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Office of the President

TO MEMBERS OF THE COMMITTEE ON GROUNDS AND BUILDINGS

DISCUSSION ITEM

For the Meeting of January 17, 2006

ANNUAL REPORT ON GREEN BUILDING, CLEAN ENERGY, AND SUSTAINABLE TRANSPORTATION POLICY

EXECUTIVE SUMMARY

Annual Report:	Green Building, Clean Energy Policy, and Sustainable Transportation Policy
Previous Actions:	**December 2004** – Presidential Policy on Green Building Design and Clean Energy Standards (the Policy). **September 2005** – The Regents authorized the President to incorporate sustainable transportation practices into the existing Green Building and Clean Energy Policy.
Project Summary:	• This is the second annual report on successful implementation of the Green Building and Clean Energy Policy. • Highlights of 2005 achievements include becoming one of the largest purchasers of renewable energy in the country, receiving another large grant to assist implementation work, significant progress on instituting campus Green Building Baselines, and continued recognition through awards and media coverage. • At the direction of The Regents, the President has established the Sustainable Transportation Policy and Policy Guidelines found in Attachment I.

BACKGROUND

At the Committee's December 2002 meeting, The Regents requested that the President undertake a feasibility study for the adoption of a Green Building Policy and Clean Energy Standard for all new capital projects. In July 2003, The Regents approved "as University policy for all capital projects, the principles of energy efficiency and sustainability in the planning, financing, design, construction, renewal, maintenance, operation, space management, facilities utilization, decommissioning of facilities and infrastructure to the fullest extent possible consistent with budgetary constraints, and regulatory and programmatic requirements." In June 2004, the President formally issued the *Presidential Policy on Green Building Design and Clean Energy Standards* (the Policy).

The development of the Policy was informed by a committee made up of state government officials from the California Energy Commission and the State Consumer Services Agency, faculty members with expertise in these disciplines, and administrators from each of the ten campuses and the Office of the President. The committee met at five separate, all-day meetings, with numerous subgroups and ad hoc meetings to complete the work within a five-month time frame. In late February 2003, student representatives from each campus that had passed a resolution requesting that the University develop policies for integrating sustainability into its energy purchasing practices and building guidelines met with the committee to share information and provide input about the draft sustainability policy.

The final feasibility studies and policy recommendations of the committee were presented to the Committee on Grounds and Buildings in June 2003 and to the full Board in July 2003, where they were passed unanimously.

One of the policy items (II.e.) dealt with energy saving in fossil fuel use related to transportation service. At the September 19, 2005, meeting of the Committee on Grounds and Buildings, The Regents directed that this policy be expanded and authorized the President to adopt the policy guidelines to include sustainable transportation efforts throughout the University of California. The Policy and Policy Guidelines governing the Green Building Policy and Clean Energy Standards have been amended to incorporate the transportation elements in draft form, as displayed in Attachment I. The President, under delegated authority, will issue these amendments in the next several weeks.

The second Annual Report describes the progress achieved toward implementation of the Policy in calendar year 2005. Detailed implementation progress for each item in the Policy is summarized in Attachment II. The following section highlights the major implementation achievements of the past year.

HIGHLIGHTS OF 2005 ACCOMPLISHMENTS

Campus Green Building Baselines Approved

Using numerous sources and criteria, campus Green Building Baselines have been developed to streamline the administration of the green building certification process, while being primarily based on the U.S. Green Building Council's standards. The University enhanced the standards to address the unique character of its campus communities. These baselines allow each campus the opportunity to recognize the past efforts towards sustainable development such as storm water drainage systems, energy generation efforts, and sustainable land use planning, as well as commit to future efforts for every new construction project. All baselines include the mandatory energy efficiency requirements which are a unique feature of the UC Green Building Policy Guidelines.

Green Building Baselines for six campuses have been approved by the Office of the President. Baseline point totals for each campus range from 20 to 33. In addition to the mandatory energy efficiency measures, the Policy mandates that individual projects be designed and built to a minimum standard equivalent to a LEED™ "Certified" rating, meaning a minimum of 26 points. The Davis campus provided an outstanding example of commitment to green design by establishing a campus baseline of 33 points, which is equivalent to a LEED™ "Silver" rating.

Attachment III summarizes the frequency with which campuses committed to particular green building strategies. In addition to complying with all prerequisites and other UC mandatory measures, 100 percent of the campuses committed to points for optimizing energy use, diversion of 50 percent of construction waste, use of low-emitting materials and inclusion of a LEED™ accredited professional on the design team. In addition, 89 percent committed to the point for thermal comfort (ASHRAE 55-1992) and 78 percent committed to points for reduced site disturbance, light pollution reduction, water-efficient landscaping, and 20 percent use of materials manufactured regionally. Campuses also committed to design innovation credits including Energy Supply Efficiency (UCLA, UCDMC), Waste Heat Recovery (UCDMC), Campus Sustainability Assessment (UCB, UCI), and an Energy Load Leveling Program (UCI).

The Merced, Santa Barbara, and Irvine campuses did not develop Green Building Baselines because they have committed to the policy option of submitting all projects to the US Green Building Council (USGBC) for third-party LEED™ certification.

Green Building Projects

Projects approved for inclusion in the University's capital improvement program beginning July 1, 2004, must meet the Policy requirements. The Policy requirements apply to 25 projects ranging in cost from $5 million to over $100 million and building types including laboratories, classrooms, housing, student centers, research buildings, and a childcare center. Of these 25 projects, one has a proposed LEED™ or equivalent rating of gold, nine of silver, and the remaining fifteen will be at the certified level.

In addition, 53 projects with budgets approved before 2004-05 have incorporated sustainable features which meet many of the requirements of the new policy. Attachment IV lists University building projects, both those with budget approval pre-policy and post-policy, and their green building targets.

Savings by Design Program

All projects implemented under the Policy are required to register with the Savings by Design Program. This program, offered by California's four investor-owned utility companies, provides design assistance, energy analysis, and financial incentives for individual building projects. Financial incentives can be used to offset increased costs associated with more energy efficient buildings. To date, 98 University projects totaling 11.9 million square feet of building space have been registered with the program. By the time these projects are completed, the program is anticipated to provide $4.1 million in incentive payments to these projects and allow the University to avoid an additional $5 million per year in energy costs.

Energy Efficiency in New and Existing Buildings

The partnership program with the investor-owned utilities and the California State University which provided $15 million towards energy efficiency projects in both systems was completed in December 2005. The program funded over $6 million worth of energy retrofits and commissioning projects at all UC campuses. This is projected to result in an annual systemwide energy cost avoidance of $1.8 million. In addition to funding energy efficiency retrofits, the program also provided extensive training to UC staff in project management, facilities, and other related campus units (see *Training* below). Due to the success of this program, a new three-year joint program with the CSU and the utilities has been approved that will provide an additional $38 million in project and program funding. This new program should add to the $1.8 million in annual cost avoidance from the 2004-2005 projects by a projected $5.8 million, for a total of at least $7.6 million in annual cost savings by 2008.

A second grant from the California Public Utilities Commission funded the nonprofit organization Alliance to Save Energy to pilot student energy conservation programs on the Berkeley, Santa Barbara, San Diego, and Irvine campuses. The "Green Campus" program provides opportunities for students to get directly involved in saving energy on campuses through programs such as light bulb exchanges and residence hall energy competitions.

Finally, UC and CSU are midway through a third program funded by the California Energy Commission to install 13 pilot projects demonstrating new emerging energy efficiency technologies. The data from these pilot projects will be used to help evaluate and prioritize future UC investments in cost effective, cutting-edge energy technologies.

Onsite Generation and Procurement of Renewable Energy

While lowering the University's energy consumption, the University has also made progress in greening the electricity that it still consumes. The share of certified renewable energy in our direct access portfolio increased from zero percent two years ago to 16 percent today. According to the Environmental Protection Agency's Green Power Partnership, UC's combined purchase with the CSU ranks as the eighth largest institutional purchase of green power in the country.

Only slight progress has been made in the past year in the area of on-site renewable energy generation, as the cost of solar generating equipment remains high. In late 2005, federal energy legislation passed which offers tax incentives for private investment in solar photovoltaics. The University has begun work on a program to bring third-party owned and operated solar projects to the campuses. This is expected to improve the near term progress in meeting the ten megawatts of campus-based renewable energy generation required by the Policy.

Staff, Faculty, and Student Participation in Sustainability Activities

To provide coordinated sustainability efforts that include all campus stakeholders, chancellor- or vice chancellor-level advisory committees on sustainability have been or are being established on all ten campuses. These committees will meet regularly and provide for organized involvement of staff, faculty, and students from all departments in pursuing campus sustainability initiatives. Taking the Berkeley campus as an example, some of the committee's 2005 activities included organizing an annual Chancellor's Sustainability Summit, presenting the Chancellor's Sustainability Awards to exemplary staff, faculty, and students, creating a Chancellor's Green Development Fund to provide small grants for innovative projects to improve campus sustainability, and publishing the most comprehensive Campus Sustainability Assessment of any university in the country. All of these were achieved through collaboration among faculty, staff, and students and connected campus operations to academic curriculum and research.

Faculty and students have also supported implementation of the Policy through other ties to the University's educational mission. Faculty involved in the Sustainability Committee at the Berkeley campus have launched the nation's first Green Building Research Center (http://greenbuildings.berkeley.edu/). Students also created their own course called the "Education for Sustainable Living Program" that reaches more than 400 students each spring on five campuses to expose them to leading thinkers on sustainable living topics and to organize active involvement in improving campus sustainability practices. This student-run course was recently chosen first from among student initiatives around the world for an international prize for "student entrepreneurship in higher education" from the Oikos Foundation in Switzerland.

Partnerships with Government and Nonprofit Organizations

Partnerships with government agencies and nonprofit organizations continue to leverage additional resources to assist the University in implementing the Policy. The Alameda County Waste Management Authority provided a grant to conduct a pilot "LEED for Existing Buildings" project, contributing to the development of guidelines for sustainable operations and maintenance practices. The San Francisco Environment Department and the Environmental

Protection Agency are providing technical and other assistance for the University's sustainability procurement initiatives. The University continues to work with the U.S. Green Building Council to assist UC campuses going through the LEED certification process and to comment on green building standards under development. The University also actively participates in the California State Green Building Task Force, the California State Energy Policy Advisory Committee, and the California State Environmentally Preferable Purchasing Task Force.

Training

The University continues to promote effective implementation of the Policy through training, with the following successful programs as examples. The fourth annual UC Sustainability Conference, hosted by UC Santa Cruz in June 2005, attracted over 400 attendees from the UC and CSU systems. This conference highlighted and shared best practices in energy efficiency, green buildings, and sustainability on UC and CSU campuses. The first annual Higher Education Energy Efficiency Partnership Best Practice Awards were presented to exemplary UC and CSU energy efficient projects at a special ceremony during the conference.

The UC Project Management Institute also continued its ambitious series of trainings sponsored by the CPUC grant mentioned above. Since July 2004, some 780 staff participants attended more than 51 training offerings. Most staff members attended multiple trainings, which also included CSU and community college participants. The training program provided energy efficiency and green building courses for the operation and maintenance of existing buildings as well as for the design, construction, and commissioning of new buildings.

Procurement

The University is committed to incorporating sustainable purchasing practices in the development of its systemwide bid proposals and contracts. In the past year, the University's strategic sourcing initiative has required all bidders to submit information regarding their company's sustainable business practices in addition to submitting information regarding their product offerings in recycled goods, re-manufactured goods, post-consumer content products, and energy efficient products. The Strategic Sourcing Office has worked closely with Facilities Administration, the Sustainability Staff group, and the California Student Sustainability Coalition and is committed to including green purchasing representation on each systemwide commodity team.

Some recent successes include an increase in recycled content office product purchases from 11 percent in FY 2004-2005 to 14 percent in the first quarter of FY 2005-2006. Strategic Sourcing has instituted a requirement that all new equipment purchases through the new office equipment contracts awarded for copiers, printers, and fax machines be ENERGY-STAR© models. In addition, in association with the bottled water contract award, replacement of bottled water dispensers with ENERGY-STAR© models was a requirement for bidders to participate in the systemwide contract. These efforts have been assisted by the hiring at the Santa Barbara campus of a Sustainable Procurement Coordinator who collaborates on systemwide commodity teams and helped develop a training module on sustainable purchasing practices.

Sustainable Transportation Practices

The sustainable transportation practices incorporated into the *Presidential Policy and Policy Guidelines,* found in Attachment I, were drafted in coordination with campus administration, faculty, students (MoveUC and the California Student Sustainability Coalition), Office of the President staff, and other stakeholders.

The Sustainable Transportation Policy Initiative was established in response to the challenge by the California Student Sustainability Coalition and former Student Regent Murray. The goal was to deliver for Regents' approval a sustainable transportation policy setting out Presidential Policy Guidelines to advance sustainable transportation practices at UC campuses.

The Policy Guidelines outline goals on metrics and monitoring of greenhouse gas emissions, average daily trips to and from campuses, and increasing transportation demand management options. Transportation demand management programs have improved the sustainability of transportation practices on University campuses. The campuses use an array of these programs, and each serves to improve specific aspects of a transportation infrastructure. The effectiveness of each program depends on the unique environment of the campus on which it is implemented.

External Recognition for UC

One measure of the success of the policy is the continuing public recognition which The Regents and the University receive for green building, clean energy, and other sustainability efforts. The Berkeley campus was selected as one of three recipients in the "best overall" category of the 2005 Flex Your Power Awards for energy efficiency in the State of California. The Los Angeles campus was also given honorable mention for its demand response program and the San Diego campus given honorable mention for "education and leadership" in energy efficiency. Newspaper and magazine articles on the growing green building and campus sustainability movements have chronicled the University's leadership in these areas, especially at the new Merced campus. University staff continue to be invited to give keynote speeches and other presentations on the Policy at regional and national conferences.

(Attachments)

ATTACHMENT I

UNIVERSITY OF CALIFORNIA POLICY ON GREEN BUILDING DESIGN, CLEAN ENERGY STANDARDS, AND SUSTAINABLE TRANSPORTATION PRACTICES

Resource sustainability is critically important to the University of California, the State of California, and the nation. Efficient energy use is central to this objective, and renewable energy and energy conservation efforts provide a means to save money, foster environmental awareness, reduce the environmental consequences of University activities, and provide educational leadership for the 21st century.

The University is committed to stewardship of the environment and to reducing the University's dependence on non-renewable energy sources. With this commitment in mind, initiatives and best practices will be reviewed regularly and successes shared by augmenting the existing University guidelines. These guidelines recommend that University operations:

- Incorporate the principles of energy efficiency and sustainability in all capital projects, within budgetary constraints and programmatic requirements.

- Minimize the use of non-renewable energy sources on behalf of the University's built environment by creating a portfolio approach to energy use, including the use of local renewable energy and purchase of green power from the grid.

- Incorporate alternative means of transportation to, from, and within the campus to improve the quality of life on campus and in the surrounding community. The campuses will continue their strong commitment to provide affordable on-campus housing, in order to reduce the volume of commutes to and from campus. These housing goals are detailed in the campuses' Long Range Development Plans.

The Office of the President will report annually to The Regents on the Policy's impact on capital and operating costs, energy use, building design, and sustainable transportation practices.

UNIVERSITY OF CALIFORNIA POLICY GUIDELINES FOR THE GREEN BUILDING DESIGN, CLEAN ENERGY STANDARDS, AND SUSTAINABLE TRANSPORTATION PRACTICES

Resource sustainability is critically important to the University of California, the State of California, and the nation. Efficient energy use is central to this objective, and renewable energy and energy conservation projects provide a means to stabilize campus budgets, increase environmental awareness, reduce the environmental consequences of University activities, and provide educational leadership for the 21st century.

On July 17, 2003, The Regents of the University expressed support for a Presidential policy to promote "…the principles of energy efficiency and sustainability in the planning, financing, design, construction, renewal, maintenance, operation, space management, facilities utilization, and decommissioning of facilities and infrastructure to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements." At the September 2005 meeting, The Regents authorized the President to incorporate sustainable transportation practices into this Policy. Transportation to and from and within the campus grounds has a significant impact on air quality and affects both the campus landscape and relations with surrounding communities. It is desirable, therefore, effectively to manage transportation demand, provide transportation options, and encourage the use of low-impact vehicles, non-fossil fuels, and creative modes of transport, while ensuring maximum campus access and preserving lifestyle features. This approach to transportation services is a necessary component of the University's sustainability efforts.

The University of California is committed to improving the University's effect on the environment and reducing the University's dependence on non-renewable energy. Guidelines for implementing practices in support of Green Building Design, Clean Energy Standards, and Sustainable Transportation Practices are explained in detail in the following plan for achieving these goals.

I. Green Building Design

a. Given the importance of energy efficiency to Green Building design, the University has set a goal for all new building projects, other than acute-care facilities, to outperform the required provisions of the California Energy Code (Title 24) energy efficiency standards by at least 20 percent. Standards for energy efficiency for acute-care facilities will be developed in consultation with campuses and medical centers.

b. The University of California will design and build all new buildings, except for laboratory and acute-care facilities, to a minimum standard equivalent to a *LEED*™ 2.1 "Certified" rating.

c. Campuses will strive to achieve a standard equivalent to a *LEED™* "Silver" rating or higher whenever possible within the constraints of program needs and standard budget parameters.

d. Given the importance of specifically addressing sustainability in laboratory facilities, the University of California will design and build all new laboratory buildings to a minimum standard equivalent to a *LEED™ 2.1* "Certified" rating and the *Laboratories for the 21st Century (Labs21) Environmental Performance Criteria* (EPC), as appropriate. The design process will include attention to energy efficiency for systems not addressed by the California Energy Code (Title 24).

e. Any proposed exception from the above standards may be requested administratively during preparation of the PPG. Any exception proposed after approval of the PPG will be treated as a scope change and processed in accordance with standard University procedures.

f. Further study will be conducted before a similar sustainable design policy for new acute-care facilities is adopted.

g. Any significant renovation projects involving existing buildings will also apply sustainability principles to the systems, components, and portions of the building being renovated.

h. In consultation with the campuses, the Office of the President will develop an internal evaluation and certification standard based on the *LEED™* and *Labs21* measures.

i. Campuses may choose to pursue external certification through the *LEED™* process, augmented with *Labs21* criteria as appropriate for laboratory systems, in lieu of the internal process for a given project.

j. The measures required by this policy will be incorporated into all new building projects, other than acute-care facilities, submitted for first formal scope and budget approval as of July 1, 2004

k. To the extent feasible within approved funding, campuses are encouraged to apply sustainability principles to all projects in current design.

l. The University planning and design process will include explicit consideration of lifecycle cost along with other factors in the project planning and design process, recognizing the importance of long-term operations and maintenance in the performance of University facilities.

m. For existing buildings, the University will explore the development of a standard methodology for sustainable policies and standards for facilities management, including assessing the *LEED™* Existing Building (*LEED™ EB*) evaluation tool being developed for this purpose. These policies and standards will address aspects of building cleaning, maintenance, and operation to include factors such as chemical usage, indoor air quality, utilities, and recycling programs.

n. The University will work closely with the U.S. Green Building Council, Labs21, the Department of Energy, the U.S. Environmental Protection Agency, State government, and other organizations to facilitate the improvement of evaluation methodologies to address University requirements effectively. Additionally, the University will work with the U.S. Green Building Council to develop a self-certification tool for University use.

o. The University will use its purchasing power to promote the availability of products that are resource-efficient, energy-efficient, water-efficient, and of recycled and rapidly renewable content for building materials, subsystems, components, equipment, and supplies.

p. The University will work with regulatory agencies and other entities to speed the development, approval, and implementation of products and technologies that improve energy efficiency and support sustainable design, construction, and operating practices.

q. The University will develop a program for sharing best practices.

r. The University will incorporate the Green Building Design policy into existing facilities-related training programs, with the aim of promoting and maintaining the goals of the policy.

II. Clean Energy Standard

a. The University will implement a systemwide portfolio approach to reduce consumption of non-renewable energy. The portfolio will include a combination of energy efficiency projects, the incorporation of local renewable power measures for existing and new facilities, green power purchases from the electrical grid, and other energy measures with equivalent demonstrable effect on the environment and reduction in fossil fuel usage. The appropriate mix of measures to be adopted within the portfolio will be determined by each campus. Since each campus' capacity to adopt these measures is driven by technological and economic factors, the campus will need to reevaluate the energy measures mix on a regular basis. The portfolio approach will provide valuable analytical information for improving energy efficiency, resulting in an overall improvement in the University's impact on the environment and a reduction in the reliance on fossil fuels during the next decade of capital program growth.

b. The University will strive to achieve a level of grid-provided electricity purchases from renewable sources that will be similar to the State's Renewable Portfolio Standard, which sets a goal of procuring 20 percent of its electricity needs from renewable sources by 2017. The University will initiate progress towards this objective in 2004 by purchasing 10 percent of grid-supplied electricity from renewable sources, subject to funding availability, and will track progress annually toward achievement of the year 2017 goal.

c. With a goal of providing up to 10 megawatts of local renewable power by 2014, the University will develop a strategic plan for locating renewable power projects in existing and new facilities. The plan will include demonstration projects for photovoltaic systems and other renewable energy systems, such as landfill-gas-fueled electricity generation or thermal energy production. The strategic plan will include criteria for evaluating the

feasibility of a variety of projects, such as incorporating photovoltaic systems in replacement roofing projects and in new buildings, as well as forecasting the accommodations necessary for eventual installation of photovoltaic systems. The University will assess the progress of renewable energy technology improvements, both in terms of cost and technical efficiency. To achieve the renewable power goal, the University will maximize the use of available subsidies and negotiate pricing reductions in the marketplace, and will develop funding sources for financing the costs of renewable energy measures.

d. With a goal of reducing systemwide non-renewable energy consumption, the University will develop a strategic plan for implementing energy efficiency projects for existing buildings and infrastructure to include operational changes and the integration of best practices. The plan will identify opportunities to incorporate energy retrofit projects into major building renovations as funding is available, and to initiate standalone retrofit projects, as justified by future energy savings. The University will monitor industry progress in energy retrofits and implement technical improvements as they become available. As with renewable energy projects, the University will develop funding sources and establish a program for financing retrofit projects. The initial goal for energy efficiency retrofit projects will be to reduce systemwide growth-adjusted energy consumption by 10 percent or more by 2014 from the year 2000 base consumption level. The University will strive to achieve even greater savings as additional potential is identified and funding becomes available.

e. The University will continuously evaluate the feasibility of other energy-saving measures with equivalent demonstrable effect on the environment and reduction in fossil fuel use. In particular, campuses will strive to implement the Sustainable Transportation Practices described in Section III, below.

f. The University will develop a variety of funding sources and financing alternatives for energy efficiency, renewable energy, and clean energy projects that will enable campuses to be flexible in addressing their energy needs.

g. The University will pursue marketing of emissions credits as a means to bridge the cost-feasibility gap for green power projects.

h. With an overall goal of reducing greenhouse gas (GHG) emissions while maintaining enrollment accessibility for every eligible student, the University will pursue the development of a long term strategy for voluntarily meeting the State of California's goal, pursuant to the Governor's Executive Order S-3-05, that is: by 2010, to reduce GHG emissions to 2000 levels; by 2020, to reduce GHG emissions to 1990 levels; by 2050, to reduce GHG emissions to 80 percent below 1990 levels.

i. The Senior Vice President–Business and Finance, in coordination with campus administration, faculty, students, and other stakeholders (the Sustainability Group), will research options for collection, monitoring, and certification of energy use and greenhouse gas (GHG) emissions. The Sustainability Group will develop an in-house methodology by which to collect, monitor, and certify energy use and GHG emission, and will pursue an affiliate membership with the California Climate Action Registry (CCAR). The methodology will include development of a "higher education protocol" to

allow for normalization of data and accurate reporting procedures. The Sustainability Group will monitor progress toward reaching the stated goals for GHG reduction and will evaluate suggestions for programs to reach these goals. The Sustainability Group will also examine the feasibility of developing benchmarking processes to measure overall energy use over time.

III. Sustainable Transportation Practices

a. In implementing a least-cost economic and environmental strategy for campus fleets, campuses shall implement practicable and cost-effective measures, including, but not necessarily limited to, the purchase of the cleanest and most efficient vehicles and replacement tires, the use of alternative fuels, and other conservation measures. With the goal of measuring all campus fleet vehicles' fuel consumption reduction, campuses will collect and report fuel consumption for 2005-06 to the Office of the President.

b. The campuses will be encouraged to collect data on Average Vehicle Ridership (AVR) of commuters. AVR is defined as the number of trips to campus divided by the number of automobiles used for those trips (AVR = trips/automobiles). Campuses may use this data to set goals for reduction of fuel consumption. AVR data may also be used in conjunction with transportation mode split data to develop maps of distance "zones" surrounding the campus and to model each zone's proportionate share of various commuting modes (e.g., percentage of bicycle or single-occupancy vehicle trips within 0-2 miles from the central campus core).

c. The Senior Vice President–Business and Finance has made a written request to major automobile manufacturers expressing both the University's commitment to work with industry to provide vehicle and fuel choice, and the expectation that industry will provide these choices to the fullest extent possible. The Sustainability Group will continue to work with State agencies to facilitate the purchase and use of LEV, ZEV, and alternative fuel vehicles by the campuses and to find solutions for increasing the availability of an affordable supply.

d. Using the time period 2004-2005 as a baseline, campuses will strive to increase the percentage of low or zero-emission vehicles (LEV, ZEV) by 50 percent by the year 2009-2010, or to increase the number of LEV and ZEV vehicles by 20 percent by the year 2009-2010, whichever is more feasible.

e. The University will work with regulatory agencies and other entities (e.g. regional transit agencies, air quality management districts) to speed the development, approval, and implementation of programs and technologies that support the goals of sustainable transportation as related to the increased use of bio-diesel or other alternative fuel sources.

IV. Transportation Demand Management Programs

a. The University will continue to facilitate the sharing of best practices within UC and with other educational institutions. In particular, the University will continue to participate in Transportation Sessions at the annual UC/CSU/CCC Campus Sustainability Conference, building on the success of transportation information shared at the 2005 Conference.

b. The University will develop a mechanism for ongoing involvement of undergraduate and graduate students in efforts toward achieving sustainable campus transportation. The means may include but are not limited to undergraduate and graduate internships and/or scholarships for relevant conference attendance. The Office of the President will begin funding an internship for one to two students beginning in the 2005-06 academic year and continuing until at least 2009-10. At that time, the program's results will be reviewed, and the Senior Vice President Business and Finance will determine whether or not to extend the program.

c. Within three years of issuance of these guidelines, each campus will implement a pre-tax transit pass purchasing program to facilitate the purchase of transit passes by University employees or will establish a universal access transit pass program for its employees.

d. The University will pursue the introduction of car-share programs at every campus for all eligible car-share program participants, where available.

e. To the extent practical, the campuses will develop a business case analysis for proposed parking structure projects.

V. Authority and Report Schedule

The Regents has delegated authority to the President for promulgating policy promoting sustainable new capital projects, existing University facilities, and campus transportation resources. The President has delegated authority to the Senior Vice PresidentBusiness and Finance for further definition of measures to implement University policy regarding sustainability. Chancellors are responsible for implementation in the context of individual building projects, facilities operations, and transportation projects and programs.

On an annual basis, the President will provide a report to The Regents that details the impact of the University's sustainability efforts on the overall capital program, University operating costs, energy use, and campus transportation resources. The University's sustainability guidelines will be subject to continuous review. The guidelines will be reexamined every three years, with the intent of developing and strengthening implementation provisions and assessing the influence of the guidelines on existing facilities, new capital projects, plant operating costs, fleet and transportation services, and campus accessibility, mobility, and livability. The University will provide means for the ongoing active participation of students, faculty, administrators, and external representatives in further development and implementation of the Policy on Green Buildings, Clean Energy, and Sustainable Transportation Resources.