

College of Architecture and Planning Ball State University Unit Level Sustainability Plan

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Ball State University Unit-level Sustainability Planning

[as mandated in Goal IV F of the 2007-2012 Ball State University Strategic Plan]

A Sustainability Plan

for the

Directorship of Guillermo Vasquez de Velasco, PhD, Dean Michel Mounayar, Associate Dean College of Architecture and Planning Vice-Presidency of Terry King, PhD

Submitted to
Dr. Terry King
Provost and Vice-President for Academic Affairs

31 January, 2008

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Achievements to Date

The following are our short-form question responses within the categories of Governance and Administration, Operations, Curriculum and Research, and Community Service and Outreach. In developing these short-form responses, we are pleased to report significant achievements in these areas and have identified opportunities for further development/transformation.

[Provide brief descriptions for each affirmative or goal response]

Governance and Administration Y N Goal
☐ X ☐ 1. The unit has standing committees to address issues of sustainability.
The College has several committees related to Facilities, Services and Technology, all of which operate with a commitment to sustainability.
Y N Goal X 2. The unit gives assigned load and/or a staff position dedicated to sustainability initiatives.
No specific staff member is assigned solely to advance a sustainable agenda, however all of CAP technical and support staff have been tasked to look at their own areas and develop sustainable practices.
Y N Goal X 3. The unit has established policies that encourage sustainability initiatives.
The college initiated a program four years ago to improve facilities performance including the installation of occupancy sensors in most faculty offices, changing major air handling units, relamping fifth and six floor with more efficient fixtures, provided recycling bins in all of AB spaces. Developed stations for student use for used model-building supplies on the sixth and fifth floor.
Y N Goal X 4. The unit has sustainability integrated into its mission statement.
CAP's Mission statement indirectly alludes to sustainability through its commitment to the advancement of Architecture, Landscape Architecture and Urban Planning. Three areas of study directly related to sustainability.
"CAP's Mission Statement: The College of Architecture and Planning is a learning community committed to growing careers and educated citizens through education, research and professional service for the professions of architecture, historic preservation, landscape architecture and urban planning."

X
CAP Mainatains membership in numerous organizations directly related to a sustainable future including: ACSA, AIA, ASLA, APA, ARCC, Green Builders, and many others.
 Y N Goal X
CAP encourages and highly values research related to sustainable environments and their development.
Y N Goal X
CAP leadership and faculty show strong commitment to integrating sustainable issues into the

curriculum. CAP has been the host of numerous national meetings on the subject.

<u>Operations</u>
Y N Goal X 1. The unit purchases/uses Energy Star Office and Telecommunications Equipment.
CAP is keen on specifying Energy Star Telecommunication Equipment
Y N Goal X
CAP issued a dean's directive to all CAP units to limit the use of paper with a strong suggestion towards the use and distribution of e-documents. CAP course syllabi have been posted to Blackboard.
Y N Goal X
Y N Goal X
In particular, we recycle a substantial amount of model-making materials.
 Y N Goal X
Recycling bins are available and distributed all through the Architecture Building including shops, offices, studios, and lecture rooms.
Y N Goal X Goal 6. The unit has policies that encourage the use of teleconferencing capabilities to limit travel.
Teleconferencing equipment is available, and its use is encouraged.
Y N Goal X
CAP staff requests, as standard practice, the Ball State Hybrid cars for travel.
Y N Goal X
CAP staff requests, as standard practice, the booking of hotels that have a sustainability agenda.
Y N Goal X 9. The unit uses washable dinner/service ware for its meetings/receptions.
CAP uses washable wares for small events. However, that is not the case for large events at this

time.

Y N Goal X 10. The unit purchases/uses remanufactured office furniture.
CAP always indicates a preference to recycled materials or furniture
Y N Goal X 11. The unit purchases/uses sustainable materials for office furnishings.
Sustainable equipment and supplies are routinely requested.
Y N Goal X 12. The unit discourages the use of single-occupant automobile travel.
When possible CAP Staff are encouraged to car pool.
Y N Goal X 13. Classroom, Office and/or Restroom lighting for the unit is controlled by occupancy sensors.
This is a pending request to Facility planning.
Y N Goal X 14. The unit's thermostats are set to minimize energy use for heating and cooling.
Greater control on HVAC system is requested. At this time occupants have minimal control of environmental systems.
Curriculum Y N Goal X
CAP departments offer several courses on sustainability.
Y N Goal X
Sustainability content is encouraged for all CAP courses.
Y N Goal X 3. The unit has courses in which students are encouraged to address sustainability issues in their assignments.
This is central to good design and planning and is encourages in all CAP design studios.
Y N Goal X

Y N Goal X 5. The unit has dedicated sustainability courses that can be taken for credit as part of a major or minor outside of the unit.
CAP level courses with sustainability content are not open to non CAP students. A CAP sustainability course open to BSU students would be a good goal to pursue.
Research Y N Goal X 1. Members of the unit have conducted research on issues of sustainability in their discipline.
Work includes: Vectren Demonstration houses, Biotown study, CBP, CHP, LDI, and BFI projects.
Y N Goal X
We are in the process of generating an inventory of publications.
 Y N Goal X
We are in the process of generating an inventory of conference presentations.
Y N Goal X
We are in the process of generating an inventory of affiliations.
 Y N Goal X
CAP has hosted a variety of meetings on the subject (mainly in charrette format).
Y N Goal X 6. The unit has hosted conferences on issues of sustainability.
Next CAP Conference is on Open Architecture which is directly related to sustainability.
Community Service and Outreach Y N Goal X
Yes through the work of CAP faculty and Institutes

Y N Goal X
Yes! especially in Muncie and Indianapolis.
Y N Goal Y
CAP:IC, AIA, USGBC Indiana, ASLA, IPA.
Y N Goal X
Work through CAP Institutes and Centers: LDI, CBP, BFI, and CHP
Existing conditions as baseline (data as available)
In preparing our short-form responses to the questions in the previous section, we accumulated the following data sets. These comprise the numerical underpinnings specific to our (pick one) Center, Institute, Department, College, Vice-Presidency.
A List of Academic Offerings
Topical Sustainability Lectures
Topical Sustainability Modules
Modules of CAP 101/102 Environmental Design I & II
Sustainability Courses
Sustainability Programs
CAP Guest Lecture Series, CAP Exhibit Series, CAP Research Institutes and Centers
Sustainability Concentrations

Sustainability Degree Offerings

Sustainability Immersive On & Off-Campus Experiences

CAP Travel Programs
Community Based Projects Program
Land Design Institute Programs
Building Futures Institute Programs
Center for Historic Preservation Programs

Existing conditions as baseline (data as available)

A List of Faculty, Staff and Student Activities

Professional Academic Organizations

USGBC

AIA

ASLA

APA

IPA

ARCC

Professional Staff Organizations

NCARB

NAAB National Architecture Accrediting Board

ACSA Association of Collegiate Schools of Architecture

PAB Planning Accreditation Board

ASLA American Society of Landscape Architects
NTHP National Trust for Historic Preservation

ASHRAE

Student Associations and Clubs

AIAS

ASLAS

EGB

NOMAS

CAP

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Hybrid Fleet Vehicle Use

BSU has several Hybrid University Cars

Hybrid Electric Shuttle Bus Use

Bicycling

Architecture Building offers several Bicycle Racks Some faculty Bicycle or walk to campus

Carpooling

MITS Bio-Diesel Bus Use

Conference Travel; Carbon Offset Purchases (and others...)

Existing conditions as baseline (data as available) A List of Operational Commitments in the Building(s) We Occupy

Building Use: Lamps, Occupancy Sensors, Waterless Urinals

Architecture Building was retrofitted with occupancy sensors where possible. More work is required including re-activation of solar chimney; use of solar collectors, water conservation, as well as potential for rain-water collection.

Material Use/Recycling: Paper, Water, Cartridges, Cans, Glass, Wet Garbage

A recycling program is in place.

Food Use/Recycling: Local Sourcing, Washable Dinnerware

Goals

Given our assessment of where things stand, we have identified the following goals for our unit.

Governance and Administration

Explore the potential for a new sustainability faculty committee

Continue information exchange among faculty, students, and staff

Operations

Improve attention to recycling

Attempt to rely more on digital information display rather than printing and plotting by providing studios with ready to use plasma screens.

Reduce reliance on printing and plotting

Reduce need for travel by improved telecommunication capabilities

Develop a culture of stewardship for AB including student responsibility to turning off the lights and projectors after use

Powering down during breaks and vacations

Refilling ink cartridges

Lowering building temperature

Curriculum

Further incorporate green design and sustainability issues into the first year curriculum

Use GLS and Exhibit series to promote sustainability

Encourage sub-units such as academic departments and research institutes to incorporate sustainability course content when appropriate

Encourage CAP Curriculum committee to encourage sustainability course content

Work with other units and department on collaborative curricula in sustainability.

Research

Support research of faculty and students related to sustainability

Attempt to find funding sources for architecture and planning via new research grant writer

Collaborate with CERES on sustainable initiatives.

Community Service and Outreach

Support CAP's Community Services activities including such activities that contributes towards sustainable communities. Including CBP, BFI, LDI, and CHP

Continue to assist communities to address issues of revitalization and sustainability

Continue national presence among institutions committed to sustainability.

Implementation

We have aligned specific action items with the 5-year cycling of the Strategic Plan and anticipate being able to move forward in the respective categorical areas, as described below.

2008 Action Items	Resource Needs
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Governance and Administration	
Consult on establishing CAP Sustainability Committee	
Operations	
Request ink refilling service for faculty and students	
Request plasma screens for design studios	\$45,000
Post conserve electricity signs in classrooms	\$45,000
Specify only energy star equipment	
Curriculum	
Further integrate Sustainability course content into the Com First Year	
Encourage CAP Curriculum Committee to develop a comm Syllabus statement on sustainability	
Research	
Continue membership in professional organization directly involve in sustainability	
Hire new grant writer	\$45,000
Help faculty attend conferences	\$3,000
Community Service and Outreach Continue support to CBP	1/2 fte

Continue support for LDI	1/2 fte
Continue support for BFI	1/2 fte
Continue support for CHP	1/2 fte

2009 Action Items	Resource Needs
Governance and Administration	
Create CAP's Sustainability Committee	
Work with departments on departmental plans	
Operations	
Develop a conservation effort in the use of AB, facilities equipment, and resources	
Reduce reliance on paper	
Improve information flow among offices, faculty and studer through the use of digital course management	
Curriculum	
Adopt a common syllabus statement on sustainability	
Encourage sustainability course offering	
Further integrate sustainability into the First year curriculun amend curriculum map	
Research	
Expand travel funding	
Continue research membership in professional organization	
Hire grant writer	
Expand research funding	
Activate CAP's committee on research	

Community Service and Outreach	
Develop deeper partnership with BBC	
Continue community efforts of CBP, LDI, BFI, CHP	
Reinforce CAP:IC and MUDS	
Continue leadership positions in national organizations	

Governance and Administration

Work with departments on departmental plans

Operations

Reduce reliance on paper

Improve information flow among offices, faculty and studer through the use of digital course management

Curriculum

Host lectures on sustainability

Participate in BSU core curriculum in the area of sustainabil

Reinforce existing faculty development opportunities for sustainability content areas

Develop extended ed course work on sustainability

Research

Expand research on green design and planning

Actively disseminate research opportunities to faculty and students

Reinforce the graduate studies culture especially in the area green design and planning

Community Service and Outreach

Continue community outreach activities of the college

Develop BBC fellows program

Reinforce CAP:IC and MUDS

2011 Action Items

Resource Needs

Governance and Administration

Enact sustainability policies regarding travel and use of reso

Operations

Eliminate waste and improve efficiency of CRC

Consolidate resources

Develop and print foot print assessment

Curriculum

Host lectures on sustainability

Participate in BSU core curriculum in the area of sustainabil

Reinforce existing faculty development opportunities for sustainability content areas

Develop extended ed course work on sustainability

Research

Expand research on green design and planning

Actively disseminate research opportunities to faculty and students

Reinforce the graduate studies culture especially in the area green design and planning

Community Service and Outreach

Continue community outreach activities of the college

Develop BBC fellows program

Reinforce CAP:IC and MUDS

2012 Action Items	Resource Needs
Governance and Administration	
Review sustainability policies regarding travel and use of resources	
Operations	
Eliminate waste and improve efficiency of CRC	
Consolidate resources	
Develop and print foot print assessment	
Curriculum	
Host lectures on sustainability	
Participate in BSU core curriculum in the area of sustainabi	
Reinforce existing faculty development opportunities for sustainability content areas	
Develop extended ed course work on sustainability	
Research	
Expand research on green design and planning	
Actively disseminate research opportunities to faculty and students	
Reinforce the graduate studies culture especially in the area green design and planning	
Community Service and Outreach	
Continue community outreach activities of the college	
Develop BBC fellows program	

Reinforce CAP:IC and MUDS	

Ball State University Unit-level Sustainability Planning

[as mandated in Goal IV_F of the 2007-2012 Ball State University Strategic Plan]

RESULTS

A Sustainability Plan

for the

College of Architecture and Planning Building Futures Institute

Submitted to
Dr. Terry King
Provost and Vice-President for Academic Affairs

31 January, 2008

[on or before]

Achievements to Date

The following are our short-form question responses within the categories of Governance and Administration, Operations, Curriculum and Research, and Community Service and Outreach. In developing these short-form responses, we are pleased to report significant achievements in these areas and have identified opportunities for further development/transformation.

[Provide brief descriptions for each affirmative or goal response]

Governance and Administration
$\begin{bmatrix} \mathbf{Y} & \mathbf{N} & \mathbf{Goal} \\ \mathbf{x} & \mathbf{D} \end{bmatrix}$ 1. The unit has standing committees to address issues of sustainability.
Y N Goal x 2. The unit gives assigned load and/or a staff position dedicated to sustainability initiatives.
Y N Goal x 3. The unit has established policies that encourage sustainability initiatives.
Y N Goal
Y N Goal x 5. The unit maintains active membership in organizations engaged in promoting sustainability.
Y N Goal x □ □ 6. The unit encourages and rewards research related to sustainability.
 Y N Goal x The unit encourages and rewards the integration of sustainability issues into course material.

Operations Y N Goal	The unit purchases/uses Energy Star Office and Telecommunications
Y N Goal X	The unit has policies to restrict paper use.
Y N Goal x 3.	The unit uses recycled paper.
Y N Goal X 4.	The unit recycles all materials accepted by the university system.
Y N Goal x \ \ \ \ \ \ \ \ \ \ 5.	The unit has appropriate recycling bins throughout its offices.
	The unit has policies that encourage the use of teleconferencing capabilities to imit travel.
Y N Goal x	The unit specifies hybrid electric vehicles for travel.
Y N Goal X S 8.	The unit shows preference for sustainable lodging for professional travel.
Y N Goal x	The unit uses washable dinner/service ware for its meetings/receptions.
Y N Goal X 10	. The unit purchases/uses remanufactured office furniture.
Y N Goal X 11	. The unit purchases/uses sustainable materials for office furnishings.
Y N Goal	. The unit discourages the use of single-occupant automobile travel.

Y N Goal x 13. Classroom, Office and/or Restroom lighting for the unit is controlled by occupancy sensors.
Y N Goal X 14. The unit's thermostats are set to minimize energy use for heating and cooling.
Curriculum Y N Goal x 1. The unit has courses dedicated to issues related to sustainability.
Y N Goal x 2. The unit has courses with sustainability content.
Y N Goal
Y N Goal x 4. The unit recognizes sustainability courses from other departments as legitimate electives for credit in its programs.
Y N Goal $x \square S$. The unit has dedicated sustainability courses that can be taken for credit as part of a major or minor outside of the unit.

Resear	<u>rch</u>	
Y N X [Goal	1. Members of the unit have conducted research on issues of sustainability in their discipline.
Y N x [Goal	2. Members of the unit have published on issues of sustainability in their discipline.
Y N x [Goal	3. Members of the unit attend conferences that address issues of sustainability.
Y N x [Goal	4 . Members of the unit belong to associations dedicated to sustainability issues.
Y N	Goal	5. The unit has hosted workshops on issues of sustainability.
Y N	Goal	6. The unit has hosted conferences on issues of sustainability.

Community Y N Goal x	Service and Outreach1. The unit engages in public and/or outreach activities that address issues of sustainability.
Y N Goal x	2. The unit is in partnership with others in the community in the pursuit of sustainability.
Y N Goal	3. The unit participates in community events that address issues of sustainability.
Y N Goal	4. The unit has initiated community endeavors in pursuit of sustainability.

Existing conditions as baseline (data as available)

In preparing our short-form responses to the questions in the previous section, we accumulated the following data sets. These comprise the numerical underpinnings specific to our (pick one) Center, Institute, Department, College, Vice-Presidency.

A List of Academic Offerings

8	
Topical Sustainability Lectures	
NA	
Topical Sustainability Modules	
NA	
Sustainability Courses	
NA	
Sustainability Programs	
NA	
Sustainability Concentrations	
NA	
Sustainability Degree Offerings	
NA	
Sustainability Immersive On-and Off-Campus Experiences	
NA	

Existing conditions as baseline (data as available)

A List of Faculty, Staff and Student Activities

Professional Academic Organizations

NA
Professional Staff Organizations
NA
Student Associations and Clubs
NA
Hybrid Fleet Vehicle Use
We use them
Hybrid Electric Shuttle Bus Use
NA
Bicycling
We do
Carpooling
SOMETIMES
MITS Bio-Diesel Bus Use
NA
Conference Travel; Carbon Offset Purchases (and others)
NA

Existing conditions as baseline (data as available)

A List of Operational Commitments in the Building(s) We Occupy

Building Use: Lamps, Occupancy Sensors, Waterless Urinals	
NA	
Material Use/Recycling: Paper, Water, Cartridges, Cans, Glass, Wet Garbage	
YES	
Food Use/Recycling: Local Sourcing, Washable Dinnerware	
NA	

Goals

Given our assessment of where things stand, we have identified the following goals for our unit.
Governance and Administration
NA
On anations
Operations
NA
Curriculum
NA
Research
Continue doing sustainability related research
Community Service and Outreach
continue

Implementation

We have aligned specific action items with the 5-year cycling of the Strategic Plan and anticipate being able to move forward in the respective categorical areas, as described below.

2008	Action Items	Resource Needs
Governance and Administration		
Operations		
Curriculum		
Research		
Community Service	e and Outreach	

2009	Action Items	Resource Needs
Governance and A	Administration	
Operations		
Curriculum		
Research		
Community Service	ce and Outreach	

2010 Action Items	Resource Needs
Governance and Administration	
Operations	
Curriculum	
Donosal	
Research	
Community Service and Outreach	
Community Service and Outreach	

2011 Action Items	Resource Needs
Governance and Administration	
Operations	
Curriculum	
Research	
Community Service and Outreach	

2012 Action Items	Resource Needs
Governance and Administration	
Operations	
Operations	
Curriculum	
Research	
Community Service and Outreach	

Ball State University Unit-level Sustainability Planning

[as mandated in Goal IV F of the 2007-2012 Ball State University Strategic Plan]

A Sustainability Plan

for the

College of Architecture and Planning Center for Historic Preservation

Submitted to
Dr. Terry King
Provost and Vice-President for Academic Affairs

31 January, 2008

[on or before]

Achievements to Date

The following are our short-form question responses within the categories of Governance and Administration, Operations, Curriculum and Research, and Community Service and Outreach. In developing these short-form responses, we are pleased to report significant achievements in these areas and have identified opportunities for further development/transformation.

[Provide brief descriptions for each affirmative or goal response]

Go	vernance and Adı	<u>ministration</u>
Y	. — —	nit has standing committees to address issues of sustainability. The Center for Historic Preservation only has 4 staff and therefore does not have committees. We are, however, making efforts to become more sustainable.
Y	N Goal 2. The un initiative	it gives assigned load and/or a staff position dedicated to sustainability ves.
Y	N Goal 3. The un	it has established policies that encourage sustainability initiatives. Our students travel frequently. We encourage them to "make the most" of each trip and always request hybrid vehicles from Ball State transportation.
Y	N Goal M 4. The un	it has sustainability integrated into its mission statement.
Y	N Goal 5. The un sustain	it maintains active membership in organizations engaged in promoting ability. The Center's staff maintains membership in the National Trust for Historic Preservation, which encourages sustainability through the reuse of historic buildings and provides focused sessions on green buildings at its annual conference.
Y	N Goal M 6. The un	it encourages and rewards research related to sustainability. In the next few months, the Center plans to make a concentrated effort to apply for a wide variety of grants and research awards, several of which have a sustainability focus.
Y		it encourages and rewards the integration of sustainability issues into material. N/A

<u>Op</u> Y ⊠		tions Goal	. The unit purchases/uses Energy Star Office and Telecommunications Equipment
Y 	N	Goal	. The unit has policies to restrict paper use.
Y	N	Goal 3	. The unit uses recycled paper.
Y	N	Goal	The unit recycles all materials accepted by the university system. The Center, which is located on the Minnetrista campus, recycles all materials that are recycled by Minnetrista.
Y	N	Goal 5	. The unit has appropriate recycling bins throughout its offices.
Y	N	Goal	The unit has policies that encourage the use of teleconferencing capabilities to limit travel. The Center currently uses teleconferencing on occasion, but plans to use it more often in upcoming projects.
Y	N	Goal	. The unit specifies hybrid electric vehicles for travel.
Y	N 	Goal	. The unit shows preference for sustainable lodging for professional travel.
Y	N	Goal	. The unit uses washable dinner/service ware for its meetings/receptions.
Y	N 	Goal	0. The unit purchases/uses remanufactured office furniture. The Center has only purchased one piece of new office furniture – all other furniture has been obtained through University surplus.

Y	N 	Goal 1	1. The unit purchases/uses sustainable materials for office furnishings.
Y	N 	Goal	2. The unit discourages the use of single-occupant automobile travel. Single-occupant travel is often necessary.
Y	N 	Goal	3. Classroom, Office and/or Restroom lighting for the unit is controlled by occupancy sensors.
Y	N	Goal	4 . The unit's thermostats are set to minimize energy use for heating and cooling.
<u>Cu</u> Y □		ulum Goal 1	1. The unit has courses dedicated to issues related to sustainability. N/A – The Center does not teach courses. At present, none of the Center's projects have a sustainability component.
Y	N 	Goal 2	2. The unit has courses with sustainability content.
Y	N 	Goal	3. The unit has courses in which students are encouraged to address sustainability issues in their assignments.
Y	_	Goal 4	I. The unit recognizes sustainability courses from other departments as legitimate electives for credit in its programs.
Y	N 	Goal	5. The unit has dedicated sustainability courses that can be taken for credit as part of a major or minor outside of the unit.

Res	<u>earch</u>		
Y	N Go	_	Members of the unit have conducted research on issues of sustainability in their discipline.
Y	N Go ⊠ [_	Members of the unit have published on issues of sustainability in their discipline.
Y	N Go	_	Members of the unit attend conferences that address issues of sustainability.
Y	N Go	_	Members of the unit belong to associations dedicated to sustainability issues.
Y	N Go ⊠ [_	The unit has hosted workshops on issues of sustainability.
Y	N Go ⊠ [_	The unit has hosted conferences on issues of sustainability.

Community Service and Outreach			
Y	N	Goal 1.	The unit engages in public and/or outreach activities that address issues of sustainability.
Y	N M	Goal 2.	The unit is in partnership with others in the community in the pursuit of sustainability.
Y	N 	Goal 3.	The unit participates in community events that address issues of sustainability.
Y	N 	Goal	The unit has initiated community endeavors in pursuit of sustainability.

Existing conditions as baseline (data as available)

In preparing our short-form responses to the questions in the previous section, we accumulated the following data sets. These comprise the numerical underpinnings specific to our (pick one) Center, Institute, Department, College, Vice-Presidency.

A List of Academic Offerings

Topical Sustainability Lectures
Topical Sustainability Modules
Sustainability Courses
Sustainability Programs
Sustainability Concentrations
Sustainability Degree Offerings
Sustainability Immersive On-and Off-Campus Experiences In the future, the Center would like to become involved in projects that immerse our students in
sustainability issues as they relate to historic buildings.

Existing conditions as baseline (data as available) A List of Faculty, Staff and Student Activities

Professional Academic Organizations
Professional Staff Organizations
Student Associations and Clubs
Hybrid Fleet Vehicle Use We encourage all of our staff (4) and students (9) to use hybrid vehicles when travelling.
Hybrid Electric Shuttle Bus Use
Bicycling 1 student rides her bike to the Center.
Carpooling
MITS Bio-Diesel Bus Use
Conference Travel; Carbon Offset Purchases (and others) We encourage all of our staff (4) and students (9) to use hybrid vehicles when travelling.

Existing conditions as baseline (data as available)

A List of Operational Commitments in the Building(s) We Occupy

Building Use: Lamps, Occupancy Sensors, Waterless Urinals

The Center uses fluorescent light bulbs in lamps.

Material Use/Recycling: Paper, Water, Cartridges, Cans, Glass, Wet Garbage

The Center uses recycled paper, and recycles paper, ink cartridges, cans and glass.

Food Use/Recycling: Local Sourcing, Washable Dinnerware

The Center uses washable dinnerware.

Goals

Given our assessment of where things stand, we have identified the following goals for our unit.
Governance and Administration
Operations
Curriculum
Research
The Center would like to receive a grant to study, research or otherwise immerse our students in sustainability issues common in historic buildings.
Community Service and Outreach

Implementation

We have aligned specific action items with the 5-year cycling of the Strategic Plan and anticipate being able to move forward in the respective categorical areas, as described below.

2008	Action Items	 Resource Needs
Governance and	Administration	Currently, because of restrictions on the use of procurement cards and because of purchasing procedures, it is almost impossible to purchase the most sustainable office supplies, furniture, and consumable items for events.
Operations		
Curriculum		
Research		
Community Serv	ice and Outreach	

2009 Action Items	Resource Needs
Governance and Administration	
Operations	
Committee	
Curriculum	
Research	
Community Service and Outreach	

2010 Action Items	Resource Needs
Governance and Administration	
Operations	
Curriculum	
Research	
Trescur en	
Community Service and Outreach	

2011 Action	Items	Resource Needs
Governance and Adı	ministration	
Operations		
Curriculum		
Research		
Community Service	and Outreach	
I		

2012 Action Items	Resource Needs
Governance and Administration	
Operations	
Operations	
Curriculum	
Research	
Community Service and Outreach	

Ball State University Unit-level Sustainability Planning

[as mandated in Goal IV_F of the 2007-2012 Ball State University Strategic Plan]

A Sustainability Plan

for the

College of Architecture and Planning Land Design Institute

Submitted to
Dr. Terry King
Provost and Vice-President for Academic Affairs

31 January, 2008

[on or before]

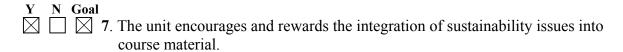
Achievements to Date

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[Provide brief descriptions for each affirmative or goal response]

Governance and Administration
Y N Goal 1. The unit has standing committees to address issues of sustainability.
The Institute has no standing committees. Core faculty members (at BSU and at partner universities) work closely to promote sustainability, which is a thrust of the Institute.
Y N Goal 2. The unit gives assigned load and/or a staff position dedicated to sustainability initiatives.
The LDI has no load to assign and no staff positions to dedicate to sustainability. The Director is typically loaded 25% to LDI. Sustainability is a thrust of the LDI.
Y N Goal 3. The unit has established policies that encourage sustainability initiatives.
Established policies include the LDI mission of ecologically and culturally responsible land design; agenda of enhancing sustainability at BSU and the communities it serves; and interinstitutional Agreements to work with other universities to promote sustainability.
Y N Goal
The LDI mission statement of ecologically and culturally responsible land design includes two of the three foundations of the "triple bottom line" of sustainability. The goal of expanding the LDI mission statement to include economic viability (today and in the future) will communicate the Institute's sustainability thrust in a more balanced manner.
Y N Goal Solution Solution
These include LDI leadership in two international sustainability consortia and institutional linkages with sustainability non-profits. The goal is to continue to build LDI membership in global, national, and regional sustainability networks.
Y N Goal ⊠ □ № 6. The unit encourages and rewards research related to sustainability.
CAP Ball State University Unit-level Sustainability Planning

While the LDI has no line item funding, it encourages and facilitates faculty development in research related to sustainability, and has secured internal and external funding that has rewarded faculty financially and in other ways (such as last year's Green Initiatives Award). The goal is to continue to pursue internal and external funds and to encourage and reward faculty members engaged in research related to sustainability. Permanent funding (in lieu of current dependency on grant funding) would significantly enhance LDI's ability to encourage and reward research related to sustainability. Continued development of the LDI LandLab will help achieve this goal.



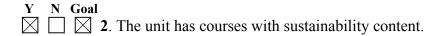
The LDI has encouraged and rewarded the integration of sustainability issues into course material. This has included creating the "ID250 Introduction to Sustainability" course (as part of the two FIPSE-funded sustainability consortia) and two assessments grants that have developed ways to integrate LEED into course materials and ways to integrate the international sustainability consortia into curricula. LDI ability to reward faculty is limited because LDI has no budget other than grant funding. The goal is to continue to pursue resources and encourage and reward the integration of sustainability issues into course material.

Operations Y N Goal
The LDI purchases little equipment, since it has no permanent funding and little grant funding for equipment. When the LDI has purchased equipment (such as computers), I believe these have been Energy Star.
Y N Goal
Most of the communications within the unit is by e-mail and videoconferencing. The LDI is currently developing its green materials database in digital form to make this material available to students in a way that limits paper use.
Y N Goal 3. The unit uses recycled paper.
Y N Goal N Goal 4. The unit recycles all materials accepted by the university system.
The LDI recycles some but not all materials.
Y N Goal ⊠ □ □ 5. The unit has appropriate recycling bins throughout its offices.
Y N Goal ⊠ □ № 6. The unit has policies that encourage the use of teleconferencing capabilities to limit travel.
The LDI has elected to use teleconferencing to avoid about 50% of its sustainability consortia travel. To reduce teaching-related travel, the LDI has facilitated innovative teaching including teleconferencing and videoconference teaching. Videoconference teaching included the ID250: Introduction to Sustainability course taught to our Brazilian partners; and an international design studio with our Mexican partners. This design studio included development of innovative technology-enhanced videoconferencing techniques that integrated videoconferencing, desktop sharing, Smart Board technology, digital design critiques, voice-over-Internet, and Blackboard file-sharing. The goal is to continue to develop tools that help the LDI reduce the amount of travel.
Y N Goal N Goal 7. The unit specifies hybrid electric vehicles for travel.
The LDI has requested hybrid electric vehicles on some occasions.

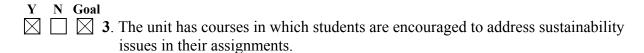
Y N Goal
CAP
January 31, 2008

☐ ☒ ☒ 8. The unit shows preference for sustainable lodging for professional travel.
Preference is to stay at sustainable lodging when networking is not an issue and when budgets allow. Desirability of networking often results in staying at the conference hotel.
Y N Goal Solution Y Soluti
The LDI has not consistently used washable dinner/service for its meetings. The goal is to do so whenever feasible.
Y N Goal ☐ ☑ ☑ 10. The unit purchases/uses remanufactured office furniture.
Since the LDI has no BSU budget and since office furniture is generally not billable to grants, the LDI has not purchased office furniture. The LDI uses furniture purchased by other units of the university, which to my knowledge have not purchased remanufactured office furniture.
Y N Goal N Goal 11. The unit purchases/uses sustainable materials for office furnishings.
Since the LDI has no BSU budget and office furniture is generally not billable to grants, the LDI has not purchased office furniture. The LDI uses furniture purchased by other units of the university. I do not know whether these office furniture are made of materials that have come from manufacturers that use materials harvested in a sustainable manner
Y N Goal ⊠ □ 12. The unit discourages the use of single-occupant automobile travel.
Yes, but since travel is mostly by the director to develop grants, by individual faculty to attend conferences, or by P.I.s to implement projects, much of the LDI's travel remains single-occupant.
Y N Goal Society
The goal is to convert the LDI Office to use occupancy sensors on the lighting.
Y N Goal 14. The unit's thermostats are set to minimize energy use for heating and cooling.
Goal is to be more consistent in turning the thermostat down when the room is not in use.
Curriculum Y N Goal ⊠ □ № 1. The unit has courses dedicated to issues related to sustainability.

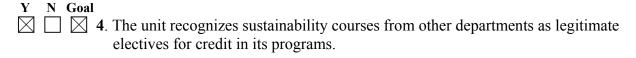
The LDI is not funded to teach courses. It did create the ID250: Introduction to Sustainability course. The LDI Director annually works with the CERES Director to ensure that the course is funded and with the instructor to see that the course is taught. The director also actively recruits students into the course. Faculty associated with the LDI also regularly offer several sustainability courses including immersive summer field study courses in sustainability, including international design-build studios.



The LDI is not funded to offer courses. However faculty associated with the LDI regularly build sustainability into courses. The LDI has also partnered with the Community Based Projects Director to create the Green Line Economic and Community Development Corridor project that encourages classes throughout the College (and hopefully in the future other colleges) to pursue sustainability projects associated with the Green Line. In Fall 2007 about ten (10) CAP studios pursued Green Line sustainability projects. The LDI also promotes other sustainability projects including renewable energy projects, carbon-neutral or carbon-positive projects, eco-balance and resource-balancing projects, brownfields reclamation projects, hazard recovery projects, and others. The goal is to continue to facilitate these types of class content.



The LDI is not funded to offer courses. However the LDI Director proposed that the Cooper-Skinner field site of the LDI LandLab (education, research, and demonstration lab that promotes sustainable decisions in the Midwest USA) be designated as a carbon-neutral design campus. Also, LDI faculty (Motloch and Calkins) proposed, and the faculty unanimously voted, that the Department of Landscape Architecture adopt the 2010 Initiative that requires faculty to include reduced fossil fuel consumption as a criterion of their class projects. They also proposed to the BSU Council on the Environment (COTE), and COTE recommended, that the University accept the 2030 Challenge for a carbon-neutral campus by year 2030 (with progressive interim performance targets). The goal is to continue to encourage faculty throughout the university to address sustainability issues in their assignments. The LDI LandLab that is beginning to be built on the Cooper-Skinner field site, will significantly increase the LDI's ability to do so.



The LDI has no academic degree programs. However its director works closely with advisors and chairs to see that the sustainability courses taken in the LDI-led sustainability exchanges by students in several departments (architecture, landscape architecture, natural resources and environmental management, business, and urban planning) are accepted as legitimate electives in their degree programs. In most cases, he has been successful. The goal is to be <u>more</u> effective in allowing the excellent sustainability courses offered by our consortia partners (in Brazil, Mexico and Canada) to be accepted into BSU degree programs. The goal is also to ensure that the LDI director does not loose signature authority on international exchanges into these interdisciplinary

sustainability exchange programs, so the director can continue to bring excellent international students into sustainability courses throughout BSU, thereby enhancing the international dimension into these sustainability courses as legitimate electives in BSU degree programs.

Y	N	Goal		
\boxtimes		\boxtimes	5 .	The unit has dedicated sustainability courses that can be taken for credit as part of
				a major or minor outside of the unit.

While the LDI has no dedicated courses, its director coordinates the Interdepartmental Minor in Sustainable Land Systems as well as teaching its sustainable land systems course. The LDI also facilitated creation of the ID250: Introduction to Sustainability course that is the foundations course of the Cluster of Interdepartmental Minors in Sustainability.

Kesearch N. N. C.
Y N Goal 1. Members of the unit have conducted research on issues of sustainability in their discipline.
The LDI works closely with faculty members in several departments to promote their sustainability research that they bring into their discipline. In the past year, for example, this has included significant work with faculty members in architecture, landscape architecture, business and urban planning. The goal is to continue and increase effectiveness.
Y N Goal Quantum Y N Goal
The LDI has worked with faculty members in various BSU departments as well as other universities to facilitate BSU faculty success in publishing on issues of sustainability in their disciplines as well as in other disciplines. This often includes co-authoring among faculty to ensure success. The goal is to continue and increase effectiveness.
Y N Goal Members of the unit attend conferences that address issues of sustainability.
LDI faculty members (including the director and faculty associates) have regularly attend sustainability conferences. Regularly these faculty present papers or chair sessions in these conferences. This includes eight papers in international conferences (six overseas and 2 stateside) this past academic year.
Y N Goal Members of the unit belong to associations dedicated to sustainability issues.
Although the LDI has no budget to join organizations, it has taken advantage of institutional membership in sustainability organizations such as the U.S. Green Building Council (USGBC).
Y N Goal Solution The unit has hosted workshops on issues of sustainability.
The LDI has hosted numerous workshops on issues of sustainability including the EPA Save-A-Light feature project in 2006, several ZERI (Zero Emissions Research Initiatives) workshops, an iCREED workshop promoting renewable energy, ecological restoration workshops, and others. The goal is to continue and expand this role.
Y N Goal M Soal M 6. The unit has hosted conferences on issues of sustainability.
The LDI has not hosted sustainability conferences: due to a lack of resources. The goal is to

obtain funding and to host a sustainability conferences; due to a lack of resources. The goal is to obtain funding and to host a sustainable conference that would include LDI national and international partners; members of its network in sustainability, integral sustainability and industrial symbiosis; and others.

Community Service and Outreach
Y N Goal I. The unit engages in public and/or outreach activities that address issues of sustainability.
The LDI engages in public and/or outreach activities that address issues of sustainability in Muncie (Living Lightly Fair, Second Chance Game, Straw-bale educational sessions, Muncie CLEAN, and so on), East Central Indiana (eco-economic and green initiatives), in the State of Indiana (Indiana CLEAN, Elkhart CLEAN, BioTown USA, and others), and globally (community-based sustainability projects in two FIPSE-funded international consortia). The goa is to expand these activities.
Y N Goal 2. The unit is in partnership with others in the community in the pursuit of sustainability.
The LDI partners with non-profits, agencies and others in the community in the pursuit of sustainability.
Y N Goal Solution 3. The unit participates in community events that address issues of sustainability.
Recent community events in which the LDI has participated include those at the local level (such as the Living Lightly Fair), State level (such as BioTown USA and Indiana CLEAN), national level (such as the EPA-funded Energy Efficiency Workshop and Save-A-Light Celebration in Reynolds and the Ohio River Brownfields Redevelopment Conference) and globally (including two international sustainability consortia).
Y N Goal Y N Goal
The LDI has initiated community endeavors such as the Second Chance Game (a sustainability

game) that has been a regular program offering of the Minnetrista Cultural Center and Oakhurst Gardens and that has been played locally for several years by small and large groups of 6th-8th graders.

Existing conditions as baseline (data as available)

In preparing our short-form responses to the questions in the previous section, we accumulated the following data sets. These comprise the numerical underpinnings specific to our (pick one) Center, Institute, Department, College, Vice-Presidency.

A List of Academic Offerings

Topical Sustainability Lectures

Faculty linked with the LDI regularly lecture on a range of sustainability topics including sustainable development frameworks, ZERI and other approaches to integrated technologies, Smart Growth, LEED, green building, sustainable communities, integrated water-wastewater-energy-building-landscape systems, and other topics.

Topical Sustainability Modules

Several faculty members linked with the LDI typically give sustainability projects in their design studios. Corresponding lectures constitute the equivalent of sustainability modules to prepare students to complete these projects. Faculty members linked with the LDI have also delivered class units or modules on the triple-bottom-line of sustainability, Leadership in Energy and Environmental Design (LEED), green building, sustainability in different global contexts, the Indiana CLEAN program, and other sustainability topics.

Sustainability Courses

Faculty linked with the LDI regularly teach sustainability courses including LA471: Sustainable Land Systems, ID250: Introduction to Sustainability, LA498/598 Reconnecting People and Place Summer Foreign Field Study Design-build Studio, and LA498/598 Sustainable Community Foreign Field Study course and sustainability in business. They have taught special Business Fellows courses on healthy living, Indiana Clean (including Muncie CLEAN and Elkhart CLEAN Projects), and energy efficiency and community conversion to renewable energy (BioTown USA).

Sustainability Programs

The LDI is the U.S. Lead on two international sustainability consortia: the US-Brazil Sustainability Consortium, and the North American Sustainability, Housing and Community Consortium. These are the two pilot projects of the Sustainability for the Americas Initiative, with is the LDI's first regional cluster of its intended global sustainability network.

Sustainability Concentrations

The LDI Director coordinates the Interdepartmental Minor in Sustainable Land Systems, which is one of the University's Cluster of Interdepartmental Minors in Sustainability.

Sustainability Degree Offerings

None. The LDI has a desire to create a sustainability degree program, as have several of its partner universities in its two international sustainability consortia.

Sustainability Immersive On-and Off-Campus Experiences

Faculty members linked with the LDI pursue a number of sustainability immersive experiences, both onand off-campus. In the past year, on-campus immersive learning experiences of these faculty have
included immersive learning experiences at the Cooper-Skinner field site designing and building the
straw-bale building. In the past year or two, off-campus immersive learning experiences have included
the EPA-P3 National Student Design Competition Presentation in Washington DC, the Reconnecting
People and Place Summer Foreign Field Study including design-build in Mexico, the Save-a-Light and
Energy-efficient Workshop (National DOE Project), semester sustainability exchanges in Brazil
(USBSC) and Mexico (NASHCC) and inter-institutional sustainability partnering among two landscape
architecture classes at BSU and one integrated systems engineering class at Purdue.

Existing conditions as baseline (data as available)

A List of Faculty, Staff and Student Activities

Professional Academic Organizations

Faculty members associated with the LDI are active in several sustainability-related professional organizations. These include the American Institute of Architects (AIA), the American Society of Landscape Architects (ASLA), and the U.S. Green Building Council (USGBC).

of Landscape Architects (ASLA), and the U.S. Green Building Council (USGBC).
Professional Staff Organizations
Student Associations and Clubs
Hybrid Fleet Vehicle Use
Hybrid Electric Shuttle Bus Use
Bicycling
Carpooling
MITS Bio-Diesel Bus Use
Conference Travel; Carbon Offset Purchases (and others)
Some faculty members linked with the LDI engage in web-based conference to reduce flight miles

Some faculty members linked with the LDI engage in web-based conference to reduce flight miles, purchase carbon offsets when available, and choose to stay in sustainable hotels when available.

Existing conditions as baseline (data as available) A List of Operational Commitments in the Building(s) We Occupy

Building Use: Lamps, Occupancy Sensors, Waterless Urinals	
Material Use/Recycling: Paper, Water, Cartridges, Cans, Glass, Wet Garbage	

Food Use/Recycling: Local Sourcing, Washable Dinnerware

Goals

Given our assessment of where things stand, we have identified the following goals for our unit.

Governance and Administration

- Expand Mission Statement to more clearly embrace economic viability today and tomorrow.
- Reconstitute its Sustainability Advisory and Development Group to enhance LDI effectiveness in promoting eco-economic and sustainable community development in Indiana and beyond.
- Secure an operating budget (for release time, membership in sustainability organizations, travel to generate projects, faculty development in the area of sustainability, technology-enhanced videoconference teaching tool development, hosting international sustainability conference, participating in sustainability conferences, etc.) so LDI can more effectively pursue its operations, curriculum, research and outreach intentions.

Operations

- Expand activities of the LDI's Sustainability for the Americas initiative, including research and education n other countries of the Americas; Extend LDI international sustainability initiatives in other global regions.
- Continue to increase the number of faculty members associated with the LDI and the number that benefit from LDI activities.
- Continue to build the LDI LandLab as a laboratory for immersive learning, research and demonstration of green materials and technologies.
- Increase LDI effectiveness in promoting sustainability in the Midwest

Curriculum

- Promote adoption of 2010 Initiative by academic units within the College of Architecture and Planning; Continue to help incorporation 2010 Initiative provisions into curricula.
- Promote BSU development of an interdisciplinary sustainability degree program; or a sustainability degree extension for degrees across campus (CalPoly Pomona model).
- Facilitate faculty development of distance education courses in the area of sustainability.
- Integrate LandLab experiences into curriculua as immersive learning.
- Continue to build international dimensions of curriculum to help students see beyond unsustainable U.S. paradigm.
- Create early responder curriculum and CAP Peace Corps Training Program to enhance social justice (social sustainability)
- Build LEED distance education program
- Expand the use of LDI-developed technology-enhanced videoconferencing, including "design-crits-at-a-distance" in the College of Architecture and Planning.

Research

- Faculty development and LDI facilitation of research proposals in area of sustainability.
- Reward faculty for research in the area of sustainability.
- Continue to build the LDI LandLab green technology demonstration projects as sustainability research facilities.
- Initiate eco-economic development research and industrial symbiosis research that can enhance Indiana economic competitive (now and in the future) in ways that are environmentally sustainable.

Community Service and Outreach

- Promote eco-economic and sustainable community development in East Central Indiana and Statewide.
- Implement program for local community service and outreach projects (including immersive learning) in the area of sustainability
- Continue to build international community service and outreach projects (and immersive learning projects that helps students see beyond U.S. paradigm) in the area of sustainability

Implementation

We have aligned specific action items with the 5-year cycling of the Strategic Plan and anticipate being able to move forward in the respective categorical areas, as described below.

Governance and Administration

Expand Mission Statement to more clearly embrace economic viability today and tomorrow.

Reconstitute Sustainability Advisory and Development Group to enhance LDI effectiveness in promoting ecoeconomic and sustainable community development in Indiana and beyond.

Operating budget (additional release time and summer salary for director, membership in sustainability organizations, travel to research projects and generate funding, faculty participating in conferences, etc.) so LDI can pursue its operations, curriculum, research and outreach goals.

Faculty development in the area of sustainability including rewards to faculty

Hosting international sustainability conference

Technology-enhanced videoconference teaching tool development

Operations

Expand activities of Sustainability for the Americas initiative, including research and education in other countries of the Americas; Extend LDI international sustainability initiatives in other global regions.

Continue to increase the number of faculty members associated with the LDI and the number that benefit from LDI activities.

\$0

\$1000 / year to meet with members, develop knowledge of local operations, build trust, etc.

\$30,000 / year

\$20,000 / year

\$20,000 stipends and reimburseables for speakers

\$7500 / year for stipend, hardware and software.

\$8,000 / year for travel (including international) to build partnerships, develop projects, and develop funding proposals.

\$9,000 / year to reward faculty for proposal generation and for participation prior to their receipt of external funding.

Continue to build the LDI LandLab as a laboratory for immersive learning, research and demonstration of green materials and technologies.

\$20,000 for promotional DVD; \$15,000 / year for oversight and to pursue external funding for facilities construction and maintenance.

Increase LDI effectiveness in promoting sustainability in the Midwest

\$2,000 / year marketing budget.

Curriculum

Promote adoption of 2010 Initiative by academic units within the College of Architecture and Planning; Continue to help incorporation 2010 Initiative provisions into curricula

\$0

Promote BSU development of an interdisciplinary sustainability degree program; or a sustainability degree extension for degrees across campus (CalPoly Pomona model).

\$9,000 for one year to develop program;

Facilitate faculty development of distance education courses in the area of sustainability.

\$0 because LDI only facilitates; Other units work with faculty to implement.

Integrate LandLab experiences into curricula as immersive learning.

Included in administrative funding above (no additional)

Continue to build international dimensions of curriculum to help students see beyond unsustainable U.S. paradigm.

Included in administrative funding above (no additional)

Create early responder curriculum and CAP Peace Corps Training Program to enhance social justice (social sustainability) \$20,000 to create program and to pursue external funding to sustain program

Build LEED distance education program

\$10,000 to convert course currently being taught in the classroom (by faculty associated with LDI) into a distance education course

Expand the use of LDI-developed technology-enhanced videoconferencing, including "design-crits-at-a-distance" in the College of Architecture and Planning.

\$1000 stipend for each faculty to use technology in heir course.

Research

Faculty development and LDI facilitation of research proposals in area of sustainability.

\$20,000 / year to develop two faculty each year.

Reward faculty for research in the area of sustainability.

See "Operations" above

Continue to build the LDI LandLab green technology demonstration projects as sustainability research facilities.

See "Operations" section above

Initiate eco-economic development research and industrial symbiosis research that can enhance Indiana economic competitive (now and in the future) in ways that are environmentally sustainable.

\$15,000 to pursue funding to create BSU Eco-economic Innovation Center

Community Service and Outreach

Promote eco-economic and sustainable community development in East Central Indiana and Statewide.

\$20,000 / year to implement economic and sustainable community trunk show (workshop in 10 communities per year)

Implement program for local community service and outreach projects (including immersive learning) in the area of sustainability \$5,000 / year for project development; Implementation funded by communities.

Continue to build international community service and outreach projects (and immersive learning projects that helps students see beyond U.S. paradigm) in the area of sustainability

See Sustainability for the Americas item in "Operations" section.