Earth Day Service Clubs Event Tuesday, April 22, 2008 Kulp Auditorium, Ithaca High School Remarks by Cornell President David J. Skorton As Prepared For Delivery

## (President Skorton is introduced by Dale Flynn, president of the Ithaca Rotary Club.)

Thank you, Dale, for that generous introduction. And thank you all for turning out tonight for what I hope will be another regular way for Cornell to connect with members of the various service clubs, other organizations in the greater Ithaca area, and interested community members.

I'm grateful to the Ithaca Rotary Club – where I am an honorary member -- for taking the lead in bringing so many of us together tonight.

Today is Earth Day – a day to celebrate our integral connections to our planet and our responsibility to serve as stewards of our environment;

To live in ways that reduce our deleterious impacts on the environment and promote sustainable development.

As part of its contribution to a greener environment, the Ithaca Rotary Club, in partnership with the Sunrise Rotary Club, takes responsibility for cleaning up Route 13, from the Stewart Park entrance to a point just west of the Triphammer Road overpass – two miles as the crow flies, but actually four miles counting all the on and off ramps along the way.

Noel Desch, Rotarian and retired Cornellian, leads the effort each year. He tells me that Rotary will be doing the cleanup this year on May 10 – and it takes 30 Rotarians to do it right. I hope some of you, who are members of one of those two Rotary Clubs, will sign up with Noel, if you haven't done so already.

The first Earth Day, in 1970, drew attention to gross assaults on the environment – things like Los Angeles smog and the "death" of Lake Erie.

Over-population was high on the list, thanks to the writings of Paul Erlich and the advocacy of Zero Population Growth (ZPG).

Many of us were concerned about the effects of pesticides on the environment – brought to popular attention by Rachel Carson's *Silent Spring* and the good work that was done at Cornell to document the role of DDT in the demise of the peregrine falcon and other birds of prey.

Today we are facing environmental challenges that are in some ways more subtle but potentially more encompassing –

- including global climate change,
- the limited supply of fossil fuels at a time when the world's energy demands are exploding,

• and the very real need of the world's people – more than 2 billion of whom live on less than \$2 a day – to improve their prospects in ways that are environmentally and socially sustainable.

I am pleased to report that Cornell is addressing these sorts of issues – in partnership with the greater Ithaca community and with many other collaborators – in a variety of ways.

Tonight I'd like to share some of the things we are doing to promote sustainability – through our academic initiatives, through the operation of our campus and collaborations with local partners.

Then, I want to spend a few minutes looking at some of the broader challenges we face as a university and the impact they may have on the community.

And, finally, I'll offer some observations on the importance of working together to ensure that Ithaca and the surrounding communities remain vibrant, inclusive, and economically strong – so that all our citizens feel empowered to work toward personal and community goals.

Without a doubt, Ithaca is one of the nation's "greenest" communities – and that is a strong selling point as Cornell seeks to recruit the world's best faculty, students and staff members to the university.

Next Saturday, as part of National Volunteer Week's Day of Service – an event cosponsored by The Cornell Tradition and OnSite Volunteer Services – community leader Gay Nicholson will receive the Cornell Tradition's Debra Newman '02 Community Recognition Award – in appreciation of her years of service to regional sustainability.

Gay's achievements include being among the founders and leaders of Sustainable Tompkins, the Cayuga Sustainability Council, and the Green Resource Hub.

All these organizations, and many others within our community, have challenged us to think and act more sustainably.

Earlier this month, my wife, Robin Davisson, and I attended a dinner at EcoVillage – an event designed to introduce the wider public to that environmentally and socially sustainable community and garner support for its plans to develop a new Center for Sustainability Education on site.

EcoVillage got its start at Cornell in 1991 – through the vision of co-founders Liz Walker and Joan Bokaer.

EcoVillage remains a partner project of the Center for Research, Ethics and Social Policy, an independent non-profit organization based at Cornell.

As some of you may know, Cornell Dining, which provides meals in campus eateries, has made a substantial commitment to use local foods.

Through its Local Food Growers Initiative, Dining has significantly increased the amount of locally grown produce that it purchases. We've invited local farmers to Cornell for dinner – so that chefs can meet the farmers and farmers can meet the chefs.

Of the \$1 million Cornell Dining has spent on produce this fiscal year, 33 percent has been for local and regional produce (from within New York State or within 250 miles of Ithaca), up from just 7 percent in 2005. In this way, the university is promoting agriculture as one of our most important industries.

Cornell Dining, in cooperation with Cornell Farm Services, also composts about 500 tons of pre-consumer and post-consumer waste annually.

They are even planning to have compostable cups and food containers and composting bins set up to alleviate some of the solid waste issues associated with Slope Day.

I also want to mention the work that Monika Roth and the Tompkins County Cooperative Extension Office have done to promote local foods.

Their local foods website, for example, includes a guide to local food resources – from milk and meat suppliers, to roadside markets, to U-pick produce -- and a list of local farms that are participating in the CSA program.

The web site helps make the point that local foods are good for the farmer, healthy for the consumer, and that local sustainable agriculture helps keep our environment "green and growing."

More broadly, Cornell Cooperative Extension of Tompkins County is establishing an entire program area devoted to environmental education and the Green Economy, beginning with 5 full-time positions devoted to strengthening specific sectors of a green economy including renewable energy and energy efficiency, green building, sustainable forestry and other land-based enterprises, transportation alternatives, and re-use.

The combined potential value of these sectors in Tompkins County, according to CCE director Ken Schlather, totals well over \$125 million a year with the potential of more than a thousand jobs.

Energy conservation and achieving climate neutrality are also high priorities at Cornell.

The Lake Source Cooling project, which I know was of concern to many in the community when it was first proposed, now saves 25 million KwH per year and substantially reduces our emission of greenhouse gases.

We all recognize that Cayuga Lake is an essential asset to our community and region. Cornell and the Water Resources Council, or the WRC, regularly exchange information with various monitoring interests in southern Cayuga Lake, including those volunteer groups monitoring our tributaries.

For more than a year and a half, a committee of the WRC, that includes Cornell faculty and staff, has been working in cooperation with other entities to develop a more comprehensive community-based monitoring program for the southern end of the lake.

Cornell has supported this initiative with both academic and financial resources. The WRC committee recently drafted a monitoring plan that includes in-lake water quality monitoring and the redeployment of a Remote Underwater Sampling Station or RUSS to provide instantaneous and accessible data about water quality and meteorological data.

We appreciate the new links with the City of Ithaca, Tompkins County and other interested parties that are developing as discussion of this proposal proceeds.

Building on the momentum generated over the past several years by KyotoNOW and other student groups – such as the Sustainability Hub -- as well as other campus efforts,

We have in place a 10-year multi-phase plan (which began in 2002 and extends to 2012) to reduce our campus energy use by 20 percent from what it was in the year 2000.

Our Combined Heat and Power Plant, which will be in service by Fall 2009, will produce electricity and heat together using less energy than making them separately – and reduce our CO<sub>2</sub> emissions by some 70,000 tons per year.

And we take very seriously the energy we use. Our "sustainablecampus.Cornell" web site includes an area where anyone can get up-to-the-month information on energy use for every building on campus. If you are interested, go to the site and look around – it's instructive and easy to do.

Just over a year ago, in February 2007, I signed the American College and University Presidents Climate Commitment.

This action commits Cornell to achieving climate neutrality, with respect to greenhouse gases, starting with our Ithaca campus.

An implementation committee, co-chaired by Professor Tim Fahey and Vice President for Facilities Services Kyu Whang, is advancing our efforts in this area – including a comprehensive survey of all our greenhouse gas emissions, which will be completed by September 2008, and a plan for achieving climate neutrality, to be completed by September 2009.

Ithaca College and Tompkins-Cortland Community College are also signatories of the Presidents Climate Commitment – and are engaged in many initiatives to promote sustainability and reduce their environmental footprint – all of which contribute to the wider efforts in the Ithaca area to promote sustainable development.

We already have several certified "green buildings" on campus. In fact, Alice Cook House, part of our residential initiative on West Campus, was the first residence hall in New York State to earn certification through the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program.

At its January 2008 meeting, the Board of Trustees voted to require construction projects over \$5 million to meet, at a minimum, LEED standards at the "silver" level.

The newly completed Cornell Master Plan for the Ithaca campus puts an emphasis on sustainable development, and the list goes on...and should, because we have a long way to go to even approach climate neutrality.

We recently brought together people from across the campus whose workday decisions can affect sustainability for a daylong retreat on the Advancing Sustainability Action Plan (ASAP).

ASAP includes all aspects of sustainability: Climate neutrality, land use, waste and pollution, food and water, transportation, and endowment investments and so on.

ASAP currently has more than a dozen funded projects under way to promote sustainability, and it will soon be welcoming off-campus representatives to its committee structure.

I am pleased that, on the academic side, we have more than 300 faculty members involved in some aspect of sustainability through their teaching and research, and we are moving forward with the Cornell Center for a Sustainable Future (CCSF), which will focus on three interconnected themes:

- energy,
- environment,
- economic development (including poverty alleviation, water and food systems, infrastructure, institutions, and education).

Last month, at the inaugural meeting of the Clinton Global Initiative University, a project of the William J. Clinton Foundation, I presented a Cornell Commitment to Action based on the continued development of the CCSF.

The commitment to action through the CGI will enhance CCSF's ability to leverage and implement its discoveries through partnerships with external collaborators and funding sources — with the goal of turning our hard won knowledge into sustainable benefits for the human race.

I mention the Center for a Sustainable Future not just because it is Earth Day, but also because it illustrates an essential point about universities and their connections to the larger society.

Universities – and especially land grant universities like Cornell -- are entrusted with education, research and outreach so that knowledge can be used to address the world's challenges.

Universities have been around since the Middle Ages, but the focus of our education and inquiry has evolved along with the societies we serve.

As some of you know, in recent months changing federal research priorities have had an impact on our Laboratory for Elementary Particle Physics – the synchrotron – and we've had to lay off some of our staff there.

Our NSF-funded research centers are typically supported for 5-year terms, and are sometimes renewed for a maximum of 10 years.

At those key points in the funding cycle, we need to consider whether to put more effort into securing funding for existing areas or to move into new areas of promise or need.

As one door of research opportunity closes, though, others open – and increasingly the funding for new research initiatives includes contributions from foundations and corporations as well as from state and federal sources.

The Cornell Center for a Sustainable Future has been launched with \$10 million in university support, much of it provided by private donors, and we hope to attract as much as \$40 million from a variety of additional public and private sources to support its work over the next 10 years.

In another example, we recently received a \$26.8 million grant from the Bill & Melinda Gates Foundation to launch a broad-based global partnership to combat stem rust in wheat.

Cornell will bring together 15 institutions to devise resistant wheat varieties that will protect resource-poor farmers as well as consumers from catastrophic crop loss.

While research funding from federal and state sources remains essential – and absolutely critical to the overall vitality of universities like Cornell – we need to tap a broader variety of sources in the support of this essential work.

We now have before us a rare window of opportunity to change and strengthen the university in significant ways. We are facing a major demographic shift at Cornell, and within higher education generally, as the professors we hired during the last great expansion of higher education – in the 1960s and 1970s – near retirement age.

We estimate that at Cornell we will need to recruit as many as 600 new faculty members – roughly a third of our current faculty -- over the next decade.

While competition for outstanding faculty members is extremely keen – because other universities are also facing an unprecedented wave of retirements -- this turnover gives us an extraordinary opportunity to build our strength in emerging areas of opportunity and need.

Sustainability is one critical area in which we have the potential to develop our strengths by adding new faculty members.

Next fall, for example, we will welcome Jeff Tester, a Cornell alumnus and currently professor at MIT, back to campus as our first Croll Professor of Sustainable Energy Systems in the College of Engineering.

Another area where we are building faculty strength is in the area of molecular biology and genetics.

We've already brought on board Scott Emr, a distinguished biologist who most recently was full professor at the University of California, San Diego School of Medicine, as director of the Weill Institute for Cell and Molecular Biology.

We have just made offers to four outstanding candidates for junior faculty positions in the Weill Institute. All also had attractive offers to go elsewhere – but they have decided accept our offer and to move to Ithaca in August.

These faculty members and their campus colleagues contribute significantly to the community: They and their families buy houses and rent apartments. They support local businesses, volunteer for community enterprises, and contribute their time and talents in a host of other ways – including by joining service clubs and other community organizations like those represented here this evening.

Moreover, the results of their research can lead to the development of new businesses within our community.

To give you just one example – one that seems appropriate to mention on Earth Day: A few years ago, Anil Netravali, professor of fiber science and apparel design in the College of Human Ecology, developed a biodegradable composite from plant fiber and a resin derived from soy protein.

In 2006, he co-founded, with Pat Govang, a company called e2e Materials LLC to sell products based on his research.

The company's products caught the attention of Cornell alumnus Jason Salfi, co-founder of Comet Skateboards. Mr. Salfi moved the company's manufacturing operations to Ithaca last fall to be close to the material supplier – creating several new jobs, with the prospect of more to come, as Comet's product line expands.

And e2e also has the potential for further growth. Last year it won the \$100,000 grand prize in the Essential Connections.org Emerging Business Competition, which recognizes the most growth-oriented business in Central New York. The competition is sponsored by the Metropolitan Development Association of Syracuse and Central New York, one of the key business leadership organizations in our region.

In attracting new faculty – and staff and students – to Cornell, the quality of life in the surrounding community is critical.

The number of service clubs and other organizations in the greater Ithaca area – and the good work you do in our community every day -- is one measure of why this is such a good place to put down roots.

Another factor is the natural beauty of our area, and the commitment that so many of us have to live sustainably and to be careful stewards of the environment.

I hope we can continue to work together to strengthen the things that make Ithaca such a vibrant place – and also to work on those areas that still need improvement – to ensure that the Ithaca area extends its promise to all members of our community. Thank you for your time tonight and for all you do for our community every day.