs and other activities may increase off-peak demand. This will require transportation support until the time that evening classes end, the WVU Libraries close and the conclusion of WVUp All Night.

- a. WVU officials work with Mountain Line officials to assure that the Campus PM route meets the needs of the campus. We also recommend that WVU work with the City of Morgantown and local business owners to develop more transportation options for students and residents of Morgantown during late hours of the night.
- b. The PRT remain in operation later into the evening giving students another transportation option in the later evening hours. It may not be economically feasible to keep the PRT functioning until the close of the libraries or WVUp All Night; however, we feel another reliable transportation option needs to be provided

10. WVU needs to work with appropriate governmental bodies to increase the number of bike lanes, sidewalks, etc. that provide alternative means of transportation. WVU also needs to work with the appropriate governmental body to assure the maintenance of sidewalks, including the removal of snow and ice.

In support of this assumption, we recommend that:

- a. Information should be periodically gathered about the number of students and employees who currently use bicycles to commute to and around the campus and the number who may be interested in doing so. For those who currently commute by bike, at least the following information should be gathered.
 - (1) The route(s) used to commute. In particular, information is needed about whether bike commuters using roadways to commute, the Caperton Trail, Decker's Creek Trail, a combination, etc.
 - (2) The months of the year when bicycling is used as a major mode of transportation to the campus.
 - (3) The times of day when bike commuting occurs.
 - (4) The issues or problems faced by the commuter.

The same kinds of information could be gathered for other forms of commuting to campus including walking.

- b. Bike trails begin and end at several accessible locations around Morgantown. Particular attention should be paid to creating accessible locations that will lead between the Caperton Trail, Decker's Creek Trail and campus. "Spokes" need to be established between the trails and campus to encourage their use. Additional transit may be required between those locations and campus to encourage bike use.
 - (1) There have been reports of bikers and pedestrians being verbally accosted on rail trails, which could serve to discourage use of the trails to commute. WVU should work with the appropriate authorities to assure that the trails are patrolled, especially during the months that they may be most used by commuters.

- c. A registration system for bicycles on campus should be explored. Many campuses make use of such a registration system. Such a system helps trace stolen bikes and helps identify the owner of an abandoned bike.
- d. Covered parking and bike lockers be created for bicycles on campus. Among the areas where lockers might be created are residence halls and PRT stations.
- e. Whether a fee is required for the use of bike lockers or other amenities associated with bikes may need to be explored. If it is determined that a fee should be associated with bike registration, it should be minimal.
- f. The creation of covered parking and bike lockers should be encouraged at other locations in the community. WVU may wish to work with the Morgantown Bike Board in encouraging community amenities to facilitate biking.
- g. Buildings constructed or renovated on campus should consider bike lockers or other indoor bike storage as well as outside bike racks.
- h. A fleet of inexpensively rented or free bicycles or mopeds distinguishable by color should be explored for short-term use on campus. The fleet might include electric bicycles. The vehicles need to comply with applicable laws concerning powered vehicles. Such systems have been created at the University of Colorado and University of Montana among other campuses.
- i. Appropriate signage for bicyclists and pedestrians should be provided on campus. The signage should be consistent with respected practices such as the MUTCD standards for signs and those of the West Virginia Department of Transportation. It also may be necessary to create bike dismount zones on campus to reduce conflicts between cyclists and pedestrians.
- j. An education program about safety issues concerning bicyclists, pedestrians and motorists continue to be implemented on campus through the Morgantown Bicycle Board's Confident City Cycling program. WVU should continue to defray the tuition costs for those that successfully complete the program.
- k. WVU officials and local governmental bodies explore regulations and enforcement for snow and ice removal on pedestrian walkways. The

- liability issues associated with the failure to remove snow and ice from public walkways should also be explored.
- WVU officials continue to identify ways to better distinguish campus crosswalks for pedestrians and drivers. This may take the form of improved signage consistent with MUTCD and other accepted traffic engineering treatises. Traffic engineering expertise should be sought as to the best solutions including when the installation of a marked crosswalk at a non-intersecting location is considered.
- m. It is important that all safety regulations be enforced for the safety of all on campus.
- n. WVU officials work with local governments and the Department of Highways to improve crosswalks frequently used by students and employees. This may include the addition of the items identified in l, above. It may also include countdown signals for pedestrians.
- o. WVU officials develop periodic publicity campaigns to highlight available bike paths and pedestrian walkways and encourage their use. The campaigns may include identifying trails on campus maps, recognizing individuals who use these means of commuting, etc.
- 11. WVU needs to assure that there are adequate sidewalks, safe crosswalks, appropriate signage, etc. on campus and that the infrastructure supporting pedestrians is appropriately maintained. When building new roads on campus, bike lanes with appropriate signage should also be provided. WVU also needs to work with appropriate governmental bodies to assure that routes taken to campus support pedestrian safety.

a. Attention initially should be focused on those crosswalks that have been identified as providing the greatest risk.

Several walkability audits have been conducted since the adoption of the last Plan. Audits should continue to be conducted on an annual or semi-annual basis to pinpoint and address areas of concern. An annual report on improvements in walkability should be shared with the Transportation and Parking Advisory Committee.

In deciding how to deal with areas of concern, expertise on campus including that provided by the West Virginia Local Technical Assistance

Program housed in the WVU Department of Civil and Environmental Engineering should be utilized. Such an audit might identify and prioritize existing locations on and around the campus where improvements are needed. Findings and corrective action taken from the walkability audits should be presented to the WVU Transportation and Parking Advisory Committee.

Some of these crosswalks are the primary responsibility of WVU. Other crosswalks are the responsibility of a governmental body, and WVU will need to work with that entity to improve the crosswalks.

- b. The review of crosswalks should assure that appropriate signage has been installed, visual obstacles eliminated or reduced, Public Rights of Way Accessibility Guidelines met, etc. Some of the alternatives that should be considered are identified above in 10i.
- c. WVU's policy should be that no parking lot or structure be built without properly designing and completing sidewalks, stairs, lighting, bike paths and walkways to the buildings/facilities. Pedestrian friendliness should be considered in all parking areas and new construction. Generous sidewalks, safe crosswalks, traffic calming, landscaping, street lamps, bike lanes, facilities, trash receptacles, pull-offs, shelters, benches, and environmental impacts should be planned in the design stages of all new construction or renovations. Smart growth planning and design should be encouraged.
- d. Sidewalks that don't complete the route a pedestrian may wish to travel should be addressed. There have been complaints that some sidewalks end abruptly leaving pedestrians only the option of walking in the roadway. Campus "goat paths" should also be addressed to assure that pedestrians may safely cross the campus.
- e. WVU officials encourage local governmental bodies to adopt requirements like those in 11c for parking lots or structures built.
- f. Previous studies or groups that are vested in walkability and biking should be consulted on an on-going basis and, when appropriate, their efforts be partnered with those of the University. Among those who may be consulted are the West Virginia Department of Transportation Bicycle and Pedestrian Coordinator, Morgantown Pedestrian Safety Board and Morgantown Bicycle Board. The Morgantown Pedestrian Board, for example, has developed a Pedestrian Safety Plan

(http://www.morgantown.com/traffic-docs/Pedestrian_Safety_Board/Plan/MPSB%20Plan%208_13_2010.pdf) It may also be appropriate to hire consultants to assist with improving walkability and biking.

- g. Improvements should be made to assure that campus crosswalks are marked and lighted. National studies indicate that most injuries and fatalities involving pedestrians occur as pedestrians attempt to cross streets and a disproportionate number occur at night. WVU should continue to conduct evening audits to determine where lighting problems exist on campus and in the community.
- h. WVU officials work with appropriate governmental bodies to assure that sidewalks are provided in residential developments targeted toward students, that those sidewalks are maintained, and that they are connected to destinations and pedestrian facilities wherever possible.
- i. WVU officials work with the appropriate governmental body to explore creating crosswalks at mid-block locations on long thoroughfares. Traffic engineering expertise should be sought with regard to such crosswalks.
- j. Improvements of those pathways on campus known as "goat paths" should be explored. The unpaved and unlighted nature of such paths may pose a risk to those using them.
- k. A webpage with possible commuter bike paths has been created by the Bike Morgantown (http://bikemorgantown.com/route_map.php). WVU should examine whether this needs to be supplemented with additional biking or walking paths and linked to the Transportation and Parking site.
- 1. WVU, along with local modal advocacy groups, continue to pursue Department of Transportation and other available grant funding to fund bicycling and walking safety and infrastructure improvements.
- m. Campus administrative responsibility for the construction and maintenance of bike racks and lockers should be clearly assigned. Funding responsibility for sidewalks and any other infrastructure around parking lots and structures should also be clearly assigned.
- n. When planning construction on campus, pedestrian paths around and/or through construction sites should be considered and efforts to accommodate pedestrian safety implemented.

- o. Effective communication needs to be maintained between the Transportation and Parking Office and other campus units and committees, such as Facilities Management and the Capital Planning Committee. The communication should cover campus needs, possible design guidelines and other issues related to improving transportation and parking.
- p. Alternatives for funding transportation and parking needs such as using the proceeds of University bond issues should be explored. Funding improvements by investing in cost saving devices, such as LED lighting in parking lots, should also be explored.
- q. Contractor and University vehicles should not be parked on sidewalks except in emergency situations. Having to traverse around a parked vehicle does not ease walking access to or on campus.

Parking Assumptions and Recommendations

12. There is insufficient land and other resources to meet all the parking needs of WVU students, employees, and campus visitors. While WVU will continue to provide significant parking resources, it cannot provide parking in immediate proximity to the student's classroom or employee's workplace for every student or employee who may request a parking permit or for visitors coming to campus for special events. Given this, WVU's efforts will need to be supplemented by other public and private resources.

- a. Key WVU officials continue the ongoing dialogue with governmental bodies such as the City of Morgantown, Westover, Star City, Monongalia County, and Greater Morgantown Metropolitan Planning Organization to determine how their combined resources can improve the parking in the region.
- b. Key WVU officials continue an on-going dialogue with the Morgantown Chamber of Commerce, local churches, businesses, and nonprofits to determine how their combined resources can improve the parking in the region.

- c. Key WVU officials continue to encourage private developers of housing designed to accommodate WVU students to include transit to campus in the amenities offered by their development as a means of reducing oncampus parking demands. Officials should also encourage governmental entities such as the Monongalia County Commission and Morgantown City Council to require such transit plans as a condition of a building permit.
- 13. WVU's parking plan must be developed in concert with the plans of the Greater Morgantown Metropolitan Planning Organization, Morgantown Parking Authority, City of Morgantown, Department of Highways, and other appropriate governmental bodies.

- a. Key WVU officials should establish an opportunity for dialogue and consultation that includes representatives from the public, private, and nonprofit sectors. The goal of such dialogue would be to discuss solutions to the region's parking issues.
- b. Input from governmental entities be sought before finalizing the revised Transportation and Parking Plan. The goal is to seek "buy-in" from other entities about the assumptions and recommendations of the plan and establish a means by which these entities will assist in the plan's implementation.
- c. WVU employees and students should be informed of regional government proposals that may serve to improve the transportation and parking infrastructure, such as the soon to be updated Long-Range Regional Transportation Plan.
- d. The development of bus and/or High Occupancy Vehicle (HOV) lanes should be encouraged for any roads built or redesigned as a part of the 2030 Plan or any other initiative.
- 14. Increasing population in the Morgantown area, which has not been accompanied by a sufficiently expanded traffic infrastructure, has resulted in increased congestion. To reduce congestion, park and ride systems must be developed and on campus parking rates developed with consideration of market rates so that alternatives are financially attractive to employees and students.

- a. WVU explore replacing additional vehicles in the University fleet with "clean" vehicles as a means of reducing air pollution. This recommendation includes attention to off-road vehicles such as Gator and Cushman utility vehicles.
- b. In encouraging students and employees to make use of alternatives to the single-occupant vehicle, WVU communicate the actual costs associated with some modes of transportation. Actual costs may include the opportunity costs associated with land use, environmental impacts, greenhouse gases produced through the use of automobiles, etc. The American Automobile Association estimates that driving a medium sedan 15,000 miles per year costs \$9,641 annually (http://www.aaapublicaffairs.com/Main/Default.asp?SectionID=&SubCategoryID=9&CategoryID=3&ContentID=23 retrieved on September 1, 2011).
- c. WVU explore alternative ways to support modes of transportation. The Toor and Havlick book, Transportation and Sustainable Campus Communities (Island Press: 2004) suggests a range of approaches that could be taken from a transportation allowance (p. 37) to parking cash out and taxation incentives (p. 38) to the nonmotorized alternatives discussed in Chapter 5.
- d. Alternative class and work schedules designed to reduce congestion at peak hours be should continue to be explored and implemented.
 - (1) WVU has made significant progress in offering a coordinated range of General Education Curriculum courses on the Evansdale campus that allow students living in residence halls to stay on the campus where they live. Sections involving more than 2,700 students each semester were offered during fall and spring semester 2010-11. It has been estimated that this has reduced the vehicle miles traveled by 21,576 weekly and reduced CO₂ emissions by 22,030 pounds per week. These efforts should be continued and expanded.

As additional GEC courses are offered on the Evansdale campus, a balance will need to be struck between the demand for large classrooms for those courses and the demand for disciplines based on the Evansdale campus.

(2) Consider actions that would result in an increased distribution of courses throughout the day. Some campuses limit the number of

courses that a given department may offer during peak class times. For example, a department may be required to offer 40% of its classes outside the peak hours of 10 a.m. to 3 p.m. This reduces the demand for classrooms as well as transportation and parking during the peak hours.

- (3) Increased use of flex schedules including four-day work-weeks for employees may reduce the demand for transportation and parking. Such schedules could also have the advantage of keeping University offices open for more hours each day, which may help meet the needs of non-traditional students.
- (4) Tele-commuting one or more days per week for some employees may also be an appropriate way to reduce transportation and parking demands. Offering additional online courses and online degrees may be a way to reduce student transportation and parking demands.
- 15. WVU and its Parking Management Office must be effective and comprehensive in advising students, staff, faculty, and visitors of off-campus parking alternatives and on-campus parking regulations. This may require WVU to make campus constituents aware of parking alternatives at off-campus locations, such as those provided by the Morgantown Parking Authority.

- a. Online information about parking alternatives and regulations should be accessible to visitors to campus as well as to students, staff and faculty. Information for visitors should be easily accessible and provide the information that may be needed by those not familiar with the campus.
- b. Signs in parking lots and structures identify critical elements for potential parkers, including the following. ¹
 - (1) The kind of permit required to park in the lot/structure. Color-coding could be used to communicate this kind of information.
 - (2) The hours that parking restrictions are in effect.

¹ See West Virginia Code 18B-4-6 (a) (3)

- (3) The availability of temporary permits, if such permits are available.
- (4) The consequences of illegally parking.
- (5) The phone number to call if a car has been towed.
- (6) The phone number of the Parking Management Office.
- (7) In some parking areas, directional signs/information may be needed to direct parkers to the safest route to a building.
- c. Detailed parking regulations should be made more available to those applying for a parking permit or the extension of a permit. Such regulations are now available online. Those obtaining or renewing a permit should be periodically informed of how they may access the parking rules and regulations.
- d. Job applicants should be advised to explore transportation and parking alternatives as a part of the process of considering a position. Such applicants include faculty members and staff members, and those beginning their initial employment with WVU and those transferring from one WVU position to another.
- e. A list of non-WVU parking alternatives and/or links to such alternatives be compiled and made available to visitors, students, staff and faculty. The Transportation and Parking website currently includes information about the Morgantown Parking Authority lots and parking lots maintained by non-profit or private organizations.
- f. The owners of non-WVU lots and structures should be encouraged to post telephone contact numbers to call when a car has been towed. Students have complained about the difficulty of learning how to retrieve vehicle towed from such lots.
- g. The Parking Management Office refer students and employees with disabling conditions who contact them about parking permits to the appropriate office with which such requests should originate.
 - (1) If the disabling condition is a permanent one, the Parking Management Office should provide information about and/or the forms needed to obtain a West Virginia Department of Motor Vehicles Mobility Impaired Placard or Plate. The Parking Office should also provide

- information about the process for obtaining a WVU parking permit in addition to the West Virginia permit.
- (2) If the disabling condition is a temporary one, the Parking Office should refer students to the Office of Disability Services and employees to the appropriate office to obtain information about a temporary campus permit. The Office of Disability Services has a website that provides useful information:

 http://socialjustice.wvu.edu/office_of_disability_services/accessible_parking
- h. A charge for public parking spots for those with ADA permits should be explored. Such spots are those that do not require a permit but are open to any non-employee. Such a charge is permissible and may encourage turnover in parking that will allow more students to use the available space.
- 16. WVU's parking resources will include a mix of permit lots and metered lots. Metered lots will be primarily used to meet the needs of students and visitors to campus.

- a. Policies should be developed to strongly encourage short term utilization of metered parking.
- b. The University investigate and implement new technologies and payment methods for metered parking lots.
- 17. WVU's parking operations must be self-sufficient². Thus, parking fees must generate enough income to pay for the development and maintenance of parking lots and garages, shuttle bus or other transportation associated with parking lots, staff needed to patrol the lots and administer the program, and other costs associated with the parking program.

In support of this assumption, we recommend that:

a. A strategic plan and supporting budget projections continue to be updated annually for transportation and parking services and continue to be shared with the Transportation and Parking Advisory Committee.

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² See WV Code 18B-10-15 (a) (2) and 18B-10-15 (b) (a) and 18B-19-2 (b), (c) & (d)(1).

Greater transparency with regard to revenue and expenditures is a means of explaining parking costs to employees and students.

- (1) It may be appropriate for the budget to reference other sources of support used to fund transportation expenses as opposed to parking and parking-related expenses. For example, the University budget rather than the Parking Management Office budget helps to fund portions of the free use of the Mountain Line by students and employees.
- b. The current reliance on parking citations to support parking operations be examined. Citations currently provide approximately 35% of the Parking Office budget. Such heavy reliance on fines may limit the financial ability to pursue other alternatives, such as gated lots, that may also curb illegal parking.
- c. Devise alternative methods of collecting fines associated with parking citations received by employees, citizens and vendors. At present, the only alternatives are denial of permit renewal for employees who have permits and/or referral to magistrate court. Human Resources should be asked to identify disciplinary action that may be appropriate for employees who refuse to pay citations.

18. WVU's parking fees may be increased periodically to keep pace with rising costs.

- Increases in parking fees should reflect several factors including the following:
 - (1) The income needed to support the self-sufficiency of parking based on the strategic plan and supporting budget documents described above.
 - (2) While rates should not be increased solely because they are lower than the rates charged for other public and private parking, it is appropriate to consider such rates when establishing rates.
 - (3) Grant or other funding received that may assist in reducing rates.
 - (4) The goal of reducing congestion on and around campus by reducing the number of single-occupant cars.
- Notice of planned increases needs to be provided in sufficient time for those currently parking in WVU lots to make other arrangements if they

do not wish to pay a proposed higher rate. For lots that are used by students, notice should be provided before they have left the campus for the semester.

19. It is appropriate to charge differential rates for WVU's parking depending on such features as the quality and nature of the parking lot, the portability of the parking permit, and the closeness of the lot to campus buildings.

- a. Annual parking permit fees reflect the below features:
 - (1) Proximity to campus buildings. The rates for parking that is close to campus buildings may be higher than the rates for parking that is more distant.
 - (2) The nature of the lot. It should cost more to park in a garage than a surface lot and more to park in a paved surface lot than a gravel surface lot.
 - (3) If special features such as gated lots are introduced, the fees for those lots should be higher than those for lots without gates.
 - (4) The turnover goals for metered lots. Many metered lots charge a reduced rate for more limited use to encourage patrons to turnover parking spaces more frequently.
 - (5) Reduced rates for car pool and vanpool members as a means of encouraging carpooling.
- b. The fees charged for park-and-ride lots be the lowest fees charged for any parking. The fees should include the cost of shuttle buses transporting those parking at the lots to campus and/or other income reallocated to support that function.
- c. Explore issuing permits for non-prime hours. Some campuses issue permits at a reduced rate to students and shift workers for late afternoon and evening hours when employees are less likely to be using the permitted lot.
- d. The continued promotion and issuance of car pool and vanpool permits should be explored for all garages and lots. There are several features of car pool permits on other campuses that we recommend be considered.

- (1) Reduced rates to encourage car pools and vanpools. On some campuses, the rates for three- and four-person car pools are less than those charged for two-person car pools.
- (2) Preferential parking spaces for those who car pool or vanpool.
- (3) Institutional division of the cost of a car pool permit among all car pool members so a single member does not need to assume the responsibility of collecting from his/her fellow riders. This may be difficult to do based on current T2 features.
- (4) The ability of a car pool member to opt out of the arrangement during the three to six months after the start of the car pool or vanpool and be issued his/her original permit.
- (5) With the exception of the provision specified in #4, those identified as members in a car pool or vanpool should generally not be allowed to purchase individual permits until the next renewal period.
 - (a) An exception to this may be appropriate if a car pool or vanpool member changes positions within the University and his/her campus changes as a result.
- (6) When monitoring compliance with car pool requirements, consideration should be given to those who may drop off car pool or vanpool members at campus locations other than the lot in which they park.
- (7) WVU should continue to promote car pool and vanpool programs by continuing to make a guaranteed ride home program available.
- e. WVU should continue to promote car pool incentives for students.
- 20. Given the self-sufficient nature of parking, fees must equal or approach the cost of the parking and parking services provided. While some redistribution may be appropriate, those parking in gravel lots, for example, should not pay an inappropriately high fee so as to keep costs artificially low for those parking in garages.

- a. Parking fees for similar quality parking should be roughly comparable. Thus, all those parking in garages should pay roughly comparable rates.
- b. Parking should be seen as a common good. Thus, as the assumption indicates, some redistribution is possible to serve the common good.
- 21. WVU needs to comply with applicable federal, state, county and city laws and regulations in developing parking, including the Americans with Disabilities Act and WVU's Stormwater Management Program.

- a. WVU officials conduct a periodic review of compliance with the applicable regulations that deal with parking.
- b. The requirements of the Stormwater Management Program, which are regulated by the West Virginia Department of Environmental Protection under the Municipal Separate Storm Sewer System, should be considered both when constructing new parking areas and renovating existing ones.
- 22. To encourage the use of alternative transportation means, adequate parking spaces and appropriate amenities should be made available for motorcycles, motorbikes, motor scooters, and bicycles.

- a. Parking personnel inventory all parking lots on campus and identify useable space in each lot for non-passenger car spaces. These inventories should be reviewed and plotted periodically to ensure that needs are met. These spaces may need to be in highly visible locations to deter potential theft and vandalism.
- b. All non-passenger vehicles should be registered with the Parking Management Office via an online web site. Owner and vehicle information should be recorded to include make, model, and serial number of any non-passenger vehicle being used on campus. Registrations could last one academic year.
- c. Racks or some other device to which a bicycle, motor bike, or scooter can be secured should be provided in each parking area identified and approved for such parking by the Parking Management Office. Where possible, the areas should provide overhead cover.

- d. Issuing permits for motorized alternatives be explored. Some campuses require a permit for motorcycles, motorbikes and motor scooters. Other campuses issue a permit at a reduced price to those who use this means of transportation in addition to having a permit for a car.
- 23. Students and their parents will continue to be educated about the challenge of having cars on campus. Efforts will continue to develop transportation alternatives that make cars less necessary for students, faculty and staff.

- a. All University tours for prospective students include the information about transportation and parking and the availability of alternative means of transportation to the single-occupant automobile.
- b. A letter should be sent to parents prior to the start of fall semester each year highlighting the transit and other transportation alternatives available and discouraging students from bringing cars to campus.
- c. The Parents' Club Newsletter should be encouraged to include an annual article about transportation and parking. While the focus may change from year to year, it would be desirable for the article to emphasize transportation alternatives (mass transit, bikes, etc.) as a means of discouraging students from bringing cars to campus.
- d. Content on parking and the consequences of illegally parking should be considered for inclusion in activities such as New Student Orientation, Honors Orientation, residence hall sessions, as well as any new employee orientation. This content could be a part of or parallel that recommended under 2d and 2f in Transportation (see above).
- e. The Off-Campus Housing Office be provided with materials for distribution to students through the Off-Campus Housing Fair and other means that encourage students to consider access to campus when renting off-campus housing.
- f. There should be publicity about students who do not drive a singleoccupied car to campus as a means of highlighting alternative transportation and recognizing those students who make use of such alternatives.
- 24. Existing parking spaces eliminated to serve another purpose, such as construction sites for new buildings, must be replaced at no cost to the

parking program. The funding for new buildings should generally include the funding needed to construct parking for the building occupants and visitors. When a parking lot is created where another function or service existed, parking fees may be required to assist with the costs of creating an alternative location for that service.

In support of this assumption, we recommend that:

- a. In approving the construction site for a new building, the impact of that site on parking be explicitly reviewed. If the site will eliminate existing parking, the cost of replacing that parking should generally be included in the construction budget.
- b. When a new building is built on a site that does not presently provide parking, the parking for the occupants of that building should be explicitly considered. Construction funds may need to include the provision of parking.
- c. When an existing structure is demolished to create a parking lot or structure, the use of parking fees to pay a portion or all of relocation costs for that function or service should be considered. We anticipate that there will be a few instances when existing structures that need to be replaced are demolished to create parking.
- 25. Contractors or others working on University property should be required to make arrangements for their employees to park at an off-campus site through the contractual agreements WVU makes with them. While portions of parking lots may need to be temporarily taken out of service as construction staging areas, construction employees should not park in campus spaces denying access to those spaces to University employees and students.

- a. WVU require that bid documents for projects clearly indicate:
 - (1) Parking for contractor employees is the responsibility of the contractor.
 - (2) Contractor employees cannot park in permit only parking spaces.
 - (3) With construction projects in high-density areas of the campus, contractors should be required to arrange for off-site parking with employees bussed to campus.

- (4) Contractors should be prohibited (discouraged) from allowing their employees from using metered parking when doing contract work on campus.
- 26. When auxiliary units make use of University parking spaces, there should be appropriate reimbursement of the costs associated with such use.
 - a. Explore the need for events including profit-generating events such as Intercollegiate Athletics or entertainment events to reimburse some of the infrastructure costs associated with the use of parking lots and structures. The lots and structures have generally been constructed with the parking permit income generated. It seems appropriate that others making use of the lots who do not hold permits in them contribute to infrastructure support.
 - (1) Such reimbursement could occur by charging a fee for those who park in the lot. The income from that fee should generally be provided to the Parking Office.
 - (2) Reimbursement could occur by charging a surcharge on ticket prices with the income generated provided to the Parking Office.
 - (3) Reimbursement could occur through negotiated agreements that support a portion of the infrastructure costs for utilized lots. Such agreements should include the escalation of fees to reflect increases in permit costs.
 - (4) Parking charges that do more than only reimburse the infrastructure costs but also reflect market rates should be considered.
 - b. There needs to be close coordination and adequate notification when parking areas usually used by students and employees are closed because of a special event. In particular, the closing of the unpaid lot at the Coliseum and/or other permitted lots need to be preceded by sufficient notification so that those usually using them may make other arrangements.
 - c. The impact of the use of parking spaces during regular working hours should be considered in agreeing to requests from auxiliary or other units for temporary on-campus parking.

27. Other University units making use of parking for such activities as conferences, workshops, or for visitors to the unit should pay the Parking Management Office for the cost of parking for the visitors. Visitors who park in permit lots may displace the permit holders who have paid to park in that lot. If visitors do not pay a fee that represents a share in the costs of lot maintenance, all maintenance costs are transferred to the permit-holder.

In support of this recommendation, we recommend that:

- a. Arrangements should be made with units that host visitors, workshops and/or conferences to support the costs of parking used by the visitors. This may include a fee paid by the unit to Parking Management for the space utilized.
- b. Explore the use of metered visitor spaces by selected building.
- c. Explore the possibility of institutional payment to Parking Management to support visitor parking in lieu of or in addition to unit or visitor payment.
- d. Units should be encouraged to consider bus transportation from off-site parking locations to campus for workshops and conferences so as to minimize on-campus parking demand.
- e. Permit holders should be advised of the unavailability of parking in their usual lot because of visitor use as early as possible and alternative arrangements suggested.
- 28. State-owned licensed and unlicensed vehicles frequently park in permitted lots but do not pay for parking permits. As with campus visitors, this may mean that permit-holders are displaced from the lot that they have paid to park in.
 - a. Arrangements should be made for University-owned state vehicles to obtain permits and/or to pay for permitted spots designated for a state vehicle.
- 29. Penalties for repeated violations of parking regulations are a means of deterring such violations. Sometimes parking tickets received for illegal parking in permitted lots are treated by repeat violators as the equivalent of a parking fee rather than a deterrent to illegal parking. Towing for a specified number of unpaid parking tickets should be used as an additional deterrent for those who park illegally in permit lots. Should this prove to be an insufficient deterrent, towing for any tickets, whether

paid or unpaid, may need to be introduced at some future time. Additionally, while current state statutes prohibit booting as an enforcement option for WVU, efforts should be taken to provide statutory authority that would allow booting for enforcement purposes.

- a. Up-to-date and easy to read parking maps, hours, rules and regulations should be widely disseminated and readily available throughout the campus.
- b. Towing not occur until an offender has accumulated five or more unpaid citations for illegally parking in a permit lot. For metered lots, towing will occur after 10 or more unpaid citations have been accumulated.
- c. When the fifth unpaid citation in a permit lot and tenth citation in a metered lot on a particular vehicle is warranted, the citation should call the offender's attention to the possibility of towing.
- d. A "Will Tow" list be generated and posted at least weekly on the parking website so that offenders can determine if they are eligible for vehicle towing. To the extent possible, the list should be updated daily. Failure to post the license number of a vehicle eligible for towing does not mean that the vehicle may not be towed so long as good faith efforts have been made to update the list.
- e. To the extent possible, special notification of towing eligibility should be given to repeat offenders within the University community through means like an automated e-mail alert whenever a vehicle becomes towing eligible. Failure to provide such notification does not mean that a vehicle may not be towed since it is the vehicle owner's/driver's responsibility to be aware of and pay the citations received.
- f. To retrieve a towed vehicle, violators must pay or make arrangements to pay all outstanding citations and costs incurred with the towing of the vehicle.
- g. Pursue legislative authority to use booting in advance of towing so that another <u>enforcement</u> alternative will be available.
- h. Progressive discipline or other appropriate methods be used when an employee has a practice of repeatedly not paying parking citations. Some employees have parking citations ranging from multiple hundreds of

dollars to more than a thousand dollars. Discipline is appropriate for employees who do not behave as responsible members of the University community.

30. Parking fines will continue to be the primary deterrent for illegal parking in metered lots.

In support of this assumption, we recommend that:

- a. Up-to-date and easy to read parking maps, hours, rules and regulations should be widely disseminated and readily available throughout the campus.
- b. Explore the conversion of permit lots used largely by students to metered lots while considering the needs of both undergraduate and graduate students. Metered lots may most efficiently utilize the parking space available.
- 31. Parking lots and garages should be designed to fit with the surrounding environment and include plantings and other landscaping features that add to the attractiveness of the campus. Parking lots and garages also need to provide sufficient lighting to assure safety and security and sidewalks to provide safe access.

- a. The impact that parking lot and structure entrances and exits may have on pedestrians, surrounding residential areas and traffic patterns be considered when siting lots and structures.
- b. Plantings and other landscaping features should be added for the attractiveness of existing and new parking lots and structures. The costs of new lots and structures should include funding for landscaping features. It may be appropriate to make use of the University's landscape architecture program in designing enhanced landscaping.
- c. In constructing new lots and renovation existing lots, storm water management should be considered. This may result in the permeable surfaces, rain gardens and buried storm water detention devices among other mechanisms. (See also 21b).
- d. There is adequate lighting in and around parking lots and garages and on the access paths and roads to the lots and garages.

- e. Crosswalks and sidewalks leading to parking lots and structures protect the safety of the pedestrians who may use them. Among other things, this should include assuring that there is appropriate snow and ice removal, adequate lighting to emphasize visibility and security, and proper crosswalk street markings, curb cuts, and signage to promote pedestrian safety.
- f. The use of video camera surveillance, emergency phones and other technology should be explored as a means of increasing the security in and around parking lots and structures.
- g. Given the topography of the campus, double deck parking may be feasible in some parking lots. Such arrangements could expand the inventory of available parking spots.

Other related matters

The call for campus and community comments on the draft plan generated many suggestions that are too specific for inclusion. However, the Transportation and Planning Advisory Committee wants to assure that some of those suggestions are periodically considered when the Plan is adopted and implemented.

- 1. It was suggested that a qualitative return on investment standard be used in determining the priority of projects to be addressed. The use of such a systematic approach may be of help.
- 2. Several suggestions were made for specific improvements to areas used by bikers and pedestrians. A copy of the comments received has been shared with the Department of Transportation and Parking. We suggest those suggestions be reviewed when new projects are under consideration.

Recommendations adopted by the Transportation and Parking Advisory Committee at its meeting of December 2, 2011 and presented to Vice President Narvel G. Weese, Jr. on December 15, 2011. Final review and forwarded recommendation by the Transportation and Parking Advisory Committee was made on February 27, 2012.

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