Infrastructure Status Reports

The reports included in this document were submitted by various state agencies to the Legislative Services Agency in accordance with the following provisions:

Sections 8.57(6)(h), 8.57A(5), 8.57B(5), 8.57C(4), and 12E.12(9), <u>Code of Iowa</u> and Chapter 1179, Section 19, 2006 Iowa Acts

Compiled by the Legislative Services Agency

Table of Contents

Dept. of Administrative Services
Dept. of Agriculture and Land Stewardship
Dept. for the Blind
Dept. of Corrections
Dept. of Education
Ethics and Campaign Finance Disclosure
Dept. of Human Rights
Dept. of Human Services
Iowa Telecommunications and Technology Comm 64
Iowa Law Enforcement Academy
Dept. of Natural Resources
Dept. of Public Defense
Board of Regents
Dept. of Veterans Affairs
Department of Transportation

Department of Administrative Services

Annual Infrastructure Report—2006

lowa Department of Administrative Services

January 1, 2007

In accordance with the Code of Iowa, Section 8.57, this annual report summarizes the status of all ongoing building related projects for which an appropriation from the Rebuild Iowa Infrastructure Fund, the Vertical Infrastructure Fund or the Tobacco Settlement Trust Fund has been made to the Department of Administrative Services. The report includes projects for which funding reverted in 2006 as well as ongoing projects.

Infrastructure Appropriations for Facilities Statewide

Location: Statewide

Project: Major Maintenance

Description of the Work:

Major maintenance; health, safety, loss of use; and Americans with Disablities Act deficiencies at the Capitol Complex and statewide for twelve agencies and divisions participating in the Vertical Infrastructure Program in collaboration with the Governor's Vertical Infrastructure Advisory Committee, including the Department of Administrative Services; the Department of Commerce, Alcoholic Beverages Division; the Department of Corrections; the Department of Cultural Affairs; the Department of Education, including lowa Public Television and lowa Vocational Rehabilitation Services; the Department of Human Services; lowa Law Enforcement Academy; the Department of Public Safety; Terrace Hill; lowa Veterans Home and lowa Workforce Development. The advisory committee meets on a monthly basis to review the progress of the work and to make recommendations on procedures and priorities. Additional information on major maintenance projects is available in the advisory committee's Eighth Annual Report to the Governor, dated December 15, 2006.

Progress of the Work:

Work is on-going and many projects have been completed. Refer to the Vertical Infrastructure Advisory Committee's Eighth Annual Report to the Governor dated December 15, 2006, for additional information.

Estimated Completion Date of the Project: (See Comments Below)

Completion dates for individual projects varies. It is anticipated that final completion of all work will correspond with reversion dates.

Total Estimated Cost of the Project: \$288,513,208

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. All funds have been allocated to specific projects based on priorities recommended by the Governor's Vertical Infrastructure Advisory Committee. Additional funding sources include rebates, SIFIC loans and agency operational funds for specific projects.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type			Appropriation Code and Name			
Iowa Infrastructure Account						
FY 2000	Appropriation	049R	DGS-Health,Fire,Life,Gen.Maint	\$7,500,000		
FY 2001	Appropriation	049R	DGS-Health,Fire,Life,Gen.Maint	\$10,500,000		
FY 2002	Appropriation Transfer	049R	DGS-Health,Fire,Life,Gen.Maint	\$86,000		
			Total from Iowa Infrastructure Account:	\$18,086,000		
		Tota	Out Year Appropriations from Iowa Infrastructure Account:	\$0		
		Tota	Five Year Plan Estimate from Iowa Infrastructure Account:	\$0		
	Total Estimate	ed Fundii	ng Requirement Through FY2012 from Iowa Infrastructure Account:	\$18,086,000		

Infrastructure Appropriations for Facilities Statewide

ject: Major Mai	ntenance			
Tax-Exempt Bonds Pro				
FY 2002	Appropriation	031R	DGS-Major Renovation	\$11,500,000
FY 2003	Appropriation	031R	DGS-Major Renovation	\$15,750,000
FY 2004	Appropriation	031R	DGS-Major Renovation	\$11,500,000
FY 2006	Appropriation	031R	DGS-Major Renovation	\$3,000,000
			Total from Tax-Exempt Bonds Proceeds Rest:	\$41,750,000
	Tota	l Out Ye	ear Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0
	Tota	l Five Y	ear Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0
	Total Estimated Fund	ding Req	uirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$41,750,000
Vertical Infrastructure F	und			
FY 2006	Appropriation	022T	VIF - Major Maintenance	\$5,623,200
FY 2007	Appropriation	022T	VIF - Major Maintenance	\$10,000,000
FY2008	FY2008 Appropriation	022T	VIF - Major Maintenance	\$40,000,000
FY2009	FY2009 Appropriation	022T	VIF - Major Maintenance	\$40,000,000
FY2008-FY2012	Five Year Plan Estimate	022T	VIF - Major Maintenance	\$120,000,000
			Total from Vertical Infrastructure Fund:	\$15,623,200
		Tota	Out Year Appropriations from Vertical Infrastructure Fund:	\$80,000,000
		Tota	I Five Year Plan Estimate from Vertical Infrastructure Fund:	\$120,000,000
Rebuild Iowa Infrastruc FY 2006 FY 2005	Appropriation Appropriation	0R52 0R29	Statewide Major Maintenance Statewide Major Renovation & Repair	\$291,891 \$4,300,000
F1 2005	Арргорпацоп	UNZ9	Total from Rebuild Iowa Infrastructure Fund:	\$4,591,891
	To	tal Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$4,591,691 \$0
			Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$0 \$0
			equirement Through FY2012 from Rebuild lowa Infrastructure Fund:	\$4,591,891
Additional Funding Sou		iung ite	quirement i mought 12012 nom Nebulla Iowa ilmastracture i ana.	ψ 4 ,551,051
•	Various Agenies for Related	0R29	Statewide Major Renovation & Repair	\$154,390
	Various Agenies for Related	049R	DGS-Health,Fire,Life,Gen.Maint	\$380,351
	Various Agenies for Related	031R	DGS-Major Renovation	\$5,077,652
	Various Agenies for Related	022T	VIF - Major Maintenance	\$870,357
	Various Agenies for Related	0R52	Statewide Major Maintenance	\$25,742
	Various Agenies for Related	031R	DGS-Major Renovation	\$334,405
	Various Agenies for Related	031R	DGS-Major Renovation	\$1,619,221
T dildo i toooivod iloiii	various rigorillos for restatou		Total Additional Funds:	\$8,462,117
			Total Year To Date Appropriations:	\$80,051,091
			Total Teal To Date Appropriations: Total Additional Funds:	\$8,462,117
			Total Out Year Appropriations:	\$80,000,000
			Total Gut Teal Appropriations. Total Five Year Plan Estimate:	\$120,000,000
			i dai i ivo i cai i ian Estimate.	φ , ε ω ω ω ω
			Total Estimated Funding Requirement Through FY2012:	\$288,513,208

Year to Date Financial Summary for Major Maintenance:

Year To Date Appropriations:	Year To Date Additional Funds:	Year To Date Total Funds:	Year To Date Total Encumbered:	Year To Date Total Expended:	YTD Encumbered Not Expended:	YTD Available To Encumber:	
\$80,051,091	\$8,462,117	\$88,513,208.42	\$75,884,006	\$73,339,826	\$2,544,180	\$12,629,202	

Infrastructure Appropriations for Facilities Statewide

Location: Statewide

Project: Routine Maintenance

Description of the Work:

Routine, recurring and preventive maintenance for state owned facilities at the Capitol Complex and statewide for twelve agencies and divisions participating in the Vertical Infrastructure Program in collaboration with the Governor's Vertical Infrastructure Advisory Committee, including the Department of Administrative Services; the Department of Commerce, Alcoholic Beverages Division; the Department of Corrections; the Department of Cultural Affairs; the Department of Education, including Iowa Public Television and Iowa Vocational Rehabilitation Services; the Department of Human Services; Iowa Law Enforcement Academy; the Department of Public Safety; Terrace Hill; Iowa Veterans Home and Iowa Workforce Development. The advisory committee makes meets on a monthly basis to review the progress of the work and to make recommendations on procedures and priorities. Routine maintenance funds are distributed to each agency on a square foot basis, typically at the rate of 18 to 21¢ per square foot for some 11.5 million square feet of facilities. Additional information on routine maintenance is available in the advisory committee's Eighth Annual Report to the Governor, dated December 15, 2006.

Progress of the Work:

Agencies are responsible for expending funds within the guidelines of a Memorandum of Understanding between each agency and the Department of Administrative Services.

Estimated Completion Date of the Project: January 2007

All funds will be transferred to agencies by this date.

Total Estimated Cost of the Project: \$112,200,500

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that all funds will be expended.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Appropriation Code and Name			ppriation Code and Name	Amounts		
Iowa Infrastructure Account						
FY 2001	FY 2001 Appropriation 008C Capitol Complex Routine Maint.					
FY 2002	Appropriation	007C	Statewide Routine Maintenance	\$2,000,000		
			Total from Iowa Infrastructure Account:	\$4,000,000		
		Total	Out Year Appropriations from Iowa Infrastructure Account:	\$0		
		Total	Five Year Plan Estimate from Iowa Infrastructure Account:	\$0		
Total Estimated Funding Requirement Through FY2012 from lowa Infrastructure Account:				\$4,000,000		
Rebuild Iowa Infrastruc	ture Fund					
FY 2005	Appropriation	0R27	DGS-Routine Maintenance	\$2,000,000		
FY 2006	Appropriation	0R27	DGS-Routine Maintenance	\$2,000,000		
FY 2004	Appropriation	0R17	DGS-Routine Maintenance	\$1,664,000		
FY2008-FY2012	Five Year Plan Est	timate 0R17	DGS-Routine Maintenance	\$100,000,000		
FY 2007	Appropriation	044T	DGS-Routine Maintenance	\$2,536,500		
			Total from Rebuild Iowa Infrastructure Fund:	\$8,200,500		
		Total Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0		
		Total Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$100,000,000		
	Total Estimat	ed Funding Re	quirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$108,200,500		
			Total Year To Date Appropriations:	\$12,200,500		
			Total Additional Funds:	\$0		
			Total Out Year Appropriations:	\$0		
			Total Five Year Plan Estimate:	\$100,000,000		
		-	Total Estimated Funding Requirement Through FY2012:	\$112,200,500		

Infrastructure Appropriations for Facilities Statewide

Location: Statewide

Project: Routine Maintenance

Year to Date Financial Summary for Routine Maintenance:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$12,200,500	\$0	\$12,200,500.00	\$12,170,978	\$12,170,978	\$0	\$29,522	

Location: Capitol Complex, Des Moines

Project: Capitol Interior and Exterior Restoration

Description of the Work:

Continuing restoration of Capitol including removal of the final remaining mezzanine, relocation of the cafeteria, restoration of the rotunda and continuing safety and accessibility improvements. Exterior work including restoration of the east steps, restoration of sidewalks and drives, and landscaping improvements including irrigation.

Progress of the Work:

As part of recent contracts, removal of all non-code compliant mezzanines has been completed, the cafeteria has been relocated and areas of refuge have been established. Some water damage repairs have been completed.

Estimated Completion Date of the Project: (See Comments Below)

Work is on-going. Removal of mezzanines and restoration of 2nd and 3rd floors of the east projection will be completed in January 2007. Installation of areas of refuge will be completed by January 2007. Water damage repairs have been completed in areas G23, CO2 and C202, however, some damaged areas are still damp and work cannot proceed until further drying takes place. Design work is underway for restoration of the east exterior steps and construction is expected to take place between May of 2007 and December of 2008. Design is underway for restoration of the upper rotunda areas, including painting and lighting improvements, a work is expected to take place between May and December of 2007.

Total Estimated Cost of the Project: \$67,857,853

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. Between 1983 and 2006 more than \$90 million has been appropriated to Capitol restoration projects. Additional details are available upon request.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Appropriation Code and Name			Amounts	
Endowment for lowa's	Health Restricted Capitals	Fund		
FY 2007	Appropriation	041T	Capitol Interior	\$6,830,000
		Total fr	om Endowment for Iowa's Health Restricted Capitals Fund:	\$6,830,000
	Total Out Year Appropri	ations fr	om Endowment for Iowa's Health Restricted Capitals Fund:	\$0
	Total Five Year Plan Es	timate fr	om Endowment for Iowa's Health Restricted Capitals Fund:	\$0
Total Estim	ated Funding Requirement T	hrough F	Y2012 from Endowment for Iowa's Health Restricted Capitals Fund:	\$6,830,000
Iowa Infrastructure Acc	count			
FY1995-FY1999	Appropriation	055R	Capitol Prior Year Appropriations	\$15,067,600
FY 2000	Appropriation	055R	Capitol Restoration Interior	\$4,381,000
FY 2001	Appropriation	055R	Capitol Restoration Interior	\$4,324,100
FY 2002	Appropriation Transfer	055R	Capitol Restoration Interior	\$334,000
			Total from Iowa Infrastructure Account:	\$24,106,700
		Tota	Out Year Appropriations from Iowa Infrastructure Account:	\$0
		Tota	Five Year Plan Estimate from Iowa Infrastructure Account:	\$0
	Total Estimate	ed Fundii	ng Requirement Through FY2012 from Iowa Infrastructure Account:	\$24,106,700

Location: Capitol Complex, Des Moines

-	terior and Exterior F	restor	ation	
Tax-Exempt Bonds Pro	ceeds Rest			
FY 2002 Appropriation 051R DGS-Capitol Inter. Rest.				
FY 2003	Appropriation	051R	DGS-Capitol Inter. Rest.	\$2,700,000
FY 2005	Appropriation	051R	DGS-Capitol Inter. Rest.	\$3,500,000
FY 2003	Appropriation	016R	DGS-Cap.Inter.Rest 03	\$5,000,000
FY 2004	Appropriation	016R	DGS-Cap.Inter.Rest 03	\$6,239,000
FY 2006	Appropriation	016R	DGS-Cap.Inter.Rest 03	\$4,500,000
FY 2002	Appropriation Transfer	051R	DGS-Capitol Inter. Rest.	\$499,940
FY 2003	Appropriation Transfer	051R	DGS-Capitol Inter. Rest.	\$120,000
			Total from Tax-Exempt Bonds Proceeds Rest:	\$24,258,940
	Tota	al Out Y	ear Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0
	Tota	al Five Y	ear Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0
	Total Estimated Fun	ding Req	uirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$24,258,940
FY2008-FY2012	Five Year Plan Estimate	e 017T	Capitol Interior/Exterior	\$12,500,000
			Total from Rebuild Iowa Infrastructure Fund:	\$0
	To	otal Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0
	To	otal Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$12,500,000
	Total Estimated Fu	ınding Re	equirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$12,500,000
dditional Funding Sou	irces			
Transfer from Treasur	rer's Office	051R	DGS-Capitol Inter. Rest.	\$25,000
Misc. Receipts		051R	DGS-Capitol Inter. Rest.	\$8,071
Funds Received per N	MOU with Public Safety	051R	DGS-Capitol Inter. Rest.	\$124,851
Funds Received per N	MOU with Cultural Affairs	051R	DGS-Capitol Inter. Rest.	\$4,291
			Total Additional Funds:	\$162,213
			Total Year To Date Appropriations:	\$55,195,640
			Total Additional Funds:	\$162,213
			Total Out Year Appropriations:	\$0
			Total Five Year Plan Estimate:	\$12,500,000
			Total Estimated Funding Requirement Through FY2012:	\$67,857,853
				+,

Year to Date Financial Summary for Capitol Interior and Exterior Restoration:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$55,195,640	\$162,213	\$55,357,853.39	\$50,859,383	\$48,887,945	\$1,971,438	\$4,498,470	

Location: Capitol Complex, Des Moines

Project: Records Center Renovation for Dept. of Public Safety Offices

Description of the Work:

Renovation of the Records and Property Center on the Capitol Complex to provide offices for the Department of Public Safety.

Progress of the Work:

Renovation work is expected to be completed in Spring 2007. The move into the renovated facility will begin in April 2007.

Estimated Completion Date of the Project: May 2007

Work is nearing completion. Move-in of Public Safety is scheduled to take place in March and April of 2007.

Total Estimated Cost of the Project: \$18,425,210

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that all funds will be expended. Some additional funds have been provided by the Department of Public Safety. Relocation and move funds have been provided by a separate appropriation.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds /	Fiscal Year / Type	Appropriation Code and Name	Amounts
Tax-Exempt Bonds	Proceeds Rest		
FY 2003	Appropriation	0R95 DGS-Record Center Remod. 03	\$1,600,000
FY 2006	Supplementals	079R Records and Property Ctr Remodeling FY06	\$2,200,000
		Total from Tax-Exempt Bonds Proceeds I	Rest: \$3,800,000
		Total Out Year Appropriations from Tax-Exempt Bonds Proceeds I	Rest: \$0
		Total Five Year Plan Estimate from Tax-Exempt Bonds Proceeds I	Rest: \$0
	Total Estimat	ed Funding Requirement Through FY2012 from Tax-Exempt Bonds Proceeds	Rest: \$3,800,000
Rebuild Iowa Infras	tructure Fund		
FY 2004	Appropriation	021R GSE-Records Center Remodel	\$4,750,000
FY 2005	Appropriation	021R GSE-Records Center Remodel	\$5,000,000
FY 2006	Appropriation	021R GSE-Records Center Remodel	\$4,700,000
		Total from Rebuild Iowa Infrastructure F	Fund: \$14,450,000
		Total Out Year Appropriations from Rebuild Iowa Infrastructure F	Fund: \$0
		Total Five Year Plan Estimate from Rebuild Iowa Infrastructure F	Fund: \$0
	Total Estima	ted Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure I	Fund: \$14,450,000
Additional Funding	Sources		
Funds Received f	from Public Safety	021R GSE-Records Center Remodel	\$175,210
		Total Additional F	unds: \$175,210
		Total Year To Date Appropriati	ions: \$18,250,000
		Total Additional Fu	unds: \$175,210
		Total Out Year Appropriat	ions: \$0
		Total Five Year Plan Estin	mate: \$0
		Total Estimated Funding Requirement Through FY2	2012: \$18,425,210

Year to Date Financial Summary for Records Center Renovation for Dept. of Public Safety Offices:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:
\$18,250,000	\$175,210	\$18,425,210.00	\$18,346,738	\$15,748,070	\$2,598,667	\$78,472

Location: Capitol Complex, Des Moines

Project: Micrographics Building Demolition

Description of the Work:

Demolish the deteriorating Micrographics Building north of the Records and Property Center in preparation for renovation of the Records and Property Center.

Progress of the Work:

Work is completed.

Estimated Completion Date of the Project: August 2005

Total Estimated Cost of the Project: \$170,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. Appropriated funds were adequate to complete the work.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type		Appropriation Code and Name	Amounts	
Tax-Exempt Bonds	Proceeds Rest			
FY 2003	Appropriation	0R92 DGS-Micrographic Demo. 03	\$170,000	
		Total from Tax-Exempt Bonds Proceeds Rest:	\$170,000	
		Total Out Year Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0	
		Total Five Year Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0	
	Total Estima	ated Funding Requirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$170,000	
		Total Year To Date Appropriations:	\$170,000	
		Total Additional Funds:	\$0	
		Total Out Year Appropriations:	\$0	
		Total Five Year Plan Estimate:	\$0	
		Total Estimated Funding Requirement Through FY2012:	\$170,000	

Year to Date Financial Summary for Micrographics Building Demolition:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:
\$170,000	\$0	\$170,000.00	\$170,000	\$170,000	\$0	\$0

Location: Capitol Complex, Des Moines

Project: Records Center Relocation

Description of the Work:

Funding is for move related expenses, temporary lease costs, tenant improvements at leased locations and other relocation expenses related to renovation of the Records and Property Center into an office facility for the Department of Public Safety. This funding enables the Department of Administrative Services to move agencies housed at the site to new locations and to assist with relocation of Public Safety from the Wallace Building and Public Safety leased locations into the renovated building.

Progress of the Work:

Cultural Affairs, Revenue, Iowa Prison Industries and General Services Fleet functions have been moved out of the facility. Planning is underway to move Public Safety into the renovated building beginning in April 2007.

Estimated Completion Date of the Project: June 2007

Total Estimated Cost of the Project: \$729,237

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. Estimated cost includes funds from this appropriation and additional funds from other Relocation and Leasing assistance appropriations to the Department of Administrative Services.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds	Source of Funds / Fiscal Year / Type Appropriation Code and Name		Amounts	
Rebuild Iowa Infrastructure Fund				
FY 2004	Appropriation	0R22 DGS-Records & Property Center Relocation	\$729,237	
		Total from Rebuild Iowa Infrastructure Fund:	\$729,237	
		Total Out Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0	
		Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$0	
	Total Estima	ated Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$729,237	
		Total Year To Date Appropriations:	\$729,237	
		Total Additional Funds:	\$0	
		Total Out Year Appropriations:	\$0	
		Total Five Year Plan Estimate:	\$0	
		Total Estimated Funding Requirement Through FY2012:	\$729,237	

Year to Date Financial Summary for Records Center Relocation:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$729,237	\$0	\$729,237.00	\$526,584	\$474,554	\$52,030	\$202,653	

Location: Capitol Complex, Des Moines

Project: New State Office Building/Wallace Building Replacement

Description of the Work:

Funding is for construction of a new 350,000 gross square foot office building and for demolition of the Wallace Building.

Progress of the Work:

Conceptual cost estimates have been completed and the required Return on Investment analysis is nearing completion. Legislative approval to proceed with planning and design will be requested in early January.

Estimated Completion Date of the Project: June 2011

Schedule is tentative only, subject to legislative approval to proceed and pending further detailed planning and design work.

Total Estimated Cost of the Project: \$77,142,100

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that funds appropriated in FY2007, FY2008, FY2009 and FY2010 will be adequate to complete the project.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Appropriation Code and Name				Amounts
Endowment for low	a's Health Restricted Capitals	Fund		
FY 2007	Appropriation	075R	Design Construc new state office bldg FY07	\$37,585,000
		Total fro	om Endowment for Iowa's Health Restricted Capitals Fund:	\$37,585,000
	Total Out Year Appropri	ations fro	om Endowment for Iowa's Health Restricted Capitals Fund:	\$0
	Total Five Year Plan Es	timate fro	om Endowment for Iowa's Health Restricted Capitals Fund:	\$0
Total E	stimated Funding Requirement TI	rough FY	/2012 from Endowment for Iowa's Health Restricted Capitals Fund:	\$37,585,000
FY2008	FY2008 Appropriation	028T	New State Building	\$16,100,000
FY2009	FY2009 Appropriation	028T	New State Building	\$16,800,000
FY2010	FY2010 Appropriation	028T	New State Building	\$6,657,100
			Total from Rebuild Iowa Infrastructure Fund:	\$0
	To	otal Out \	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$39,557,100
	To	tal Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$0
	Total Estimated Fu	nding Red	quirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$39,557,100
			Total Year To Date Appropriations:	\$37,585,000
			Total Additional Funds:	\$0
			Total Out Year Appropriations:	\$39,557,100
			Total Five Year Plan Estimate:	\$0
		7	Total Estimated Funding Requirement Through FY2012:	\$77,142,100

Year to Date Financial Summary for New State Office Building/Wallace Building Replacement:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$37,585,000	\$0	\$37,585,000.00	\$10,254	\$10,254	\$0	\$37,574,746	

Location: Capitol Complex, Des Moines

Project: Wallace Building Renovation

Description of the Work:

Replacement of hot water heating valves and pumps, changing of egress doors in high voltage room and storage room for code compliance and other short term improvements recommended by the building evaluation work.

Progress of the Work:

Most of the repair work has been completed. Balancing of hot water heating lines is underway. Additional work is undertaken as identified and as allowed by available funding.

Estimated Completion Date of the Project: July 2007

Total Estimated Cost of the Project: \$625,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that all appropriated funds will be expended.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds /	rce of Funds / Fiscal Year / Type Appropriation Code and Name		Amounts	
Rebuild Iowa Infrastructure Fund				
FY 2006	Appropriation	019T Wallace Building	\$625,000	
		Total from Rebuild Iowa Infrastructure Fu	und: \$625,000	
		Total Out Year Appropriations from Rebuild Iowa Infrastructure Fu	und: \$0	
		Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fu	und: \$0	
	Total Estima	ted Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure F	und: \$625,000	
		Total Year To Date Appropriation	ons: \$625,000	
		Total Additional Ful	nds: \$0	
		Total Out Year Appropriation	ons: \$0	
		Total Five Year Plan Estim	ate: \$0	

Total Estimated Funding Requirement Through FY2012:

\$625,000

Year to Date Financial Summary for Wallace Building Renovation:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$625,000	\$0	\$625,000.00	\$426,649	\$379,248	\$47,401	\$198,351	

\$230,000

Infrastructure Appropriations for Administrative Services Facilities

Location: Capitol Complex, Des Moines

Project: Wallace Building Evaluation

Description of the Work:

Funding allowed for a complete evaluation of the building and recommendations for repair or demolition.

Progress of the Work:

The assessment is complete and served as the basis for a recommendation by the Governor's Property Advisory Committee to construct a new state office building and subsequently demolish the Wallace Building.

Estimated Completion Date of the Project: December 2005

Total Estimated Cost of the Project: \$230,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type		Appro	opriation Code and Name	Amounts			
Rebuild Iowa Infrast	Rebuild Iowa Infrastructure Fund						
FY 2004	Appropriation	018R	DGS-Wallace Bldg Evaluation 04	\$50,000			
FY 2005	Appropriation Transfer	018R	DGS-Wallace Bldg Evaluation 04	\$180,000			
			Total from Rebuild Iowa Infrastructure Fund:	\$230,000			
	To	otal Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0			
	To	otal Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$0			
	Total Estimated Fu	nding Re	equirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$230,000			
			Total Year To Date Appropriations:	\$230,000			
			Total Additional Funds:	\$0			
			Total Out Year Appropriations:	\$0			
			Total Five Year Plan Estimate:	\$0			

Year to Date Financial Summary for Wallace Building Evaluation:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$230,000	\$0	\$230,000.00	\$199,211	\$199,211	\$0	\$30,789	

Total Estimated Funding Requirement Through FY2012:

Location: Capitol Complex, Des Moines

Project: West Capitol Terrace/Removal of Parking Lots 7 and 8

Description of the Work:

Funding has provided for planning and design, including removal of temporary parking lots 7 and 8 west of the Capitol Building and replacement with an ADA compliant walkway between East 7th and Finkbine, including landscaping to create a major public greenspace at the west entrance to the Capitol Complex. Funding is for Phase 1 only, which includes removal of the parking lots and creation of a plaza comparable in width to the East Locust Street right-of-way.

Progress of the Work:

The parking lots were removed in the summer of 2006 and work began in September 2006 for installation of the plazas. Work is approximately 3 weeks ahead of schedule.

Estimated Completion Date of the Project: June 2007

The targeted completion date for Phase 1 work is June 1, 2007, and work is scheduled to be complete in time for the first annual HyVee Triathlon on June 17, 2007. Completion of Phases 2 and 3 is dependent upon funding.

Total Estimated Cost of the Project: \$6,516,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Appropriation Code and Name			Amounts	
Tax-Exempt Bonds Pro	ceeds Rest			
FY 2003	Appropriation	0R94	DGS-Parking Lots 03	\$93,000
FY 2006	Supplementals	080R	West Capitol Terrace Restoration FY06	\$2,300,000
FY 2007	Appropriation Transfer	080R	West Capitol Terrace Restoration FY06	\$473,000
			Total from Tax-Exempt Bonds Proceeds Rest:	\$2,866,000
	Tota	al Out Y	'ear Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0
	Tota	al Five \	Year Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0
	Total Estimated Fun	ding Red	quirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$2,866,000
FY2008-FY2012	Five Year Plan Estimat	e 014T	West Capitol Terrace Restoration/Removal Parking Lot 8	\$3,650,000
			Total from Rebuild Iowa Infrastructure Fund:	\$0
	To	otal Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0
	To	otal Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$3,650,000
	Total Estimated Fu	ınding Re	equirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$3,650,000
			Total Year To Date Appropriations:	\$2,866,000
			Total Additional Funds:	\$0
			Total Out Year Appropriations:	\$0
			Total Five Year Plan Estimate:	\$3,650,000
			Total Estimated Funding Requirement Through FY2012:	\$6,516,000

Year to Date Financial Summary for West Capitol Terrace/Removal of Parking Lots 7 and 8:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$2,866,000	\$0	\$2,866,000.00	\$2,548,503	\$1,167,954	\$1,380,550	\$317,497	

Location: Capitol Complex, Des Moines

Project: Repairs to Parking Lots and Sidewalks

Description of the Work:

Repairs to various parking lots on the Capitol Complex.

Progress of the Work:

Design is under way and work is expected to begin in the Spring of 2007.

Estimated Completion Date of the Project: September 2007

All funds will be encumbered by June 30, 2007.

Total Estimated Cost of the Project: \$3,195,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that all appropriated funds will be expended. Additional funds have been requested for repairs to additional parking lots.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Appropriation Code and Name		Amounts			
Tax-Exempt Bonds Proceeds Rest					
FY 2006	Supplementals 081	R Parking Lot Repairs on Capitol Complex FY06	\$1,545,000		
		Total from Tax-Exempt Bonds Proceeds Rest:	\$1,545,000		
	Total Ou	t Year Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0		
	Total Fiv	e Year Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0		
	Total Estimated Funding I	Requirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$1,545,000		
FY2008-FY2012	Five Year Plan Estimate 012	2T Repairs to Parking Lots and Sidewalks	\$1,650,000		
		Total from Rebuild Iowa Infrastructure Fund:	\$0		
	Total C	Out Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0		
	Total F	ive Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$1,650,000		
	Total Estimated Funding	Requirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$1,650,000		
		Total Year To Date Appropriations:	\$1,545,000		
		Total Additional Funds:	\$0		
		Total Out Year Appropriations:	\$0		
		Total Five Year Plan Estimate:	\$1,650,000		
		Total Estimated Funding Requirement Through FY2012:	\$3,195,000		

Year to Date Financial Summary for Repairs to Parking Lots and Sidewalks:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$1,545,000	\$0	\$1,545,000.00	\$36,396	\$18,810	\$17,585	\$1,508,604	

\$12,720,000

Infrastructure Appropriations for Administrative Services Facilities

Location: Capitol Complex, Des Moines

Project: New Parking Structure

Description of the Work:

Design and construction of a new parking structure to serve the Capitol Complex.

Progress of the Work:

Work is completed and the parking structure opened

Estimated Completion Date of the Project: February 2003

Total Estimated Cost of the Project: \$12,720,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. Appropriated funds were adequate to complete the work.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type App		Appro	opriation Code and Name	Amounts
Iowa Infrastructure Acc	ount			
FY1995-FY1999	Appropriation	068R	Parking Structure Construction	\$5,820,000
FY 2000	Appropriation	066R	Parking Structure Construction	\$3,500,000
			Total from lowa Infrastructure Account:	\$9,320,000
		Tota	Out Year Appropriations from Iowa Infrastructure Account:	\$0
	Total Five Year Plan Estimate from Iowa Infrastructure Account:			
	Total E	stimated Fundi	ng Requirement Through FY2012 from lowa Infrastructure Account:	\$9,320,000
Tax-Exempt Bonds Pro	ceeds Rest			
FY 2003	Appropriation	017R	DGS-Cap.Park Garage 03	\$3,400,000
			Total from Tax-Exempt Bonds Proceeds Rest:	\$3,400,000
		Total Out Y	ear Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0
		Total Five Y	ear Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0
	Total Estimat	ted Funding Req	uirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$3,400,000
			Total Year To Date Appropriations:	\$12,720,000
			Total Additional Funds:	\$0
			Total Out Year Appropriations:	\$0
			Total Five Year Plan Estimate:	\$0

Year to Date Financial Summary for New Parking Structure:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$12,720,000	\$0	\$12,720,000.00	\$12,719,853	\$12,719,853	\$0	\$147	

Total Estimated Funding Requirement Through FY2012:

Location: Capitol Complex, Des Moines

Project: Capitol Complex Security

Description of the Work:

Installation of and improvements to card access systems on the Capitol Complex, in cooperation with the Department of Public Safety.

Progress of the Work:

Work associated with the appropriation to the Department of Administrative Services has been completed.

Estimated Completion Date of the Project: (See Comments Below)

Work continues with additional funds appropriated to the Department of Public Safety. Completion of the work complex-wide is dependent upon additional funding.

Total Estimated Cost of the Project: \$1,000,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. Appropriated funds to the Department of Administrative Services have been expended. The Department of Public Safety is deterimining additional priorities and funding needs. Additional funds have been appropriated to the Department of Public Safety.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds /	ource of Funds / Fiscal Year / Type Appropriation Code and Name		Amounts
Tax-Exempt Bonds	Proceeds Rest		
FY 2003	Total from Tax-Exempt Bonds Proceeds Rest:		\$1,000,000
		Total from Tax-Exempt Bonds Proceeds Rest:	\$1,000,000
		Total Out Year Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0
		Total Five Year Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0
	Total Estima	ted Funding Requirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$1,000,000
		Total Year To Date Appropriations:	\$1,000,000
		Total Additional Funds:	\$0
		Total Out Year Appropriations:	\$0
		Total Five Year Plan Estimate:	\$0
		Total Estimated Funding Paguiroment Through EV2012	¢1 000 000

Total Estimated Funding Requirement Through FY2012: \$1,000,000

Year to Date Financial Summary for Capitol Complex Security:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$1,000,000	\$0	\$1,000,000.00	\$1,000,000	\$1,000,000	\$0	\$0	

Location: Capitol Complex, Des Moines

Project: Electrical Distribution System Upgrade

Description of the Work:

Provide for continued repair, replacement and upgrades to the primary distribution system for the Capitol Complex, including replacement and relocation of transformers in the Capitol building, full generation for the Capitol Complex and specific generation improvements for Public Health and Information Technology. Work is being phased to initially meet the needs of Public Health and Information Technology, and that work has been funded and is nearing completion. When the project is complete, the entire primary loop system will be replaced or upgraded and the complex will have full back-up generation.

Progress of the Work:

Primary and alternate feeds from MidAmerican have been replaced. Three emergency generators are operational and a fourth generator is to be delivered in February 2007. Installation of underground ducts for the electrical loops for the east and west sides of the complex is underway. High voltage wire and transformers for the loops is scheduled to arrive in February. Installation of secondary feed conduits from transformer pads to main distribution panels in buildings is underway. Upgraded service to buildings will be completed in summer 2007. Fifth generator and completion of the loop.

Estimated Completion Date of the Project: June 2007

The schedule for additional work is dependent upon funding.

Total Estimated Cost of the Project: \$14,553,432

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. The accounting for some additional funds, provided by the Department of Public Health and the Information Technology Enterprise, is maintained with Major Maintenance projects. Additional details are available upon request.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fis	cal Year / Type	Appro	opriation Code and Name	Amounts
Tax-Exempt Bonds Pro	ceeds Rest			
FY 2006	Supplementals	050T	Capitol Complex Electrical Distribution System Upgrade	\$3,468,801
		Is 050T Capitol Complex Electrical Distribution System Upgrade Total from Tax-Exempt Bonds Proceeds Rest: Total Out Year Appropriations from Tax-Exempt Bonds Proceeds Rest: Total Five Year Plan Estimate from Tax-Exempt Bonds Proceeds Rest: timated Funding Requirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest: \$3,468 020T Capitol Complex Electrical Distribution System Upgrade In Estimate 020T Capitol Complex Electrical Distribution System Upgrade Total from Rebuild Iowa Infrastructure Fund: Total Out Year Appropriations from Rebuild Iowa Infrastructure Fund: Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund: \$1,843 Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund: \$1,843 Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund: \$1,843 Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund: \$1,843 Total Additional Funds: \$509 Total Additional Funds: \$509 Total Additional Funds: \$509		\$3,468,801
	Tota	al Out Y	ear Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0
	Tota	al Five Y	ear Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0
	Total Estimated Fun	nding Req	uirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$3,468,801
Rebuild Iowa Infrastruc	ture Fund			
FY 2006	Appropriation	020T	Capitol Complex Electrical Distribution System Upgrade	\$1,843,878
FY2008-FY2012	Five Year Plan Estimat	e 020T	Capitol Complex Electrical Distribution System Upgrade	\$8,730,960
			Total from Rebuild Iowa Infrastructure Fund:	\$1,843,878
	To	otal Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0
	To	otal Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$8,730,960
	Total Estimated Fu	ınding Re	equirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$10,574,838
Additional Funding Sou	rces			
Innovations Fund Loan	า	020T	Capitol Complex Electrical Distribution System Upgrade	\$509,793
			Total Additional Funds:	\$509,793
			Total Year To Date Appropriations:	\$5,312,679
			Total Additional Funds:	\$509,793
			Total Out Year Appropriations:	\$0
			Total Five Year Plan Estimate:	\$8,730,960
			Total Estimated Funding Requirement Through FY2012:	\$14,553,432

Year to Date Financial Summary for Electrical Distribution System Upgrade:

\$35,000

Infrastructure Appropriations for Administrative Services Facilities

Location: Capitol Complex, Des Moines

Project:	Electrical	Distribution	System	Upgrade
----------	------------	--------------	---------------	----------------

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$5,312,679	\$509,793	\$5,822,472.00	\$5,321,964	\$2,709,051	\$2,612,914	\$500,508	

Project: Monument Lighting for Allison and Soldiers & Sailors Monuments

Description of the Work:

This appropriation provides for decorative lighting for these monuments on the Capitol Complex.

Progress of the Work:

Work was completed in 2005.

Estimated Completion Date of the Project: (See Comments Below)

Total Estimated Cost of the Project: \$35,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Rebuild Iowa Infrastructure Fund		Appropriation Code and Name	Amounts
FY 2005	Appropriation	0R30 Monument Lighting	\$35,000
Total from Rebuild Iowa Infrastructure Fund:		l: \$35,000	
		Total Out Year Appropriations from Rebuild Iowa Infrastructure Fund:	
		Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund	l: \$0
	Total Estima	ted Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure Fund	l: \$35,000
		Total Year To Date Appropriations	: \$35,000
		Total Additional Funds	s: \$0
		Total Out Year Appropriations	s: \$0
		Total Five Year Plan Estimate	s: \$0

Total Estimated Funding Requirement Through FY2012:

Year to Date Financial Summary for Monument Lighting for Allison and Soldiers & Sailors Monuments:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$35,000	\$0	\$35,000.00	\$23,953	\$21,323	\$2,629	\$11,047	

Location: Capitol Complex, Des Moines

Project: Property Acquisition and Related Services

Description of the Work:

Fund property acquisition and services related to property acquisition at the Capitol Complex including appraisals and environmental assessments.

Progress of the Work:

Funds have also been used to evaluate properties under consideration and for acquisition. The following properties were been purchased in 2006: 1022 Des Moines Street and 709 E. Locust Street.

Estimated Completion Date of the Project: June 2008

Dependent upon availability of properties and reversion dates for funding.

Total Estimated Cost of the Project: \$5,641,221

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that all appropriated funds will be expended. Additional funds have been requested although

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fis	cal Year / Type	Source of Funds / Fiscal Year / Type Appropriation Code and Name			
Endowment for Iowa's I	Health Restricted Capitals	Fund			
FY 2007	Appropriation	077R Purchase Land FY07	\$500,000		
		Total from Endowment for Iowa's Health Restricted Capitals Fund:	\$500,000		
	Total Out Year Appropri	ations from Endowment for Iowa's Health Restricted Capitals Fund:	\$0		
	Total Five Year Plan Est	imate from Endowment for Iowa's Health Restricted Capitals Fund:	\$0		
Total Estim	ated Funding Requirement TI	rough FY2012 from Endowment for Iowa's Health Restricted Capitals Fund:	\$500,000		
Tax-Exempt Bonds Pro	ceeds Rest				
FY 2002	Appropriation	041R DGS-Land Acquisition/Improvment	\$200,000		
FY 2003	Appropriation Transfer	041R DGS-Land Acquisition/Improvment	(\$57,204)		
FY 2006	Reversions	041R DGS-Land Acquisition/Improvment	(\$1,575)		
	Total from Tax-Exempt Bonds Proceeds Rest:				
	Tota	l Out Year Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0		
	Tota	I Five Year Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0		
	Total Estimated Fun	ding Requirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$141,221		
FY2008-FY2012	Five Year Plan Estimate	e 011T Capitol Complex Property Acquisition & Related Services	\$5,000,000		
		Total from Rebuild Iowa Infrastructure Fund:	\$0		
	To	tal Out Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0		
	To	tal Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$5,000,000		
	Total Estimated Fu	nding Requirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$5,000,000		
		Total Year To Date Appropriations:	\$641,221		
		Total Additional Funds:	\$0		
		Total Out Year Appropriations:	\$0		
		Total Five Year Plan Estimate:	\$5,000,000		
		Total Estimated Funding Requirement Through FY2012:	\$5,641,221		

Year to Date Financial Summary for Property Acquisition and Related Services:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$641,221	\$0	\$641,221.18	\$605,727	\$578,040	\$27,687	\$35,494	

Location: Capitol Complex, Des Moines

Project: Relocation and Leasing Assistance

Description of the Work:

Funding is for move related expenses, temporary lease costs, tenant improvements at leased locations and other relocation expenses related to renovation of and movement into buildings on the Capitol Complex. This funding enables selected agencies that are currently paying for leases off-complex to return to the Capitol Complex. It also allows for the temporary relocation of agencies on the Capitol Complex to off-complex locations, as may be required from time to time depending upon changing program needs on and off complex. The FY2007 appropriation allocates specific funds to Cultural Affairs; State Fire Marshal's lease, Corrections and Board of Parole; and Community Based Corrections.

Progress of the Work:

The following agencies were returned to the Capitol Complex from leased facilities: Corrections, Elder Affairs, Board of Parole, Public Health, Public Employment Relations Board (PERB) and Ethics and Campaign Disclosure Board. Other agencies were housed in leased facilities with these funds. Funds specified in the FY2007 appropriation for use by Cultural Affairs and Community Based Corrections have been transferred to those agencies. Funds specified in the FY2007 appropriation for use by Corrections and the Board of Parole for Capitol Complex Association fees are being managed by the Department of Administrative Services.

Estimated Completion Date of the Project: June 2010

Leasing and relocation work is on-going and it is expected that completion of the project(s) will coincide with reversion of the funds.

Total Estimated Cost of the Project: \$17,004,509

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that the full amount of funds appropriated, totaling \$7,822,055.78 from FY2003 through FY2007, will be expended by the reversion date of June 30, 2010. Rental Reimbursements from Iowa Prison Industries, totaling \$432,443.28 between FY2003 and FY2006.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Appl		Appro	ppriation Code and Name	Amounts
Rebuild Iowa Infrastruct	ture Fund			
FY 2003	Appropriation	0R08	DGS-Leases/Assistance	\$898,000
FY 2004	Appropriation	0R08	DGS-Leases/Assistance	\$631,449
FY 2005	Appropriation	0R08	DGS-Leases/Assistance	\$2,271,617
FY 2006	Appropriation	0R08	DGS-Leases/Assistance	\$1,824,000
FY2008-FY2012	Five Year Plan Esti	imate 0R08	DGS-Leases/Assistance	\$9,122,500
FY 2007	Appropriation	040T	DGS-Leases/Assistance	\$1,824,500
			Total from Rebuild Iowa Infrastructure Fund:	\$7,449,566
		Total Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0
		Total Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$9,122,500
	Total Estimate	ed Funding Re	quirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$16,572,066
Additional Funding Sou	rces			
Rent Reimbursments I	Y03 from Iowa Prison	0R08	Rent Reimbursments FY03 from Iowa Prison Industries	\$132,676
Rent Reimbursments I	Y04 from Iowa Prison	0R08	Rent Reimbursments FY04 from Iowa Prison Industries	\$119,907
Rent Reimbursments I	Y05 from Iowa Prison	0R08	Rent Reimbursments FY05 from Iowa Prison Industries	\$119,907
Rent Reimbursments I	Y06 from Iowa Prison	0R08	Rent Reimbursments FY06 from Iowa Prison Industries	\$59,954
			Total Additional Funds:	\$432,443

Location: Capitol Complex, Des Moines

Project: Relocation and Leasing Assistance

Total Year To Date Appropriations: \$7,449,566

Total Additional Funds: \$432,443

Total Out Year Appropriations: \$0

Total Five Year Plan Estimate: \$9,122,500

Total Estimated Funding Requirement Through FY2012: \$17,004,509

Year to Date Financial Summary for Relocation and Leasing Assistance:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$7,449,566	\$432,443	\$7,882,009.28	\$4,889,924	\$4,629,242	\$260,682	\$2,992,086	

Location: Iowa Laboratories, Ankeny

Project: New Multipurpose Laboratories Facility

Description of the Work:

Design and construction of a new multipurpose laboratories facility for the Department of Agriculture and Land Stewardship (including Metrology); Department of Public Safety, Division of Criminal Investigation; Department of Public Health, State Medical Examiner; University of Iowa Hygienic Lab, Des Moines Division.

Progress of the Work:

Work is complete and agencies have moved into the facility. Warranty items and additional enhancements are continuing, including completion of a Bio-safety Level 3 Laboratory for the University Hygienic Lab.

Estimated Completion Date of the Project: November 2005

It is anticipated that additional work items will be completed by June 2007.

Total Estimated Cost of the Project: \$53,937,580

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. The project has been completed with appropriated funds. The occupants have contributed additional funds for an additional DNA lab and for a BSL-3 lab. Additional funds were contributed by Public Safety, the City of Ankeny, Homeland Security/Emergency Management, and MidAmerican Energy (rebate). Additional funds are anticipated from the University Hygienic Lab

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds /	Fiscal Year / Type	Appro	Amounts	
Iowa Infrastructure	Account			
FY 2001	Appropriation	015C	DGS - New Building/Office/Lab	\$3,200,000
			Total from lowa Infrastructure Account:	\$3,200,000
		Tota	Out Year Appropriations from Iowa Infrastructure Account:	\$0
Total Five Year Plan Estimate from Iowa Infrastructure Account:		\$0		
	Total Estimate	ed Fundii	ng Requirement Through FY2012 from Iowa Infrastructure Account:	\$3,200,000
Tax-Exempt Bonds	Proceeds Rest			
FY 2002	Appropriation	058R	DGS-Multipurpose Lab	\$16,670,000
FY 2003	Appropriation	058R	DGS-Multipurpose Lab	\$16,670,000
FY 2004	Appropriation	058R	DGS-Multipurpose Lab	\$16,660,000
FY 2007	Appropriation Transfer	058R	DGS-Multipurpose Lab	(\$473,000)
			Total from Tax-Exempt Bonds Proceeds Rest:	\$49,527,000
	Tota	al Out Ye	ear Appropriations from Tax-Exempt Bonds Proceeds Rest:	\$0
	Tota	al Five Y	'ear Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0
	Total Estimated Fun	ding Req	uirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:	\$49,527,000
Additional Funding	Sources			
Misc. Cash Recei	ipts	058R	DGS-Multipurpose Lab	\$559,710
Homeland Securi	ity Grant	058R	DGS-Multipurpose Lab	\$498,371
Transfer from Pul	blic Safety for DNA Lab Build-out	058R	DGS-Multipurpose Lab	\$152,500
			Total Additional Funds:	\$1,210,580
			Total Year To Date Appropriations:	\$52,727,000
			Total Additional Funds:	\$1,210,580
			Total Out Year Appropriations:	\$0
			Total Five Year Plan Estimate:	\$0
			Total Estimated Funding Requirement Through FY2012:	\$53,937,580

Year to Date Financial Summary for New Multipurpose Laboratories Facility:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:

Location: Iowa Laboratories, Ankeny

Project: New Multipurpose Laboratories Facility

\$52,727,000 \$1,210,580 \$53,937,580.43 \$51,761,896 \$51,040,958 \$720,938 \$2,175,685

Project: New Multipurpose Laboratories Facility Maintenance and Operations

Description of the Work:

Provide heat, lights, air conditioning and water (the essential utility services including natural gas, electricity, water and sewer services) to operate the facilities of the Capitol Complex and the Labs Facility at Ankeny, including other maintenance and operational needs..

Progress of the Work:

Funds have been expended for utility costs associated with start-up and for some equipment needs.

Estimated Completion Date of the Project: June 2007

Total Estimated Cost of the Project: \$355,500

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that all appropriated funds will be utilized.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type		Appropriation Code and Name	Amounts	
Rebuild Iowa Infras	tructure Fund			
FY 2005 Appropriation		0R28 DGS-Lab Facility Routine Maint.	\$355,500	
		Total from Rebuild Iowa Infrastructure Fund:	\$355,500	
		Total Out Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0	
		Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$0	
	Total Estima	ted Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$355,500	
		Total Year To Date Appropriations:	\$355,500	
		Total Additional Funds:	\$0	
		Total Out Year Appropriations:	\$0	
		Total Five Year Plan Estimate:	\$0	

Total Estimated Funding Requirement Through FY2012:

\$355,500

Year to Date Financial Summary for New Multipurpose Laboratories Facility Maintenance and Operations:

Year To Date Appropriations:	Year To Date Additional Funds:	Year To Date Total Funds:	Year To Date Total Encumbered:	Year To Date Total Expended:	YTD Encumbered Not Expended:	YTD Available To Encumber:	
\$355,500	\$0	\$355,500.00	\$347,234	\$347,234	\$0	\$8,266	

Infrastructure Appropriations for Human Services Facilities

Location: Cherokee Mental Health Institute, Cherokee

Project: Cherokee CCUSO Renovation

Description of the Work:

Renovation of middle "stack" of three additional floors at the CCUSO operation to accommodate growth in patient admissions and provide a secure, safe environment for patients and staff. Design and installation of a new elevator/stair addition for CCUSO between south stacks B & C adding a handicap access elevator to the main administration building south side.

Progress of the Work:

Design is completed and contractors are on site.

Estimated Completion Date of the Project: April 2007

Total Estimated Cost of the Project: \$2,050,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that all appropriated funds will be expended.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type		Appro	opriation Code and Name	Amounts	
Tax-Exempt Bonds	Proceeds Rest				
FY 2006	Appropriation	031T	DHS-CCUSO Rest Cap	\$650,000	
			Total from Tax-Exempt Bonds Proceeds Rest:	\$650,000	
Total Out Year Appropriations from Tax-Exempt Bonds Proceeds Rest:					
		Total Five Y	ear Plan Estimate from Tax-Exempt Bonds Proceeds Rest:	\$0	
	Total Estimate	Total Estimated Funding Requirement Through FY2012 from Tax-Exempt Bonds Proceeds Rest:		\$650,000	
Rebuild Iowa Infras	tructure Fund				
FY 2006	Appropriation	026T	DHS-CCUSO Renovation	\$1,400,000	
			Total from Rebuild Iowa Infrastructure Fund:	\$1,400,000	
		Total Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0	
		Total Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$0	
	Total Estima	ted Funding Re	equirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$1,400,000	
			Total Year To Date Appropriations:	\$2,050,000	
			Total Additional Funds:	\$0	
			Total Out Year Appropriations:	\$0	
			Total Five Year Plan Estimate:	\$0	
			Total Estimated Funding Requirement Through FY2012:	\$2,050,000	

Year to Date Financial Summary for Cherokee CCUSO Renovation:

Year To Date Appropriations:	Year To Date Additional Funds:	Year To Date Total Funds:	Year To Date Total Encumbered:	Year To Date Total Expended:	YTD Encumbered Not Expended:	YTD Available To Encumber:	
\$2,050,000	\$0	\$2,050,000.00	\$1,972,602	\$323,061	\$1,649,541	\$77,398	

Infrastructure Appropriations for Human Services Facilities

Location: Iowa Juvenile Home, Toledo

Project: Iowa Juvenile Home Powerhouse Replacement

Description of the Work:

Replace the existing powerhouse and all associated equipment. The project will involve the following major items: stabilize the West wall of the existing Power House to avoid collapse; design and construction of geothermal heat pump system for heating and cooling; installation of furnaces in buildings that will not be served by geothermal system; installation of new centralized domestic hot water system; waterproofing existing tunnel system with asbestos removal as required; raze the existing Power House and removal of underground storage tanks; energy management improvements of window replacement, faucet and lighting upgrades, roof insulation and cooler and freezer replacement.

Progress of the Work:

Design has been completed. Well field for geothermal system has been installed. Bids received for remaining work could not be accepted as prices came in higher than current funding level.

Estimated Completion Date of the Project: (See Comments Below) Completion date dependent on appropriation of additional funds.

Total Estimated Cost of the Project: \$9,717,090

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. Additional funds have been requested.

List of All Revenue Sources Being Used to Fund the Project:

Cource of Funds / Fiscal Year / Type App		Appro	opriation Code and Name	Amounts	
Endowment for Iowa's I	Health Restricted Cap	oitals Fund			
FY 2007	Appropriation	042T	DHS - Toledo Renovation	\$1,521,045	
		Total fr	rom Endowment for Iowa's Health Restricted Capitals Fund:	\$1,521,045	
Total Out Year Appropriations from Endowment for Iowa's Health Restricted Capitals Fund:					
	Total Five Year Pla	n Estimate fr	rom Endowment for Iowa's Health Restricted Capitals Fund:	\$0	
Total Estim	ated Funding Requirem	ent Through F	Y2012 from Endowment for Iowa's Health Restricted Capitals Fund:	\$1,521,045	
Rebuild Iowa Infrastruc	ture Fund				
FY 2006	Appropriation	027T	DHS - IJH Powerhouse	\$1,161,045	
FY2008-FY2012	Five Year Plan Est	imate 027T	DHS - IJH Powerhouse	\$7,035,000	
			Total from Rebuild Iowa Infrastructure Fund:	\$1,161,045	
		Total Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0	
		Total Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$7,035,000	
	Total Estimate	ed Funding Re	equirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$8,196,045	
			Total Year To Date Appropriations:	\$2,682,090	
			Total Additional Funds:	\$0	
			Total Out Year Appropriations:	\$0	
			Total Five Year Plan Estimate:	\$7,035,000	
			Total Estimated Funding Requirement Through FY2012:	\$9.717.090	

Year to Date Financial Summary for Iowa Juvenile Home Powerhouse Replacement:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$2,682,090	\$0	\$2,682,090.00	\$538,991	\$429,795	\$109,196	\$2,143,099	

Infrastructure Appropriations for Human Services Facilities

Location: Iowa Juvenile Home, Toledo

Project: Iowa Juvenile Home Education & Infirmary Building

Description of the Work:

Construct a new school/infirmary building at the Iowa Juvenile Home; renovate existing school building; demolish old infirmary and Wilson Cottage. The construction will provide substantially increased space for vocational instruction and training, provide a science lab to be used in conjunction with academic classes, and build a modern gym. The construction will also allow the infirmary to be moved from its present outdated and inefficient space into the basement of the new building.

Progress of the Work:

RFP for design services has been issued and responses are due January 11, 2007. Selection of firm anticipated by end of February 2007.

Estimated Completion Date of the Project: March 2009

Total Estimated Cost of the Project: \$8,130,668

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. Additional funds have been appropriated for FY2008.

List of All Revenue Sources Being Used to Fund the Project:

ource of Funds / Fiscal Year / Type		Appro	ppriation Code and Name	Amounts	
Endowment for low	va's Health Restricted Capitals	Fund			
FY 2007	Appropriation	076R	DHS TOLEDO EDUC INFIRMARY BLDG FY07	\$5,030,668	
		Total fr	om Endowment for Iowa's Health Restricted Capitals Fund:	\$5,030,668	
	Total Out Year Appropr	ations fr	om Endowment for Iowa's Health Restricted Capitals Fund:	\$0	
Total Five Year Plan Estimate from Endowment for Iowa's Health Restricted Capitals Fund:					
Total Estimated Funding Requirement Through FY2012 from Endowment for lowa's Health Restricted Capitals Fund:				\$5,030,668	
FY2008	FY2008 Appropriation	036T	DHS Iowa Juvenile School Home New Education &	\$3,100,000	
			Total from Rebuild Iowa Infrastructure Fund:	\$0	
	T	otal Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$3,100,000	
	T	otal Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$0	
	Total Estimated Fu	ınding Re	quirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$3,100,000	
			Total Year To Date Appropriations:	\$5,030,668	
			Total Additional Funds:	\$0	
			Total Out Year Appropriations:	\$3,100,000	
			Total Five Year Plan Estimate:	\$0	
			Total Estimated Funding Requirement Through FY2012:	\$8,130,668	

Year to Date Financial Summary for Iowa Juvenile Home Education & Infirmary Building:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$5,030,668	\$0	\$5,030,668.00	\$5,609	\$5,609	\$0	\$5,025,059	

\$2,443,000

Infrastructure Appropriations for Human Services Facilities

Location: Woodward Resource Center, Woodward

Project: Woodward Resource Center Wastewater Treatment Plant

Description of the Work:

Replace the 70-year old wastewater treatment plant at the Woodward Resource Center with a three cell lagoon system which permits the facility to comply with health and safety standards issued by the state Department of Natural Resources (DNR) for wastewater treatment plants. The current plant is not in compliance with these standards and has received citations from the DNR. Temporary improvements were made but will only last for a few years and will not bring the plant into full compliance. Non-compliance with the standards could result in a fine from the DNR and action to close the wastewater treatment operation, forcing the closure of the facility. The wastewater treatment plant serves the approximately 500 dependent residents and 760 staff who support these residents.

Progress of the Work:

Design is completed. Bids for construction will be received in January 2007.

Estimated Completion Date of the Project: November 2007

Plant is anticipated to be operational in November 2007; additional grading and miscellaneous items may need to be completed in spring 2008.

Total Estimated Cost of the Project: \$2,443,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. It is anticipated that all appropriated funds will be expended.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Appropriation Code and Name Endowment for Iowa's Health Restricted Capitals Fund		Appropriation Code and Name	Amounts	
FY 2007	Appropriation	047T Woodward Resource Center Wastewater Treatment	\$2,443,000	
		Total from Endowment for Iowa's Health Restricted Capitals Fund:	\$2,443,000	
	Total Out Year Appropriations from Endowment for Iowa's Health Restricted Capitals Fund:			
Total Five Year Plan Estimate from Endowment for Iowa's Health Restricted Capitals Fund:				
Total Estimated Funding Requirement Through FY2012 from Endowment for lowa's Health Restricted Capitals Fund:		\$2,443,000		
		Total Year To Date Appropriations:	\$2,443,000	
		Total Additional Funds:	\$0	
		Total Out Year Appropriations:	\$0	
		Total Five Year Plan Estimate:	\$0	

Year to Date Financial Summary for Woodward Resource Center Wastewater Treatment Plant:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$2,443,000	\$0	\$2,443,000.00	\$244,246	\$34,316	\$209,930	\$2,198,754	

Total Estimated Funding Requirement Through FY2012:

Infrastructure Appropriations for Terrace Hill Facilities

Location: Terrace Hill, Des Moines

Project: Terrace Hill Maintenance

Description of the Work:

For repairs to the exterior of the mansion and carriage house, including roofs, windows and ornamental exterior components; for design of a new boiler system; signage, for plaster repairs and for replacement of historic carpeting in the mansion's main corridors.

Progress of the Work:

Design work for roof and window repairs has been completed, however, bids received exceed the budget and additional funds are required. Planning is just beginning for carpet replacement. Signage designs have been approved.

Estimated Completion Date of the Project: (See Comments Below)

Completion of exterior repairs is dependent upon receipt of additional funding. Carpet replacement is expected to be completed during 2007. Plaster repairs will take place in 2008.

Total Estimated Cost of the Project: \$846,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012. Costs for the exterior work is being re-evaluated and a supplemental appropriation request is being prepared. Interior work is estimated to cost \$75,000. Terrace Hill was notified in December of 2006 that a Save America's Treasures grant will be awarded to the State to assist with the exterior repair work.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Appr Rebuild Iowa Infrastructure Fund		Appro	Appropriation Code and Name		
FY 2006	Appropriation	030T	Terrace Hill Maintenance	\$571,000	
FY 2007	Appropriation	030T	Terrace Hill Maintenance	\$75,000	
FY2008-FY2012	Five Year Plan Estir	mate 030T	Terrace Hill Maintenance	\$50,000	
	\$646,000				
		Total Out	Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0	
		Total Five	Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$50,000	
Total Estimated Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure Fund:		\$696,000			
Additional Funding Sou	rces				
Save America's Treas	urers Grant	030T	Terrace Hill Maintenance	\$150,000	
			Total Additional Funds:	\$150,000	
			Total Year To Date Appropriations:	\$646,000	
			Total Additional Funds:	\$150,000	
			Total Out Year Appropriations:	\$0	
			Total Five Year Plan Estimate:	\$50,000	
			Total Estimated Funding Requirement Through FY2012:	\$846.000	

Year to Date Financial Summary for Terrace Hill Maintenance:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$646,000	\$150,000	\$796,000.00	\$120,106	\$35,625	\$84,482	\$675,894	

Infrastructure Appropriations for Not For Profit Facilities

Location: African-American Museum, Cedar Rapids

Project: Assistance to African American Museum in Linn County

Description of the Work:

As required by the language of the appropriation, funds were tranferred directly to the African-American Museum in Linn County.

Progress of the Work:

Funds were transferred in 2004.

Estimated Completion Date of the Project: May 2004

Total Estimated Cost of the Project: \$300,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five Year Plan Requests through FY2012.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Rebuild Iowa Infrastructure Fund		Appropriation Code and Name	Amounts	
FY 2004	Appropriation	0R21 DGS-African/American Museum	\$300,000	
Total from Rebuild		Total from Rebuild Iowa Infrastructure Fund:	\$300,000	
	Total Out Year Appropriations from Rebuild Iowa Infrastructure Fund:		\$0	
	Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund:		\$0	
Total Estimated Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure		ated Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$300,000	
	Total Year To Date Appropriations:		\$300,000	
		Total Additional Funds:	\$0	
		Total Out Year Appropriations:	\$0	
		Total Five Year Plan Estimate:	\$0	
		Total Estimated Funding Requirement Through FY2012:	\$300,000	

Year to Date Financial Summary for Assistance to African American Museum in Linn County:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:
\$300,000	\$0	\$300,000.00	\$300,000	\$300,000	\$0	\$0

\$250,000

Infrastructure Appropriations for Not For Profit Facilities

Location: Tanager Place, Cedar Rapids

Project: Assistance to Child Development Center Facility in Linn County

Description of the Work:

As required by the language of the appropriation, funds were transferred directly to Tanager Place in Linn County.

Progress of the Work:

Funds were transferred in 2004.

Estimated Completion Date of the Project: May 2004

Total Estimated Cost of the Project: \$250,000

Note: Total Estimated Cost of the Project = Year To Date Appropriations + Year To Date Additional Funds + Out Year Appropriations + Five

Year Plan Requests through FY2012.

List of All Revenue Sources Being Used to Fund the Project:

Source of Funds / Fiscal Year / Type Rebuild Iowa Infrastructure Fund		Appropriation Code and Name	Amounts
FY 2004	Appropriation	0R20 DGS-Child Treatment Center Match	\$250,000
	Total from Rebuild Iowa Infrastructure Fund:		\$250,000
		Total Out Year Appropriations from Rebuild Iowa Infrastructure Fund:	\$0
		Total Five Year Plan Estimate from Rebuild Iowa Infrastructure Fund:	\$0
	Total Estima	ted Funding Requirement Through FY2012 from Rebuild Iowa Infrastructure Fund:	\$250,000
		Total Year To Date Appropriations:	\$250,000
		Total Additional Funds:	\$0
		Total Out Year Appropriations:	\$0
		Total Five Year Plan Estimate:	\$0

Year to Date Financial Summary for Assistance to Child Development Center Facility in Linn County:

Year To Date	Year To Date	Year To Date Total	Year To Date Total	Year To Date Total	YTD Encumbered Not	YTD Available To	
Appropriations:	Additional Funds:	Funds:	Encumbered:	Expended:	Expended:	Encumber:	
\$250,000	\$0	\$250,000.00	\$250,000	\$250,000	\$0	\$0	

Total Estimated Funding Requirement Through FY2012:

Department of Agriculture and Land Stewardship

Agriculture Drainage Well (ADW) Closure and Alternative Drainage Assistance Fund FY 2006 Appropriation Status 12-20-2006

Amount of Appropriation: \$500,000.00

Expenditures and Obligations:

Administrative Costs: \$25,000

Project Obligations: \$475,000

Expenditures to date: \$ 6,715

The "Humboldt-Webster 1-10" project has a total estimated cost of \$2.28 million dollars to close up to 20 wells. The project is funded with at least 25% by the landowners, \$500,000 from a Watershed Improvement Review Board (WIRB) grant, and the remaining balance from the ADW Closure and Alternative Drainage Assistance Fund. Construction on this project began in November 2006 and the estimated completion date is August 2007.

Funds for this program have been appropriated to the Division of Soil Conservation since 1987.

State Conservation Cost-share Program FY 2006 Appropriation Status 12-28-2006

Amount of Appropriation:

\$5,500,000

Expenditures and Obligations:

Administrative Costs: \$ 225,000

Project Obligations: \$5,275,000

Expenditures to Date: \$3,482,216

Estimated Completion: On-going

The Division of Soil Conservation has received state appropriations for conservation cost-share since 1973. The program is the cornerstone of soil and water conservation practice application in Iowa. Evidence of the program's effectiveness can be seen across the landscape in terraces, waterways, erosion control structures and other conservation practices.

Funds utilized through this program are matched 50:50 by landowners, spent locally to hire private contractors, and reinvested by those contractors in local communities. Installation of soil and water conservation practices provides permanent protection of Iowa's soil resources and water quality. Public benefits of clean water for drinking and recreation warrant public investment in conservation and water quality protection. Provision is also made for additional protection of Public Owned Lakes.

All cost share funds are allocated to the 100 Soil and Water conservation Districts. Applications received from landowners are used to obligate funds locally. When applications are approved, landowners secure a contractor to build the practices. Installation of a practice or conservation system from time of application to completion of construction may take as long as twelve to eighteen months.

Iowa Conservation Reserve Enhancement Program (CREP) Infrastructure fund FY 2006 Appropriation Status 12-26-2006

Amount of Appropriation:

\$1,500,000.00

Expenditures and Obligations:

IP-1 CREP Obligations: \$ 407,040.68

Total Expenses (charged directly to CREP): \$1,092,959.32

Total expended and obligated: \$1,500, 000.00

During the program year, eight CREP wetland projects were constructed with approximately 427 acres of combined wetland and buffer enrolled in the Iowa CREP and placed under 30-year or permanent easements. 90.35 acres of wetland pool were created treating 13,900 watershed acres resulting in 6,776 tons of nitrate removed over the designed lifetime.

Funds for this program have been appropriated to the Division of Soil Conservation since 2000.

District Initiative Program FY 2006 Appropriation Status 12-28-2006

Amount of Appropriation:

\$2,000,000

Expenditures and Obligations:

Administrative Costs: \$ 100,000

Project Obligations: \$1,900,000

Expenditures to Date: \$ 785,630

Estimated Completion: 6/30/2007

The Division of Soil Conservation has received state appropriations for the District Initiative Program to assist with the implementation of federal farm programs since 2000. This appropriation is important in providing funds to enhance the USDA Farm Service Agency's Conservation Reserve Program (CRP), and the USDA Natural Resources Conservation Service's Environmental Quality Incentive Program (EQIP). Practices installed through these programs include buffer strips, filter strips, wetlands, terraces, structures, livestock grazing systems, and other conservation practices.

Funds through the District Initiative Program are used to provide the Soil and Water Conservation Districts and federal partners with technical assistance to work with landowners and applicants one-on-one to address their resource conservation needs. Funds also go to provide signup and cost share incentives to implement practices that protect the states soil and water resources. Funds also go into supporting technical needs to assist technical staff with conservation planning like the enhanced modern soil survey.

In FY06, contracts were initiated to provide technical assistance at the local level through soil and water conservation districts (SWCD's) and to work with producers to implement conservation on their land. Funds were also used to offer sign-up incentives to promote the continuous CRP program and to help landowners install practices such as buffer strips, filter strips, wetlands, and tree plantings. Landowners not interested in CRP were offered incentives keep protected acres in grass through hay production and grazing, assistance was provided to USDA, Iowa State University, and county efforts to obtain updated and current soil surveys used in conjunction with conservation and farm program planning. Money was also budgeted for additional technical assistance needed to leverage the maximum amount of EQIP dollars allotted to Iowa.

Integrated Farm & Livestock Management (IFLM) Demonstration Program FY 2006 Appropriation Status 12/26/2006

Amount of Appropriation: \$850,000.00

Expenditures, Other Revenue Sources and Obligations:

Administrative Costs: \$42,500.00

Other Revenue Sources: \$257,734.88

Project Obligations: \$1,065,234.88

Expenditures to Date: \$683,219.24

Estimated Completion: 6/30/2007

Six projects received funding from the IFLM FY-06 appropriation:

- In-Season Nitrogen Management Strategies for Corn Production
- Agronomic & Environmentally Sound Utilization of Nitrogen & Phosphorus in Poultry Manure
- On-Farm Demonstration of Manure Phosphorus Management
- Educating Growers About Living Mulch Systems for Grain Crop Production
- Iowa Learning Farm (Phase I: Conservation Systems)
- Iowa Soybean Association Agriculture & Environment Performance Program

On-farm sites have been established to demonstrate the effectiveness and adaptability of emerging agricultural systems for nutrient and pesticide management, water quality protection and soil conservation. Information gained is being widely disseminated to producers, agribusiness, educators, researchers, and private and government agencies through statewide conferences, regional workshops, field days, and other events. In addition, information is posted to the numerous linked websites and published in newsletters, fact sheets, and other publications.

Funds for this program have been appropriated to the Division of Soil Conservation since 2000.

Watershed Protection Program Fund (WSPF) FY 2006 Appropriation Status 12-28-2006

Amount of Appropriation:

\$2,700,000

Expenditures and Obligations:

Administrative Costs: \$ 135,000

Project Obligations: \$2,565,000

Expenditures to Date: \$2,558,993

Estimated Completion: On-going

WSPF funds are used to develop and encourage integrated approaches to meet water quality, flood control, erosion control, recreation, wildlife habitat, and other resource protection objectives. The program provides funding for watershed solutions to water quality and water management problems that impact local communities, the state, and the nation. Funds for this program have been appropriated to the Division of Soil Conservation since 2000.

Funds utilized through WSPF do not exceed 75% cost share to applicants. Funds may also leverage funding from the US Department of Agriculture, the US Environmental Protection Agency, and other local sources. The local applicant provides at least 25% of the cost of all conservation practices and sometimes up to 50% of the cost.

Forty-eight watershed protection projects received funding in FY06 and twenty-eight soil and water conservation districts(SWCD's) received development grants for new projects. In the 48 funded projects, landowners installed 439 conservation practices benefiting 8,944.5 acres. Soil loss before was 84,526.5 tons per year, or 9.5 tons per acre per year. Soil loss after was 23,207.4 tons per acre per year, or 2.6 tons per acre per year. Soil savings was 61,319.13 tons per acre per year or 6.9 tons per acre per year.

Development grants allowed SWCD's to complete watershed assessments and planning for new project applications.

Department for the Blind

As required by H.F. 2782, the Department for the Blind hereby submits its report on the use of amounts appropriated by division V, section 16 to the Transportation, Infrastructure, and Capitals Appropriations Subcommittee and to the Capital Projects Committee of the Legislative Council.

The bill appropriated \$ 4,000,000 to the Department for the Blind for the costs associated with building renovations. As of December 29, 2006, the Department has expended \$ 1,811 for project management services performed by the Department of Administrative Services. On December 11, 2006, the Department for the Blind, pursuant to a competitive bid letting, signed a contract for architectural services with Design Alliance, Inc., Waukee, Iowa. The contract provides for a stipulated sum of \$ 346,563 payable to Design Alliance.

The proposed schedule for the project calls for the schematic design to be prepared by December 29, 2006; design development by January 31, 2007; and a release for bidding by May 1, 2007. Based on this schedule, we would tentatively expect to complete this project during calendar year 2008. The work planned for this project includes the major mechanical systems (HVAC) in the building and the renovation of the third and fourth floors. The total estimated cost of the project tentatively remains at \$ 4 million pending the receipt of design plans from the architect and bids from contractors. The appropriation in H.F. 2782 remains the exclusive revenue source for this work.

Bruce K. Snethen
Deputy Director
Iowa Department for the Blind
524 4th Street
Des Moines, Iowa 50309-2364
515-281-1293
800-362-2587

See what your state government is accomplishing at resultsiowa.org The New Iowa: A Healthy, Vibrant, Growing State.

Department of Corrections



STATE OF IOWA

THOMAS J. VILSACK, GOVERNOR SALLY J. PEDERSON, LT. GOVERNOR

Iowa Results Website (www.resultsiowa.org)

DEPARTMENT OF CORRECTIONS GARY D. MAYNARD, DIRECTOR

Website (www.doc.state.ia.us)

DATE: December 28, 2006

TO: Transportation, Infrastructure, and Capitals Appropriations Subcommittee

Capital Projects Committee of the Legislative Council

Dave Reynolds, Legislative Services Agency Dennis Hart, Department of Management

FROM: Curt Smith, Legislative Liaison/Assistant to the Director

RE: 2007 Infrastructure Appropriations Act Annual Report

The Department of Corrections received funding through the 2007 Infrastructure Appropriations Act. Below is the status report of each appropriation:

Rebuild Iowa Infrastructure Fund

- ➤ Rent payments for the community-based corrections facility in Davenport (\$122,000) Done. Seventh Judicial District Department of Correctional Services has purchased the building, and will not need rent assistance in FY 2008.
- Lease payment to connect the electrical system at Fort Madison (\$133,168) Done.
- > Systemic study of Corrections system (\$500,000) In progress. The initial report is due from the consultant in mid-January 2007. The final report is due April 2007. The report may indicate a need for additional funds to study issues raised by the consultant.

Tobacco Settlement Trust Fund

- Construction of a community-based correctional facility in Fort Dodge (\$1,400,000) In progress. The construction is on schedule to be completed on time and within budget.
- Renovating kitchen at Anamosa State Penitentiary (\$1,840,000) In progress. The renovation is on schedule to be completed on time and within budget.
- ➤ Oakdale expansion one-time equipment purchases (\$3,376,519) In progress. The purchases are being made on time and within budget.

Endowment for Iowa's Health Restricted Capitals Fund

- Construction of a community-based correctional facility in Davenport (\$3,750,000) In progress, but behind schedule due to community resistance to planned facility location. Seventh District is exploring other locations.
- Construction of a community-based correctional facility in Fort Dodge (\$1,000,000) In progress. The construction is on schedule to be completed on time and within budget.
- Construction of a residential facility for offenders with mental health needs in Cedar Rapids (\$1,000,000) - In progress. The construction is on schedule to be completed on time and within budget.

The mission of the Iowa Department of Corrections is to: Protect the Public, the Employees, and the Offenders

Technology Reinvestment Fund
➤ For costs associated with corrections offender network data system (\$500,000) – In progress. Data being shared with other criminal justice agencies.

Department of Education



STATE OF IOWA

THOMAS J. VILSACK, GOVERNOR SALLY J. PEDERSON, LT. GOVERNOR

DEPARTMENT OF EDUCATION
JUDY A. JEFFREY, DIRECTOR

To: Members – Transportation, Infrastructure, and Capitals

Appropriations Subcommittee

Members - Capital Projects Committee of the Legislative Council

Director – Legislative Services Agency Director – Department of Management

From: Jeff Berger, Department of Education Legislative Liaison

Subject: Annual Report – 2007 Infrastructure Appropriations Act

Date: December 21, 2006

House File 2782, enacted as a result of the 2006 legislative session, requires state agencies that have received an appropriation from the specific funds referenced in the bill to provide the status of all projects in progress for which an appropriation from the funds has been made. These funds include:

- Rebuild Iowa Infrastructure Fund
- Environment First Fund
- Vertical Infrastructure Fund
- Restricted Capitals Fund of the Tobacco Settlement Trust Fund
- Endowment for Iowa Health Account Restricted Capitals Fund of the Tobacco Settlement Trust Fund
- Technology Reinvestment Fund

The Department of Education received four appropriations from the RIIF fund for FY07. The rest of this report details the progress on the use of each of those funds.

1. ICN Part III Leases

Appropriation \$2,727,000.00 Expenditures \$2,727,000.00

The funding for Part III ICN circuits provides leased data circuits to 397 schools and libraries statewide. These leased circuits provide the connection for high schools to be part of the ICN videoconferencing system. Currently schools utilize ICN connections to offer high school and college credit classes to their students in order to better prepare them for the workplace and post-secondary education. Schools also can offer virtual "field trips" via their ICN classroom so that their K-12 students may visit with authors, learn about careers, and expand the real-life

experiences of their students. Increasingly, districts and the Area Education Agencies collaborate to provide staff development for teachers in topics such as research-based teaching strategies in reading and math.

The Part III circuits are complete. The costs for the circuits are on going as they are leased from various private telecommunications providers. Additional revenue sources to pay for the circuits beyond the RIIF funds include limited support from the Universal Service Fund E-rate program.

2. Iowa Learning Technology Commission

Appropriation \$500,000.00 Expenditures \$312,339.06

The Iowa Learning Technology Commission received \$500,000 in FY06 from HF 875 - the Rebuild Iowa Infrastructure Fund bill - for the awarding and implementation of grants to promote innovative uses of technology. Six grants were awarded to school districts in four size categories and are currently being implemented, scheduled for completion by the end of the 2006-07 school year at which time a final report will be developed. Ten percent of the overall grant awards (\$45,000) is being held by the Department pending successful completion of all grant activities. An additional \$25,000 was set aside for the employment of external evaluators that would help the six grantees objectively evaluate the results of the grant implementation. A total of \$76,548.54 remains from this original appropriation. It is expected that all grant funds will be expended upon successful completion of the grants and the development of the final report, which is due to the legislature in January 2008.

3. Community College Infrastructure Program

Appropriation \$2,000,000.00 Expenditures \$2,000,000.00

This program provides funding to lowa's fifteen community colleges for major renovation and major repair needs, including health, life, and fire safety needs, and for compliance with the federal Americans With Disabilities Act, for state buildings and facilities under the purview of the community colleges. The funding provided in FY06 was the first of a multi-year funding stream for the community colleges. Examples of projects that are underway include upgrading elevators, doors, sidewalks, and parking lots for compliance with the Americans with Disabilities Act. Other projects include upgrades to HVAC systems to increase energy efficiency, fire alarm system installations, and upgrades, and other life safety systems such as security lights and cameras.

4. Library Infrastructure/Technology

Appropriation \$900,000.00 Expenditures \$896,532.86

RIIF appropriations were used to provide part of the funding for Open Access and Access Plus library program, which are part of the overall Enrich Iowa program for libraries in Iowa. Open Access allows Iowans to borrow library items directly from any participating library in the state, while Access Plus provides Iowans with equal access to library resources around the state by partially subsidizing interlibrary Ioan costs. \$630,945 from RIIF was used for Open Access funding in FY06 and \$147,595 was used for Access Plus funding. \$122,000 was used for a one-time project, which allowed 305 public libraries to purchase high-quality electronic library records to facilitate their participation in statewide library resource sharing.

Iowa Community Colleges \$2 Million Rebuild Iowa Infrastructure Funding Fiscal Year 2006

Community College	Fiscal Year 2006 Allocation	Use of Funds			
Northeast Iowa Community College	\$ 96,200	Remodeling access to the Calmar Child Care facility and to the Wilder Building on the Calmar Campus.			
North Iowa Area Community College	\$ 112,400	Upgraded elevator to make ADA compliant, upgraded fire alarm system in Auditorium, replaced 911 phone system, and replaced several roof sections.			
Iowa Lakes Community College	\$ 104,400	Renovation project on the Algona Campus to make ADA compliant and meet fire marshal regulations.			
Northwest Iowa Community College	\$ 51,000	Upgraded the fire alarm system in Building D and replaced rooftop units on Building B.			
Iowa Central Community College	\$ 107,400	Heating, Ventilation, & Air Conditioning (HVAC) replacement on the auditorium at the Fort Dodge Center and window replacement in the library at the Fort Dodge Center.			
Iowa Valley Community College District	\$ 99,000	Installation of handicap doors, emergency lighting, handicap ramp, and security cameras.			
Hawkeye Community College	\$ 143,200	Upgraded Heating, Ventilation, & Air Conditioning (HVAC) system and the computer energy system, installed doors in the print shop for ADA compliance, and replaced concrete stairway to courtyard.			
Eastern Iowa Community College District	\$ 176,200	Updated restrooms to be ADA compliant.			
Kirkwood Community College	\$ 277,200	Improving handicapped accessibility and safety to Linn Hall as well as replacing single pane windows and doors to be more energy efficient.			
Des Moines Area Community College	\$ 293,600	Heating, Ventilation, & Air Conditioning (HVAC) upgraded.			
Western Iowa Tech Community College	\$ 115,600	Built an inclined walkway into one of the campus buildings and remodeled the Enrollment Services area.			
Iowa Western Community College		Installed and expanded campus security camera system in student housing, upgraded fire/severe weather alarm systems in Clark Hall, and installed power assist ADA door openers at several buildings at Council Bluffs campus.			
Southwestern Community College	\$ 51,600	Replaced 19 doors with doors that are ADA compliant in the Instructional Center. Also added 2 new doors pe recommendation of fire marshal.			
Indian Hills Community College	\$ 162,600	A variety of projects were completed, including installation of automatic door openers, some Heating, Ventilation, & Air Conditioning (HVAC) issues, carpet replacement, safety lighting, sprinkler system replacement, self-contained trash compactor replacem			
Southeastern Community College	\$ 90,800	Constructed new 96 vehicle parking lot on West Burlington campus and installed handicapped accessible transition ramps and alcoves at the Mount Pleasant Center.			
Grand Total	\$2,000,000				

Phone: 515-242-3100 Toll free: 800-532-1290



RECEIVED

DEC 2 1 2006

LEGISLATIVE SERVICES AGENCY

December 15, 2006

To Whom It May Concern:

Per House File 2782, there is a new annual reporting requirement of state agencies that have received an appropriation from the following funds:

- o Rebuild Iowa Infrastructure Fund (HF 2782, Sec. 33)
- o Environment First Fund (HF 2782, Sec. 34)
- o Vertical Infrastructure Fund (HF 2782, Sec. 35)
- o Restricted Capitals Fund of the Tobacco Settlement Trust Fund (HF 2782, Sec. 38)
- o Endowment for Iowa Health Account Restricted Capitals Fund of the Tobacco Settlement Trust Fund (HF 2782, Sec. 19)
- o Technology Reinvestment Fund (HF 2782, Sec. 23)

Attached is the report from Iowa Public Television to meet this requirement. Please let me know if you have any questions. My phone number is (515)242-3120 or email: Molly@iptv.org. Thank you.

Sincerely,

Molly M. Phillips

Director of Communications



Iowa Public Television Infrastructure Appropriations Status Report December 15, 2006

Project: Digital Television Conversion

Description:

The Federal Communications Commission (FCC) has mandated that the entire broadcast industry convert from our present analog transmission standard to a new digital transmission standard. IPTV must convert nine transmitters, eight translators and its headquarters from analog to digital. To prepare a site for digital broadcast, towers are purchased, leased, modified, or built. Transmitters, antennas, transmission lines and other RF components are designed, purchased and installed. Buildings for the transmitters and equipment are built or modified.

The main stakeholders in this project are children, educators, adult learners and citizens across the State of Iowa.

High Definition Television is the service that allows Iowa Public Television to broadcast programming that brings movie theater-quality images and concert hall sound clarity to the home. The stunning picture and sound will bring to life much of the programming that is watched at home and will provide viewers with pictures so real viewers will feel like they're a part of them. These wide-screen presentations provide just one option in a wide array of digital television opportunities.

Another exciting digital television offering is called multicasting and involves Standard Definition Television (SDTV). While DTV provides a single broadcast channel, digital technology allows four or more channels of programs. This allows IPTV to then expand into four or more channels in the daytime - simultaneously providing programs to meet the needs of preschoolers, seniors and lifelong learners, each with their own channel. Interactive learning tools will be delivered right to the television, giving viewers unlimited educational opportunities and offering students a way to be actively engaged in content. And, while not the same quality as HDTV, SDTV still provides vastly superior quality over current analog television.

DTV technology will allow for more information and expansion of service. Datacasting opportunities will allow us to include additional information about the programming that can be viewed after the program airs. Interactive programs will allow viewers to actively participate in the event. The possibilities for partnership and interaction with IPTV viewers will be outstanding.

Progress of Work Completed:

The following high power transmitters have been completed and are on-air:

- KDIN-DT, Des Moines
- KIIN-DT, Iowa City
- KBIN-DT, Council Bluffs
- KSIN-DT, Sioux City
- KRIN-DT, Waterloo
- KHIN-DT, Red Oak

The following low power transmitters have been completed and are on-air:

- KTIN-DT, Fort Dodge
- KYIN-DT, Mason City

An analog transmitter has been purchased and installed in Davenport (KQIN-DT). The analog transmitter will be converted to digital.

The following translators have been completed and are on-air:

- Ottumwa
- Fort Madison

Work has begun on a new 1207' tower at KTIN-DT in Fort Dodge. Work has also begun on a new 1553' tower in Mason City.

The digital interconnections between the transmitter sites and Johnston headquarters have been completed. A digital master control system has been installed at Johnston headquarters. Vendor proposals for studio equipment are being evaluated for technical specifications and cost.

Total Estimated Cost of Project: \$47,000,000

List of all Revenue Sources to Fund the Project:

State Funds:

- Technology Program
- Pooled Technology Fund
- Tax-Exempt Bonds Proceeds Rest
- Rebuild Iowa Infrastructure Fund
- Technology Reinvestment Fund

Federal Funds

• Department of Commerce, National Telecommunications and Information Administration, Public Telecommunications Facilities Program

Other Funds

- Corporation for Public Broadcasting Digital Universal Service Fund Grants
- Corporation for Public Broadcasting Digital Distribution Fund Grants
- Business and Industry partners

Amount of Funds Expended: \$23,544,450 (as of June 30, 2006)

Amount of Funds Obligated: \$6,947,268 (as of June 30, 2006)

Estimated Completion Date of Project: June 30, 2008

Project: Replacement of Analog Transmitters

Description:

This project is for the purchase and installation of six UHF transmitters to replace analog transmitters that are 25 years old or older. These replacements are critically important because the FCC is requiring that broadcasters simulcast analog and digital signals until February, 2009.

CPI, the vendor who maintained IPTV's klystron tubes that are used in our existing analog transmitters, no longer stocks replacements and can no longer supply rebuilt tubes without our first sending them a dud klystron (a tube that has failed). The rebuild process requires that the dud tube be capable of being rebuilt, and more than half the time this is not the case. The rebuild process also takes three to six months during which time the transmitter is off the air and Iowans are not being served. There is a limited supply of the tubes and they are no longer being manufactured. If we can not get replacements when our klystron tubes go out, we cannot provide analog service to our viewers in that area. The replacement of our transmitters would eliminate reliance on klystron tubes, allowing us to maintain public television service.

These transmitters will be used for both our analog and digital services -- analog immediately and then as a back-up to our digital transmitters at the end of analog broadcasting. The back-up transmitters would increase the reliability of our services to the more than 1,000,000 viewers who watch IPTV's programming each week

Progress of Work Completed:

A request for proposals has been issued for 6 analog transmitters that can then be converted to digital transmitters.

Total Estimated Cost of Project: \$3,425,000

List of all Revenue Sources to Fund the Project:

State Funds: Technology Reinvestment Fund

Amount of Funds Expended: \$0 (as of June 30, 2006)

Amount of Funds Obligated: \$0 (as of June 30, 2006)

A RFP for \$3,200,000 has been issued for 6 analog transmitters.

Estimated Completion Date of Project: June 30, 2009

Ethics and Campaign Finance Disclosure

TO: TRANSPORTATION, INFRASTRUCTURE, & CAPITALS

APPROPRIATIONS SUBCOMMITTE LEGISLATIVE SERVICES AGENCY DEPARTMENT OF MANAGEMENT CAPITAL PROJECTS COMMMITTEE

FROM: CHARLIE SMITHSON, ETHICS BOARD DIRECTOR & COUNSEL

DATE: DECEMBER 27, 2006

Re: INFRASTRUCTURE REPORTING REQUIREMENT

The purpose of this memorandum is to provide you with information concerning an appropriation to the Iowa Ethics and Campaign Disclosure Board (Board) from the Technology Reinvestment Fund. The appropriation was made to the Board under 2006 Iowa Acts, Ch. 1179, Division VI, Sec. 21 (HF 2782). This report is being filed with you pursuant to 2006 Iowa Acts, Ch. 1179, Division VI, Sec. 23 (HF 2782). The report is as follows:

- 1. An appropriation of \$39,100 was made to the Board with the legislative directive for "technological improvements to the board's electronic filing system."
- 2. In response, the Board issued an informal competitive solicitation and ultimately approved a contract with Quality Consulting, Inc., an Iowa based vendor. The contract calls for the following improvements to the Board's electronic filing systems:
- A. An overhaul of the current campaign finance system to make the current system easier for users. This overhaul is for the purpose of making it easier for the regulated community to file campaign disclosure reports via the Internet and thus encourage the regulated community to do so. This benefits the regulated community, the Board, and the public.
- B. An overhaul of the current executive branch lobbyist and executive branch lobbyist client system to make the current system easier for users. This will encourage the regulated community to file electronically. The system overhaul will also improve the Board's ability to audit executive branch lobbyist and client reports. Finally, the overhaul will improve the public's viewing of filed reports. All of this benefits the regulated community, the Board, and the public.
- C. The production of a new personal financial disclosure system that will permit the approximately 600 executive branch officials and employees that file Personal Financial Disclosure Statements with the Board pursuant to Iowa Code section 68B.35 to do so via the Internet. This will benefit the regulated community and the Board.
- 3. The total estimated cost of the project is \$36,800. An additional \$602.72 was paid to the Department of Administrative Services Information Technology Enterprise for access to database, data information, and program language for current systems. This would make the total cost of the project \$37,402.72

- 4. The source of revenues for the project is the appropriation made to the Board in 2006 Iowa Acts, Ch. 1179, Division VI, Sec. 21.
- 5. The amount of funds currently expended on the project is \$15,322.72.
- 6. The progress of the work completed and the estimated completion date of the project is as follows:
- A. The vendor has collected all requirements gathering.
- B. Initial views and screen shots have been provided.
- C. The final application for all three phases is estimated to be completed on March 6, 2007.

If any of you have questions or concerns about this project or the appropriation made to the Board, please notify me.

Department of Human Rights

Criminal Justice Information System (CJIS) Integration Project HF 2782 - Status Report

Pursuant to the language contained in HF 2782 the following status report is submitted regarding the implementation of Iowa's Criminal Justice Information System (CJIS).

Description of the Project: Justice agencies throughout the nation increasingly recognize the importance of integrating their information systems in order to share critical data, documents, images and key transactions. In recognition of this need to share information, many state and local jurisdictions, including the State of Iowa, are actively developing and implementing plans for comprehensive integrated justice information systems. Integrated systems improve the quality of information and thereby: improve public safety, eliminate data entry errors and redundant data entry, provide complete, current and timely data, improve the ability to evaluate policy decisions and changes, maximize available resources, improve data retrieval response time, provide for better, more informed decision making, and improve the operational effectiveness of existing systems.

It is well known that each justice agency makes decisions regarding persons or cases that should be shared with other persons or agencies. However, many systems have been developed in isolation of one another. This results in independent systems that may share common data concepts but cannot easily communicate with each other. The goal of justice integration is to design a system or "variety of functions" to enable the efficient, accurate and timely electronic sharing of information within and between justice agencies.

A \$2.6 million appropriation from the Tobacco Settlement Fund to CJJP was provided to allow the Division of Criminal and Juvenile Justice Planning (CJJP) to contract with the Department of Administrative Services, Information Technology Enterprise, and selected technology service providers to purchase, install, and program the hardware and software necessary to actually perform electronic information exchanges between criminal justice agencies.

Progress of Work Completed:

Since 2001 significant progress has been made towards implementing CJIS in Iowa. Identified below are some of the more notable achievements.

Two major research projects, the Adult Exchange Modeling Project and the Juvenile Exchange Modeling Project, mapped out the flow of criminal and juvenile justice information throughout the justice system from the initial point of contact with law enforcement to the final disposition of sentence. These projects identified hundreds of

points where information was exchanged and they identified bottlenecks and redundancies that can be targeted for improvements.

Special projects such as the electronic pre-sentence investigation (PSI) project, the County Attorney Case Management Project, and project Kaleidoscope were conducted to demonstrate the value and feasibility of integrating multiple, disparate systems. The PSI project allows the pre-sentence investigation writers in the Department of Corrections to electronically transmit PSI's from the Department of Corrections ICON system directly to the judges' bench. The County Attorney Case Management Project provided a common case management system for multiple counties which allows them to begin electronically sharing information between themselves and with other justice agencies. Project Kaleidoscope is an information sharing project which connects the Department of Corrections, Department of Public Safety, Polk County Sheriff's Office and the Polk County Attorney's Office. This has demonstrated that multiple systems can be successfully integrated. Also, CJJP did an exhaustive analysis of the status of automation to use to start correcting information sharing deficiencies.

Governor Vilsack and Chief Justice Lavorato entered into an agreement via a Memorandum of Understanding (MOU) that established a formal governance structure to oversee the implementation of CJIS in Iowa. This multi-jurisdictional, multi-branch of government structure is responsible for all policies and procedures related to justice information sharing in Iowa.

In 2005, the State of Iowa completed a comprehensive, five-year, criminal justice information system integration plan. This plan provides the blueprint for Iowa to follow to totally integrate the justice community in Iowa.

All of the necessary computer programming (information exchange packages, domain models, schemas, and sequencing diagrams) has been completed to begin the electronic exchange of information involving selected information exchanges.

Most recently, under the guidance and direction of the State's CJIS Advisory Committee, CJJP issued a Request for Proposal (RFP) on October 30, 2006. This RFP was intended to solicit proposals to provide all the services necessary to establish an electronic CJIS information exchange broker or service bus and to actually begin exchanging information electronically for nine specific criminal justice exchanges. The RFP required that all proposals be submitted by December 5, 2006. There were a total of five proposals submitted and those proposals were evaluated and scored by an eight member RFP review team. That review team made a recommendation to the CJIS Advisory Committee on which vendor they felt best met the requirements of the RFP and were still within the available budget. The CJIS Advisory Committee accepted that recommendation and voted unanimously to award the contract to the recommended vendor. As of the writing of this report CJJP is in contract negotiations with the selected vendor and hopes to have an executed contract shortly after the first of the year.

In the spring of 2007, once the exchange broker has been installed, the first nine exchanges will be implemented. These exchanges include: 1) arrest warrant, 2) citation, 3) complaint, 4) OWI complaint, 5) incident report, 6) protective order, 7) trial information, 8) pre-sentence investigations, and 9) sentencing orders. Plans are also underway to implement an additional 20 exchanges in the fall and winter of 2007.

<u>Total Estimated Cost of the Project</u>: The total estimated cost of implementing the CJIS project is approximately \$11 million.

Revenue Sources Used to Fund the Project: Because this project is so critical to public safety and homeland security the CJIS Advisory Committee and CJJP have aggressively pursued funding for this project from a variety of revenue sources. Since 2001, funds have been received from Byrne grants, grants from the National Governor's Association (NGA), National Criminal History Improvement Program (NCHIP) grants, State Return on Investment (ROI) funds, Homeland Security grants, and state appropriations (received in FY 07).

<u>Amount of Funds Expended</u>: Since 2001, the total amount of funds expended from all funding sources is \$2,775,849.

<u>Amount of Funds Obligated</u>: Of the \$2.6 million appropriation received in FY 07, approximately \$600,000 has been obligated. The balance is anticipated to be obligated by the end of the fiscal year.

Estimated Completion Date of the Project: June 30, 2011

Department of Human Services



STATE OF IOWA

THOMAS J. VILSACK, GOVERNOR SALLY J. PEDERSON, LT. GOVERNOR

DEPARTMENT OF HUMAN SERVICES
KEVIN W. CONCANNON, DIRECTOR

Interoffice Memorandum Division of Child and Family Services

To:

Dave Reynolds, Legislative Service Agency

From:

Mary Nelson, Division Administrator

Date:

December 28, 2006

Subject:

Status Report on the SFY 2006 project funded for a total of \$250,000 by the

Rebuild Iowa Infrastructure Fund

One project in SFY 2006 was funded through the Division of Child and Family Services (known then as the Division of Behavioral, Developmental, and Protective Services). Details of the project are below.

The State Funds Recipient:

Lutheran Services in Iowa, Inc. \$250,000

Project Description:

Construction of a residential treatment facility for youth

with emotional and behavioral disorders

Progress Of Work Completed:

All work has been completed

Total estimated cost of project:

\$6.4 million, with the state funding \$250,000 of this

amount

Revenue sources:

State funding of \$250,000 with additional private funding

Funds expended thus far:

All of the appropriated \$250,000 has been spent



STATE OF IOWA

THOMAS J. VILSACK, GOVERNOR SALLY J. PEDERSON, LT. GOVERNOR

DEPARTMENT OF HUMAN SERVICES KEVIN W. CONCANNON, DIRECTOR

Interoffice Memorandum Division of Child and Family Services

To:

Dave Reynolds, Legislative Service Agency

From:

Mary Nelson, Division Administrator

Date:

December 28, 2006

Subject:

Status Report on the SFY 2007 project funded for a total of \$300,000 by the Rebuild

Iowa Infrastructure Fund

One project in SFY 2007 is in progress through the Division of Child and Family Services. Details of the project are below.

The State Funds Recipient:

Youth Homes of Mid-America, Inc. \$300,000

Project Description:

Planning, design, renovation, and construction of a

residential treatment facility for youth with emotional and

behavioral disorders in Johnston, Iowa

Progress Of Work Completed:

Work has been initiated; the overall percentage of the work

completed is not known

Estimated Completion Date:

All state funded work is expected to be completed by June

30, 2007

Total estimated cost of project:

Estimates for the overall project at this agency total about

\$787,000

Revenue sources:

State funding of \$300,000 and a minimum \$300,000 match

funding from the recipient agency as required by the appropriation (state funding is contingent on matching funds from the recipient that are "moneys... from sources

other than the state on a dollar-for-dollar basis"

Funds expended thus far:

All state funds were obligated for this project upon written

evidence the recipient committed the required amount of

matching funds

Iowa Telecommunications and Technology Commission

IOWA TELECOMMUNICATIONS & TECHNOLOGY COMMISSION

Thomas J. Vilsack GOVERNOR Sally J. Pederson LT. GOVERNOR Betsy Brandsgard CHAIRPERSON

Pamela A. Duffy Robert R. Hardman Timothy L. Lapointe Michael W. Mahaffey David A. Vaudt



December 27, 2007

Memorandum

Members of the Capital Projects Committee of the Legislative Council
Members of the Transportation, Infrastructure, and Capitals Appropriations Subcommittee
Dave Reynolds, Legislative Services Agency (LSA)
Jennifer Acton, Legislative Services Agency (LSA)
Dave Fardal, Department of Management (DOM)
Lee Hill, Department of Management

FR: John Gillispie, Executive Director

RE: Infrastructure Project Status

This status report is being submitted to meet the requirement in House File 2782 for agencies receiving funding from the Technology Reinvestment Fund to report the status of their funded projects by January 1, 2007.

The ICN received an appropriation of \$1,997,500, to replace and upgrade equipment that is reaching its end of functional life. Following is a list of the equipment being replaced or upgraded.

- Voice (Local Telephone System) equipment serving state agencies in the capitol complex. The
 manufacturer no longer supports the equipment and third-party refurbished replacement parts are becoming
 scarce. So far, the ICN has not experienced large outages. (Second part of three-year project)
- Customer site field router that directs voice, video, and data traffic to the network. Replacement of approximately 14% of the current field routers. Besides the age induced risk factor, newer equipment maximizes the number of circuits routed and ensures industry compatible capabilities are available to ICN users.
- Backbone video transmission equipment that was intended for use on the original network
 architecture. The manufacturer no longer supports the equipment, increasing the potential for numerous
 video classroom and other service failures. The new equipment will provide an additional cost effective
 option for schools, government agencies, and other ICN users to connect. (Continuation of equipment
 replacement begun in FY 2006)
- Internet Protocol Technology Equipment. Many ICN users video are moving to Internet Protocol (IP) technology. More simultaneous and better quality Video over IP conferences would be available than are currently supported. The current equipment will be reassigned to meet other IP bandwidth requirements.
- **Update of equipment and software for video scheduling.** To ensure each video session comes up as scheduled, several replacement servers (computers) are required. Updated software is required for seamless management and coordination between the current and future technologies.

To date, \$628,414 of the appropriation has been expended and another \$415,060 has been obligated. All of the subprojects are scheduled to be finished by the end of the fiscal year and are in some stage of completion. The funding source for the projects is the appropriation, with the ICN paying for any costs exceeding the appropriation from the Iowa Communications Network Fund. See the attached worksheet for details.

Please contact Tami Fujinaka, Government Relations Manager if you require additional information. (tami.fujinaka@iowa.com or 515-725-4658)

Iowa Communications Network

Technology Reinvestment Fund Appropriation Status December 27, 2006

Equipment Type	Status of Subproject	Estimated Cost	Revenue Sources	Amount of Funds Expended	Estimated Completion Date
Voice (Local Telephone System) equipment serving state agencies in the capitol complex	Equipment ordered, most received.	\$900,000	Technology Reinvestment Fund Appropriation	\$628,414 With the remainder of the costs obligated	04/30/2007
Customer site field router that directs voice, video, and data traffic to the network.	Related to IP equipment category below. Locations requiring routers will be dependent upon IP equipment purchased under that RFP.	\$160,000	Technology Reinvestment Fund Appropriation	0	04/30/2007
Backbone video transmission equipment that was intended for use on the original network architecture.		\$100,000	Technology Reinvestment Fund Appropriation	0	05/31/2007
Internet Protocol Technology Equipment.	RFP released and equipment currently being evaluated for compatibility with existing ICN equipment.	\$800,000	Technology Reinvestment Fund Appropriation	\$109,374 obligated	06/30/2007
Update of equipment and software for video scheduling.	Contract is completed, work is in progress.	\$37,500	Technology Reinvestment Fund Appropriation	\$34,100 obligated	03/31/2007
Total Appropriation		\$1,997,500			

Iowa Law Enforcement Academy

Technical Projects Report To the Legislature

December 29, 2006

The Iowa Law Enforcement Academy received \$50,000 for the initial development of a computer laboratory for the basic training and continuing education of Iowa peace officers. The Academy library was rearranged during the summer and early fall 2006 to accommodate the new computer laboratory.

Electrical work began on the project in late October and early November. The computer desks were delivered in December 2006. The remaining electrical work is being completed during December and early January 2007.

Six of the computers arrived in December 2006. These are computers that are higher grade that will be used in advanced computer and law enforcement digital photography training for investigators and prosecuting attorneys. The remaining twelve computers are on order. The teacher area, instructional white board, and projector are ordered and to be delivered in January 2007.

Additional monies have been requested in FY 2008 to complete the project including a server that will allow internet availability for the students while assuring inappropriate sites are not accessible and additional instructor aids. Monies are also requested for computers in each of the officer's dormitory rooms. There are currently two computers in each dormitory room. These have been donated computers to the Academy. The requested new monies will purchase new computers for the officers and begin the planned three-year rotation for dormitory computers.

Respectfully submitted,

E.A. "Penny" Westfall Director

Department of Natural Resources

Iowa Department of Natural Resources Funding Report December 31, 2006

Appropriation Name	Description of Project	Progress	Tot	al Estimated Cost	Additional Funding	I	Funds Expended	Funds Obligated	Estimated Completion Date
Rebuild Iowa Infrastructure Fund	_								
Destination Park	Supports the creation of a destination park.	0%		3,000,000	\$ 4,000,000	\$	-	\$ 	June, 2007
Lake Cornelia	To make improvments at Lake Cornelia.	0%		429,000		\$	140	\$ 	June, 2007
Waubonsie State Park Addition & Improvements	To purchase land adjacent to Waubonsie State Park and implement necessary development.	78%	\$	1,500,000		\$	1,170,766	\$ 329,234	June, 2007
Ft. Atkinson Preserves Improvement	To restore Ft. Atkinson.	26%	\$	500,000		\$	128,809	\$ 371,191	June, 2007
Mid America Port Commission	To pay dues to the Mid-America Port Commission.	100%	\$	80,000		\$	80,000	\$ -	Complete
Total Rebuild Iowa Infrastructure Fun			\$	5,509,000	\$ 4,000,000	\$	1,379,715	\$ 8,129,285	
Environment First Fund	_								
Water Quality and Keepers of the Land	Supports the Keepers of the Land Program with the goal of making it easy for lowans to volunteer and become involved as advocates for lowa's natural resources.	100%	\$	100,000		\$	100,000	\$ -	Complete
Marine Fuel Tax	Supports the established program that improves the quality of lakes and other boating areas, increases access points and develops them for safe and appropriate use, and makes other boating safety and recreation related improvements.	72%	\$	2,300,000		\$	1,650,093	\$ 649,907	June, 2007
State Park Maintenance	Supports the Park's Bureau facility and grounds maintenance costs, equipment costs to maintain the facilities and grounds, and a portion of facility maintenance staff costs, primarily in the form of summer workers.	100%	\$	2,000,000		\$	2,000,000	\$ -	Complete
GIS Watershed Managers	Supports the development, acquisition, and analysis of geographic and demographic data for	96%	\$	195,000		\$	187,151	\$ 7,849	June, 2007
	resource management.	70							

Water Quality Monitoring	Supports water quality monitoirng which enables the Department to assess the quality of our water and extent of water quality problems, determine wheter watershed improvements were effective, and identify new threats to and emerging issues in lowa's water quality.	100% \$	2,955,000	\$	2,955,000	\$ -	Complete
Water Quality Protection	Supports the public drinking water supply program by providing a match for federal funds.	100% \$	500,000	\$	500,000	\$ -	Complete
Lake Dredging	Supports the established program that restores deteriorated lake water quality and improves fishing, swimming, boating and other recreational activities on lakes across lowa.	51% \$	1,500,000	\$	760,145	\$ 739,855	June, 2007
Resource Enhancement and Protection	Allows for sustainable funding for natural resource protection, cultural resource enhancement and protection and outdoor recreation enhancement at all levels of state government: state, county and city.	100% \$	11,000,000	\$	11,000,000	\$ -	Complete
Total Environment First Fund	,	\$	20,550,000	\$ - \$	19,152,389	\$ 1,397,611	
Tobacco Settlement Trust Fund	<u>-</u>						
Lewis and Clark Rural Water	Pass thru to Lewis & Clark Rural Water Association for development.	100% \$	2,500,000	\$	2,500,000		Complete
Total Tobacco Settlement Trust Fund	. issession of development	\$	2,500,000	\$ - \$	2,500,000		

Department of Public Defense

2007 Infrastructure Appropriations Act Report (per HF 2782)

Prepared for:

Transportation, Infrastructure, and Capitals Appropriations Subcommittee Legislative Services Agency Department of Management Capital Projects Committee of the Legislative Council

Prepared by:

Joanne Andersen, Accountant Iowa Department of Public Defense

Date: 01/03/07

Project description:

Camp Dodge Armed Forces Readiness Center (AFRC)

Progress of work completed: 10% complete

Estimated Completion date: Oct-08

			Actual			lotal Est
		Budgeted/	Expense	Funds	Est	Cost of the
Funding Source:	<u>Fund</u>	Appropriated	to 12/31/06	Obligated	Projections	<u>Project</u>
Rebuild la Infrastructure Fund	0017	100,000.00	0.00		100,000.00	100,000.00
Vertical Infrastructure Fund	0099					0.00
Tobacco Settlement Trust Fund	0198					0.00
Endow Health Restricted Capitals Fund	0942					0.00
Technology Reinvestment Fund	0943					0.00
General Fund Appropriation R31	0001					0.00
National Guard Facility Impr Fund	0171					0.00
Federal Funds		37,000,000.00	3,700,000.00		33,300,000.00	37,000,000.00
Camp Dodge AFRC Total		37,100,000.00	3,700,000.00	0.00	33,400,000.00	37,100,000.00

Iowa City Readiness Center

Progress of work completed: Design phase

Estimated Completion date: Jul-08

Funding Source:	<u>Fund</u>	Budgeted/ Appropriated	Actual Expense to 12/31/06	Funds <u>Obligated</u>	Est <u>Projections</u>	Total Est Cost of the <u>Project</u>
Rebuild la Infrastructure Fund	0017	2,345,000.00	415,904.40		1,929,095.60	2,345,000.00
Vertical Infrastructure Fund	0099					0.00
Tobacco Settlement Trust Fund	0198					0.00
Endow Health Restricted Capitals Fund	0942	1,444,288.00			1,444,288.00	1,444,288.00
Technology Reinvestment Fund	0943					0.00
General Fund Appropriation R31	0001					0.00
National Guard Facility Impr Fund	0171					0.00
Federal Funds		13,700,000.00	955,641.15		12,744,358.85	13,700,000.00
Iowa City Readiness Center Total		17,489,288.00	1,371,545.55	0.00	16,117,742.45	17,489,288.00

Project description:

Camp Dodge Water System Improvement

Progress of work completed: 20% complete

Estimated Completion date: Apr-07

Funding Source:	<u>Fund</u>	Budgeted/ Appropriated	Actual Expense to 12/31/06	Funds Obligated	Est <u>Projections</u>	Total Est Cost of the <u>Project</u>
Rebuild la Infrastructure Fund	0017	154,528.00	154,528.00			154,528.00
Vertical Infrastructure Fund	0099	1,939,800.00	1,658,723.76	281,076.24		1,939,800.00
Tobacco Settlement Trust Fund	0198	750,000.00	282,241.02	467,758.98		750,000.00
Endow Health Restricted Capitals Fund	0942					0.00
Technology Reinvestment Fund	0943					0.00
General Fund Appropriation R31	0001	29,532.29	50.79	29,481.50		29,532.29
National Guard Facility Impr Fund	0171					0.00
Federal Funds		6,250,000.00	1,538,205.42	735,885.45	3,975,909.13	6,250,000.00
Camp Dodge Water Syst Imp Total		9,123,860.29	3,633,748.99	1,514,202.17	3,975,909.13	9,123,860.29

Waterloo Aviation Readiness Center

Progress of work completed: Design phase

Estimated Completion date: Jul-08

Funding Source:	<u>Fund</u>	Budgeted/ Appropriated	Actual Expense to 12/31/06	Funds Obligated	Est <u>Projections</u>	Total Est Cost of the <u>Project</u>
Rebuild la Infrastructure Fund	0017					0.00
Vertical Infrastructure Fund	0099					0.00
Tobacco Settlement Trust Fund	0198	399,000.00	111,025.00	12,375.00	275,600.00	399,000.00
Endow Health Restricted Capitals Fund	0942	1,236,000.00			1,236,000.00	1,236,000.00
Technology Reinvestment Fund	0943					0.00
General Fund Appropriation R31	0001					0.00
National Guard Facility Impr Fund	0171					0.00
Federal Funds		1,500,000.00	124,100.00		1,375,900.00	1,500,000.00
Waterloo Aviation Readiness Total		3,135,000.00	235,125.00	12,375.00	2,887,500.00	3,135,000.00

Project description:

Spencer Readiness Center Renovation

Progress of work completed: 10% complete

Estimated Completion date: Jan-08

	Actual					
Fund	Budgeted/	Expense	Funds	Est	Cost of the	
<u>runa</u>	Appropriated	10 12/3 1/00	Obligated	Projections	<u>Project</u>	
0017					0.00	
0099					0.00	
0198					0.00	
0942	689,000.00	65,838.46	128,190.00	494,971.54	689,000.00	
0943					0.00	
0001	58.11	58.11			58.11	
0171					0.00	
	750,000.00	58.10		749,941.90	750,000.00	
	1,439,058.11	65,954.67	128,190.00	1,244,913.44	1,439,058.11	
	0099 0198 0942 0943 0001	Fund Appropriated 0017 0099 0198 0942 0943 0001 0171 750,000.00	Fund Budgeted/ Appropriated Expense to 12/31/06 0017 0099 0198 0942 0943 0001 0171 689,000.00 58.11 58.11 750,000.00 65,838.46 58.11 58.11	Fund Budgeted/ Appropriated Expense to 12/31/06 Funds Obligated 0017 0099 0198 0942 0943 0001 0171 689,000.00 65,838.46 128,190.00 58.11 0171 58.11 750,000.00 58.10	Fund Budgeted/ Appropriated Expense to 12/31/06 Funds Obligated Est Projections 0017 0099 0198 0942 0943 0001 0171 689,000.00 58.11 65,838.46 58.11 128,190.00 58.11 494,971.54 750,000.00 58.10 749,941.90	

Major Maintenance National Guard Facilities

Progress of work completed: Various projects in process

Estimated Completion date: Varies by project

Funding Source:	<u>Fund</u>	Budgeted/ Appropriated	Actual Expense to 12/31/06	Funds Obligated	Est <u>Projections</u>	Total Est Cost of the <u>Project</u>
Rebuild la Infrastructure Fund	0017	115,251.00	115,251.00			115,251.00
Vertical Infrastructure Fund	0099	1,269,636.00	815,451.70	129,765.85	324,418.45	1,269,636.00
Tobacco Settlement Trust Fund	0198	1,500,000.00	1,085,656.38	414,343.62		1,500,000.00
Endow Health Restricted Capitals Fund	0942					0.00
Technology Reinvestment Fund	0943					0.00
General Fund Appropriation R31	0001	240,670.76	239,353.76	1,317.00		240,670.76
National Guard Facility Impr Fund	0171	27,417.01	27,417.01			27,417.01
Federal Funds	-	5,300,000.00	2,163,894.78	3,096,835.37	39,269.85	5,300,000.00
Major Maintenance Total		8,452,974.77	4,447,024.63	3,642,261.84	363,688.30	8,452,974.77

***** ******************************

Project description:

STARCOMM - facility to house a backup emergency operations center

Progress of work completed: Design phase

Estimated Completion date: Jul-09

Funding Source:	<u>Fund</u>	Budgeted/ Appropriated	Actual Expense to 12/31/06	Funds Obligated	Est <u>Projections</u>	Total Est Cost of the <u>Project</u>
Rebuild la Infrastructure Fund	0017	1,000,000.00			1,000,000.00	1,000,000.00
Vertical Infrastructure Fund Tobacco Settlement Trust Fund	0099 0198					0.00 0.00
Endow Health Restricted Capitals Fund	0198	600,000.00			600,000.00	600,000.00
Technology Reinvestment Fund	0943					0.00
General Fund Appropriation R31	0001					0.00
National Guard Facility Impr Fund	0171					0.00
Federal Funds						0.00
STARCOMM Total		1,600,000.00	0.00	0.00	1,600,000.00	1,600,000.00

Technology Upgrades Iowa National Guard

Progress of work completed: 65% complete - vulnerability assessment completed by the Iowa National Guard;

Intrusion detection tools purchased

Estimated Completion date: May-07

Funding Source:	<u>Fund</u>	Budgeted/ Appropriated	Actual Expense to 12/31/06	Funds Obligated	Est <u>Projections</u>	Total Est Cost of the <u>Project</u>
Rebuild la Infrastructure Fund Vertical Infrastructure Fund	0017 0099					0.00
Tobacco Settlement Trust Fund	0099					0.00 0.00
Endow Health Restricted Capitals Fund	0942					0.00
Technology Reinvestment Fund	0943	75,000.00	49,623.72		25,376.28	75,000.00
General Fund Appropriation R31	0001					0.00
National Guard Facility Impr Fund	0171					0.00
Federal Funds						0.00
Tech Upgrades Total		75,000.00	49,623.72	0.00	25,376.28	75,000.00

TOTAL FOR ALL PROJECTS

Funding Source:	<u>Fund</u>	Budgeted/ Appropriated	Actual Expense to 12/31/06	Funds <u>Obligated</u>	Est <u>Projections</u>	Total Est Cost of the <u>Projects</u>
Rebuild Ia Infrastructure Fund	0017	3,714,779.00	685,683.40	0.00	3,029,095.60	3,714,779.00
Vertical Infrastructure Fund	0099	3,209,436.00	2,474,175.46	410,842.09	324,418.45	3,209,436.00
Tobacco Settlement Trust Fund	0198	2,649,000.00	1,478,922.40	894,477.60	275,600.00	2,649,000.00
Endow Health Restricted Capitals Fund	0942	3,969,288.00	65,838.46	128,190.00	3,775,259.54	3,969,288.00
Technology Reinvestment Fund	0943	75,000.00	49,623.72	0.00	25,376.28	75,000.00
General Fund Appropriation R31	0001	270,261.16	239,462.66	30,798.50	0.00	270,261.16
National Guard Facility Impr Fund	0171	27,417.01	27,417.01	0.00	0.00	27,417.01
Federal Funds		64,500,000.00	8,481,899.45	3,832,720.82	52,185,379.73	64,500,000.00
Total for All Projects		78,415,181.17	13,503,022.56	5,297,029.01	59,615,129.60	78,415,181.17

Board of Regents

Governing lowa's public universities and special schools

University of Iowa Iowa State University University of Northern Iowa Iowa School for the Deaf Iowa Braille and Sight Saving School Lakeside Laboratory Quad-Cities Graduate Center Southwest Iowa Regents Resource Center Tri-State Graduate Center



Michael G. Gartner, President, Des Moines Teresa A. Wahlert, Pro Tem, Waukee Amir I. Arbisser, M.D., Davenport Mary Ellen Becker, Ph.D., Oskaloosa Tom W. Bedell, Spirit Lake Jenny L. Connolly, Cedar Falls Robert N. Downer, Iowa City Ruth R. Harkin, Cumming Rose A. Vasquez, Des Moines

Gary W. Steinke, Executive Director

January 3, 2007

Transportation, Infrastructure, and Capitals Appropriations Subcommittee State Capitol

Capital Projects Committee of the Legislative Council State Capitol

Michael Tramontina, Director Department of Management State Capitol

Dennis C. Prouty, Director Legislative Services Agency State Capitol

Re: FY 2007 Infrastructure Appropriations Annual Report

Dear Members of the Committee:

As required by 2006 Legislative Acts, Chapter 1179 (HF 2782), attached is the report which lists the status of all capital projects in progress at the Regent institutions (as of December 15, 2006) which received FY 2007 appropriations from this legislation. The table on the next page lists each appropriation and identifies the corresponding attachment.

If you have any questions or need more information, please don't hesitate to contact this office.

Sincerely,

Gary W. Steinke

H:\BF\Legislative\2007 Session\Responses\reynolds_HF2782report122206.doc Attachments (8)

cc: Dave Reynolds, LSA Dave Fardal, DOM Legislative Liaisons Legislative Log

Appropriations for FY 2007 - HF 2782 Summary

Rebuild Iowa Infrastructure Fund (HF 2782, Sec. 33)

Tuition Replacement	\$10,329,981	Debt service, not a capital project
Economic Development	8,200,000	Separate attachment per university.
Batelle Funds	1,800,000	Separate attachment per university.
Batelle Funds - Endowments and Salaries	5,000,000	Separate attachment per university.
Iowa State University - Protein Processing Plant	1,000,000	Part of ISU spreadsheet.
University of Iowa - Hygienic Lab	8,350,000	Part of SUI spreadsheet.
Iowa State University - Vet Lab	2,000,000	Part of ISU spreadsheet.
Renovation and Repair - \$6,200,000 total		·
University of Iowa	2,557,500	Part of SUI spreadsheet.
Iowa State University	2,480,000	Part of ISU spreadsheet.
University of Northern Iowa	1,162,500	Part of UNI spreadsheet.
University of Northern Iowa - Playground Safety	500,000	Part of UNI spreadsheet.
Vertical Infrastructure Fund		
(HF 2782, Sec. 35)		
Batelle Funds - Economic Development	5,000,000	Separate attachment per university.
Endowment for Iowa Health Account Restricted Capitals		
Fund of the Tobacco Settlement Trust Fund (HF 2782, Sec. 19)		
University of Iowa - College of Public Health	2,000,000	Part of SUI spreadsheet.
Iowa State University - Chemistry Building	5,000,000	Part of ISU spreadsheet.
, , , , , , , , , , , , , , , , , , , ,	.,,	· · · · · · · · · · · · · · · · · · ·

3,000,000

Part of UNI spreadsheet.

LEGISLATIVE CROSS REFERENCES Environment First Fund (HF 2782, Sec. 34)

Restricted Capitals Fund of the Tobacco Settlement Trust Fund (HF 2782, Sec. 38)

University of Northern Iowa - Upgrades to Electrical Distribution System

Technology Reinvestment Fund (HF 2782, Sec. 23)

University of Iowa - as of December 15, 2006

FY 2007 Appropriation \$ 8,350,000 Hygienic Lab Renovation and Repair Needs (allocation to University of Iowa) College of Public Health 2,557,500 2,000,000

Description of Project	Progress of Work Completed	Total Estimated Cost of Project	List of all Revenue Sources	FY 2007 Revenue Sources	FY 2007 Revenue Source Amounts	Amount of Funds Obligated for FY 2007 (signed contracts or agreements)	Amount of Funds Expended for FY 2007	Estimated Completion Date of Project
Hygienic Lab This project will construct a new facility located on the Oakdale campus at the corner of Oakdale Blvd and Hwy 965. The project will house all of the existing UHL from Oakdale Hall plus add a couple new areas currently not located in	In Design	•	State Appropriations (RIIF)	FY 2007 State Appropriations (RIIF)	\$ 8,350,000	,		Fall 2009
Oakdale Hall.			Federal Grant Hygienic Lab Income	FY 2007 Federal Grant FY 2007 Hygienic Lab Income	\$ 1,400,000 \$ 350,000		\$ 1,139,894 \$ -	
Renovation and Repair Needs (allocation to University of Iowa) Maintenance, system upgrades, or repairs including those that were deferred to a future budget cycle or postponed until funding became available.	In Design and Construction	\$ 2,557,500	State Appropriations (RIIF)	FY 2007 State Appropriations (RIIF)	\$ 2,557,500	\$ 2,157,495	\$ 400,005	June 2007
College of Public Health	In Programming/Design		State Appropriations (Restricted Capitals Fund) FY08 State Appropriations	FY 2007 State Appropriations (Restricted Capitals Fund)	\$ 2,000,000	\$ 258,170	\$ 709,354	January 2010
Preliminary planning suggests a new facility of approximately 130,000 square feet.			Request (\$18,700,000) Gifts/Earnings/Revenue Bonds (\$24,000,000)					

Includes FY 2008 RIIF Appropriations of \$15,650,000 and FY 2009 RIIF Appropriations of \$12,000,000

Iowa State University - as of December 15, 2006

FY 2007 Appropriation \$ 2,000,000 \$ 1,000,000 \$ 2,480,000 Veterinary Lab Protein Processing Plant Renovation and Repair Needs (allocation to Iowa State University) Chemistry Building \$ 5,000,000

					Amount of Funds Obligated for	Amount of	Estimated
Progress of	Total				FY 2007 (signed	Funds	Completion
-							Date of
Completed	•	,	FY 2007 Revenue Sources	Amounts	agreements)	FY 2007	Project
PSI 2 project		\$2,000,000	EV 2007 State Appropriations				
				\$ 2,000,000	\$ 966 653	\$ 530.153	June-08
0 ,	Ψ 0,100,000		(· ····)	2,000,000	Ψ 300,000	Ψ 000,100	ound do
construction							
		State Appropriations - PIIE					
			FY 2007 State Appropriations				
Planning	\$ 7,000,000	Private Funds \$3,000,000	(RIIF)	\$ 1,000,000	\$ -	\$ -	FY 2009
				Φ 0.400.000		6 504.040	1 07
Construction	\$ 2,480,000	\$2,480,000	(RIIF)	\$ 2,480,000	\$ 1,116,704	\$ 584,642	June-07
ln .							
Programming	\$ 74,500,000	Private Funds \$15,600,000	(Restricted Capitals Fund)	\$ 5,000,000	\$ 419,101	\$ 241,188	December-10
	Work Completed BSL3 project - design; VDL project - construction Planning In Design and Construction	Work Completed Estimated Cost of Project BSL3 project design; \$ 3,100,000 Planning \$ 7,000,000 In Design and Construction \$ 2,480,000	State Appropriations - RIIF \$1,000,000 Private Funds \$3,000,000 Faderal Funds \$3,000,000 Funds Funds \$3,000,000 Funds \$3,000,000 Funds Funds \$3,000,000 Funds \$3,000,000 Funds Funds \$3,000,000 Funds Funds \$3,000,000 Funds Funds \$3,000,000 Funds \$3,	Work Completed State Appropriations - RIIF \$2,000,000 Private Funds \$1,000,000 Private Funds \$3,000,000 Frivate Funds	Work Completed Estimated Cost of Project List of all Revenue Sources for Funding Project FY 2007 Revenue Sources FY 2007 Revenue Source Amounts BSL3 project design; VDL project - construction \$ 3,100,000 \$ 3,100,000 FY 2007 State Appropriations - RIIF \$1,000,000 \$ 2,000,000 Planning \$ 7,000,000 State Appropriations - RIIF \$1,000,000 FY 2007 State Appropriations (RIIF) \$ 1,000,000 In Design and Construction \$ 2,480,000 State Appropriations - RIIF \$2,480,000 FY 2007 State Appropriations (RIIF) \$ 2,480,000 In Design and Construction \$ 2,480,000 \$ 2,480,000 FY 2007 State Appropriations - RIIF \$1,000,000 FY 2007 State Appropriations (RIIF) \$ 2,480,000	Progress of Work Completed Statistical Estimated Cost of Project Substitute of all Revenue Sources for Fy 2007 Revenue Sources Fy 2007 Revenue Sources of Fy	Progress of Work Completed Estimated Cost Completed State Appropriations - RIIF \$2,000,000 Private Funds \$1,000,000 Univ Funds \$100,000 Private Funds \$3,000,000 RIIF) In Design and Construction In Design and Construction FY 2007 State Appropriations - RIIF \$2,007 State Appropriations RIIF RY 2007 State Appropriations RY 2

University of Northern Iowa - as of December 15, 2006

FY 2007 Appropriation

Renovation and Repair Needs Electrical Distribution Loop System/Load-Break Switches, Phase 1 Iowa Safe Surfacing Project - National Program Playground Safety \$ 1,162,500 \$ 3,000,000 \$ 500,000

Description of Project	Progress of Work Completed	Total Estimate		Revenue Sources for FY 2007	Amount of Funds Obligated	Amount of Funds Expended	Estimated Completion Date of Project
Renovation and Repair Needs (allocation to University of Northern Iowa) Maintenance, system upgrades, or repairs including those that were deferred to a future budget cycle or postponed until funding became available.	In design, construction, or complete	\$ 1,162,50	FY 2007 State Appropriations (RIIF)	\$ 1,162,500	\$ 1,162,500	\$ 763,363	June-07
Electrical Distribution Loop System/Load-Break Switches Phase 1 This project is part of a phased project to add cabling and sectionalized switches to the electrical distribution system to further improve the loop system. The project would convert the outdated 4,160 volt loop to a 12,470 volt loop system, replace outdated 12,470 volt cables, and make improvements at the Power Plant.	In design	\$ 3,000,00	FY 2007 State Appropriations (Restricted Capitals Fund)	\$ 3,000,000	\$ 246,000	\$ -	December-08
lowa Safe Surfacing Project - National Program for Playground Safety The purpose is to provide safe play environments for children in elementary schools and child care centers by providing education about playground safety for the individuals who work in those centers and rubber tile surfacing.	Most of the tiles have been installed or delivered to the agencies	+,	FY 2007 State Appropriations (RIIF)	\$500,000	\$ 126,595	\$ 373,405	May-07

Iowa State University Economic Development Accomplishments and Highlights of Technology Transfer Activities

Introduction

Iowa State University and the State of Iowa are at the edge of a great opportunity like we have not seen before. The stars, so to speak, are in alignment. The vision, as seen by the university leadership a few years ago, is in alignment, too, aligned with the unique opportunity of today.

We live in a time of change that challenges us every day — a time when our senses must anticipate and prepare us for what is coming. We have always been a university engaged in discovery of new knowledge and bringing that knowledge into practical use. After all, our mission is learning, discovery and engagement. It is the engagement that has taken on new meaning.

We are an institution of growing numbers of entrepreneurs.

Entrepreneurship is defined here as: "Process of creating value by bringing together a unique package of resources to exploit an opportunity."

The "process of creating value..." comes in many forms. It includes an infrastructure of education, discovery and outreach. It includes creative, fast, flexible, responsive and visionary people who can see what is not yet in front of them. It includes the development of resources so they are ready to be used when needed. It includes recognizing opportunity when it shows up. And, finally, it includes the wisdom and tenacity to fully exploit that opportunity. This, I believe, is the definition of an entrepreneurial institution.

A special example of the process of creating value for Iowa State University began seven years ago when the Plant Sciences Institute was created. It continued to evolve when five years ago President Gregory Geoffroy selected five areas of special attention, one of which was the "bioeconomy," which led to the creation of the Office of Biorenewables Program.

Thus, over the past several years, we have seen very special and significant efforts in recruiting and developing faculty in the biosciences, engineering, agriculture and related areas. The University has been working with the State and private industry to develop programs such as the Grow Iowa Values Fund and the Bioscience Alliance of Iowa (following the Battelle study) which continue to add value today.

This brings us to the present where we are fortunate to have a huge opportunity to be the nation's leader. Iowa is the place of this opportunity and Iowa State University is prepared, with the help of its partners, the State and industry of Iowa, to move forward.

Business and industry of Iowa and much of the country reside on the edge of a world transitioning to new forms of energy products. We are transitioning from use of one-time petroleum products to renewable biological products. This transition will be gradual and will occur over many years. It provides a need and opportunity for research and discovery on the fundamental structure of plants. It provides a need and opportunity for development of more effective and economical renewable energy sources. It provides the need and opportunity for new companies and employment for the development of the economy of the State of Iowa. It provides, in other words, the need and opportunity for developing excellence and leadership in the 21st century.

John A. Brighton Vice President for Research and Economic Development

¹Michael Morris, Syracuse University

Iowa State University Economic Development Accomplishments and Highlights of Technology Transfer Activities

Executive Summary for 2006 Annual Report

- > ISU received \$279.7 million in sponsored funding from both federal and non-federal sources. Of this amount, \$15.6 million was received from businesses and commodity groups for research activities and \$13 million for non-research activities, including many projects that provide technical support and outreach to companies in the State of Iowa.
- ➤ ISU has maintained its position as one of the nation's leading universities in technology transfer accomplishments. In the latest survey conducted by the Association of University Technology Managers (FY04), in which 164 U.S. universities participated, ISU ranked 3rd in the number of licenses and options executed and 1st in this category for those universities without medical schools. ISU also ranked 4th for licenses and options yielding income and 2nd in this category for universities without medical schools.
- > ISU inventors disclosed 120 new technologies to the Office of Intellectual Property and Technology Transfer and 19 patents were issued on ISU inventions.
- ➤ ISURF executed 140 new licenses and options for ISU technology, including 95 for plant germplasm. Forty new technology licenses were executed with companies, four of which are located in Iowa. Of the five new option agreements executed in FY06, two of them are with Iowa companies.
- > Technologies licensed to Iowa companies (not including plant germplasm) resulted in over \$38 million in sales by those companies in calendar year 2005.
- > Two new Iowa companies were formed this past year due to ISU technologies and/or technical expertise. This brings the total count to 80 over the past two decades.
- Five new companies and affiliates joined the ISU Research Park in FY06, bringing the historical total to 151 companies and research centers that have located in or been affiliates of the Research Park. These companies employ nearly 2,100 people throughout the world. The total square footage within the Research Park is now nearly 325,000 square feet.
- ➤ The ISU Pappajohn Center for Entrepreneurship and the Small Business Development Center (SBDC) provided over 6,900 hours of professional and student consulting assistance to start-up and existing companies in FY06 and worked with 32 technology based companies located at or affiliated with the ISU Research Park. They also served over 106 clients with counseling and educated 180 clients through its 20 Smart Start business start-up workshops.
- ➤ The Institute for Physical Research and Technology (IPRT) leads the State in matching Iowa businesses and entrepreneurs with university resources in cost-shared research and development projects. In FY06 IPRT cost-sharing funds of \$364,931 were leveraged to \$1,097,912 in 30 product development and process improvement projects with Iowa companies.
- Three ISU and Ames Laboratory scientists have won national recognition for developing a software tool that helps engineers visualize and work with large sets of 3-D data. The result is a tool that helps engineers quickly solve problems and make decisions. Their technology has been recognized with a prestigious R&D 100 Award. This brings the total number of R&D awards to ISU since 1984 to 28.

- For FY06, as a result of CIRAS (Center for Industrial Research and Service) activities, 267 companies in Iowa reported \$27 million in new investments, \$9 million in costs saved or avoided, and \$63 million in sales gained or retained. Companies that worked with CIRAS and its partners reported that 955 jobs were added or retained as a result of the assistance they received.
- ➤ The Center for Industrial Research and Service (CIRAS) provided assistance in every county in Iowa in FY06. This activity included technical assistance and education by CIRAS staff, assistance by CIRAS partners, and attendees at engineering continuing education workshops.
- ➤ A "Point of Contact" system continues to help companies find the assistance they need within the university. The university homepage has a link for business/industry that takes the reader to the "Point of Contact" information. In the past year, the Office of the Vice President for Research and Economic Development received and acted upon approximately 500 inquiries. Inquiries have included requests from Iowa manufacturers for technical assistance, requests for information on special courses/workshops and requests for results of specific research projects.
- In late June 2006, ISU reviewed its processes related to industry contracts and post-award activities through a week-long Kaizen "Lean" event that was facilitated by business leaders from Vermeer Manufacturing and a private consultant. Others participating were representatives from the Iowa Business Council, the University of Iowa, the University of Northern Iowa and three industries in addition to Vermeer (Pioneer, Pratt-Whitney and Rockwell Collins). As a result of this event and ongoing follow-up, several improvements have been/will be made in this area that increases productivity between the university and external sponsors, thus providing better customer service and improving the bottom line. This event was so successful that it will be used in other areas at ISU. In fact, the Iowa State University Research Foundation/Office of Intellectual Property and Technology Transfer is planning such an event to be held in the next several weeks.
- ➤ ISU has worked closely with legislators, the Iowa Department of Economic Development, the University of Iowa, the University of Northern Iowa and the Board of Regents, State of Iowa to establish the Grow Iowa Values Fund. This legislation is providing the universities and private colleges new financial resources to expand technology transfer and commercialization efforts.
- ➤ ISU, the University of Iowa and the University of Northern Iowa have worked closely with the Iowa Department of Economic Development, the Board of Regents, State of Iowa; legislators and business leaders through the Biosciences Alliance of Iowa organization to implement the Battelle initiative. Proposed projects that focus on the biosciences, information technology and advanced manufacturing are currently under review.

Acronyms in This Report

CCUR - Center for Crops Utilization Research

CIRAS - Center for Industrial Research and Service

CTRE - Center for Transportation Research and Education

IDED – Iowa Department of Economic Development

IPRT – Institute for Physical Research and Technology

ISURF – Iowa State University Research Foundation

OIPTT - Office of Intellectual Property and

Technology Transfer

SBDC – Small Business Development Center

SBIR – Small Business Innovation Research

STTR – Small Business Technology Transfer

Economic Development and Technology Transfer Statistics

Sponsored Funding

In FY06, \$279.7 million was received by ISU in sponsored funding (Figure 1).

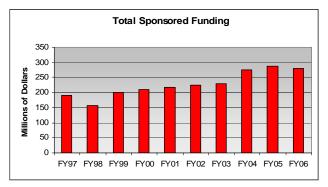


Figure 1

\$171.4 million of this was dedicated to research activities (Figure 2) and the rest to public service, educational projects, financial aid and buildings.

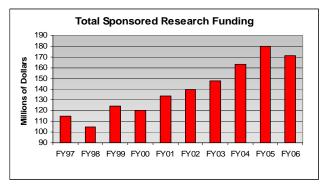


Figure 2

The research awards include contracts and grants from both federal and non-federal sources. Many projects supported by these funds result in technology that is transferred to the marketplace and consequently assists companies and communities across Iowa. Figures 3 and 4 show the two major sources for this type of support — the federal government and businesses and commodity groups. In FY06, the federal government funded research projects totaling \$120.2 million (Figure 3).

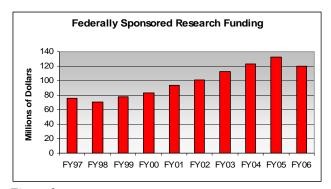


Figure 3

As shown in Figure 4, in FY06 businesses (including commodity groups) funded research projects at ISU totaling \$15.6 million. In addition, businesses funded non-research projects totaling \$13 million (not shown in Figure 4).

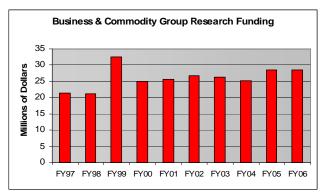


Figure 4

ISU Research Foundation Disclosures of Inventions

ISU researchers disclosed 120 new technologies to the Office of Intellectual Property and Technology Transfer (OIPTT). Figure 5 below shows disclosures received over the past 10 years by discipline.

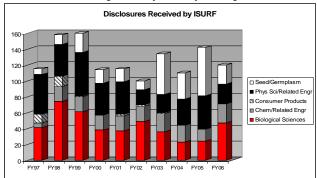


Figure 5

Patents Issued to ISU Inventors

Figure 6 below shows patents issued to the ISU Research Foundation (ISURF) over the last ten years. The trend in this graph is the result of increased time required for the U.S. patent office to review patent applications.

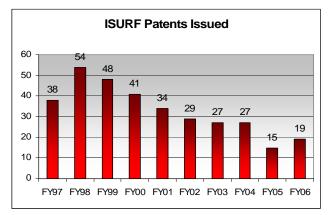
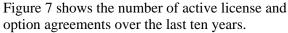


Figure 6

Iowa State's Research Foundation Signs New Licenses

In FY06, the Research Foundation signed 140 new license and option agreements, including 95 for plant germplasm. Of the forty-five new technology licenses and options signed, six were with Iowa companies. These are critical statistics since licenses and options characterize the actual transfer of ISU technologies to the marketplace. It should be noted that 31 inventions were licensed/optioned for the first time in FY06. Of these, 18 are plant varieties and 13 are other technologies.



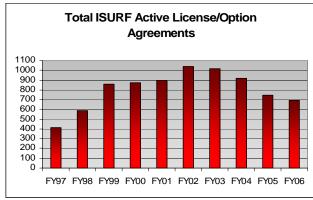


Figure 7

ISU Ranked High Nationally

ISU has maintained its position as one of the nation's leading universities in technology transfer accomplishments. In the latest survey conducted by the Association of University Technology Managers (FY04), in which 164 U.S. universities participated, ISU ranked 3rd in the number of licenses and options executed and 1st in this category for those universities without medical schools. ISU also ranked 4th for licenses and options yielding income and 2nd in this category for universities without medical schools.

ISU Technology Generates Iowa Sales

New technologies originating at ISU contribute directly to the economy of Iowa. Technologies licensed to Iowa companies, excluding plant germplasm, resulted in over \$38M million in sales by those companies in calendar year 2005. Figure 8 shows both Iowa and non-Iowa sales of licensed ISU technologies during the last ten years. Total sales of ISURF-licensed technologies (not including plant germplasm) were \$277 million in calendar year 2005. The large increase in sales over calendar year 2004 is due to increased sales of lead-free solder products.

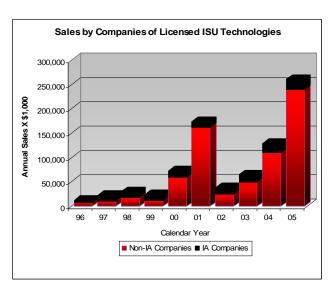


Figure 8

The next graph (Figure 9) shows the pattern over the past ten years of only Iowa companies.

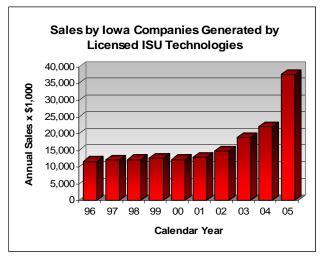


Figure 9

Making New Plant Germplasm Available

Figure 10 below shows the number of bushels of soybeans planted in Iowa on which royalties were collected and the dollar amount of those royalties over the last ten years. In FY06, 51,047 bushels of specialty soybean varieties developed at ISU were planted in Iowa, generating \$163,766 in royalties. The increase in planting and royalties over FY05 is due to the increased acceptance of altered fatty acid soybean varieties by growers.

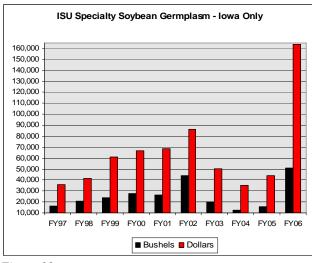


Figure 10

Encouraging the Development of Intellectual Property

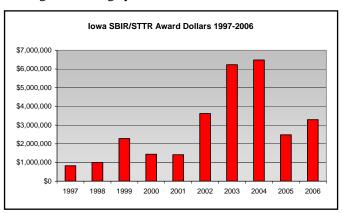
In FY06, ISURF disbursed value-added funds for eight ISU inventor projects for a total of \$148,057. These projects are the subject of patent applications and are being actively marketed and licensed. In addition, ISURF provided a total of \$8,800 in rent for two ISU start-ups at the Carver Co-Lab of the

Plant Sciences Institute and \$30,000 for scale-up of a new material to assist a start-up licensee.

SBIR/STTR Proposal Assistance

The Office of Intellectual Property and Technology Transfer began supporting SBIR/STTR outreach efforts July 1, 2005 with the addition of an SBIR/STTR Program Administrator to the OIPTT staff. Because of limited awareness of this program—which positively impacts Iowa's small, tech-based businesses and the Iowa economy—an emphasis was placed on outreach and training activities, in addition to providing proposal preparation support.

In FY06 ten Iowa companies won twelve new SBIR and STTR awards worth \$3.3 million. The Departments of Agriculture, Defense and Energy, as well as the National Institutes of Health, the National Science Foundation, and the National Aeronautics and Space Administration, are funding this year's Iowa SBIR/STTR award winners. The funded projects reflect Iowa's strengths in biotechnology, information systems, materials development and agriculture. Over one million dollars in support was garnered from the NSF for diverse topics that range from the development of a "smart" material using a natural fiber reinforced composite to novel oxygen sensor technologies to developing better authoring tools for intelligent tutoring systems.



The increase in the value of awards in 2006 is due in part to an increase in the Phase II grants awarded to Iowa companies. Phase II awards can be worth up to \$750,000 compared to an award of up to \$100,000 for Phase I grants.

Outreach and training activities included giving informational presentations to a number of groups across Iowa, including colleges and universities, as well as economic development representatives and entrepreneurs. These presentations reached audiences

of over one hundred. In addition, publication of the Iowa SBIR/STTR Newsletter began in September 2005 and is currently distributed to nearly 200 researchers, entrepreneurs, investors, economic development representatives, and federal, state and local governmental officials across the state. Materials for a Phase I Writing Workshop were developed, and for the first time in several years, an SBIR/STTR proposal preparation workshop was held in March on the ISU campus. Participants in the workshop included representatives from nine small businesses, as well as ISU faculty, staff and students. Overall, several hundred people with potential interest in the SBIR/STTR programs have been contacted and made aware of the SBIR/STTR support services available through OIPTT. In addition, sixteen small Iowa companies were provided direct assistance in the preparation of twenty Phase I and Phase II proposals.

ISU Research Park

Currently there are 41 companies and centers located at the Research Park employing 611 people and nine affiliate companies (See Figure 11). Five new companies and affiliates have joined the Park during this fiscal year bringing the historical total to 151 companies and research centers that have been located in or been affiliates of the Research Park (see Figure 12). These companies employ nearly 2,100 people throughout the world.



Figure 11

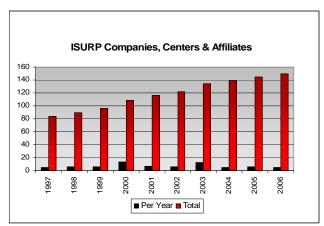


Figure 12

Employment figures

- Existing tenant companies & centers- 611
- Other Iowa employees of existing tenants- 66
- Other U.S. employees of existing tenants 9
- International employees of existing tenants -2
- Existing ISIS affiliates 92
- Former ISIS & RP companies 1,313 Total 2,093

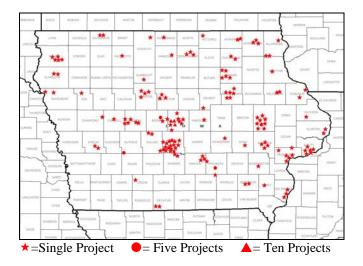
IPRT Meets the Growing R&D Needs of Iowa Industry

Accessing expertise from across the university, the Institute for Physical Research and Technology (IPRT) is able to meet the research and development needs of diverse Iowa companies leading the state in matching Iowa businesses and entrepreneurs with university resources in cost-shared research and development projects. In FY06, IPRT cost-sharing funds of \$364,931 were leveraged to a total research value of \$1,097,912 in 30 projects with Iowa companies to conduct product development, process improvement, R&D and technology development and commercialization.

Table 1

Year	Number of Projects ¹	IPRT Cost- sharing Funds ²	Industry Investment	University- Other Funds	Contract Totals
2006	30	364.9	558.1	174.9	1,097.9
2005	33	289.8	302.3	121.3	713.4
2004	43	379.3	532.9	204.8	1,117.0
2003	26	187.5	389.0	149.7	726.2
2002	44	478.4	949.6	553.0	1,981.0
2001	34	329.5	691.6	604.0	1,625.1
2000	36	426.9	887.8	522.3	1,837.0
1999	29	350.2	603.7	382.2	1,336.1
1998	35	400.1	477.1	443.1	1,320.3
1997	37	331.0	608.5	546.3	1,485.8
1996	27	316.1	373.0	599.9	1,289.0
1995	31	284.5	428.5	581.6	1,294.6
1994	16	280.3	294.2	629.2	1,203.7
1993	10	282.5	500.6	136.8	919.9
1993- 2006	431	4,701.0	7,596.9	5,649.1	17,947.0

¹At any point in time, Tech Transfer Associates will be developing, implementing, and managing 40-50 projects. Technology Transfer Associates work with lowa industry to define research needs and match those needs with university resources. This column reports the number of initiated contract research agreements with lowa firms. ² The figure in this column reflects the allowance of carryover funds from one fiscal year to the next and additional IPRT appropriation for contract research projects and Technology Commercialization Acceleration program (TCAP) cost sharing funds.



IPRT Works for Iowa

IPRT Industrial Interactions—FY06

- Short-term, technical assistance—121 projects
- Contract Research and Development—30 projects
- IPRT Centers—42 Interactions

IPRT Company Assistance

IPRT Company Assistance leverages the expertise of the IPRT research centers and other ISU capabilities to help Iowa companies solve technical problems, create new products and processes, and increase productivity and quality. IPRT's efforts also lead to development of new, high-tech companies. IPRT Company Assistance provides help through both short-term, no-cost technical assistance, and its R&D cost-sharing program.

Each year, IPRT Company Assistance helps about 200 firms—from one-person startups to Fortune 500 corporations. The figure below indicates the number of projects undertaken each year since 1996 with Iowa companies.

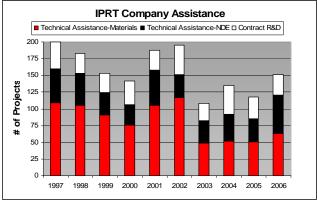


Figure 13

Iowa Companies Report Economic Impact of IPRT Company Assistance

A four-year summary of project evaluation data was analyzed in January 2006 and clearly shows that Iowa companies with technical problems and research and development needs continue to find important technical help through the services of IPRT Company Assistance. Companies report positive impacts affecting their companies' sales, investments, and operating costs. The estimated annual average impact over the period is \$17.5M per year, and it is estimated that 32 jobs on average are created or retained each year. The average cost per year of providing these programs is approximately \$660K per year. The average satisfaction rating given by clients during this four year period is 4.5 (1-5 scale), and the average survey return rate is 57%.

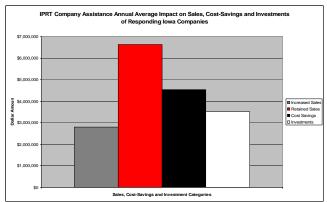


Figure 14
Chart based on survey data from FY02, FY03, FY04, and FY05

SBDC

In a report published by James J. Chrisman, Ph.D. in Management and Information Systems at Mississippi State University, data was collected from survey respondents for *Economic Impact of Small Business Development Centers*. In that report, based on several years of data, it was shown that for every \$1.00 in SBDC funding in FY04, the amount of tax dollars returned to the State of Iowa and the federal government by SBDC clients was \$4.65. There were also 243 jobs retained, 1,321 jobs created, \$13.8 million in sales retained and \$77 million in sales increased.

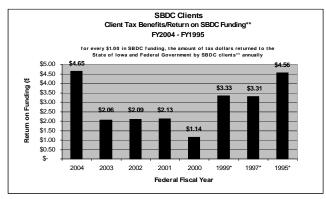


Figure 15

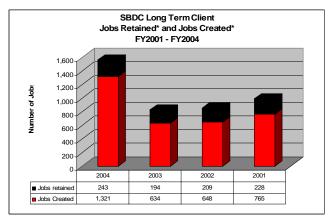


Figure 16

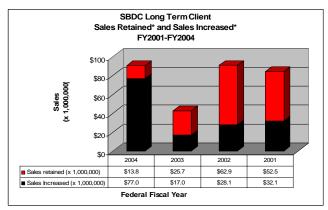
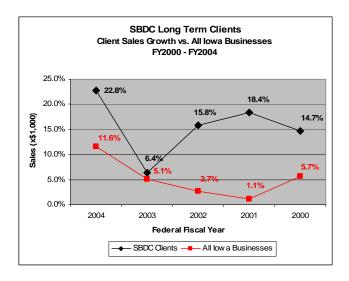
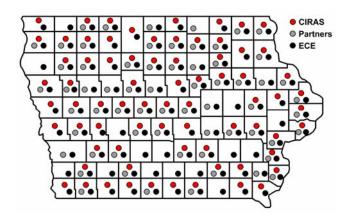


Figure 17



CIRAS

The Center for Industrial Research and Service (CIRAS) provides assistance in every county in Iowa. This activity includes technical assistance and education by CIRAS staff, assistance by CIRAS partners, and attendees at engineering continuing education (ECE) workshops.



Companies Arising from ISU Technology

Thirty-six companies whose formation was based in part on technologies and/or technical expertise at Iowa State University are listed below in Table 2. Forty-four additional companies were formed prior to 1998.

Table 2

IOWA COMPANIES THAT HAVE FORMED DUE TO ISU TECHNOLOGIES AND/OR TECHNICAL EXPERTISE

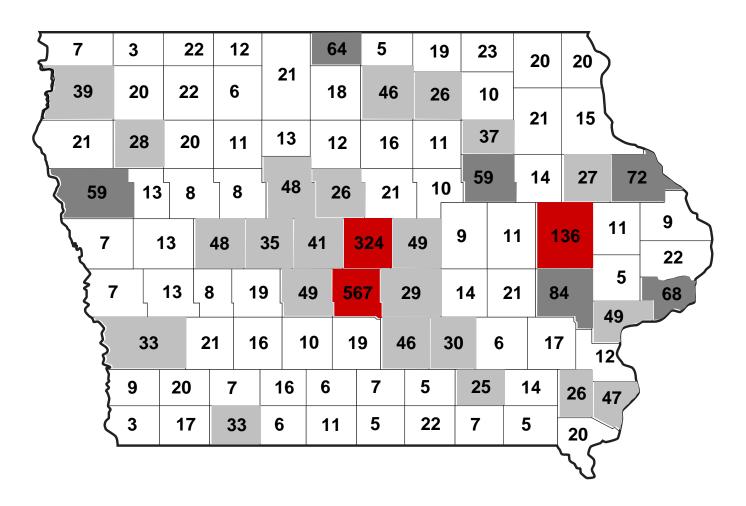
(80 as of 9/01/06)

Name of Company Date Specialization	
Magnet Array Co. 2006 Oil filters	
Endometrics, Inc. 2006 Medical software	
Sirrah, LLC 2005 Vaccines for swine	
Noise & Vibration Technologies, Inc. 2005 Noise & vibration product development	
MTEC Bioanalytics 2005 Imaging for specialty grains	
NERP Technologies, Inc. 2004 Protein systems in plants	
Mobiliscript 2004 Growth enhancement in plants	
ZProMinGene, Inc. 2004 Diagnostic reagent kits	
G-Rad Systems, Inc. 2004 Civil/construction engr. data acquisition so	ftware
Actus Potentia, Inc. 2004 Software for manufacturing processes	
Infiscape Corporation 2004 High-end graphics software	
Riboassembly, Inc. 2004 Protein production	
CMnet Inc. 2004 CAD data search engine	
Vibroacoustics Solutions Inc. 2003 Active noise control	
Integrated Sensor Technologies 2003 Optical sensors	
DAF Enterprises 2002 Data filtering and padding	
Osteoceramics, Inc. 2002 Animal orthopedics	
International Cooperation Analysis 2002 Algorithms for mining databases	
& Planning	
Glass House Studio 2001 Visualization and simulation techniques	
Advanced Structural Imaging 2001 Computer aided tap testing	
Walters and Associates 2001 Live animal fat prediction software	
Ensoft, Corp. 2000 Software reengineering	
NewLink Genetics Corp. 2000 Genomics and therapeutic products	
MultiSep, Inc. 2000 Electrophoretic instrumentation technology	
Nitro Cream, Inc. 2000 Ice cream processing system	
Novascan, Inc. 2000 Instrumentation for atomic force microscop	y
Phytodyne Incorporated 1999 Plant transformation technologies	
Technology Labs, Inc. 1999 Assessing computer performance	
MASIM, Inc. 1999 Process for joining ceramics (closed in 200	2)
IA-TEK 1999 Process for analyzing seeds (closed in 2000)))
Biotronics 1999 Ultrasound techniques for food animals	
Innovative Materials Testing 1999 Advanced nondestruction evaluation technic	ques
Technologies	
Modelspace Corporation 1998 CAD System for turbomachinery	
MSTRS Technologies 1998 Metered semiochemical timed-release syste	ems
NDE Technologies, Inc. 1998 X-ray simulation code	
epmt, inc. 1998 auction market simulators	

FY06 Economic Development Interactions by County

Iowa State University works with Iowa industry, communities, and economic development personnel in a variety of capacities. The map below demonstrates the broad reach of these activities — nearly 3,200 interactions taking place in every county in Iowa in FY06. Each interaction below represents a face-to-face encounter (or significant remote communication) with an Iowa industry, community, and/or economic development group to connect them with ISU resources to solve a problem or help move forward a project that relates to the economic growth of the area. More than 25 ISU units contributed to this effort, crossing all major industry platforms.

It should be noted that the map below does not include any data for the Iowa Small Business Development Center due to confidentiality reasons. During FY06, that unit provided business assistance to companies, involving 2,316 clients and 17,038 counseling hours in 99 counties. They also conducted 319 training workshops in which 4,924 individuals participated. In addition, it should be noted that many interactions represent multiple contacts with the same company or community. Some units provided multiple contacts but others did not.



Economic Development and Technology Transfer Highlights

ISU Research Park

The mission of the Iowa State University Research Park is to provide an environment where established technology-related organizations and science and technology entrepreneurial ventures can develop and prosper in Iowa. The Research Park works to fulfill this mission in many ways.

Most visible are the facilities the Research Park builds, operates, and leases to companies located at the Park. These facilities often contain technologically-advanced laboratories and equipment required by the science-based companies served by the Park. To date, the Research Park Corporation has invested over \$20 million in land, building and improvements; this does not include the millions of dollars invested in land, buildings, and improvements by others.

The Research Park works with a variety of partners to provide services and resources required by technology companies. These partnerships are essential to the growth and success of these companies:

- Iowa State University provides a tremendous pool of resources, access to specialized laboratories, equipment, and services, student employees, and many more invaluable services. The University is the primary source of intellectual property for new companies while many of the mature companies have ongoing research collaborations with university researchers. ISU students have always been a tremendous asset.
- The City of Ames and the State of Iowa, as well as private local investors, provide financial resources to companies as they mature.

The Research Park has a broader impact than the companies located at the Park. There are currently 41 companies employing 611 people at the Research Park. Historically over 150 companies have been located at or been affiliates of the Research Park. Today these companies collectively employ nearly 2,100 people throughout the world, the majority in Iowa.

Each year the Research Park tries to extend its value to the university, community, and state by meeting with a wide range of organizations interested in learning about research parks and incubators. Please visit the Research Park web site at www.isupark.org to learn more about the Research Park and the companies it serves.

New Company Highlights in the Research Park

New companies this past fiscal year included:

BioProtection Systems Corp., an emerging biotechnology company located in the Research Park. The company is developing innovative vaccine solutions to increase the United States' biodefense capabilities. BioProtection Systems Corporation is collaborating with NewLink Genetics' experienced biomedical and bioinformatics professionals to exploit new vaccine technologies.

BiOva, **LLC**, a joint venture between Glycon Technologies, LLC's research and patents and industrial leaders in the poultry business, was created to exploit the ability to separate the eggshell membrane from the eggshell on an industrial scale and the extraction of eggshell membrane derivative products. *BiOva's* primary business mission is the production and sale of natural proteins, amino acids and organic calcium for use in the food, cosmetic, nutraceutical, amino acid and medical industries.

Clearsighted, Inc. is an e-learning consultancy, dedicated to high-quality learning experiences in schools and corporations. Its primary mission is to use Intelligent Tutoring Systems (ITSs) to speed up employee training on scientific analysis software. ITSs can enable learners to achieve mastery in one-third the time of traditional training, because they use artificial intelligence to offer realistic practice tasks, immediate feedback, and individual monitoring of specific skills. ITSs are usually expensive and difficult to develop, but Clearsighted's technology makes ITSs commercially viable, allowing software manufacturers to decrease customers' training time dramatically.

Emerjent Inc. Today's combination of rapidly evolving new technologies, unprecedented availability of information, and the need to stay current, have the potential to overwhelm most people. *Emerjent Inc.* is developing software tools that allow customers to turn these hurdles into opportunities. Through automated intelligence gathering and analysis of widely scattered

data from disparate sources, customers will be able to confidently navigate the innovation landscape of emerging technologies. *Emerjent* will develop a suite of software tools that automatically track emerging technologies by collecting and analyzing data from disparate database and web-based resources. These tools will be offered on a subscription basis to competitive intelligence professionals, private equity investors, and startup companies and will be accessed either through stand-alone desktop applications or a web-based portal.

Nano-Electrochem, Inc. was created to exploit the global capacitor market, specifically targeting the markets for voltage tunable, gigahertz, electrolytic, and electrochemical capacitors. The current research objective is to demonstrate the feasibility of producing a high-dielectric, non-linear nano-capacitor with a high energy density while still maintaining existing power outputs. This proposed capacitor features a high dielectric constant sustainable to gigahertz frequencies and a capacitance that is voltage sensitive. Customers will include producers of products requiring energy pulses and energy storage; any product requiring power retention (back-up energy) during an outage or shutdown; voltage sensitive or frequency resonance response equipment (microwave communications, radio, cell phones); and microelectronics where size is limited or where "smaller is better" (consumer electronics).

Plant Sciences Institute Incubator Adds Two Companies

In FY06, two new start-up companies moved into the Innovations Development Facility, an on-campus business incubator in the Roy J. Carver Co-Laboratory. One of the new tenant companies is working on expressing recombinant proteins in the nectar of plants. While still in the early stages of this technology, their long-term goal is to express high value medicinal proteins and antigens for human or veterinary consumption. This protein expression company was also successful in receiving a Phase I Small Business Innovation Research (SBIR) grant from USDA. The second new company in the facility is a company involved in developing novel methods for the crystallization of various proteins. The first application will be a high-throughput protein crystallization procedure and a stand-alone bench top prototype. A total of eight companies have signed lease agreements for business incubator space since

the Innovations Development Facility opened in September of 2003.

Vaccine Start-up Company

Sirrah, LLC is a startup biotech company from Iowa State. The company was incorporated in June 2005 for the purpose of developing vaccines for swine diseases, specifically Porcine Reproductive Respiratory Syndrome (PRRS) and swine influenza. The intellectual property involved is based on a provisional patent filed in November 2005 regarding the protective antigenic determinants of the PRRS virus. The ISU Research Foundation has granted Sirrah an exclusive license to the intellectual property. Sirrah scientists have demonstrated proof of concept for use of replicon technology for vaccine development in pigs. Sirrah's molecular-based approach and replicon-platform backbone manufacturing allows for a more rapid and effective response to the exact pathogen occurring in disease outbreaks of PRRS and swine influenza. Sirrah officials plan to move into the ISU Research Park in October 2006.

Pappajohn Center for Entrepreneurship/ ISU Small Business Development Center

Business Assistance

In the past year, the ISU Pappajohn Center/ISU SBDC has:

- contributed 6,979 hours of professional and student consulting assistance to start-up and existing companies;
- served 106 clients with in-depth counseling, and more than 250 additional clients via email and telephone;
- educated more than 180 clients through its 20
 Smart Start business start-up workshops;
- worked with 32 technology based companies located at or affiliated with the ISU Research Park.

The Center assisted eight companies in applying for ISU Grow Iowa Values Funds, and assisted five companies applying for Iowa Department of Economic Development Grow Iowa Values Funds.

The Center assisted in the development of the John Pappajohn Iowa Business Plan Competition, and helped four companies prepare for the competition. The Center provided significant assistance in the development of the top two scoring plans (of seven selected to participate in the interview phase of the competition).

Education and Experiential Learning

A campus wide effort to revamp the existing Entrepreneurial Studies Minor and increase participation in all of the colleges is underway. A series of workshops in each college, to be followed by a competitive grants program for faculty, including the development of courses in entrepreneurship, is being launched fall 2006. Support for the program is being provided by the Kauffman Foundation and is administered by the Pappajohn Center for Entrepreneurship. The introductory course in entrepreneurship, which is offered to all majors, continues to be filled to capacity (300 annually), with 60% of enrollment coming from students not in the business college.

More than 15 Iowa State faculty members attended or presented research at the U.S. Association for Small Business & Entrepreneurship (USASBE) annual conference.

More than 80 Iowa State students attended a six-week long course in Alicante, Spain. Students took courses in Entrepreneurship and Spanish, and visited local entrepreneurs in the region.

In its third year, the Entrepreneurship & Innovation Learning Community will house 30 students in an immersive learning experience. Speakers and mentors from the business community provide guidance and serve as speakers and offer field trip opportunities. The students plan to open a student-run coffee and snack shop in their community in the fall.

The ISU Entrepreneurship Club draws a number of students from a variety of majors who are interested in interactions with entrepreneurs from the community.

Internship and work experiences for students are offered on a year-round basis to companies located in the ISU Research Park. All majors and classifications are invited to apply for opportunities to work with start-up and new companies based on technologies developed at Iowa State. More than 30 students are employed each year through the Pappajohn Center's formal entrepreneur internship program.

Endorsed by the Iowa Board of Regents, the Pappajohn Centers in Iowa, with leadership from the Okoboji Economic Development Corridor, hosted the first Okoboji Entrepreneurship Institute. Twenty-four students (eight each from Iowa State, UNI, and Iowa) participated in a week-long program that included a startup-up company computer simulation, nationally recognized speakers, and economic development presentations by host families and Okoboji economic development staff.

Business Plan Competition

An Iowa State University team of software development students received one of the top \$5000 cash prizes in the annual Pappajohn New Venture Business Plan Competition, held this year in conjunction with the Collegiate Entrepreneurs Iowa Conference at Iowa State. Close to 400 students from throughout Iowa attended the conference. The conference features successful entrepreneurs – alumni and students – and promotes resources available for students interested in launching companies. The competition and the conference are co-hosted by the five John Pappajohn Entrepreneur Centers in Iowa.

Business Accelerator

The Center is partnering with the Greater Des Moines Partnership and DMACC to establish the Central Iowa Accelerator, an Iowa Department of Economic Development program targeted at assisting high impact clients and for which the IDED provides seed funding for the establishment of an accelerator program. As a partner the center will provide ongoing guidance, support and oversight to the accelerator staff.

ISU Pappajohn Center / ISU SBDC Assists Companies Access Wellmark Venture Fund

The ISU Pappajohn Center and ISU SBDC (Small Business Development Center) serve as a gateway for applicants to the Wellmark Venture Fund, a convertible debt program providing up to \$150,000 in financing to qualifying applicants – generally high tech / high impact companies in the area of biotechnology, software, advanced materials, instrumentation and so forth. After leading the effort to restructure the terms of the financing to reduce concerns of applicants, the ISU Pappajohn Center / ISU SBDC assisted three companies in applying for and receiving funds from the program in the last quarter of FY 2006. In all three situations the Wellmark investments leveraged additional funds.

ISU Pappajohn Center Assists Company with Immigration Issue

A client company faced the potential loss of a key employee with advanced degrees in mechanical engineering and computer science, due to immigration concerns. The Center participated in rewriting the application materials and assembling the necessary support for the reapplication. This involved marshalling support from city officials, investors, and a congressional representative to make a strong reapplication. A local attorney was recommended rather than the one the employee had previously used. The employee was awarded a new H1B visa. This allowed the company to stay on track with its development efforts, which was a critical factor in achieving a sale with the company's original customer. In addition, the loss of the employee, because of her unique skill set, would likely have required the hiring of two employees to replace her, resulting in additional drain on cash flow.

Client Quote: Our existence as an Ames-based technology startup would have been questionable had it not been for the assistance and support provided to us by the ISU Pappajohn Center.

Survey Assistance

Agren, Inc. is a private consulting firm that works with governmental agencies, corporations, and non-profit organizations on a wide variety of agricultural and environmental projects. Faculty members in the Center for Survey Statistics and Methodology provided a full range of data collection services to Agren for a business telephone survey relating to prescribed fires. These services included questionnaire design, programming, and telephone data collection with 50 businesses that had experienced escaped fires, and data file preparation.

Increased Government Contracts

A small company in Davenport requested CIRAS assistance in creating sales for the company through government contracts. CIRAS worked with the company in bid preparation, term definition, interpretation of FAR regulations, RFID readiness, and crating and packaging. CIRAS also helped with marketing to GSA to increase product visibility and increase sales. As a result, the company's government contracts for the past year have grown to more than \$600,000.

Setting Higher Standards

One of Iowa's largest grain cooperatives requested internal auditor training from CIRAS to becoming certified to the new national biodiesel industry quality standard, BQ-9000. CIRAS provided training for internal audits, a pre-certification audit, and advice on implementing the BQ-9000 standard. The plant became the second company certified to BQ-9000 in April 2005. As a result, sales are expected to increase 30 percent with cost savings of \$200,000, 12 jobs were saved, and five new jobs were created.

Improved Productivity

CIRAS worked with a company in Sully to improve the productivity of the work cells involved by using constraint management methods and revising the local and global measurements used. The company has since acquired the GoalSetter brand of basketball hoops and reports a \$1.5 million increase in sales with no additional operating expenses, a decrease in inventory of \$200,000, and they saved \$270,000 by reducing costs and avoiding unnecessary investment.

Biobased Products Catalogued and Ready

CIRAS is working with the USDA to implement the Federal Biobased Products Preferred Procurement Program (FB4P) authorized by the 2002 Farm Bill. The program is designed to open potential federal markets for biobased products. The first of a series of rules designating six biobased items was published in the Federal Register on March 16, 2006. Items include diesel fuel additives, mobile equipment hydraulic fluids, roof coatings, penetrating lubricants, water tank coatings, and bedding, bed linens and towels. Company products are showcased in the FB4P Biobased Products Catalog. www.biobased.oce.usda.gov/Catalog/catalog1.cfm

Entrepreneurial Network

In October 2005 ISU Extension brought together entrepreneurs and inventors in Carroll County to explain the benefits of a Regional Entrepreneurs Association. Twenty-eight people attended the first meeting; now the group meets monthly to hear a speaker, share ideas and concerns, and provide support for each other. Participants also network in small groups to help each other individually. As a result, Carroll was selected as one of four Iowa communities for the MyEntre.net program. Ten participating business owners expanded their businesses. Seventeen business owners credit REA for giving them a business idea. Three stated an economic

impact of over \$1,000 and 33 members said REA was an effective way to network with other entrepreneurs.

Bringing the Dairy Industry Back to Iowa

The New Farm Family Project involves seven counties in northeast and northwest Iowa. Each has a steering committee of volunteers that helps new immigrant dairy farm families establish a new dairy farm in Iowa. ISU Extension has helped the steering committees organize and hold public meetings to determine if this project is feasible in a county or community, coordinate formal tours for prospective farmers, develop building concepts for a new dairy, review possible sites for suitability to build on, provide technical assistance on herd additions and biosecurity, facilitate steering committees in developing lists of service providers, assist in the development of job descriptions, and many other management needs of new dairies. One new dairy farm started in November 2005 and four more will begin operation this fall or winter. A total of 1,570 cows will be retained or added to Iowa's cow population with these five new dairy farms, and the hope is that more will follow. It is estimated that one dairy cow in a community has a \$15,000 total economic impact annually.

Partnering for Progress

Tri-City Energy, LLC is a Keokuk startup business producing biodiesel using soybean oil as a feedstock. The United States Department of Agriculture required that the company obtain an independent third party feasibility study and review of its business plan to qualify for a Business and Industry loan guarantee of \$2,000,000 and a Renewable Energy Grant of \$500,000. The funds were necessary to help the company achieve its goal of building a biodiesel manufacturing plant capable of producing five million gallons a year. The ISU Value-Added Agriculture review team completed the feasibility study and the review of the business plan, and the company received both the loan and the grant. Tri-City will begin producing biodiesel in September 2006. The fuel will be sold to regional outlets within 50 miles of Keokuk.

Product Development Feedback

Vibroacoustics Solutions, Inc., an ISU start-up company, was formed to commercialize technologies that better reduce noise and vibration in a variety of manufactured products. The key to the technology is in developing "smart" materials and components that are integrated into products such as ceiling tiles,

construction equipment, acoustic doors, and suspension systems. The technology allows each product to better absorb unwanted noise and vibration frequencies. IPRT helped the company collect feedback from potential customers to help direct initial product development, and the company launched its acoustic door core product. The company recently won a NASA SBIR Phase I award, won a Phase II SBIR award from the National Science Foundation, and has product development contracts with two potential customers. It employs approximately five to eight employees. The company has offices in Boone and Brooklyn, Iowa.

Rural Business Assistance

Five members of the Apparel, Educational Studies, and Hospitality Management Department have teamed with IDED's Main Street Iowa program to develop business assistance plans that incorporate experiential value-based strategies (i.e., adding educational, aesthetic, entertainment, and escapist experiences) for small rural retail and hospitality firms. The plans covered an array of business elements such as marketing, website development, merchandise presentation, and enhancing the physical presence of tourism, retail, and hospitality businesses. In this second year of a three-year project funded by the USDA, faculty and student teams worked 16 Main Street Iowa businesses from State Center, Story City, Hampton, and Osceola.

Reaping Rewards of Locally Raised Foods

Selling locally raised fresh fruits and vegetables at local markets typically pays about four or five times more than the production costs. According to Iowa State University's Leopold Center for Sustainable Agriculture, the revenue generated per acre by Iowa fruit and vegetable farms is almost seven times the amount generated per acre by corn and soybean farms—about \$1,800 per acre versus \$260 per acre. The Leopold Center and CTRE are working together to identify ways to help Iowa farmers compete in the fruit and vegetable market. The initial result is a webbased planning tool that helps stakeholders identify supply gaps and assess potential shipping advantages that might be achievable with local production.

Managing I-235 Reconstruction

The Iowa DOT is reconstructing I-235, a 14-mile urban freeway serving downtown Des Moines and West Des Moines. When completed, I-235 will have at least three lanes in each direction, with four in each direction downtown. All interchanges will have been reconstructed, 71 bridges modified or rebuilt, and a new landmark—a blue arch pedestrian bridge—constructed. CTRE is providing scheduling and production management services for this comprehensive, multi-year project to ensure that the Iowa DOT, working on multiple tasks with multiple contractors, utilities, and government agencies, accomplishes the work on time and on budget, with minimal inconvenience to the traveling public.

Industrial Strength Blades

Creating a better industrial skinning blade for slaughterhouses was the key for a small Iowa manufacturer to break into a new market. Working with faculty and graduate students from the Department of Materials Science and Engineering, a blade was developed that is more wear resistant than the market-leading industrial blades. Using an electron microscope, a procedure was developed that reduced numerous burrs and sharpening defects on the blades. With the improved process and attention to the quality control of the subcontracted blade sharpening procedures, the company has positioned its blades for major growth in the market for industrial slaughterhouse blades.

Adjustable Cabinets

ISU researchers are collaborating with a Waterloo company to produce cabinets with universal design features that can accommodate a variety of users. The modular approach allows cabinet components to be quickly changed with simple tools. The cabinets have the potential to revolutionize accessibility requirements in multifamily housing. Instead of installing accessible cabinets in the "handicapped" units and "standard" cabinets in the rest, the same modular cabinets can be installed in all units and easily changed as needed when new residents of various statures and abilities come and go. The Iowa Finance Authority has expressed interest in installing the cabinets in apartment units they finance. The project is a collaborative effort of ISU researchers from Human Development and Family Studies, the Center for Industrial Research and Service (CIRAS). and Industrial and Manufacturing Systems

Engineering, funded by a grant from the U.S Administration on Aging.

Cool Snacks

A company in Bettendorf that specializes in stainless steel fabrication recently introduced a new high-heat cooling tunnel to rapidly cool baked products, such as cookies, snack bars, and candies. Staff from CIRAS and a faculty member from Mechanical Engineering worked with the company to develop a computer model of the tunnel. Company leaders estimate that they have retained sales of \$2,500,000 and that they have the potential to gain \$3,000,000 per year in additional sales because of the assistance they received from ISU Extension and the College of Engineering. The company has also invested in \$50,000 of new equipment and anticipates adding at least six employees at the Bettendorf plant.

Fields of Flax

U.S. consumption of flaxseed and flaxseed oil is increasing. Other grain buyers are increasing their purchase of flaxseed for animal feeds. The construction of a crushing facility for organic flax and other oilseeds in northwestern Iowa has attracted organic crop producers to try producing this specialty crop. Production and marketing challenges include pest management in organic systems and the uncertainty of only one verified market. To address these challenges, Value-added Agriculture Extension partnered with the Agronomy Department, the Leopold Center for Sustainable Agriculture, and Practical Farmers of Iowa. Field research addressed planting and weed control methods and cultivar evaluations for organic production. Post-harvest research includes evaluating oil quality and quantity, and seed cleaning and handling methods to meet current market demands. A flax working group includes growers, processors, buyers, and researchers. Workshops in 2005 and 2006 let prospective growers know about market opportunities, production methods, and research. Approximately 1,000 acres of organic flax were grown in Iowa in 2006, with an estimated net return of \$250 per acre -- about twice what growers would net on organic small grains, the alternative in their crop rotations.

Improved Product Quality and Reliability

A Waverly company experienced two field failures and came to IPRT Company Assistance for help. Based on field failure evidence, ISU and Ames Lab researchers suggested that welding wire, shielding

gas, and tube oxidation prevention measures be implemented. Using IPRT's input, the company is taking positive steps to improve the quality and reliability of its products. They are making changes to their welding process, are having a welder fully trained and certified through their local community college, and they hired a consultant to eliminate as much variability from their brazing process as possible. The company has also chosen the optimum filler metal for their application to improve quality, and will purchase a single shielding gas that works for all applications, eliminating the confusion and cost of stocking two. These improvements will help to avoid costly field failures and will aid in the retention of sales to existing customers.

Removing Contaminants from Water

IPRT Company Assistance assisted two Iowa companies on projects testing and evaluating the companies' new water treatment technologies. A local company developed a new product to remove arsenic from drinking water. The company needed a basic evaluation of the product and assistance in determining the dosages and treatment times for it. IPRT co-funded testing conducted by researchers in the Civil, Construction and Environmental Engineering Department (CCEE). Another local company wished to study modifications of the common sequencing batch reactor (SBR) as a possible low cost approach to removing nitrogen and phosphorous. IPRT Company Assistance established a collaborative research project with the company, CCEE, and the City of Grundy Center. Two modified operating schemes for the SBR were developed and tested at the Grundy Center municipal wastewater facility. Results showed that an existing SBR treatment plant can be easily converted to a treatment system for removal of both nutrients. Both companies plan to launch these technologies into the marketplace.

Corncob Bedding

A multi-disciplinary approach was used to help an Iowa company develop a new product application for their corncob products. The company wanted to develop animal bedding out of corn cobs that has very low levels of microorganisms and can be packaged and used for lab animals and domestic pets. Researchers from the College of Agriculture helped optimize the process for treating the corncob material to reach low level microorganism counts. Researchers from the College of Veterinary Medicine performed

animal safety tests on the bedding material. Both projects were initiated through IPRT's cost sharing program. The research generated satisfactory results, and the company plans to launch their new product in early 2007.

Fertilizer as an Ethanol Co-Product

Four All Seasons, L.L.C. of Holstein is a startup company developing natural fertilizers for the turfgrass industry made from co-products of the ethanol manufacturing process. The company has been working with a university professor of horticulture who received a patent in 1991 for his discovery that corn gluten meal can be used as a natural "weed and feed" product on lawns. Since then, more than 44 million pounds of the product have been sold through license agreements with the ISU Research Foundation. Laboratory analyses were conducted on Four All Seasons Bio-source Natural Fertilizer. It was tested against industry standards, and its performance was documented over two growing seasons. The ISU data made it possible for the company to launch the product in 2006. The Biosource Natural Fertilizer is the first new commercial offering using co-products from the Quad County ethanol plant, and Four Seasons is working to create other value-added products.

Using Genetics to Create Tastier Pork

Over the past 15 years, the emphasis on selecting for leaner pigs has resulted in pork with lower waterholding capacity, lower intramuscular fat and lower scores for juiciness and flavor. A new company is testing the use of ultrasound technology to help swine breeders select genetics to reverse this trend. Biotronics Inc., located in the Iowa State University Research Park, received a Small Business Innovative Research grant in May 2006 from the U.S. Department of Agriculture. The funds are being used for an eight-month "proof of concept" study to show how ultrasound could be used to improve the quality of pork. An ISU emeritus professor of animal science is president of Biotronics. He was instrumental in developing an ultrasound test that is used to assist cattle breeders improve beef quality. The Biotronics study will demonstrate the feasibility of developing and commercializing an approach for predicting pork quality in live animals using new digital beam forming ultrasound technology.

New Soy Processing Operation

The Center for Crops Utilization Research (CCUR) provided assistance to SafeSoy Technologies, Ellsworth, Iowa, with development and installation of CO₂ supported screw pressing for soy-oil extraction at the new plant. The process mechanically extracts oil from soybeans without using hazardous solvents and denaturing the protein in the meal. The meal is an ideal feedstock for a new protein fractionation process developed at Iowa State University. Iowa State faculty members are assisting with quality control issues associated with plant start-up and process optimization.

Pilot-Stage Product Development

The Center for Crops Utilization Research provides pilot plant services to Iowa companies. The four examples below demonstrate work conducted in the CCUR pilot plant and technical assistance available to Iowa industry:

- Grain Processing Corp., Muscatine, conducted research and development work on corn and soy protein formulations for films and foams
- Penford Products Co., Cedar Rapids, size-reduced corn bran for a potential new proprietary product
- Phyto-Technologies, Inc., Woodbine, received technical assistance with solvent extraction equipment operation and safety procedures
- Proliant, Inc., Ankeny, spray dried and sizereduced plasma products for meat research and development as well as tested products.

Environmentally Friendly Extraction Process

Extracting soybeans with the petroleum distillate hexane is the most common oil recovery method. However, hexane is a highly flammable compound that interacts with pollutants to form ozone, and a neurotoxic and hazardous air pollutant. CCUR-affiliated faculty partnered with Genencor International, to develop enzyme-assisted aqueous extraction processing (AEP) for soybeans. Genencor provided access to their extensive library of enzymes and skills in developing new specific enzymes for AEP. The project has made significant advances toward a competitive method of extraction with environmentally friendly water-based technologies improved by using state-of-the-art enzymes to enhance oil and protein recoveries and separation.

Building Muscle through Research

Metabolic Technologies, Inc., entered into a consortium agreement with Iowa State University and for the implementation of the scientific portion of the awarded NIH/NIA SBIR grant awarded to Metabolic Technologies. Daily supplementation of a product developed and owned by Metabolic Technologies containing an amino acid mixture, beta-hydroxy-betamethylbutyrate and lysine, was tested for increasing whole body protein synthesis, fat-free mass, strength and functionality in a larger group of older adult men and women over an entire year. The Human Metabolic Unit at the Center for the Designing Foods to Improve Nutrition was used as the subjects' initial and quarterly meeting and testing areas. The equipment and personnel in the center and unit were critical to the success of this project. This study has been completed and the results are promising.

Biodiesel Emissions Study

Biodiesel is available in low-percentage transportation blends in many locations around Iowa. For the utility sector that uses diesel generators for electricity production, emissions certification for use of biodiesel is a critical need. The Iowa Energy Center is working with the Iowa Association of Municipal Utilities to test emissions from stationary generators using blends up to B20 (20% biodiesel). The goal of the effort is to provide data needed to obtain broad regulatory approval for use of these higher percentage blends. The outcome of the project will benefit most of Iowa's electric utilities and some private power providers.

Biodiesel Technology Refinement

The Iowa Energy Center entered into a sponsored research agreement with Mid-States Biodiesel to develop technology for moderate-scale commercial biodiesel facilities capable of utilizing a variety of plant oils and animal fats including waste products. The company envisions a niche market where smaller, highly-automated production facilities can be colocated with feedstock generators such as food processors. The company invested in an upgraded biodiesel pilot plant at the Energy Center's Biomass Energy Conversion Facility which will become ISU's property at the end of the research project. Mid-States is also interested in helping to foster education and training around the pilot plant, seeing those as critical needs as the biodiesel industry matures in Iowa.

Reducing Truck Engine Idling

Idling truck engines consume over a billion gallons of diesel fuel annually. As the cost of diesel continues to rise, reducing truck idling is becoming a national-energy and a trucking-industry priority. But it is not that easy to do. Idling engines keep drivers comfortable so they can rest and drive safely. CTRE is working with the Iowa Energy Center, the Iowa Motor Truck Association (IMTA), and a manufacturer to demonstrate an innovative, technology-based alternative. A national workshop held last year generated a demonstration idea, and CTRE is working with IMTA to hold a combined alternative fuel and idle reduction conference in 2006.

Licensing Vaccines

Fort Dodge Animal Health, a division of Wyeth, announced it has received full licensure from the U.S. Department of Agriculture for SuvaxynTM PCV2 One Dose. Developed in collaboration with the Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM) at Virginia Tech and Iowa State University College of Veterinary Medicine, this inactivated, one-dose vaccine for piglets four weeks and older aids in the prevention of Porcine Circovirus Type 2 (PCV2) viremia and control of lymphoid depletion caused by PCV2. First identified in the early 1990s, PCV2-associated diseases have since become one of the most significant viral diseases in pigs globally. PCV2 is the causative agent of postweaning multisystemic wasting syndrome (PMWS), and is an important component of respiratory disease in pigs.

Virtual Reality Tool-Kit

The Virtual Reality Applications Center, part of the Institute for Physical Research and Technology at ISU, released its first public version of VE-Suite in June 2006. VE-Suite is a unique open-source software package that integrates together all the simulations and models needed to describe an engineering process. This creates an interactive, usercentered, virtual environment that seamlessly allows the user to perform a wide range of engineering tasks. VE-Suite is in daily use at several companies and labs including Deere & Company, Rock Island Military Arsenal, John Zink, and Pratt & Whitney. Part of this VE-Suite is a texture based engineering tool, an invention that resulted in a 2006 R&D 100 Award. The tool takes large 3-D data sets and quickly converts them into pictures that engineers can analyze and work with. The ISU researchers say there is

nothing on the market that can do the job as quickly and intuitively.

Replacement for the "Quarter Test"

For years, the best tool for an airplane mechanic to test for damage was a quarter. Mechanics would whack the quarter against the plane's exterior and if they heard a crisp whacking sound, the part was intact. If they heard a dull thud, damage was suggested. Scientists at the Center for Nondestructive Evaluation added another dimension to this longtime "tap testing" method and created the Computer-Aided Tap Tester (CATT) which creates images of what is below the surface. The Iowa State University Research Foundation patented the CATT in 2001. After securing the patent, several companies showed interest, but it remained unlicensed. Not wanting the CATT to sit on a shelf, the engineers started Advanced Structural Imaging. CATT's use is not limited to aircraft; it can test boats, cars or other vehicles or equipment.

Environmentally Safe Lead-free Solder

Beginning July 1, 2006, the European Union strictly limits the amount of lead and other hazardous materials lurking within the circuitry of any electronic appliance sold. As electronics and appliance manufacturers scramble to meet those tough new restrictions, a lead-free solder developed at the U.S. Department of Energy's Ames Laboratory is playing a key role. Patented in 1996, approximately 60 companies worldwide now have licensed Ames Lab's lead-free solder. To date, those licenses have generated royalties in excess of \$7 million. With the European directives and a similar commercial initiative in Japan, the Iowa State University Research Foundation has seen a growing interest in the alloy.

Living Roadways Community Visioning Program

Created in 1996, the Iowa's Living Roadways
Community Visioning Program provides professional
landscape planning and design services to rural Iowa
communities with populations under 10,000. In 200506, the program served 12 communities with projects
addressing transportation corridor enhancements,
community signage, downtown streetscape
improvements, recreational trail development and the
like. Through the program, 12 ISU students in
landscape architecture, architecture, and community
and regional planning worked as interns at seven
private-sector landscape architecture firms in Iowa.

The ILR Community Visioning Program received the American Planning Association's (APA) 2006 Outstanding Planning Award for a Program and was named the 2005 Outstanding Program by the Iowa Chapter of the APA.

Mount Pleasant Community Plan

Faculty, staff and students from the Institute for Design Research and Outreach, Design Extension and College of Design are among the group of researchers, consultants, architects and design professionals working with the Mount Pleasant Community LINCS (Long Range Initiative for New Collaborative Success) coalition on a three-year project to help prepare and implement a comprehensive community economic plan. In 2005-06, the Iowa State team completed planning for highway bypass/interchange development, preliminary development of a new graphic identity, and a proposed downtown district/main street master plan.

Affordable Housing for Iowans

ISU Extension Community and Economic Development (CED) received a grant from the Iowa Finance Authority to build capacity and provide technical assistance to Local Housing Trust Funds (LHTF). CED will partner with the Iowa Coalition on Housing and Homeless to help increase the amount of affordable housing in Iowa's communities, including transitional housing for new residents, starter homes for young families, senior housing, and improved housing for low- to moderate-income households. CED also will produce a field guide on how to develop an LHTF. The effort builds upon the model of successful collaboration that led to a housing trust fund developed in Dallas County.

The Best Vote

Voters in Iowa's 1,800 election precincts should find an improved system by the 2008 presidential election, as a result of a new program to train and certify local poll workers. A pilot program in Woodbury County in May 2006 was the first in a series planned for precinct election officials in all 99 Iowa counties. ISU Extension developed the training in cooperation with the Iowa State Association of County Auditors, the Iowa Association of Counties and Help America Vote Act programs for the Iowa Secretary of State's Office. The Woodbury training resulted in certification of 42 poll workers. Participants learned about the requirements in Iowa law designed to ensure open, honest, and fair elections. Plans are in place to offer

the program in about 40 counties each year in 2006 and 2007, with the final training to be finished in early 2008.

Developing Good Habits

Parents are learning how to strengthen relationships with their teens, and youth are learning how to set goals and resist peer pressure through PROSPER (Promoting School-community-university Partnerships to Enhance Resilience) in seven Iowa communities. Extension, schools, and substance abuse prevention agencies are collaborating with campus researchers from the ISU Partnerships in Prevention Sciences Institute and the College of Human Sciences, knowing that prevention programs generate savings to society. By preventing substance abuse later in life, these programs have an estimated return of \$9.60 for each \$1 invested. During the 2005-2006 school year, nearly 1,600 students and 190 families participated in substance abuse prevention programming. A study by the Washington State Institute for Public Policy calculates a net benefit of \$5,805 for each youth participating in one of the programs. Originally funded by a federal grant, PROSPER is now partially sustained by the communities — recognizing the ripple effect PROSPER is having through positive intervention techniques and the potential to positively impact family values and norms.

Intergovernmental Collaborative Activities

A faculty member in political science provided three training sessions to City Clerks' Academy and City Clerks' Institute for the use of an online system for intergovernmental collaborative activities in the State of Iowa. These activities are formalized as 28E agreements. This system allows citizens to search all 28E agreements deposited since 1965 in the Secretary of State's Office. In addition to searching, public managers can file these agreements online. The system also includes information on how to better manage these collaborative activities based on field studies. These sessions reached more than 100 city clerks.

Reducing Risks of Winter Driving

Driving during snowy, icy weather is common in Iowa and other Snowbelt states. CTRE's new Center for Weather Impacts on Mobility and Safety (C-WIMS) is helping Iowans understand and reduce the risks. For example, C-WIMS has found that when it is snowing 0.2 inches per hour or more, a motorist's risk of being in a crash is greater than if he/she were driving legally

drunk. C-WIMS administers research to improve collection and dissemination of real-time road weather data and maintains the Iowa Department of Transportation's (DOT) "Weatherview" website that displays detailed, easy-to-understand weather and road-condition road maps.

Lighten Up Iowa State University

Lighten Up Iowa is a team-based program offered in partnership with Iowa Games, the Iowa Department of Public Health, and Iowa State University Extension to help Iowans make positive changes in exercise and diet during the course of four months. Participants, working in teams, increase physical activity and improve their eating and nutrition habits. This past year, 33,183 Iowans participated in LUI and reported losing 138,872 pounds and increasing their activity by 5,122,833 miles walked (conversion of 15 minutes of activity to a mile). Go the Distance is a four-month competition based on physical activity for Iowa youth. More than 10,000 youth increased their activity to 2,029,147 miles (conversion of 15 minutes of activity to a mile walked.)

GIS Training

Based in the College of Design, the ISU Extension Geospatial Technology Program annually offers a series of hands-on short courses in geographic information systems. The program produced a set of six different courses offered nine times between January and June 2006. Four of these courses were new. More than 50 registrants participated in these oncampus offerings. In addition, a mobile GIS laboratory of laptop computers equipped with appropriate software, traveled around the state to provide training to an additional 25 professionals. The combined effort involved faculty and staff of the College of Design, Design Extension, the Institute for Design Research and Outreach, Extension Community and Economic Development, Continuing Education and Communication Services, the ISU GIS Facility, and the departments of Landscape Architecture and Community and Regional Planning.

Contemporary School Operations

Iowa State University has completed the fourth year of an agreement with Iowa School Business Officials to facilitate professional development activities to 475 school business managers, board secretaries, finance directors, superintendents, and other central office business staff. As a result, Iowa public school business officials have come to regard ISU as the

primary resource for the most contemporary school operational processes and procedures through conferences, the ICN, dialogues with legislators, and electronic newsletters.

Public School Certification Program

The Iowa School Business Management Academy is a cooperative venture with the Iowa Association of School Business Officials, Iowa Association of School Boards, the Iowa Department of Education (IDED), and the School Administrators of Iowa. The program establishes a foundation level of technical skills and knowledge for those assuming public school finance and operational responsibilities. It provides training in a voluntary certification program for Iowa public school and AEA business managers, superintendents, and board secretaries which consists of a four year program. Over 500 individuals have completed the training program since 1992.

Developing Workplace Skills

Iowa Workforce Development, Department of Human Services, and Iowa State University Extension to Families developed a 30-hour job readiness curriculum to train individuals receiving temporary public assistance. The curriculum goals are to prepare individuals for training and work by learning and practicing soft skills for the workplace. Training modules include assessing learning style/setting goals, recognizing and handling emotions, making informed decisions, communicating well with others, and understanding culture of work/balancing work and family. Approximately 3,500 to 4,000 individuals will be reached in the coming year through this training.

Bio-based Industry Conference

CIRAS coordinated the 2005 Biobased Industry Outlook conference for people involved in the production and manufacturing of biobased products. More than 420 people attended the two-day event that featured speakers who discussed new discoveries in bioprocessing, new business models and capitalization strategies for biobased businesses, and new crops and new cropping systems for biobased products. In a post-conference survey, attendees noted the importance of such an event for fostering continued growth of the industry.

Improved Child Care

In the past year, 1,815 childcare programs across Iowa received education and technical assistance through Iowa State University Extension. Ninety-four percent

of child care providers completing follow-up evaluations had adopted recommended practices to improve early childhood program quality. As a result, more than 21,000 parents can be more effective employees, knowing their children are safe in a stable, nurturing child care environment. An additional 144 individuals were employed as a result of new or expanded child care centers or home businesses assisted by Extension.

Certification Programs

For 2005-2006, the Nonprofit Management Academy provided training in Ames, Des Moines, Bettendorf, Iowa City, Marshalltown, and Fort Dodge. Thirty-six workshops were conducted with a total of 865 Iowa residents attending this year. Of these, 35 participants completed certification in nonprofit management (which requires that participants complete six continuing education units). Topics covered include fiscal management, volunteer management, nonprofit management and the law, diversity in the workplace, and grant writing. Universities collaborating in this program include University of Iowa, University of Nebraska, and University of Illinois. A number of community colleges and United Ways also are offering logistics support.

Improving Communications with Hispanic Workers

Hispanic workers with little or no English skills compose an ever-growing portion of Iowa's roadway construction workers. By developing special training tools, ISU's CTRE is playing a leading role in improving communication between the Hispanic workforce and their American peers and supervisors. The goal is to increase productivity, improve safety, and promote workplace harmony. The first tool is a technical Spanish language course for supervisors/contractors. The second tool is a preconstruction-season workshop that leads Hispanic workers and American supervisors through practice interactions that emulate on-the-job situations. Nine construction companies have requested these services.

Outreach Education for Biotechnology

During FY2006, the Biotechnology Outreach Education Center was utilized by 1,361 individuals, including 831 K-12 students, 257 participants in ISU academic programs, 100 members of the public, 68 participants in on-campus teacher workshops and 105 pre-service teacher training participants. Free supplies for laboratory experiments were provided to 120

schools in Iowa for 14,117 students, which includes 750 Extension Ag Day participants. In addition, 1,815 individuals participated in off-campus BOEC activities.

Kaizen Event

In late June 2006, ISU reviewed its processes related to industry contracts and post-award activities through a week-long Kaizen "Lean" event that was facilitated by business leaders from Vermeer Manufacturing and a private consultant. Others participating were representatives from the Iowa Business Council, the University of Iowa, the University of Northern Iowa and three industries in addition to Vermeer (Pioneer, Pratt-Whitney and Rockwell Collins). As a result of this event and ongoing follow-up, several improvements have been/will be made in this area that increases productivity between the university and external sponsors, thus providing better customer service and improving the bottom line. This event was so successful that it will be used in other areas at ISU. In fact, the Iowa State University Research Foundation/Office of Intellectual Property and Technology Transfer is planning such an event to be held in the next several weeks.

Grow Iowa Values Fund

ISU has worked closely with legislators, the Iowa Department of Economic Development, the University of Iowa, the University of Northern Iowa and the Board of Regents, State of Iowa to establish the Grow Iowa Values Fund. This legislation is providing the universities and private colleges new financial resources to expand technology transfer and commercialization efforts. As a result, ISU has awarded two rounds of grants this past year to its faculty and staff, totaling \$1.8 million to 20 research teams. These grants are fully matched by the researchers and partners.

Battelle Initiative

ISU, the University of Iowa and the University of Northern Iowa have worked closely with the Iowa Department of Economic Development, the Board of Regents, State of Iowa; legislators and business leaders through the Biosciences Alliance of Iowa organization to implement the Battelle initiative. Six proposed projects have been submitted to the Regents that focus on the biosciences, information technology and advanced manufacturing and approval of those projects is pending.

GROW IOWA VALUES FUND

The Grow Iowa Values Fund program is providing research funding to work with Iowa industry to create and improve products and processes. In March 2005, five projects were funded through a competitive RFP process. In addition, a second RFP competition was held during spring 2006. Eleven projects were selected for funding and are scheduled to begin during fiscal year 2007. The following summarizes the status of the projects funded in FY06.

Retooling Ethanol Industries: Integrating Ultrasonics into Dry Corn Milling to Enhance Ethanol Yield

PI's: David Grewell, Samir Kumar Khanal and J (Hans) van Leeuwen

Companies: Midwest Grain Processors, Lincolnway Energy, Quad County Corn Processors

Goal: Employ high-power ultrasonication prior to or during liquefaction in dry corn milling plants to achieve better sugar release for higher ethanol yield.

Progress Status: The research is approximately 5 months ahead of schedule. Characterizing the ultrasonic treatment of raw and cooked corn slurry in bench-scale is near completion. Variables studied included; sonication time, amplitude, temperature control, corn slurry pre-conditioning (cooked and raw) and enzyme introduction sequence. Other accomplishments included submission of a provisional patent application and four poster presentations. One journal article is currently being prepared for publication in high impact journal. This project has received a lot of press, including both written and radio interviews.

Quality Assessment Tools for Colonoscopy

PI's: Johnny Wong, Wallapak Tavanapong Companies: Mayo Clinic and EndoMetric

Goal: To create software to automate capture, analysis, and interpretation of colonoscopies

Progress Status: The researchers visited Mayo Clinic to install software for capturing and collecting colonoscopy videos on hardware in two endoscopy rooms and discuss improvement of software for annotating colonoscopy videos. They have signed the inter-institution agreement between ISU, Mayo Medical Venture (MMV), and University of Texas at Arlington (UTA). They have worked with MMV on preparing a comprehensive document detailing their inventions. The document has over 100 pages with 13 inventions. They have agreed to name their start-up company "EndoMetric, Inc" and registered the domain name www.endometric.com.

Enhancing the Sov Biorefinery

PI's: Victor Lin, George Kraus, John Verkade

Company: West Central Cooperative

Goal: To create a recyclable catalyst(s) for biodiesel production from soy and animal fat

Progress Summary: They have designed a new method for the synthesis of 100 grams of solid transesterification catalysts. The feasibility of this method was demonstrated successfully in a recent experiment. The recyclability of two different catalysts for the conversion of soybean oil to biodiesel was investigated. The results indicated that one of the two catalysts tested could be recycled and reused 20 times without losing its original reactivity. They have tested the feasibility of three different catalysts for the production of biodiesel from poultry fat. The result showed that the best catalyst for soybean oil conversion also performed the best for poultry fat in reactivity and recyclability.

Pneumatic Continuously Variable Natural Frequency and Damping Isolator for Active Suspensions

PI: Atul Kelkar

Company: Vibroacoustics Solutions Inc., Sears Seating, Link Manufacturing

Goal: Develop a commercial-scale prototype seat suspension system using a continuously variable natural frequency and damping isolator.

Progress Status: The acquisition and assembly of the electro-hydraulic shaker components is complete. An initial study has been done to optimize the CV NFD design parameters. Fabrication of the first model of CV NFD lab prototype is in progress, as is the investigation of controller designs. Finally, retrofitting of the Sears semi-active seat with CV NFD isolator is complete and performance evaluations are underway. They are in close

communication with Link Manufacturing, Sioux Center, IA. Link Mfg. has provided some in-kind hardware. Sears Seating, Davenport, IA, has also sent their operator seat hardware for retrofitting.

Viral Replicon Particle Discovery Research for Development of Improved Vaccines for Swine

PI's: Matt Erdman and Maynard Hogberg

Company: Sirrah

Goal: Develop animal vaccines using a new technology – Viral replicon particles

Progress Status: The core assays needed to study influenza have been developed and implemented. A source of pigs has been located in Minnesota believed to be free of influenza virus based on screening of serum for swine influenza antibodies at the ISV Veterinary Diagnostic Lab. Pigs from this source have been shipped to ISU for vaccination studies. A term sheet between Sirrah and the Iowa State University Research Foundation has been agreed upon regarding the provisional patent filed by Harris and Erdman entitled "Protective Antigenic Determinants of PRRSV."

Model-based Reasoning for Software: Advanced Algorithmic Techniques and Prototype Implementation

PI's: Suraj Kothari and Srinivas Aluru

Company: EnSoft

Goal: Identify the parts that are common to various software models by performing a model-based analysis so the parts may be refactored as reusable library components, making software maintenance and evolution more manageable and efficient.

Progress Status: They are currently experimenting with a new algorithm developed by extending an earlier algorithm they had developed for a similar string problem. Instead of strings, they have labeled directed acyclic graphs, which can be viewed as strings with many branches as opposed to the usual strings that have only one branch. They have worked with EnSoft to build a converter to create suitable graphical representations of the Simulink models. These representations are necessary to test the new algorithm. In parallel, EnSoft also developed a new version of the SimDiff.

Protein Micropatterning on Microsensors to Quantify Cell Cytotoxicity of Adherent and Non-adherent Cells

PI: Surya Mallapragada

Company: Cellular Engineering Technologies

Goal: Optimize protein micropatterning on microsensors to measure cell toxicity

Progress Status: They have been fabricating the PDMS stamps and optimizing the micropstamping techniques to obtain controlled protein pattern formation on surfaces with good micron scale resolution. In addition, they have also been pursuing an alternative approach as well that was not originally outlined in the proposal. The recent acquisition of a chemical printer located in the Chemical and Biological Engineering department (by other groups) has opened up new venues for protein printing on surface. They have submitted a Phase I SBIR proposal to NIH based on this work.

Applied Nanotechnology for Label-Free Detection of Pathogen-Specific Nucleic Acids

PI: Byron Brehm-Stecher

Company: BioForce NanoSciences

Goal: Develop sensitive and label-free diagnostics for high-priority foodborne pathogens using atomic force microscopy

Progress Status: After interviewing several candidates, they have hired a Ph.D. student with a strong molecular background to work on this project. He arrived at ISU in mid-June. The first experiments underway include examining the ability of thiolated (cysteine-labeled) peptide nucleic acid (PNA) probes to self-assemble on the surface of a gold-plated chip after spotting the PNA using a NanoArrayer to discrete ultramicrodomains.

Development of Novel Digestion-Resistant Starches from Corn to Combat Human Disease

PI's Alan Myers and Martha James

Company: Starch Design

Goal: Develop digestion-resistant starches from corn to combat human diseases

Progress Status: The amylopectin structural changes have been shown to be stably heritable with normal

Mendelian ratios. LCAPS was shown to be digested more slowly than normal starch in in vitro analyses using the Megazyme resistant starch analysis test kit. LCAPS is not a resistant starch - the Megazyme assay at 19 hours it is completely digested to the same extent as wild type starch. However, the LCAPS starch is digested at a slower rate over the first hour of the assay. This result is consistent with the rationale of the proposal and supports continuing on to the later project objectives. Planning is underway for human feeding trials.

FY07 PROJECTS

The following projects were selected for funding in FY07. These projects are in the initial start-up phase.

PI	Co-Pi's	Title
	Douglas Stokke; Daniel	Corn-Biomass Composite Fuel Pellets:
Mary Holz-Clause	Burden	An Industry-University Partnership
		Commercializing New Fractionated Soy
		Proteins to Improve Human Health and
Larry Johnson	Nicolas Deak	Food Quality
		Purification & Quality Enhancement of Fuel Ethanol to Produce Alcoholic
		Beverages with Ozonation & Activated
Jacek Koziel		Carbon
	Janusz Kapusniak,	Development of Resistance and Low-
Jay-Lin Jane	Suzanne Hendrich	Caloric Maltodextrins from Cornstarch
		Ultrasonic Assisted Exfoliation of Bio-
	Michael Kessler and	Renewable Polymer Nanocomposites
David Grewell	Howard Van Auken,	with Micro-Cellular Structures
		Ultrasonication in Soy Processing for
Samir Kumar	Buddhi Prasad Lamsal	Enhanced Protein and Sugar Yields and
Khanal	and Stephanie Jung	Subsequent Nisin Production
		Converting Low Value Thin Stillage from
J (Hans) van	Samuel E. Beattie and	Dry Milling Ethanol Plans into High
Leeuwen	Allen H. Trenkle	Value Fungal Biomass
	Aron Rutin from R3	Commercialization of a Corn/Soy Oil-
Richard Larock	Composites	Based Composite Hog Feeder
		Collaborative Research on High
		Performance Stable Amorphous Silicon-
Vik Dalal		Germanium Solar Cells
	Francine Battaglia, Ted	Gasification Technologies in Support of
Robert Brown	Heindel	Biorefineries
	X7 1 X7 C1 A1	
Manjit Misra	Yuh-Yuan Shyy, Alan Gaul	Commercialization of a Continuous In- Line Flow Meter
manjit mista	Gaui	THE LION METER

The Economic Development Council (formerly Coordinating Council on Technology Transfer) was formed in January 1993 and coordinates all ISU technology transfer activities. Representatives from technology transfer units and each of the colleges meet regularly to discuss problems, update each other on activities, assess the state and national environment for technology transfer and propose policy and procedures to encourage technology transfer. Current membership includes:

Tom Barton

Institute for Physical Research and Technology (IPRT)

Lowell Greimann

Center for Transportation Research and Education (CTRE)

Floyd Barwig

Iowa Energy Center

Tim Borich

College of Design/Extension

John Brighton (Chair)

Vice President for Research and Economic Development

Charlotte Bronson

Research Administration

Steven Carter

Pappajohn Center for Entrepreneurship/ ISU Research Park

Joe Colletti

Agriculture and Home Economics Experiment Station

Ron Cox

Center for Industrial Research and Service (CIRAS)

Michael Crum

College of Business

Walter Fehr

Biotechnology

Stephen Howell

Plant Sciences Institute

Jack Payne

Extension Administration

Kenneth Kirkland

Office of Intellectual Property and Technology Transfer (OIPTT) & Iowa State University Research Foundation (ISURF)

Sonja Klocker

Research Administration

Mike Krapfl

University Relations

Lisa Lorenzen

Director of Industry Relations

Carey Novak

Institute for Physical Research and Technology (IPRT)

Theodore Okiishi

College of Engineering

David Oliver

College of Liberal Arts & Sciences

Donald Reynolds

College of Veterinary Medicine

Jon Ryan

Small Business Development Center (SBDC) & College of Business

JaneAnn Stout

College of Human Sciences

Iowa State does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, sex, marital status, disability, or status as a U.S. Vietnam Era Veteran. Inquiries can be

directed to the Director of Equal Opportunity and Diversity, 3680 Beardshear Hall, (515) 294-7612.

Economic Development Accomplishments and Highlights of Technology Transfer Activities – Iowa State University of Science and Technology FY06

Section I

- A. Please briefly describe the relationship of your institution's economic development activities to the enhancement of economic growth in the state. This description should cover, but should not necessarily be limited to, the following:
 - the relationship between institutional activities and creation of jobs in lowa;
 - institutional activities and services which indirectly promote economic development, such as training provided to staff of local economic development agencies.

Enhancement of Economic Growth through Job Creation and Retention, Investments, Sales, and Cost Savings

Iowa State University engages in several activities that have direct impact on both the creation as well as the retention of jobs in Iowa. The ISU Research Park is a technology community that encourages commercialization of university research. Likewise, the Innovations Development Facility, part of the Plant Sciences Institute, incubates new companies. In addition, the IPRT (Institute for Physical Research and Technology) Company Assistance Program, the Center for Industrial Research and Service (CIRAS), the Small Business Development Center (SBDC) and the ISU Pappajohn Center for Entrepreneurship interact with companies across lowa to solve production and management problems. These interactions lead to the resolution of problems related to product development and business management. As a consequence of the improved production resulting from these interactions, businesses have been able to retain and often expand their work force rather than lay off workers due to the expected down turn in business if no solution to the problems had been found. Some examples of the impact that ISU units have had this past year are as follows:

➤ The ISU Research Park has been very successful in initiating as well as nurturing numerous new businesses. Five new companies and affiliates have joined the Park in FY06, bringing the historical total to 151 companies. Currently, there are 41 companies located in the park, employing over 600 people. A study by an ISU economist for the ISU Research Park suggests there is a substantial and diverse set of economic activity located at the ISU Research Park whose effects link strongly with the lowa economy. The study, conducted 2002/2003, focused on current tenants at the Park, indicated that tenants contribute both directly and indirectly to \$134.2 million in total industrial output of

firms in the state. Wages paid by Research Park companies exceeds \$36.7 million annually, with an additional \$16.9 million in wages generated by businesses providing goods and services to Research Park companies and its employees. At the time of the study, the Research Park tenant companies employed over 900 people. Another 639 jobs are generated by businesses providing goods and services to the companies and its employees. The average wage per worker at the Research Park, including students, exceeds \$40,000. The economic activity generated by Research Park tenants generates an estimated \$3.7 million in state tax income and another \$1.4 million in state charges and miscellaneous revenues annually.

- Two new faculty start-up companies have located in the Innovations Development Facility, which is a recently established on-campus business incubator in the Roy J. Carver Co-Laboratory, under direction of the Plant Sciences Institute. A total of eight companies have signed lease agreements for business incubator space since the facility opened in September 2003.
- A four-year summary of project evaluation data was analyzed in January 2006 and clearly shows that Iowa companies with technical problems and research and development needs continue to find important technical help through the services of IPRT Company Assistance. Companies report positive impacts affecting their companies' sales, investments, and operating costs. The estimated annual average impact over the period is \$17.5M per year, and it is estimated that 32 jobs on average are created or retained each year. The average cost of providing these programs is approximately \$660K per year. The average satisfaction rating given by clients during this four year period is 4.5 (1-5 scale), and the average survey return rate is 57%.
- ➤ For FY06, as a result of CIRAS (Center for Industrial Research and Service) activities, 267 companies in Iowa reported \$27 million in new investments, \$9 million in costs saved or avoided, and \$63 million in sales gained or retained. Companies that worked with CIRAS and its partners reported that 955 jobs were added or retained as a result of the assistance they received.
- In a report published by James J. Chrisman, Ph.D. in Management and Information Systems at Mississippi State University, data was collected from survey respondents for *Economic Impact of Small Business Development Centers (SBDC's)*. In that report, based on several years of data, it was shown that for every \$1.00 in SBDC funding in FY04, the amount of tax dollars returned to the State of Iowa and the federal government by SBDC clients was \$4.65. There were also 243 jobs

- retained, 1,321 jobs created, \$13.8 million in sales retained and \$77 million in sales increased.
- New technologies originating at ISU and licensed to lowa companies have resulted in \$38 million in sales by those companies in calendar year 2005. Total sales of ISURF-licensed technologies were \$277 million, not including germplasm.
- ➤ The Office of Intellectual Property and Technology Transfer (OIPTT) began supporting SBIR (Small Business Innovation Research) and STTR (Small Business Technology Transfer) outreach efforts July 1, 2005 with the addition of an SBIR/STTR Program Administrator to the OIPTT staff. Because of limited awareness of this program—which positively impacts lowa's small, tech-based businesses and the lowa economy—an emphasis was placed on outreach and training activities, in addition to providing proposal preparation support. In FY06 ten Iowa companies won twelve new SBIR and STTR awards worth \$3.3 million. The Departments of Agriculture, Defense and Energy, as well as the National Institutes of Health, the National Science Foundation, and the National Aeronautics and Space Administration, are funding this year's lowa SBIR/STTR award winners. The funded projects reflect lowa's strengths in biotechnology, information systems, materials development and agriculture. Over a million dollars in support was garnered from the NSF for diverse topics that range from the development of a "smart" material using a natural fiber reinforced composite to novel oxygen sensor technologies to developing better authoring tools for intelligent tutoring systems.

Training Opportunities for Staff of Local Economic Development Agencies

Many units on campus provide training opportunities for staff of economic development groups across the State. Some of these are done through visits to campus and some are done by ISU units going out to the agency or respective community. For example, the Office of the Vice President for Research and Economic Development has sponsored an Economic Development Open House for the past four years, in which many economic development groups across the State have participated in an all-day conference, including tours of campus facilities.

B. Creation of Economic Opportunities through Research and Scholarship

FY 2006	
number of disclosures of intellectual property	120
number of patent applications filed	52
3. number of patents issued	19
number of license and option agreements executed on institutional intellectual property	140
number of license and option agreements yielding income	299
6. royalties/license fee income	\$8.0 million
7. revenue to lowa companies as a result of licensed technologies	\$38.0 million
8. total sponsored funding	\$279.7 million
9. sponsored funding for research	\$171.4 million
10. Corporate-sponsored funding for research and economic development (excludes corporate philanthropy)	\$28.6 million
11. lowa special appropriations for economic development and technology transfer	\$2,463,557

C. Creation of Economic Opportunities through Outreach and Public Service

Please describe the ways in which your institution is engaged in the following activities (For example, What is the nature of the outreach and service activities? Which units provide it? What kinds of people and organizations benefit?):

- direct and hands-on technical assistance to businesses and entrepreneurs
- direct economic development assistance to lowa communities
- economic development services provided by the research parks

C.1 ISU System for Innovation

lowa State University is charged with advancing economic development and technology transfer activities that promote growth and benefit all citizens. While creation of knowledge remains the basic responsibility of a research university, the way we share knowledge determines our success. ISU shares knowledge and expertise with students (learning and teaching), communities (engagement),

and business and industry (technology transfer and economic development). ISU ranks as one of the most successful universities nationwide in several categories of technology transfer and economic development. The activities of the colleges, institutes and centers are coordinated through the Economic Development Council that advises the Vice President for Research and Economic Development. The Vice President and this Council continuously communicate with economic development entities within the State such as the Iowa Department of Economic Development, the Iowa Business Council, the Greater Des Moines Partnership and other local and regional agencies.

The Iowa State University "System for Innovation" was developed to focus on the transfer of university technologies into commercial applications in start-up or existing companies. Functions of the ISU System for Innovation include:

- Business Development & Assistance and Entrepreneurial Activities:
 Efforts related to start-up companies, including business assistance services & SBIR/STTR applications.
- Technical Assistance & Technology Development: Solving technical problems, assisting in product development and process improvement projects for existing businesses. This includes the current efforts of nocost technical assistance and cost-sharing projects.
- **Industry Relations**: Facilitation of a multitude of interactions between ISU and its industry partners, including the management of research relationships and interactions with economic development groups, legislative groups, and other third parties.
- Community Development: Working with community organizations to disseminate and develop programming, facilitating community organizations, fostering community planning, and coordinating with community and regional economic development networks and organizations.
- **Technology Transfer and Licensing:** The transfer of patented intellectual property to business and industry through license agreements.
- Physical Space: Physical space for business incubation is available in the ISU Research Park, Plant Sciences Institute, and Center for Crops Utilization Research.

Research and Instrumentation Facilities: Iowa State University maintains more than 20 central research facilities that also serve communities and businesses on a fee-for-service basis.

C.2 ISU's Key Units engaged in Economic Development

lowa State University, as part of the higher education system in the State, is charged with advancing technology transfer and economic development activities that promote growth and benefit all citizens. The University evolves these goals by contributing to workforce development, creating intellectual property, advancing ideas to the stage of market readiness, supporting creation of new

companies, offering assistance to existing companies, and attracting new companies to the State. The University's economic development/technology transfer support system includes the following units that are coordinated through the Economic Development Council:

- Institute for Physical Research and Technology (IPRT): Through IPRT's Company Assistance Program, Iowa companies can leverage the expertise of the IPRT research centers and other ISU capabilities in order to solve technical problems, create new products and processes, and increase productivity and quality. IPRT Company Assistance provides help through both short-term, no-cost technical assistance, and its R&D cost-sharing program. IPRT assists early-stage technology commercialization and actively collaborates with Iowa companies on technology transfer projects. Materials and process problems can be addressed, and IPRT experts can also assist Iowa companies with inspection and measurement challenges. IPRT plays an integral role in the process of technology transfer targeted at new business creation.
- Pappajohn Center for Entrepreneurship and the Small Business Development Center (SBDC): These units work with researchers to define the technologists' role in the company, evaluate markets, assist in the creation of a business plan and help the company develop connections with accountants, attorneys and investors. In a typical year, the Pappajohn Center, working with IPRT, the Plant Sciences Institute, ISURF/OIPTT and other research centers, identifies approximately 25 prospective new technologies. These technologies can take six to 26 months to develop sufficiently to justify the formation of businesses. During this time the researcher receives assistance in moving the technology from the researcher's bench to the marketplace. The Pappaiohn Center helps the researcher develop the model for the business and establish the network of resources necessary to implement the plan. These resources can include business assistance, students or capital. The Pappajohn Center/SBDC also continues to provide a referral network and facilitates the recruitment of students including access to internships.
- Iowa State Innovation System (ISIS): Near the time a venture is launched, facilities become an issue. ISIS, ISU's technology incubator, provides an ideal first home for companies. ISIS offers connections to the University, affordable space with reception services, office equipment (copiers, fax machines, and computers), conference rooms, and other amenities at a very reasonable rate. The Pappajohn Center, described above, provides mentoring to the companies as well as the opportunity for companies to utilize students as interns and researchers. ISIS will generally attract five new companies each year. Companies typically spend one to three years in the Incubator moving from product development to product sales. Once

sales are established, companies grow out of the Incubator. Some companies remain within the Research Park and continue to receive development assistance, while others move on to commercial space elsewhere. As companies mature, the University provides opportunities for collaboration between researchers at the University and in the companies. Students provide cost-effective labor and are potential employees. The Research Park provides expansion space, often financing the space and improvements.

- Iowa State University Research Park: The Iowa State University Research Park is a 230-acre development with nearly 325,000 square feet of building space and is located south of the Iowa State University campus. The ISU Research Park is more than just land and buildings; it is a technology community that encourages commercialization of University research.
- Center for Industrial Research and Service (CIRAS): CIRAS provides education, research, and technical assistance to Iowa industry through partnerships with Iowa's universities and community colleges, government agencies, and professional associations. Account managers throughout the state meet with clients to assess needs and provide links to resources that companies can use to increase their competitiveness. Solutions are offered through a combination of direct assistance from center staff, university faculty, partner organizations, and outside consultants. CIRAS staff have expertise in biorenewables, engineering, management practices, government procurement, productivity, and quality systems. The center is supported in part by the NIST Manufacturing Extension Partnership, the DoD Procurement Technical Assistance program, and the EDA University Center Program.
- ISU Research Foundation (ISURF) and the Office of Intellectual Property and Technology Transfer (OIPTT): ISURF owns and ISURF and OIPTT jointly manage, market and license the intellectual property for lowa State University. ISURF/OIPTT works with faculty members in regard to the reporting and protection of innovations, including patenting inventions. It markets the innovations to find commercial partners interested in licensing. It also funds projects within the University that have potential for broadening the intellectual property protection or providing value for its commercial potential. ISURF also provides assistance to lowa companies with SBIR (Small Business Innovation Research) and STTR (Small Business Technology Transfer) applications.
- Innovations Development Facility (IDF): This is a major activity within the Plant Sciences Institute to promote business activity in the area of plant biotechnology and economic development for the state of Iowa. IDF

encourages ISU faculty, staff, and students to commercialize their research in the plant sciences and promotes the development of start-up companies among aspiring entrepreneurs. IDF is housed in the Roy J. Carver Co-Laboratory and consists of a Co-Laboratory Business Incubator (CoBI) and a Public/Private Partnership (3P) Program. CoBI serves as an incubator facility for start-up companies associated with the Plant Sciences Institute (PSI) and the 3P Program is designed to promote collaboration between ISU and private sector entities. CoBI offers an environment to transition research from a university to a business setting. The CoBI incubator facility is a productive research location where scientists from academe and industry can work together to advance the mission of the Plant Sciences Institute and to promote economic development in lowa.

- Extension's Community and Economic Development Program: They
 provide assistance in land use and community planning, community
 economic analysis, community design, local government management
 and leadership development.
- The College of Business' Business and Partnership Program: They provide expert faculty assistance to businesses wanting to streamline processes, implement best practices or move from a local or national business to a global enterprise.
- The Office of the Vice President for Research and Economic Development works closely with all of the above units in promoting the University's mission related to technology transfer and economic development.

D. Collaboration for Economic Development

Please briefly describe two or three examples of *major economic* development collaborative projects with such other entities as Regent universities, Iowa community colleges, the Iowa Department of Economic Development, Iowa Workforce Development, or other state agencies.

Major Economic Development Collaborative Projects

<u>Grow lowa Values Fund</u> -- ISU has worked closely with legislators, the Iowa Department of Economic Development, the University of Iowa, the University of Northern Iowa and the Board of Regents, State of Iowa to establish the Grow Iowa Values Fund. This legislation is providing the universities and private colleges new financial resources to expand technology transfer and commercialization efforts. See more details in Section II of this report.

<u>Battelle Initiative</u> – ISU, the University of Iowa and the University of Northern Iowa have worked closely with the Iowa Department of Economic Development, the Board of Regents, State of Iowa; legislators and business leaders through the

Biosciences Alliance of Iowa organization to implement the Battelle initiative. Proposed projects that focus on the biosciences, information technology and advanced manufacturing are currently under review. [Andy Baumert will provide more details on this initiative.]

<u>Kaizen Event</u>—In late June 2006, ISU reviewed its processes related to industry contracts and post-award activities through a week-long Kaizen "Lean" event that was facilitated by business leaders from Vermeer Manufacturing and a private consultant. Others participating were representatives from the Iowa Business Council, the University of Iowa, the University of Northern Iowa and three industries in addition to Vermeer (Pioneer, Pratt-Whitney and Rockwell Collins). As a result of this event and ongoing follow-up, several improvements have been/will be made in this area that increases productivity between the university and external sponsors, thus providing better customer service and improving the bottom line. This event was so successful that it will be used in other areas at ISU. In fact, the Iowa State University Research Foundation/Office of Intellectual Property and Technology Transfer is planning such an event to be held in the next several weeks.

E. Collaboration for Economic Development

A table of the institution's economic development projects in Iowa, including:

- 1. name of company, community, or other entity served;
- 2. city and county where this project is in place;
- 3. university unit that has interacted with or provided assistance to the entity served

See Excel Sheet in another attachment, as well as a Word file with codes for identification of categories and an Iowa map showing distribution of interactions. The number of FY06 interactions in the Excel Sheet totals approximately 3,200.

It should be noted that the accompanying Excel Sheet does not include any data for the Iowa Small Business Development Center due to confidentiality reasons. During FY06, that unit provided business assistance to companies, involving 2,316 clients and 17,038 counseling hours in 99 counties. They also conducted 319 training workshops in which 4,924 individuals participated.

In addition, it should be noted that many interactions in the Excel sheet represent multiple contacts with the same company or community. Some units provided multiple contacts but others did not.

ACRONYMS USED IN EXCEL SHEET:

PSI=Plant Sciences Institute CCUR=Center for Crops Utilization Research FSHN=Food Science and Human Nutrition ABE=Agricultural & Biosystems Engineering CCEE=Civil, Construction & Environmental Engineering IPRT=Institute for Physical Research & Technology NDE=Nondestructive Evaluation IDRO=Institute for Design Research & Outreach BECON=Biomass Energy Conversion Facility CTRE=Center for Transportation Research & Education CIRAS=Center for Industrial Research & Service ECE= Engineering Continuing Education

Section II

GROW IOWA VALUES FUND

The Grow Iowa Values Fund program is providing research funding to work with Iowa industry to create and improve products and processes. In March 2005, five projects were funded through a competitive RFP process. In addition, a second RFP competition was held during spring 2006. Eleven projects were selected for funding and are scheduled to begin during fiscal year 2007. The following summarizes the status of the projects funded in FY06, including financial information. Due to the nature of the research, it is not anticipated that the cost share and expenditures will accumulate at the same rate. In the information below, the sources of the ISU matching funds listed are a combination of salaries, startup funds, incentive accounts and external grants. State funds directly appropriated for economic development are not used as matching funds.

Retooling Ethanol Industries: Integrating Ultrasonics into Dry Corn Milling to Enhance Ethanol Yield

PI's: David Grewell, Samir Kumar Khanal and J (Hans) van Leeuwen **Companies:** Midwest Grain Processors (\$10,000 match), Lincolnway Energy (\$12,000 match), Quad County Corn Processors (\$10,000 match), Branson

Ultrasonics (\$55,000 match) Award Amount: \$80,519 FY06 Expenditures: \$2,173

FY06 Cost Share Reported: \$1,021.51 (ISU)

Goal: Employ high-power ultrasonication prior to or during liquefaction in dry corn milling plants to achieve better sugar release for higher ethanol yield.

Progress Status: The research is approximately 5 months ahead of schedule. Characterizing the ultrasonic treatment of raw and cooked corn slurry in bench-scale is near completion. Variables studied included: sonication time, amplitude, temperature control, corn slurry pre-conditioning (cooked and raw) and enzyme introduction sequence. Other accomplishments included submission of a provisional patent application and four poster presentations. One journal article is currently being prepared for publication in a high impact journal. This project has received a lot of press, including both written and radio interviews.

Quality Assessment Tools for Colonoscopy

Pl's: Johnny Wong, Wallapak Tavanapong

Companies: Mayo Clinic (\$119,295 match) and EndoMetric

Award Amount: \$75,405 FY06 Expenditures: \$15,669

FY06 Cost Share Reported: \$79,049 **(**\$7,364 ISU, \$71,685 Mayo)

Goal: To create software to automate capture, analysis, and interpretation of colonoscopies

Progress Status: The researchers visited Mayo Clinic to install software for capturing and collecting colonoscopy videos on hardware in two endoscopy rooms and discuss improvement of software for annotating colonoscopy videos. They have signed the inter-institution agreement between ISU, Mayo Medical Venture (MMV), and University of Texas at Arlington (UTA). They have worked with MMV on preparing a comprehensive document detailing their inventions. The document has over 100 pages with 13 inventions. They have agreed to name their start-up company "EndoMetric, Inc" and registered the domain name www.endometric.com.

Enhancing the Soy Biorefinery

PI's: Victor Lin, George Kraus, John Verkade (\$70,000 match)

Company: West Central Cooperative (\$70,000 match)

Award Amount: \$140,000 FY06 Expenditures: \$26,627

FY06 Cost Share Reported: \$10,963.81 (ISU)

Goal: To create a recyclable catalyst(s) for biodiesel production from soy and animal fat

Progress Summary: They have designed a new method for the synthesis of 100 grams of solid transesterification catalysts. The feasibility of this method was demonstrated successfully in a recent experiment. The recyclability of two different catalysts for the conversion of soybean oil to biodiesel was investigated. The results indicated that one of the two catalysts tested could be recycled and reused 20 times without losing its original reactivity. They have tested the feasibility of three different catalysts for the production of biodiesel from poultry fat. The result showed that the best catalyst for soybean oil conversion also performed the best for poultry fat in reactivity and recyclability

Pneumatic Continuously Variable Natural Frequency and Damping Isolator for Active Suspensions

PI: Atul G. Kelkar (\$14,903 match)

Company: Vibroacoustics Solutions Inc. (\$61,803 match), Sears Seating, Link

Manufacturing

Award Amount: \$73,919

FY06 Expenditures: \$5,958

FY06 Cost Share Reported: \$23,098.61(\$1,898.61 ISU match, \$21,200 VSI

match)

Goal: Develop a commercial-scale prototype seat suspension system using a continuously variable natural frequency and damping isolator.

Progress Status: The acquisition and assembly of the electro-hydraulic shaker components is complete. An initial study has been done to optimize the CV NFD design parameters. Fabrication of the first model of CV NFD lab prototype is in progress, as is the investigation of controller designs. Finally, retrofitting of the Sears semi-active seat with CV NFD isolator is complete and performance evaluations are underway. They are in close communication with Link Manufacturing, Sioux Center, IA. Link Mfg. has provided some in-kind hardware. Sears Seating, Davenport, IA, has also sent their operator seat hardware for retrofitting.

Viral Replicon Particle Discovery Research For Development Of Improved Vaccines For Swine

PI's: Matt Erdman and Maynard Hogberg Company: Sirrah, Alphavax (\$239,143 match)

Award Amount: \$104,064 **FY06 Expenditures:** \$28,965

FY06 Cost Share Reported: \$59,215.21(\$13,084 ISU match, \$46,131 Alphavax

match)

Goal: Develop animal vaccines using a new technology – Viral replicon particles

Progress Status: The core assays needed to study influenza have been developed and implemented. A source of pigs has been located in Minnesota believed to be free of influenza virus based on screening of serum for swine influenza antibodies at the ISV Veterinary Diagnostic Lab. Pigs from this source have been shipped to ISU for vaccination studies. A term sheet between Sirrah and the Iowa State University Research Foundation has been agreed upon regarding the provisional patent filed by Harris and Erdman entitled "Protective Antigenic Determinants of PRRSV".

Model-based Reasoning for Software: Advanced Algorithmic Techniques and Prototype Implementation

PI's: Suraj Kothari and Srinivas Aluru (\$62,573 match)

Company: EnSoft (\$35,000 match)

Award Amount: \$97,573 FY06 Expenditures: \$11,025

FY06 Cost Share Reported: \$4,987.88 (ISU)

Goal: Identify the parts that are common to various software models by performing a model-based analysis, so the parts may be refactored as reusable library components, making software maintenance and evolution more manageable and efficient.

Progress Status: They are currently experimenting with a new algorithm developed by extending an earlier algorithm they had developed for a similar string problem. Instead of strings, they have labeled directed acyclic graphs, which can be viewed as strings with many branches as opposed to the usual strings that have only one branch. They have worked with EnSoft to build a converter to create suitable graphical representations of the Simulink models. These representations are necessary to test the new algorithm. In parallel, EnSoft also developed a new version of the SimDiff.

Protein Micropatterning on Microsensors to Quantify Cell Cytotoxicity of Adherent and Non-adherent Cells

PI: Surya Mallapragada (\$1,525 match)

Company: Cellular Engineering Technologies (\$20,000 match)

Award Amount: \$21,525 FY06 Expenditures: \$6,811

FY06 Cost Share Reported: \$3,201.05 (ISU)

Goal: Optimize protein micropatterning on microsensors to measure cell toxicity

Progress Status: They have been fabricating the PDMS stamps and optimizing the micropstamping techniques to obtain controlled protein pattern formation on surfaces with good micron scale resolution. In addition, they have also been pursuing an alternative approach as well that was not originally outlined in the proposal. The recent acquisition of a chemical printer located in the Chemical and Biological Engineering department (by other groups) has opened up new venues for protein printing on surface. They have submitted a Phase I SBIR proposal to NIH based on this work.

Applied Nanotechnology for Label-Free Detection of Pathogen-Specific Nucleic Acids

PI: Byron Brehm-Stecher (\$26,089 match)

Company: BioForce NanoSciences (\$76,000 match)

Award Amount: \$69,392

FY06 Cost Share Reported: \$1,168.65

Goal: Develop sensitive and label-free diagnostics for high-priority foodborne pathogens using atomic force microscopy

Progress Status: After interviewing several candidates, we have hired a Ph.D. student with a strong molecular background to work on this project. He will be arrived at ISU in mid-June. The first experiments underway include examining

the ability of thiolated (cysteine-labeled) peptide nucleic acid (PNA) probes to self-assemble on the surface of a gold-plated chip after spotting the PNA using a NanoArrayer to discrete ultramicrodomains.

Development of Novel Digestion-Resistant Starches from Corn to Combat Human Disease

PI's Alan Myers & Martha James (\$99,800 match)

Company: Starch Design Award Amount: \$78,000

FY06 Expenditures: Project not begun until FY07

FY06 Cost Share Reported: \$1,168 (ISU)

Goal: Develop digestion-resistant starches from corn to combat human diseases

Progress Status: The amylopectin structural changes have been shown to be stably heritable with normal Mendelian ratios. LCAPS was shown to be digested more slowly than normal starch in in vitro analyses using the Megazyme resistant starch analysis test kit. LCAPS is not a resistant starch - the Megazyme assay at 19 hours it is completely digested to the same extent as wild type starch. However, the LCAPS starch is digested at a slower rate over the first hour of the assay. This result is consistent with the rationale of the proposal and supports continuing on to the later project objectives. Planning is underway for human feeding trials. (Project not started until beginning of FY 2007)

Evaluation and Development of Commercialization Systems for the Center for Crops Utilization Research

Pl's: Larry Johnson

Award Amount: \$40,000

FY06 Expenditures: \$13,958.70

FY06 Cost Share Reported: \$18,174 (\$6129 salary/benefits; \$182

materials/supplies; \$11,863 services/other)

Goal: CCUR has engaged Battelle Memorial Institute (BMI) to conduct a study of CCUR technology transfer and commercialization practices. Through this project CCUR and the College of Agriculture expect to gain insight about how best to respond to key economic development issues for lowa.

CombiSep

Award Amount: \$75,000

FY06 Expenditures: \$25,813.21

FY06 Cost Share Reported: \$27,104.62 (salaries/benefits)

Purpose: The company will develop a new application for the instrument in

agricultural markets, resulting in new sales opportunities.

Metabolic Technologies Inc.

Award Amount: \$150,000

FY06 Cost Share Reported: \$75,268.99 (\$55,252.97 salary/benefits; \$20,016

services/other)

Purpose: The company will purchase equipment required to advance the

development of purification processes.

Infiscape

Award Amount: \$100,000 FY06 Cost Share Reported: \$0

Purpose: The company will establish their first products for specific markets.

Glycon Technologies (Biova)

Award Amount: \$100,000

FY06 Cost Share Reported: \$330,370 (\$114,305 salary/benefits; \$37,292

equipment; \$10,628 materials/supplies; \$168,145 services/other) **Purpose:** To establish production and introduce product to the market.

Industrial Hardfacing
Award Amount: \$ 25,000

Cost Share: (\$10K cash from IH, \$15K ISU salary/benefits)

FY06 Cost Share Reported: \$10K cash received;

Purpose: The company proposes to use \$25,000 to help fund work to be done

by ISU researchers to improve production processes

CMNet

Award Amount: \$50,000

FY06 Cost Share Reported: no report received

Purpose: The company proposes to integrate their software to three leading

CAD systems, opening new markets and sales.

Pappajohn Center

FY06 Award Amount: \$186,667 (ISU match \$186,667)

FY06 Expenditures: \$2,729.55 FY06 Cost Share Reported: \$0

ISU Research Park

FY06 Award Amount: \$186,667 (ISU match \$186,667)

FY06 Expenditures: \$160,920

FY06 Cost Share Reported: \$138,913.48 (services/other)

Vice President for Research and Economic Development Office

FY06 Award Amount: \$93,333 (ISU match \$93,333)

FY06 Expenditures: \$40,916

FY06 Cost Share Reported: \$41,657 (\$35657 in salary/benefits; \$6000 in

services/other)

Institute for Physical Research and Technology FY06 Award Amount: \$93,333 (ISU match \$93,333)

FY06 Expenditures: \$93,333 FY06 Cost Share Reported:

FY07 PROJECTS

The following projects were selected for funding in FY07. These projects are in the initial start-up phase.

			Amount
PI	Co-PIs	Title	Requested
		Corn-Biomass Composite Fuel	
Mary Holz-	Douglas Stokke;	Pellets: An Industry-University	
Clause	Daniel Burden	Partnership	\$49,380
		Commercializing New Fractionated	
		Soy Proteins to Improve Human	
Larry Johnson	Nicolas Deak	Health and Food Quality	\$167,717
		Purification & Quality	
		Enhancement of Fuel Ethanol to	
		Produce Alcoholic Beverages with	
Jacek Koziel		Ozonation & Activated Carbon	\$81,848
		Development of Resistance and	
	Janusz Kapusniak,	Low-Caloric Maltodextrins from	
Jay-Lin Jane	Suzanne Hendrich	Cornstarch	\$96,273
		Ultrasonic Assisted Exfoliation of	
		Bio-Renewable Polymer	
	Michael Kessler and	Nanocomposites with Micro-	
David Grewell	Howard VanAuken,	Cellular Structures	\$68,758
		Ultrasonication in Soy Processing	
	Buddhi Prasad	for Enhanced Protein and Sugar	
Samir Kumar	Lamsal and	Yields and Subsequent Nisin	
Khanal	Stephanie Jung	Production	\$76,914
		Converting Low Value Thin	
		Stillage from Dry Milling Ethanol	
J (Hans) van	Samual E. Beattie	Plans into High Value Fungal	
Leeuwen	and Allen H. Trenkle	Biomass	\$82,070

	Aron Rutin from R3	Commercialization of a Corn/Soy	
Richard Larock	Composites	Oil-Based Composite Hog Feeder	\$96,000
		Collaborative Research on High	
		Performance Stable Amorphous	
Vik Dalal		Silicon- Germanium Solar Cells	\$63,406
	Francine Battaglia,	Gasification Technologies in	
Robert Brown	Ted Heindel	Support of Biorefineries	\$132,274
	Yuh-Yuan Shyy,	Commercialization of a Continuous	
Manjit Misra	Alan Gaul	In-Line Flow Meter	\$73,737
			\$997,336

The University of Iowa 2006 Annual Economic Development Report Submitted to The Board of Regents

EXECUTIVE SUMMARY

Inspired by the Grow Iowa Values Fund (GIVF) and the Battelle Reports on Biosciences, Advanced Manufacturing and Information Solutions, The University of Iowa took a fresh look at its economic development activities and reorganized and reinvigorated them in a way that engages the University more fully and effectively in Iowa's economic development. One important result was the formation in 2005 of the IOWA Centers for Enterprise. Another was the *strategic* investment of GIVF and Battelle funds in building the University's *capacity* to drive economic development based on its academic and research strengths and through the integrated efforts of the IOWA Centers for Enterprise. The GIVF and Battelle fund investments are *essential* to building the University's capacity to engage fully in Iowa's economic development.

The IOWA Centers for Enterprise is an integrated effort comprising the activities of six University units plus liaisons with each College on the campus. As an integrated organization, it embraces outreach, workforce development, technology transfer and commercialization, entrepreneurship, and research- and education-driven economic development. The six units of the IOWA Centers for Enterprise include:

- The University of Iowa Research Foundation (UIRF)
- The John Pappajohn Entrepreneurial Center (JPEC)
- The University of Iowa Small Business Development Center (SBDC)
- The Office of Corporate Partnerships (OCP)
- The Technology Innovation Center (TIC)
- The Oakdale Research Park (ORP)

Their contributions to Iowa's economic development are summarized in this report.

Institutional Economic Development and Technology Transfer Programs

The University of Iowa Research Foundation is a non-profit corporation closely aligned with the UI. It takes ownership of and manages UI created intellectual property (IP) and the subsequent revenue stream related to licensing technologies. The UIRF works closely with UI faculty in developing the strategies required to commercialize inventions and intellectual property through the creation of new companies. This includes (i) Intellectual Property protection strategies and execution; (ii) commercialization strategies relating to licensing to existing or new companies; (iii) business model development for UI spinout companies (new companies based substantially on UI technologies); and (v) due diligence on the viability of UI spinout companies.

UIRF invests human and capital resources in creating new business opportunities from that IP, some of which result in the formation of new companies and resulting jobs. For example,

one of our new companies is projecting approximately 25 new jobs to be employed by the company's R&D division located in Iowa City. In FY06 the UIRF received 89 disclosures of intellectual property, filed 178 patent applications related to University innovations, had 56 patent applications mature into issued patents, completed 43 license and option agreements related to University intellectual property, and received \$16.3 million in royalties and license fee income.

The John Pappajohn Entrepreneurial Center provides a rich program of education and outreach services to undergraduate and graduate students at the University of Iowa and broadly to the entrepreneurial community in Iowa. It sponsors youth outreach programs directly to young people and to middle school and high school teachers by training and supporting them through incorporating entrepreneurship into their classrooms. JPEC also provides a rich array of educational programs to entrepreneurs. It also sponsors a venture capital conference and is the regional administrator of the Wellmark Venture Capital Fund, a \$5 million fund created by Blue Cross and Blue Shield of Iowa to support the creation and growth of new businesses throughout the state. The Pappajohn Center also counsels entrepreneurs in forming business plans, obtaining capital for their business, and in a host of other business-support activities.

The Small Business Development Center provides a wide range of business counseling to small businesses in Iowa. In FY06 the SBDC served 260 clients in 51 communities located in 22 Iowa counties, served 192 startups, dedicated almost 2,500 houses to clients, assisted clients in obtaining almost \$7 million in loans, and supported the creation of an estimated 424 jobs by its small business clients.

The Office of Corporate Partnerships links Iowa businesses to University of Iowa knowledge resources. It links Iowa companies to other units of the IOWA Centers for Enterprise and helps companies link with technical resources, faculty expertise, student interns, graduating students as employees, and many other resources of the University. The OCP works closely with the Iowa Department of Economic Development in economic development activities in which the University of Iowa can serve as a resource, and it serves as the single point of access for companies having inquiries and requests for assistance. In FY06, the OCP completed 28 visits to Iowa biotechnology, advanced manufacturing and information solutions companies. It arranged visits of companies and individuals to the University of Iowa campus and identified technical needs of several companies and worked with units of the University to address those needs.

The Technology Innovation Center fosters the development of new technology-based business ventures by offering specialized facilities and services to sustain them in their early, most vulnerable years. The Oakdale Research Park provides established corporations with easy, sustained access to relevant research resources at The University of Iowa. Firms in the park can expect to establish and sustain working relationships with UI faculty scientists, physicians, and engineers.

The 40 active Iowa companies affiliated with TIC and ORP reported 1,513 employees earning an average salary of nearly \$60,000 (the four UI anchor laboratories at Oakdale

reported another 182 employees). The 1,695 employees of TIC/ORP affiliate companies and labs reported living in 21 counties and 65 cities and towns in Iowa, a regional labor shed covering approximately one-fifth of the State. Assuming a State income tax rate of 5%, employees of TIC/ORP affiliates paid approximately \$5.1 million in State income taxes in FY06. TIC/ORP affiliates reported employing 92 UI students, while 135 employees had earned doctoral degrees. In FY06 the TIC accepted two new tenant companies while four firms met their business goals upon "graduating" from the incubator. The ORP welcomed one new tenant, Innovative Software Engineering, Inc.

Grow Iowa Values Fund Projects

Using the University of Iowa allocation of Grow Iowa Values Funds, the Office of the Vice President for Research established and implemented a program that incorporates two distinct and interdependent phases: I-START, which is targeted at the short term goal of facilitating university-private sector partnerships in entrepreneurship and the creation of new companies and jobs in Iowa, and I-GROW, which is designed to address middle- to long-term commitments needed to strengthen the University's *capacity* to promote and sustain high tech entrepreneurship and promote research- and technology-driven economic development in Iowa.

I-START funds are being used to:

- Renovate a building in the Oakdale Research Park that will be used to support the academic research and the company activities of an internationally known age-related macular degeneration researcher at the Carver College of Medicine. His innovation is the basis of a spin-out company that will address an unmet need in a very large (\$1B+) market.
- Provide gap funding for six faculty projects that show strong hope for commercialization. This funding is essential to move their nascent innovations down the developmental pipeline. All six projects have a corporate partner and/or are being groomed as spin-out companies.
- Provide support to bolster the activities of the Office of Corporate Partnerships, which in turn supports the IOWA Centers for Enterprise in serving as the single point of access to companies seeking to link with the resources of the University to meet their needs.
- Support the hiring of a Faculty Entrepreneurship Coordinator in The John Pappajohn
 Entrepreneurial Center. This entrepreneur contributes to the undergraduate and
 graduate entrepreneurism curriculum, provides outreach to the community of
 entrepreneurs in Iowa, and counsels students, faculty and the public at-large
 concerning entrepreneurism.
- Hire a nationally recognized consultant to assist in developing the vision for a reinvigorated Oakdale Research Park and Technology Innovation Center, and renovate meeting facilities used by tenants of the Technology Innovation Center when meeting with collaborators, venture capitalists, and the like.
- Support the activities of a software company started by University of Iowa students.

• Renovate the facilities of the Center for Biocatalysis and Bioprocessing to transform it into a facility that meets U.S. Food and Drug Administration current Good Manufacturing Practices standards necessary to be able to produce supplies of materials used in human clinical trials.

I-GROW funds are being used to provide a start-up funding package for the research program of Dr. Venkiteswaran ("Mani") Subramanian, director of the Center for Biocatalysis and Bioprocessing (CBB). Dr. Subramanian brings 24 years of industrial experience to the University, and this start-up package was essential in attracting this highly entrepreneurial faculty member to The University of Iowa.

The University of Iowa 2006 Annual Economic Development Report Submitted to The Board of Regents

INTRODUCTION

Inspired by the Grow Iowa Values Fund (GIVF) and the Battelle Reports on Biosciences, Advanced Manufacturing and Information Solutions, The University of Iowa took a fresh look at its economic development activities and reorganized and reinvigorated them in a way that engages the University more fully and effectively in Iowa's economic development. One important result was the formation in 2005 of the IOWA Centers for Enterprise. Another was the *strategic* investment of GIVF and Battelle funds in building the University's *capacity* to drive economic development based on its academic and research strengths and through the integrated efforts of the IOWA Centers for Enterprise. The GIVF and Battelle funds investments are *essential* to building the University's capacity to engage fully in Iowa's economic development.

The IOWA Centers for Enterprise is an integrated effort comprising the activities of six University units plus liaisons with each College on the campus. As an integrated organization, it embraces outreach, workforce development, technology transfer and commercialization, entrepreneurship, and research- and education-driven economic development. The six units of the IOWA Centers for Enterprise include:

- The University of Iowa Research Foundation (UIRF)
- The John Pappajohn Entrepreneurial Center (JPEC)
- The University of Iowa Small Business Development Center (SBDC)
- The Office of Corporate Partnerships (OCP)
- The Technology Innovation Center (TIC)
- The Oakdale Research Park (ORP)

Their contributions to Iowa's economic development are summarized in this report.

SECTION I.

- 1. Please briefly describe the relationship of your institution's economic development activities to the enhancement of economic growth in the state. The description should cover, but should not necessarily be limited to, the following:
- -The relationship between institutional activities and creation of jobs in Iowa
- -Institutional activities and services which indirectly promote economic development, such as training provided to staff of local economic development agencies

The University of Iowa Research Foundation.

The UIRF is a non-profit corporation closely aligned with the UI. It takes ownership of and manages UI created intellectual property (IP) and the subsequent revenue stream related to licensing technologies. UIRF invests human and capital resources in creating new business opportunities from that IP, some of which results in the formation of new companies and resulting jobs. For example, one of our new companies is projecting approximately 25 new jobs to be employed by the company's R&D division located in Iowa City.

In FY06, UIRF operating revenues were used to match GIVF funding targeted for commercialization projects, with the express intention of creating new companies within Iowa. These companies are classified as early stage high risk, and as such it is difficult to predict whether any will result in jobs, and if so, how many. More suitable measures for companies at this stage are factors such as the ability to attract management talent and financing.

UIRF is communicating with faculty far in advance of company formation, i.e., at the stage of intellectual property creation. As part of that process, UIRF is continually educating faculty on what is required to start and develop a company, and helping them to understand their role. UIRF also seeks local entrepreneurs to work with and help develop potential new UI spinout companies (new companies based substantially on UI technologies). Finally, as part of negotiating a license agreement, UIRF is performing "due diligence"- e.g. evaluating the business plan for viability and communicating that information back to faculty and entrepreneurs. Through these collective efforts, people are being educated on the entrepreneurial process, which ultimately could lead to more companies being formed and a larger number of more viable companies.

The John Pappajohn Entrepreneurial Center

Formed in 1996, JPEC is an innovator in delivering interdisciplinary courses and specialized life-long learning programs to meet the unique needs of aspiring entrepreneurs and leaders. JPEC offers academic programs and technology commercialization support.

Academic Programs

JPEC has developed a comprehensive, interdisciplinary program that combines academic coursework with experiential learning for all students across the UI campus. This innovative approach is designed to prepare graduates to pursue the creation of new ventures and apply entrepreneurship concepts in their career endeavors. Each year, over 2,000 students enroll in entrepreneurship courses at Iowa.

Certificate in Entrepreneurship

Students in business, health sciences, and liberal arts and sciences may earn the certificate in addition to their undergraduate degrees. The program encompasses advanced entrepreneurship theory and practice and teaches students how to apply entrepreneurship to their primary fields of study.

Technological Certificate

The first of its kind at any U.S. engineering college, the Technological Entrepreneurship Certificate gives engineering students specialized training on the entrepreneurial process. This program is a combination of advanced entrepreneurship and engineering courses specifically tailored for each engineering discipline.

Performing Arts Entrepreneurship Major

Performing arts students gain a competitive edge by earning an undergraduate degree in Performing Arts Entrepreneurship. Designed for students who intend to start their own business in dance, theatre arts, or music, this unique curriculum provides an avenue for developing core entrepreneurial skills.

MBA Concentration

The MBA Concentration in Entrepreneurship is designed for graduate students to study in an advanced, interdisciplinary environment, with applications from medicine, engineering, computer science, and business. A strong emphasis is placed on starting and growing technology-based ventures.

Experiential Learning

Student teams conduct field study projects for area early stage companies working with entrepreneurs in the biosciences, information technologies, and advanced manufacturing industries as well as faculty from the Colleges of Medicine and Engineering.

Entrepreneurship Club

Members of I-Envision, the campus wide entrepreneurship club, learn how to start and maintain businesses, work on community service projects, learn from successful entrepreneurs, and attend regional and national conferences. I-Envision is a member of the Collegiate Entrepreneurs Organization and Students in Free Enterprise.

Learning Community

Incoming first year students have the opportunity to live with like-minded students on the Leadership Community in Business and Entrepreneurship residence hall floor. This unique living and learning environment provides students with educational and social opportunities while introducing entrepreneurship as a field of study and career path.

Business Plan Competitions

In addition to national competitions, UI students compete for seed funding through the Volding Business Plan Competition, the Storer Engineering Start-up Award, and the statewide Pappajohn NewVenture Business Plan Competition.

Entrepreneur-in-Residence

Sponsored by Iowa State Bank & Trust Company, this program partners successful entrepreneurs with business-minded students and includes intensive one-on-one mentoring. In addition, JPEC faculty and staff regularly mentor and assist UI student entrepreneurs, as well as help access capital including the Wellmark Venture Capital Fund, area angel networks, and other sources of funding.

Consider Iowa Internship

UI students gain firsthand experience at a start-up company through this unique internship program where entrepreneurship students work as paid interns in emerging Iowa businesses. JPEC provides training to the intern and business consulting to the host company.

Technology Commercialization

Providing specialized entrepreneurial education and consulting services to UI faculty, staff, and students is a major component of JPEC's overall mission to foster the spirit of innovation and entrepreneurship in Iowa. These activities lead to the creation and expansion of sustainable business ventures, while offering entrepreneurship students exciting experiential learning opportunities.

Technology Commercialization and Faculty Entrepreneurship

JPEC leads programs involving education and business support for technology-based ventures. The Center sponsors several seminars and workshops on entrepreneurship, technology commercialization, and new venture financing. One-on-one consulting and mentoring is also provided to UI entrepreneurs pursuing the creation of a technology venture.

E-Teams

JPEC faculty directs interdisciplinary commercialization evaluation teams of graduate students, faculty, and outside mentors. These teams conduct comprehensive market studies of UI-based technologies and often work closely with faculty entrepreneurs on the development of business plans for the creation of new technology ventures.

Technology Innovation Center & Oakdale Research Park

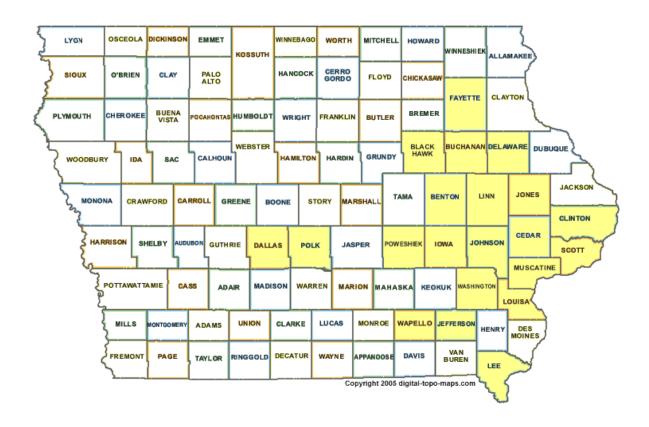
The Technology Innovation Center, the University's business incubator, fosters the development of new business ventures that make use of advanced technology. The Technology Innovation Center offers specialized facilities and services to emerging technology companies. The Oakdale Research Park provides established corporations with easy, sustained access to relevant research resources at The University of Iowa. Firms in the park can expect to establish and sustain working relationships with UI faculty scientists, physicians, and engineers. JPEC provides free consultation, training, and student interns for tenant companies. Many of the companies in the Technology Innovation Center, and some who have graduated from the Technology Innovation Center into the broader Oakdale Research Park were established around innovations licensed to them by the University.

The Technology Innovation Center (TIC) business incubator offers a nurturing environment for new business ventures using advanced technology, while the UI Oakdale Research Park (ORP) offers locations for growing technology companies to establish sustained relationships with the University.

• The 40 active Iowa companies affiliated with TIC and ORP reported 1,513 employees earning an average salary of nearly \$60,000 (the four UI anchor laboratories at Oakdale reported another 182 employees).

- The 1,695 employees of TIC/ORP affiliate companies and labs reported living in 21 counties and 65 cities and towns in Iowa, a regional labor shed covering approximately one-fifth of the State.
- Assuming a State income tax rate of 5%, employees of TIC/ORP affiliates paid approximately \$5.1 million in State income taxes in FY06.
- TIC/ORP affiliates reported employing 92 UI students, while 135 employees had earned doctoral degrees.
- In FY06 the TIC accepted two new tenant companies while four firms met their business goals upon "graduating" from the incubator. The ORP welcomed one new tenant, Innovative Software Engineering, Inc.

FY06 Labor Shed for Affiliated Companies and Labs UI Oakdale Research Park and Technology Innovation Center



Labor Shed Counties in Yellow

2. Please provide the following information for FY 2006:

-Number of disclosures of intellectual property	89
-Number of patent applications filed	
U.S. Applications	120
National Applications	28
Patent Cooperation Treaty (PCT) Applications	30
Total Applications	178
-Number of patents issued	56
-Number of license and option agreements executed on institutional intellectual property	43
-Number of license and option agreements yielding income	92
-Revenue to Iowa companies as a result of licensed technologies	\$890,000
-Royalties and license fee income	\$16.3 million
-Total sponsored funding	\$366.4 million (awards)
-Sponsored funding for research	\$269.6 million
-Corporate sponsored funding for research	\$31.9 million
and economic development (excludes corporate philanthropy)	
-Iowa special appropriations for economic development	
and technology transfer (not to include	
GIVF or Battelle appropriations) –	
Technology Innovation Center	\$43,701
Oakdale Research Park	\$92,961
Center for Advanced Drug Design	\$110,343

3. Please describe the ways in which your institution is engaged in the following activities (For example, What is the nature of the outreach and service activities? Which units provide it? What kinds of people and organizations benefit?)

- -Direct and hands-on technical assistance to businesses and entrepreneurs
- -Direct economic development assistance to Iowa communities
- -Economic development services provided by the research parks or similar service units

The University of Iowa Research Foundation

The UIRF works closely with UI faculty in developing the strategies required to commercialize inventions and intellectual property through the creation of new companies. This includes (i) Intellectual Property protection strategies and execution; (ii) commercialization strategies relating to licensing to existing or new companies; (iii) business model development for UI spinout companies (new companies based substantially on UI technologies); and (v) due diligence on the viability of UI spinout companies.

The John Pappajohn Entrepreneurial Center

Youth Outreach

JPEC believes that building entrepreneurial spirit in today's youth is a critical component for sustaining the country's long term economic health. By strengthening their ability to think

creatively and providing the tools for understanding the entrepreneurial process, youth are more inclined to consider business ownership as a career. Beginning in fall 2000 as part of JPEC's plan to support entrepreneurial engagement at all ages, JPEC embarked on a comprehensive teacher and youth entrepreneurship program, providing training, curriculum resources, and ongoing support.

Teacher Training

JPEC works directly with middle school and high school teachers by training them to incorporate entrepreneurship into their classrooms and providing them with ongoing support and curriculum resources throughout the school year. JPEC's two-day entrepreneurship seminar provides in-depth training on topics including opportunity recognition, innovation and creativity, market research and analysis, entrepreneurial finance, and business planning.

Designed to simulate an entrepreneurial-based classroom, the training provides educators with hands-on learning experiences enabling them to leave the training fully equipped to implement entrepreneurial education in their respective classrooms. Coupled with ongoing support from JPEC, participants stay abreast of additional training opportunities and are directly connected to the latest entrepreneurial resources.

Open to all teachers interested in or currently teaching entrepreneurial concepts, this program is being taught in various disciplines including careers, business, science, mathematics, marketing, family and consumer sciences, economics, and agriculture.

YouthBiz Online Curriculum

Teachers participating in the entrepreneurship training program have access to a customized, innovative, Internet-based entrepreneurship curriculum. In addition to downloading PowerPoint presentations, lesson plans, and activities on key entrepreneurial topics, teachers can access a searchable database of entrepreneurial best practices, post messages on an online discussion board, and enroll in online entrepreneurship courses for continued professional development.

Due in part to generous support from the William Zimmerman Foundation, JPEC is fortunate to work directly with a network of trained entrepreneurial educators that continually provide feedback and assist JPEC in the improvement and development of a new curriculum.

Summer Camps

Elementary and middle school students have the opportunity to participate in entrepreneurship camps held each summer.

With support from Hills Bank & Trust, Inc. and the Richard O. Jacobson Foundation, camp participants hear entrepreneurial start-up stories from successful entrepreneurs and learn the nuts and bolts of starting a business from UI entrepreneurship faculty.

In addition to networking with other young Iowans interested in starting businesses, camp participants spend the week developing business plans and designing marketing materials. Each day, students apply what they learn to their businesses. At the end of the

week, participants in the elementary camp present their business plans to their peers while participants in the middle school camp present to a panel of judges in hopes of earning seed capital to get their businesses started.

Outreach

JPEC is committed to providing entrepreneurial education, consulting services, and lectures to the community at large in order to contribute to the growth of existing and emerging businesses. Through the following programs, JPEC impacts the economic development of the region and the state of Iowa.

Conferences & Speaker Series

The John R. Hughes Lecture Series, sponsored by Hills Bank & Trust, Inc., the Sandage Entrepreneurial Speaker Series, sponsored by the Sandage Charitable Trust, and the Community Lectures, a component of the Entrepreneur-in-Residence program, sponsored by the Iowa State Bank & Trust Company, bring successful entrepreneurs to campus to share their experiences with UI students and community members. The Iowa Venture Capital and Entrepreneur Conference and Collegiate Entrepreneurs Iowa Conference provide seminars and networking opportunities for aspiring entrepreneurs, business owners, investors, and students.

Small Business Development Center

The Small Business Development Center (SBDC) at The University of Iowa offers one-stop assistance to current and prospective small business owners by providing high quality, one-on-one counseling that is tailored to the needs of individual clients. The SBDC conducts research, counsels, and trains business owners in management, financing, and operating small businesses, and provides comprehensive information services and access to experts in a variety of fields. Educational programs are offered on topics that include taxes, accounting systems, and business planning. It also offers a wide range of training seminars concerning business skills and issues, and assists small businesses in securing Small Business Administration backed loans.

Office of Corporate Partnerships

The Office of Corporate Partnerships links Iowa businesses to University of Iowa knowledge resources. It links Iowa companies to other units of the IOWA Centers for Enterprise, and assists companies in linking with technical resources, faculty expertise, student interns, graduating students as employees, and many other resources of the University. It serves as a single point of access for companies having inquiries and requests for assistance.

The Technology Innovation Center and Oakdale Research Park

The UI Oakdale Research Park (ORP) and the affiliated UI Technology Innovation Center (TIC) business incubator are physically located on the UI Oakdale Research Campus in Coralville. Corporate tenants on the Park typically require sustained relationships with UI in the form of access to specialized research facilities, research faculty consultation, opportunity for research collaboration, access to a pool of student interns and part-time employees, opportunity to do business in a research park environment, proximity to intellectual property

licensing opportunities, among others. Corporate tenants in the TIC incubator share many requirements of the larger and more established Park companies, but early-stage TIC firms seek cost-effective office and laboratory space and shared office services in an "incubator" environment. New technology ventures often require individual assistance with business planning, establishing UI research relationships, identifying professional service providers, introductions to local and state government agencies and the regional business community, help in identifying potential sources of investment and other funding, communications and others on a case-by-case basis. The Park and the TIC incubator are among the major programs by which UI encourages new "spin-offs" from its research and other new technology ventures in the State, and also by which new and growing technology ventures are recruited to the State.

The UI Park and TIC incubator are open to any business venture in or outside the State that has a technology focus and satisfies the applicable eligibility criteria or guidelines. There are no TIC restrictions on tenants when they "graduate" from the incubator; therefore those companies are free to locate wherever it is best for their business. Most but not all TIC graduates have chosen to locate in Cedar Rapids, Coralville, Iowa City or North Liberty, but others have established a presence in Davenport, Des Moines and Lowden. Because of its proximity to Interstates 80 and 380 and Highways 1, 6 and 965, companies and UI anchor laboratories at Oakdale reported a labor shed that covered 21 Iowa counties and 65 cities and towns in FY2006, representing more than one-fifth of the State.

4. Collaboration for economic development

Please briefly describe two or three examples of major economic development collaborative efforts with other entities such as Regent universities, Iowa community colleges, the Iowa Department of Economic Development, Iowa Workforce Development, other state agencies, other non-governmental organizations in the state.

The University of Iowa Research Foundation

UIRF and UI are closely engaged with the Iowa City Area Development (ICAD) Group. The number of UI participants on the ICAD Board was increased from two to three (Hay, Sharpe, York) recently in recognition of the fact that the UI is significantly engaged in economic development, and that the UI's efforts could have a major impact on the regional economy. The UI has worked with ICAD to add an entrepreneurial component to economic development. The UI will be essential to the planning and execution of that component, given our extensive efforts in new company formation and development through UIRF, JPEC, and the UI incubators and Research Park.

The John Pappajohn Entrepreneurial Center

JPEC collaborates with a wide range of partners in Iowa to impact the Iowa's economic development. Examples are below.

• Iowa Venture Capital and Entrepreneurship Conference - JPEC is a major sponsor and organizer of the Iowa Venture Capital and Entrepreneurship Conference. JPEC teams with the Iowa Department of Economic Development, other Pappajohn Centers around the state, and Equity Dynamics to put this annual conference together.

- FastTrac Entrepreneurial Training Program –JPEC has partnered with the Iowa Community College system and the University of Northern Iowa to deliver statewide the nationally acclaimed FastTrac® entrepreneurial training programs of the Ewing Marion Kauffman Foundation of Kansas City. The initiative prepares aspiring entrepreneurs to launch new ventures and existing companies to grow their businesses. Since the inception of the partnership in fall 1997, over 3,000 Iowans have completed the entrepreneurial training programs.
- Wellmark Venture Capital Fund JPEC is the regional administrator of the Wellmark Venture Capital Fund, a \$5 million fund created by Blue Cross and Blue Shield of Iowa to support the creation and growth of new businesses throughout the state. JPEC screens applicants, performs due diligence, evaluates business concepts, and assists applicants with their business plans. JPEC partners with area angel investors, equity fund managers, lenders, the Iowa Department of Economic Development, and the Small Business Administration to help business owners secure additional venture funding.
- **High School Teacher Training** JPEC partners with the Iowa Department of Education to offer teacher training to high school teachers around the state of Iowa. Introductory and advanced entrepreneurship training programs are offered.
- **Be Your Own Boss Entrepreneurship Summit** JPEC, the UI Office of Corporate Partnerships, UI I-Envision Student Organization, Community Vitality Center of Ames, and the Iowa Workplace Learning Connection jointly sponsor this one-day entrepreneurial conference open to all high school students in the state of Iowa. Participants network with like-minded peers, listen to leading entrepreneurs and learn what it is like to start and run your own business.
- **Iowa Western Community College Partnership** JPEC has designed a distance education program which will allow graduates of Iowa Western Community College (IWCC) to earn a Certificate in Entrepreneurial Studies as part of their degree programs from the UI. The partnership with IWCC will also allow JPEC to bring entrepreneurship education and business support to rural Iowa.
- Collegiate Entrepreneurs Iowa Conference A partnership among the Pappajohn centers around the state and the national Collegiate Entrepreneurs Organization to sponsor a day long entrepreneurial conference of networking, brainstorming, listening to speakers and education open to any college student in the state and region.
- John Pappajohn Business Plan Competitions JPEC partners with the other Pappajohn centers around the state to offer statewide business plan competitions for college students as well as residents of Iowa.
- Okoboji Entrepreneurial Institute JPEC partners with the Iowa Board of Regents, other Pappajohn centers around the state, Iowa Department of Economic Development, and the Iowa Lakes Corridor Development Corporation to offer the Okoboji Entrepreneurial Institute, a week-long immersion in entrepreneurship, designed to instill the entrepreneurial mindset in the state of Iowa's undergraduate students.
- Western Iowa Tech Community College A new agreement between The University of Iowa and Western Iowa Tech Community College (WITCC) will allow WITCC students to more easily continue their studies at the UI, in some cases

without leaving Sioux City. In addition, it will also help northwest Iowa more easily access the business and economic development resources of the UI.

• Committee/Organization Involvement

Iowa Business Council Capital Formation Hot Team

Iowa First Capital Fund Board

Planning Committee for the Iowa Venture Capital Conference

United States Association for Small Business and Entrepreneurship

National Consortium of Entrepreneurship Centers

Collegiate Entrepreneurs Organization

National Collegiate Inventors and Innovators Alliance

Students in Free Enterprise

Department of Education Entrepreneurship Program Management Committee

Planning Committee for the Collegiate Entrepreneurs' Iowa Conference

Iowa City Area Chamber of Commerce Economic Development Committee

The Institute of Business Appraisers

American Institute of Certified Public Accountants

Institute of Management Accountants

Professional Developers of Iowa

Association of Small Business Development Centers

Academy of Management

Small Business Educational & Entrepreneurial Development Task Force

Iowa Prolog Advisory Board

Iowa Association of Business and Industry

Iowa Business Educators Association

Department of Education Business Program Management Committee

Department of Education Alternative Schools and Programs

Iowa DECA

Neighborhood Center of Johnson County

Workplace Learning Connection

Community Vitality Center

Office of Corporate Partnerships

The Office of Corporate Partnerships collaborates with a wide range of organizations and entities. Some highlights of OCP collaboration include the following:

- **Iowa Biotechnology Association** The director serves as a designate member (for VP Meredith Hay) on the IBA Board of Directors. The OCP also assisted in coordinating displace and UI participation in the IBA Legislative Reception and cosponsored the September IBA conference, "Meeting the Biotechnology Challenge in Iowa: To Be or Not To Be."
- **Iowa Careers Consortium** The director serves on the ICC advisory board. The ICC is a public-private organization that markets career and life style opportunities in the State of Iowa.
- **Iowa Rural Development Council Steering Committee** The director serves on the IRDC Steering Committee, which meets monthly and conducts quarterly forums

- across the state. The committee is made up of federal and state agencies, including the Regent Universities.
- **ISU Economic Rural Development Conference** Attended Iowa State's annual economic development conference.
- 2006 Iowa State Fair Developed concept and oversaw production of display for Iowa State Fair Exhibit, "Celebrating Innovation & Entrepreneurship." Exhibit showcased student entrepreneurs, UI research innovators and marketed IOWA Centers for Enterprise services.

Broad Efforts

- Business Recruitment During FY06 the UI engaged in the active recruitment of
 new businesses to Iowa. UI participants included senior administrators, faculty and
 scientific research staff and professional staff of economic development/technology
 transfer units. Recruitment of out-of-state and international companies were
 collaborative efforts with the Iowa Department of Economic Development, Iowa City
 Area Development Group and Priority One (Cedar Rapids) development
 professionals.
- State Biotechnology Marketing Initiatives For more than a decade UI has been a partner with the Iowa Department of Economic Development and ISU in a major, sustained, strategic State presence at the annual international convention of the Biotechnology Industry Organization. In recent years they have been joined by UNI, regional economic development professionals and the Iowa Biotechnology Association to give Iowa an even stronger marketing presence at the world's leading biotech industry conference. Over the years, UI has been represented by the Office of Corporate Partnerships, Oakdale Research Park, Center for Biocatalysis and Bioprocessing, Division of Pharmaceutical Service and College of Pharmacy. UI spin off companies including Integrated DNA Technologies and EnzyMed have also participated. UI annually participates in the State marketing initiative at BIO. The State's considerable investment in sustaining its BIO presence since the early 1990s gives Iowa international visibility in the biotechnology industry.
- 5. Data on collaboration for economic development Please provide the following figures for FY 2006 for services provided, projects developed or other economic development and technology transfer interactions:
- -Type and number of interactions
- -Name of company, community or entity served
- -City and county where the project or interaction took place
- -University unit that has interacted with or provided assistance to the entity served

The John Pappajohn Entrepreneurial Center

Ac	ademic Program	
•	Enrollment	
	-Summer 2005: 12 Classes/Sections, 96 Undergraduates, 111 Gradu	ate Students
	-Fall 2005: 23 Classes/Sections, 972 Undergraduates, 51 Gradu	ate Students
	-Spring 2006: 28 Classes/Sections, 1156 Undergraduates, 35 Grad	luate Students
•	I-Envision Student Organization	
	-Members	130
	-National / Regional Conferences Attended	4
•	Business & Entrepreneurship Learning Community	
	-Members	50
	-Service Learning Projects Completed	11
	-Community Members Impacted by Service Learning	400
Cl	ient Consulting Services	
•	Wellmark Venture Capital Fund	
	-9 applications processed	
	-5 companies funded including one company based in the BELL and of	one at Oakdale
	-6 applications in process	
•	Bedell Entrepreneurship Learning Laboratory	
	-Number of Student Teams	26
	-Total Students Impacted since May 2004	64
Co	onsulting Projects	
•	Number of Projects	27
•	Industries include: biotech, manufacturing, medical,	
	information technology, ag services, publishing, retail	
Fa	stTrac Entrepreneurial Training Program	
	• Statewide:	
	-Classes	16
	-Total participants	324
	• Iowa City Area Class:	
	-Classes	2
	-Total participants	76
Yo	outh Programs	
	• Summer Camps	
	-Youth Entrepreneur Camp (3 rd -5 th Grade)	49
	-Jacobson Middle School Camp in Iowa City (6 th -8 th Grade)	27
	-Jacobson Middle School Camp in Des Moines (6 th -8 th Grade)	26
	High School Teacher Training	
	-Teachers	71
	-Locations across Iowa	4
	(Des Moines, Mason City, Davenport, Ottumwa)	

• UI Entrepreneurship Day -High School Students

86

• High School Business Plan Competition

-Schools participating

20

Programs, Seminars and Workshops

Date	Title	Attendees
5/31/2006	Tax Workshop	7
5/27/2006	Entrepreneurship Curriculum Development Meeting	10
5/24/2006	Tax Workshop	4
5/17/2006	Tax Workshop	4
5/11/2006	EVG / Dr. Charles Link	36
5/10/2006	Tax Workshop	5
5/05/2006	Certificate Graduate Reception	35
4/28/2006	2 nd Annual Hensley Golf Invitational	140
4/21/2006	Entrepreneur-in-Residence / Merle Volding	18
4/20/2006	Hughes Lecture Serious / John Pappajohn & BJ Do	340
4/18/2006	I-Envision Presents Tom Martin	60
4/18/2006	"Be Your Own Boss" – Entrepreneurship Day	60
4/15/2006	Entrepreneurship Curriculum Development Meeting	10
4/13/2006	Franchise Business Ownership Workshop	11
4/04/2006	I-Envision Presents Joni & Sam Schrup	110
3/23/2006	Entrepreneur-in-Residence / Keith Chiavetta	9
0,20,200	Program brings successful entrepreneurs to campus for a day of one-	
	on-one mentoring with UI students.	
3/03/2006	Collegiate Entrepreneurs Iowa Conference – UI Attendees	127
	Students living on the Leadership Community in Business and	
	Entrepreneurship floor meet one-on-one with a faculty member from	
	each business department.	
2/13/2006	College Brown Bag Luncheon – MIS with Yvonne Galusha	5
2/08/2006	College Brown Bag Luncheon – Entrepreneurship with David	6
	Hensley	
1/24/2006	College Brown Bag Luncheon – Marketing with Dave Collins	2
1/19/2006	Entrepreneurial Ventures Group / Stahlberg, Boge & Zimmerman	40
	The Entrepreneurial Ventures Group (EVG) is an initiative to	
	promote faculty entrepreneurship and technology commercialization	
	at the UI.	
11/18/2005	Sandage Speaker Series / Student Entrepreneurs	80
11/14/2005	Franchise Workshop	9
11/10/2005	EVG / Kris Johansen	35
10/25/2005	Iowa State Bank & Trust / JPEC Community Lecture / Robert	327
	Dederick	
10/24/2005	Payroll & Employment Taxes Workshop	4
10/17/2005	Reporting Sole Proprietor Income Workshop	3
10/14/2005	Entrepreneur-in-Residence / Merle Volding	6
10/10/2005	Business Expenses & Deductions Workshop	11
10/07/2005	Entrepreneur-in-Residence / Robert Reed	6
10/03/2005	Sales, Use & Local Option Tax Workshop	6
9/20/2005	FastTrac Entrepreneurial Training Program (7 week course)	29
9/16/2005	Entrepreneur-in-Residence / John Buchanan	6
9/15/2005	Iowa Venture Capital Conference (IVCC) – UI Attendance	84

7/19/2005	Iowa Sales Tax Workshop	40
7/01/2005	Smart Start	9
	TOTAL	1,694

Small Business Development Center

SBDC's are required by contract to keep their client list confidential. Summary data is below:

•	Total Clients Served	260
•	Startups Served	192
•	Hours dedicated to clients	2,434
•	Client loans (since 10/1/05)	\$6.99 million
•	Estimated jobs created by SBDC clients	424

The SBDC served clients in 51 communities located in 22 Iowa counties, as summarized below.

Number		
of Clients	City	County
1	Ainsworth	Washington
1	Amana	Linn
1	Ames	Story
1	Anamosa	Jones
1	Atalissa	Cedar
1	Brooklyn	Poweshiek
1	Burlington	Des Moines
14	Cedar Rapids	Linn
2	Clinton	Clinton
	Columbus	
1	Junction	Louisa
34	Coralville	Johnson
1	Davenport	Scott
1	Deep River	Poweshiek
1	Donahue	Scott
1	Dubuque	Dubuque
1	Fairfax	Johnson
3	Fairfield	Jefferson
1	Fredericksburg	Chickasaw
1	Grinnell	Poweshiek
1	Guernsey	Louisa
1	Hills	Johnson
110	Iowa City	Johnson
3	Kalona	Washington
1	Lone Tree	Johnson
1	Lowden	Cedar
3	Marion	Linn
1	Mason City	Cerro Gordo
1	Mechanicsville	Cedar

2	Mt. Pleasant	Henry
3	Muscatine	Muscatine
1	Naperville	(Undefined)
17	North Liberty	Johnson
2	Oxford	Johnson
1	Parnell	Iowa
1	Riverside	Johnson
3	Solon	Johnson
1	South English	Keokuk
5	Tiffin	Johnson
2	Tipton	Cedar
1	Victor	Iowa
3	W Des Moines	Polk
1	Walker	Buchanan
1	Wapello	Louisa
5	Washington	Washington
1	Waterloo	Butler
2	Wellman	Washington
3	West Branch	Cedar
1	West Chester	Washington
6	West Liberty	Cedar
5	Williamsburg	Iowa

Office of Corporate Partnerships

The Office of Corporate Partnerships completed 28 visits to Iowa companies, providing information about University of Iowa resources that may be helpful to the company. These included:

- **Biotechnology Companies**: Percival Scientific, CIVCO Medical, BioResearch Products, Cryotech, Kemin Industries, Struve Labs, Pioneer Hi-Bred, Combisep, New Link Genetics, Earthview Environmental, Gelita (Kind and Knox Gelatin), Hematech, Trans Ova Genetics, Integrated DNA Technologies, MedTech, and Embria Health Care
- Advanced Manufacturing Companies: Centro, Modine Manufacturing, Musco Lighting, Samson Industries, Gomaco, Paragon Manufacturing, and Alliant Energy.
- **Information Solutions Companies**: Vernon Research, Darning Pixel, Pohaku, Qwest, and Butler Consulting.

In addition, the Office of Corporate Partnerships arranged for visits to the UI campus:

- Tripletail Ventures (Cedar Rapids business) with faculty and staff from the College of Medicine, Director of UIHC Hospital Information Systems and John Pappajohn Entrepreneurial Center.
- Hays Water Science & SWIM (Safe Water International Ministries); Washington, Iowa's Economic Development director met with faculty from our College of Engineering, Hygienic Lab and staff from our Small Business Development Center.
- iPrism Met with OCP Director and Associate VP for Research (Referred to UI by Senator Dvorsky)

- CIVCO Medical Met with Chair of Radiation Oncology Department. Purchase agreement in place and reviewing research agreement.
- Embria Health Care/Diamond V Mills Met with Clinical Trials Office Director, Office of Business Development, Carver College of Medicine and Office of Corporate Partnerships.
- Obiter Research, LLC Facilitated a visit with the UI's Library Director, Chemistry Library Director; Chair of the Chemistry Department and facility to showcase UI resources. Obiter is considering moving its company from the University of Illinois to Oakdale Research Park. Coordinated visit with ORP, IDED and Iowa City Area Development group. Also arranged visits with staff from Center for Biocatalysis & Bioprocessing and Division of Pharm Services.

The Office of Corporate Partnerships identified technical needs of several Iowa companies and worked with units of the University to address those needs. Those companies included Hays Water Science, Tripletail Ventures, Pella Corporation, ACT, iPirsm and Embria Health Care. In addition, the OCP worked with the Iowa Department of Economic Development's International Department, providing contact information for approximately ten companies interested in research collaborations with the Carver College of Medicine and the pharmaceutical capabilities of the University's Center for Biocatalyisis and Bioprocessing, Division of Pharmaceutical Services, and Center for Advanced Drug Development.

Technology Innovation Center/Oakdale Research Park

Clients served by the Technology Innovation Center and Oakdale Research Park are summarized on the following pages.

l		l County where oject is in Place	University Unit that interacted with business or other entity	Activity
	City	County		
				BUSINESS INCUBATOR TENANTS
AISST, Inc.	Coralville	Johnson	Technology Innovation Center	
Vertex Pharmaceuticals	Coralville	Johnson	Technology Innovation Center	
Digital Artefacts, LLC	Coralville	Johnson	Technology Innovation Center	
Applied Fullerene	Coralville	Johnson	Technology Innovation Center	
Pharmacom Corporation	Coralville	Johnson	Technology Innovation Center	
Innomatix, LLC Ramaanchar Technologies,	Coralville	Johnson	Technology Innovation Center	
Inc.	Coralville	Johnson	Technology Innovation Center	
IAgen, LLC	Coralville	Johnson	Technology Innovation Center	
K2 Technologies	Coralville	Johnson	Technology Innovation Center	
Corridor Business Journal	Coralville	Johnson	Technology Innovation Center	
VIDA Diagonostics	Coralville	Johnson	Technology Innovation Center	
Componica, LLC	Coralville	Johnson	Technology Innovation Center	
Cellular Engineering Tech.	Coralville	Johnson	Technology Innovation Center	
Actual Safety, INC.	Coralville	Johnson	Technology Innovation Center	
Selim Laboratories, Inc. Innovative Software	Coralville	Johnson	Technology Innovation Center	
Engineer.	Coralville	Johnson	Technology Innovation Center	
				RESEARCH PARK TENANTS
Innovative Software			Oakdale Research Park/TIC	
Engineering	Coralville	Johnson	Graduate	
LMS CADSI	Coralville	Johnson	Oakdale Research Park/TIC	

I	l		Graduate	I I
			Oakdale Research Park/TIC	
Breakthrough to Literacy, Inc.	Coralville	Johnson	Graduate Graduate	
Stanley Environmental, Inc.	Coralville	Johnson	Oakdale Research Park	
Pearson Government	Coluivine	Johnson	Oukdare Research Lark	
Solutions	Coralville	Johnson	Oakdale Research Park	
Integrated DNA			Oakdale Research Park/TIC	
Technologies, Inc.	Coralville	Johnson	Graduate	
Pearson Educational	Coralville/Iowa			
Measurement	City	Johnson	Oakdale Research Park	
				OTHER BUSINESS
				INCUBATOR GRADUATES
				ACTIVE IN IOWA
Garvin Consulting Services	North Liberty	Johnson	Technology Innovation Center	
	Lowden, North			
Ecolotree, Inc.	Liberty	Cedar, Johnson	Technology Innovation Center	
Accredo Therapeutics	Iowa City	Johnson	Technology Innovation Center	
Corcoran Communications,				
Inc.	Iowa City	Johnson	Technology Innovation Center	
Buckle Down Publishing, Inc.	Iowa City	Johnson	Technology Innovation Center	
Bio-Research Products, Inc.	North Liberty	Johnson	Technology Innovation Center	
aJile Systems, Inc.	Cedar Rapids	Linn	Technology Innovation Center	
CompuTerra, Inc.	Coralville	Johnson	Technology Innovation Center	
Entrepreneurial Learning				
Systems	Iowa City	Johnson	Technology Innovation Center	
Caviforce Technologies, Inc.	Des Moines	Polk	Technology Innovation Center	
Sebesta Blomberg & Assoc.,				
Inc.	Coralville	Johnson	Technology Innovation Center	
HomeSafe	Coralville	Johnson	Technology Innovation Center	
Integrated DNA	Complyille	Johnson	Oakdale Research Park/TIC	
Technologies, Inc.	Coralville	Johnson	Graduate	

The Patient Education Institute	Coralville/Iowa City	Johnson	Oakdale Research Park/TIC Graduate	
Deline I am Institut	Coralville/North	T-1	Oakdale Research Park/TIC	
Police Law Institute	Liberty	Johnson	Graduate	
AudioNet International, LLC	Coralville	Johnson	Technology Innovation Center	
Market Technology Systems Resource Development	Coralville	Johnson	Technology Innovation Center	
Associates	Coralville	Johnson	Technology Innovation Center	
				DEVELOPERS
Myriad Developers, Inc.	Cedar Rapids	Linn	Oakdale Research Park	
TMD, L.L.C.	Solon	Johnson	Oakdale Research Park	
Midwest Development &				
Invest.Corp.	Fairfield	Jefferson	Oakdale Research Park	
Liberty Growth	Iowa City	Johnson	Oakdale Research Park	
Hunter Companies	Cedar Rapids	Linn	Oakdale Research Park	
S & S Developers	Iowa City	Johnson	Oakdale Research Park	
Gary Bishop Construction	Iowa City	Johnson	Oakdale Research Park	
Build to Suit Construction	Davenport	Scott	Oakdale Research Park	
Andersen Construction	North Liberty	Johnson	Oakdale Research Park	
				PROSPECTIVE TENANTS
	Champaign-Urbana	Illinois	Oakdale Research Park	
Dermacia/NGI	Newport Beach	California	Oakdale Research Park	
Higher Ed. Services Firm	NA	NA	Oakdale Research Park	
Pharmaceutical Services Firm	NA	NA	Oakdale Research Park	
Human Therapeutics Firm	NA	Germany	Oakdale Research Park	
Human Therapeutics Firm	NA	California	Oakdale Research Park	
Proteomics Firm	NA	Europe	Oakdale Research Park	
Biopharmaceutical Firm Pharmaceutical Services	NA	Missouri	Oakdale Research Park	
R&D	NA	Ireland	Oakdale Research Park	

Global CRO	NA	Ireland	Oakdale Research Park	
Medical Device Startup	NA	NA	Technology Innovation Center	
Medical Imaging Startup	Iowa City	Johnson	Technology Innovation Center	
Service to Nonprofits	Iowa City	Johnson	Technology Innovation Center	
Assistive Patient Devices	Iowa City	Johnson	Technology Innovation Center	
Software for Agi-Business	Coralville	Johnson	Technology Innovation Center	
Pharmaceutical Development	Charlottesville	Virginia	Technology Innovation Center	
Educational Services	Iowa City	Johnson	Technology Innovation Center	
Magnetic Sensing Devices	Iowa City	Johnson	Technology Innovation Center	
Advanced Manufac. Startup	Cedar Rapids	Linn	Technology Innovation Center	
Advanced Design Startup	Iowa City	Johnson	Technology Innovation Center	
Advanced Air Navigation				
Firm	Iowa City	Johnson	Technology Innovation Center	
Pharma/Nutrition Firm	Indena	Italy	Technology Innovation Center	
Medical Imaging Startup	Boston	Massachusetts	Technology Innovation Center	
Web Design/System Services	NA	Iowa	Technology Innovation Center	
Biodiesel R & D and				
Production	Kalona	Iowa	Technology Innovation Center	
Advanced Water Purification	Washington	Iowa	Technology Innovation Center	
Non-Invasive Sensor				
DevelopmentIowa City		Johnson	Technology Innovation Center	
Advanced Software				
Development	Palo Alto	California	Technology Innovation Center	

SECTION II. GROW IOWA VALUES FUNDS PROJECTS

Please provide the following information about GIVF projects for FY 2006.

- -Identify and briefly describe each project or initiative which received GIVF funding in FY 2006 including information on outcomes and progress made
- -Identify the metrics which were used to measure outcomes for each project and report progress on each metric for FY 2006
- -Provide a description of the sources of matching institutional dollars for each GIVF-funded project

Using The University of Iowa allocation of Grow Iowa Values Funds, the Office of the Vice President for Research established and implemented a program that incorporates two distinct and interdependent phases:

- I-START (first phase of investment) is targeted toward immediate or short term needs designed to directly facilitate university-private sector partnerships in entrepreneurship and the creation of new companies and jobs in Iowa.
- I-GROW(second phase) is designed to address the middle to long term commitments needed to strengthen the University's capacity to promote and sustain high tech entrepreneurship in the region and build new networks of technical-financial-business capabilities that will stimulate and sustain the growth of new companies and industries that provide high paying jobs for the citizens of Iowa.

A summary of the I-START and I-GROW initiatives is below.

SUMMARY of I-START

I-START activities included the following:

- Renovation of the Myriad Building at 2660 Crosspark in the Oakdale Research Park
- Gap funding for commercialization of faculty innovations
- Office of Corporate Partnerships to support outreach activities
- John Pappajohn Entrepreneurial Center to hire Faculty Entrepreneurship Coordinator and Graduate Assistants
- Technology Innovation Center/Oakdale Research Park to support strategic plans and renovation of high profile conference room used by Innovation Center companies
- Bio::Neos start-up company support
- Center for Biocatalysis and Bioprocessing cGMP facility

Each is discussed below.

Optherion - Construct Incubator Lab Space

GIVF Funds: \$1 million; match \$1 million forthcoming from Oakdale Research Park Corporation and Vice President Enrichment fund.

FY06 Grow Iowa Values Fund funds are used to renovate a University-owned laboratory building (The Myriad Building—2660 Crosspark) on the Oakdale Research Park. This extensive renovation will be completed in early FY07 (November 2006) when the new corporate spin-off company and an affiliated academic research team will co-occupy the building. The use of GIVF funds has allowed the University to retain a highly productive faculty member from the Carver College of Medicine and establish a spin-out company in Iowa. The company, Optherion, is developing an innovation in an area of highly unmet needs in a \$1B+ market: agerelated macular degeneration (AMD). Optherion has hired a Chief Executive Officer, Mr. Colin Foster, former president of Bayer North America. Outcomes, and anticipated outcomes, include:

- Approximately 10 20 corporate employees will be hired in the first two years
- Salaries of corporate employees on the Oakdale Research Park average nearly \$60,000
- Employees on the Oakdale Research Park are drawn from a 21-county area in Iowa
- The startup company will be founded on core technology licensed from the University of Iowa Research Foundation
- The startup company will attract significant private investment capital
- The startup company anticipates hiring graduates of Iowa colleges and universities

Iowa Centers for Enterprise Gap Funding for Innovations with Commercial Potential

GIVF Funds: \$145,686; match \$145,686 from University of Iowa Research Foundation funds.

In May, using GIVF funds, six faculty members were awarded seed funding designed to expand the commercialization of UI technology. This funding is essential to move their nascent technology down the developmental pipeline to render it a more attractive investment. In each instance the faculty innovators have an identified corporate collaborator or are working to establish a spin-out company around the innovation.

- Michael Abramoff, associate professor of Ophthalmology & Visual Sciences, in collaboration with iOptics LLC, to develop a low-cost retinal camera that can be used by family eyecare clinics.
- Mark Arnold and Gary Small, professors in the Department of Chemistry, in
 collaboration with ASL Analytic, Inc., to make a portable prototype of an infrared
 spectrometer for the easy measurement of glucose in the treatment of diabetes. This
 device would scan a section of tissue for glucose, eliminating the need to draw a blood
 sample for analysis.

- Raymond Hohl, professor in the Department of Internal Medicine, and David Wiemer, professor in the Department of Chemistry, for drug development to treat some forms of cancer in collaboration with Terpenoid Therapeutics, Inc.
- Gregory Leno and John Engelhardt, professors in the Department of Anatomy and Cell Biology, to develop cell therapy techniques that could be used to treat Alzheimer's Disease, Parkinson's Disease and other diseases. A startup company, RepGenix, LLC, is being formed around their discoveries, in collaboration with other Iowa resources and companies.
- Michael Welsh, Beverly Davidson and Joseph Zabner, professors in the Department of Internal Medicine, and Paul McCray, professor in the Department of Pediatrics, to develop new models to study cystic fibrosis, cardiovascular disease, neurological diseases and cancer in humans. A startup company is being formed around their discoveries.
- Markus Wohlgenannt, assistant professor of Physics and Astronomy and members of the UI's Optical Science and Technology Center, to make a touch screen device similar to those used in tablet computers or personal digital assistants using new technology with the potential for low cost, ultra-thin and flexible display, in collaboration with OMR Sensors, Inc.

Office of Corporate Partnerships

GIVF Funds: \$141,230; match \$141,230 from University of Iowa Research Enrichment Fund.

Grow Iowa Values Funds were used to support the efforts of the Office of Corporate Partnerships in outreach (corporate visits, marketing). They were also used for the OCP's support in the IOWA Centers for Enterprise efforts to optimize the flow of University intellectual property into opportunities for licensing, commercialization and company formation. The funds were used for salary support, marketing costs, and corporate visits.

Metric: Collaborations with Iowa-based Industry Corporate Outreach

The Office of Corporate Partnerships (OCP) strategically markets its services by engaging in a program of visits to Iowa companies in the state's targeted industry clusters of biotechnology, advanced manufacturing and information solutions. The goal is to match business needs to UI resources relating to new or existing research collaborations, new product development, product enhancement and workforce development issues. From July 1, 2005 through June 30, 2006, OCP undertook on-site visits to twenty-eight (28) Iowa companies.

Board Service

- Iowa Biotechnology Association
- Iowa Careers Consortium
- Iowa Rural Development Council Steering Committee

Regents Technology Transfer Road show

The University of Iowa, Iowa State University and the University of Northern Iowa held the first Regents Technology Transfer Road Show "Innovation Iowa," on February 15, 2006 in Des Moines, Iowa. Each university showcased centers of excellence and emerging technologies to business and community leaders in Des Moines, Ames and surrounding counties.

2005 Iowa State Fair Exhibit

Exhibited at the Iowa State Fair and showcased community and business outreach and workforce development programs.

Metric: Identify research and technical assistance needs of existing Iowa business Campus Visits

The Office of Corporate Partnerships facilitated meetings on campus for five Iowa companies. The nature of these visits was to identify UI researchers and/or staff who could assist the company with either technical assistance or assistance in identifying methods to improve their business processes.

Metric: Surveying similar activities in other states and at other universities Alliance of Business Development Professionals at Twenty Major Midwest Research Universities

During FY 2006, the Office of Corporate Partnerships joined the Midwest Regional University Network and University Economic Development Association to share best practices in technology transfer and commercialization.

Metric: Establishing a single-point of contact to facilitate commercialization of research Establishment of IOWA Centers for Enterprise

The Office of Corporate Partnerships was instrumental in creating a new initiative called IOWA Centers for Enterprise, Business & Commercialization Services. Through the Centers, the UI will give businesses, communities and individuals one point of contact for all economic development and technology transfer programs offered by the UI. IOWA Centers for Enterprise offer a comprehensive program that promotes economic development and technology transfer, provides assistance to Iowa startups and existing Iowa businesses and communities, and helps the state of Iowa develop a creative entrepreneurial workforce.

Metric: Coordinating activities to facilitate a focus on research in the State's targeted industry clusters

Highlighting Emerging Careers to Iowa High School Students

The Office of Corporate Partnerships (OCP) sponsored a one-day program for Kirkwood Community College Workplace Learning Connection students from area high schools to visit with emerging Iowa companies in the State's targeted industry clusters and UI Centers of excellence.

The John Pappajohn Entrepreneurial Center (JPEC)

GIVF Funds: \$131,375, match \$131,375 from University of Iowa Research Enrichment Fund and the Tippie College of Business Foundation account.

Grow Iowa Values Funds were used to assist JPEC in hiring a Faculty Entrepreneurship Coordinator (Jonathan Gilbert) and support graduate assistants. Mr. Gilbert serves as a resource to faculty and staff interested in commercializing University innovations. He also functions as an important entrepreneurial outreach resource for JPEC, the IOWA Centers for Enterprise, and the University. Previously, he served as CEO of USA Telephone, Inc., a competitive local exchange carrier serving more than 50,000 residential and business consumers from Maine to Virginia. He joined JPEC in March, 2006, so fiscal year activity represents 4 months of functional service.

Consultation

- Faculty. Consultation requests for the 2005-2006 included 30+ projects across 5 Colleges (Medicine, Engineering, Pharmacy, Liberal Arts, and Dentistry) and 12 Departments totaling approximately 200 hours.
- Office of the Vice President of Research (OVPR) & IOWA Centers for Enterprise (ICE). Input into candidate assessment, organizational planning, commercialization funding, and project management provided on an as requested basis.
 - -Associate Vice President Search Committee. Fiscal year activity totaled 10 hours.
 - -ICE Strategic Planning & Development. Fiscal year activity totaled 10 hours.
 - -ICE Seed Fund Review & Selection Committee. Fiscal year activity totaled 20 hours.
 - -Fund Recipient Project Management. Fiscal year activity totaled 5 hours.
- University of Iowa Research Foundation. Guidance provided for the development of an integrated commercialization process and alignment of organization structure. Fiscal year activity totaled 20 hours.
- **Deans & DEOs.** Individual meetings conducted with Dean Butler of the College of Engineering and Dr. Michael Kienzle of the College of Medicine. Fiscal year activity totaled 10 hours.
- Other. Acute consultation provided to students on business planning and career development as well as local community members seeking short term consultation on non-academic business interests.
 - -Students. Fiscal year activity totaled 20 hours.
 - -External Referrals. Fiscal year activity totaled 5 hours.

Curriculum Development and Execution

• Academic Entrepreneurship Workshops. Hands on business planning workshops created for faculty, graduate students, and research staff. Fiscal year activity totaled 120 hours.

Event Development and Execution

• Entrepreneurial Ventures Group (EVG) Speaker Series. Speaker on topic of commercialization booked and presented to faculty, graduate students, research staff, investors and community leaders in April. Fiscal year activity totaled 10 hours.

Resource Development

• ICE Commercialization Reference Materials. Fiscal year activity totaled 30 hours.

Other

- **JPEC administrative.** Fiscal year activity totaled 20 hours.
- **JPEC meetings.** Fiscal year activity totaled 15 hours.
- **JPEC support.** Fiscal year activity totaled 10 hours.
- **Guest Lecturing.** Fiscal year activity totaled 3 hours.
- **Substitute Teaching.** Fiscal year activity totaled 3 hours.

Technology Innovation Center and Oakdale Research Park

GIVF Funds: \$90,151, match \$90,151 from the University of Iowa Research Enrichment Fund and the City of Coralville.

The Grow Iowa Values Funds were used by the Technology Innovation Center and Oakdale Research Park to engage a nationally recognized consultant to assist in planning for the invigoration of the Innovation Center and Research Park, and to renovate the Innovation Center conference/presentation/board rooms for the benefit of the tenant companies.

Consulting Services for Incubator and Research Park Capacity

The firm George Vernon George Partners, a nationally recognized research park and technology incubator consulting firm, was retained to assist us in planning for the future of the Oakdale Research Park and Technology Innovation Center. The project provided necessary professional evaluation, review and recommendations for the future success of the business incubator and research park. The consulting process and report were instrumental in helping the University frame its needs for facilities, capacities, oversight, management, staffing and programs. As a result of this investment:

- The consultant's final report was submitted in May 2006
- Experienced new senior management for the park and incubator was appointed in June 2006
- A University task force relied on the consultant's report in working toward a new vision for future development on the park and Oakdale Campus
- The consultant's report guided University planning for a new incubator facility to grow more technology startup companies in Iowa

Upgrade Business Incubator Conference/Presentation/Board Rooms

Using GIVF funds, we significantly upgraded two conference rooms in the Technology Innovation Center building, which serve business incubator and Oakdale Research Park companies and incubator and park staff. A significant portion of the matching funds (\$43,500) was provided by the City of Coralville, which is a strong partner with the University in supporting the incubator, park and their tenant companies. The project was substantially completed in July 06 and the rooms are available for use.

- Anecdotal feedback from early use of the upgrade rooms is extremely favorable. This feedback will be tracked and reported. These corporate-style meeting rooms offer the capabilities and amenities that the incubator has lacked since it was established in 1984.
- Numbers of meetings and significant events will be tracked and reported.

Bio::Neos Start-up Company Support

GIVF Funds: \$25,000, match \$25,000, Bio::Neos supplying match from outside bank.

Grow Iowa Values Funds were used to support the start-up of Bio::Neos. This company was established to provide the resources for commercializing University ideas and prototypes and making them available to a larger scientific community. The first release of Bio::POD was completed on time and is in use by scientific collaborators at the University of Iowa. Several research groups throughout the country have tried the software and are considering its purchase. Work on the second release of Bio::POD and the first release of Bio::WebLab has begun on schedule. Creation of custom software for Dr. Edwin Stone's medical research facility is ahead of schedule, with phase 2 already near completion and phase 3 plans in progress. Bio::Neos has established a relationship with an employee of Integrated DNA Technologies (IDT) but has not yet established a collaboration with them as outlined in the original goals.

The following outcomes, related to metrics, are reported:

- Job creation: Two full time programming positions have been held for the company and one more full time programming position is planned for December '06 or January '07. In addition, Bio::Neos hosted an intern from France for two months during the summer, giving her valuable experience in a biotechnology company in Iowa.
- Earnings and wealth creation: the sales cycle has proven to take longer than originally anticipated. However, sales are expected soon in addition to the revenue already generated from 2 custom software contracts.
- Collaborations: A collaboration has been established with Dr. Edwin Stone at the University of Iowa. A collaboration has not yet been established with IDT, however, a new collaboration was made with the University of Northern Iowa.
- Copyright software: The Bio::POD software solution is now for sale which is copyrighted by Bio::Neos, Inc.
- Licensing software: Similar to what was described above, Bio::POD sales have not yet been made but are expected in the near future.

Center for Biocatalysis and Bioprocessing cGMP Facility

GIVF Funds: \$231,599; match \$231,599 from CBB revenues and grant funds.

Grow Iowa Values Funds, coupled with GIVF funds from FY05, were used to complete the renovation of facilities of the Center for Biocatalyis and Bioprocessing (CBB), transforming it into a facility that meets U.S. Food and Drug Administration current Good Manufacturing Practices (cGMP) standards. (Products used in human clinical trials must meet cGMP standards.) The CBB, in an integrated effort with the University's Division of Pharmaceutical Services and its Center for Advanced Drug Design, now serves a central role in the University's strategic initiative to attract (and retain) small- to medium-sized pharmaceutical and biotechnology companies to Iowa. As one example, Optherion (see discussion of Optherion in I-START, above) is discussing with the CBB the manufacturing of clinical supply quantities of product for Optherion's needs.

Outcomes: The renovation is now substantially complete.

SUMMARY of I-GROW

GIVF Funds: \$162,500, match \$162,500 from the University of Iowa Research Enrichment Fund.

The Grow Iowa Values Funds were used to provide a start-up funding package for the research program of Dr. Venkiteswaran ("Mani") Subramanian, director of the Center for Biocatalysis and Bioprocessing (CBB). Dr. Subramanian brings 24 years of industrial experience to the University, and this start-up package was essential in attracting this highly entrepreneurial faculty member to The University of Iowa.

Progress and activities so far include:

- The major program is to establish "A National Center for Microbe/Enzyme/Gene Resource for Enzyme Screening and Discovery for Various Applications"
- The first level vision for this Center has been defined
- Phase I of the project in terms of getting the first 1000 microbes, organizing them in a database as well as initiating a pilot project, is ahead of schedule. One industrial client has been identified as a potential client for the pilot project.
- Second phase of the project, in terms of 'new technology platform' to diversify the microbe/enzyme collection has been initiated in collaboration with Professor Larry Wackett, University of Minnesota.

Outcomes of these efforts include:

- Hiring: A research scientist, research investigator, one Ph.D student, a visiting scientist, and one research associate have all been hired or are in the final phase of hiring (to be completed by Oct. 06)
- A working laboratory has been established

- A 1000-microorganism database has been created with complete cataloging of the collection as well as links to appropriate gene/knowledge resource
- A pilot project has been outlined to "demonstrate" the operation and concept
- A potential client has been identified for the pilot project
- A research proposal has been completed with Professor Larry Wackett, for finding new enzymes from the microbial genomics database

Grow Iowa Values Fund Budget Information

Revenue State appropriations GIVF	As of June 30, 2006 \$1,925,000
State appropriations GIVF	\$1,925,000
GIVF	\$1,925,000
	\$1,925,000
annual francis	
general fund:	
Federal Support:	
In-kind contributions	
Other:	\$1,925,000
Totals	\$3,850,000
Expenditures	
Salaries	
Faculty	\$28,415
Professional and scientific	\$150,085
General services	\$63,539
Hourly	\$2,609
Supplies & Services	\$569,185
Rentals	\$495
Utilities	0
Equipment	\$8,876
Funds (committed but not spent)	\$563,598
Planned Expenditures	
Renovation Expenses	\$1,480,000
Additional Funds-Optherion build out	\$520,000
cGMP facility upgrades	\$463,198
Totals	\$3,850,000



University of Northern Iowa Annual Economic Development Report FY 2006

Section 1. Institutional Economic Development and Technology Transfer Programs

UNI's economic development services focus on the needs of the client in our niche strengths within the University: community and economic development, market research, environment, metal casting, executive development, new Iowans and entrepreneurship. The programs that deliver our niche assistance comprise the University's Business and Community Services Division (BCS), emphasizing hands-on assistance to businesses and communities to meet the individual needs of each client.

As our hands-on Business and Community Services staff are at the front doors of businesses in every Iowa county, we work to continuously assess and address their needs. In doing so, we are able to bring these needs back to our university community – the faculty, staff and students – for practical assistance in which all can play crucial roles. Outcomes achieved in key economic development and tech transfer programs during FY 2006 are outlined below.

1. Summary

Cumulative Overview

- BCS programs leveraged \$6 in private or federal support for each state \$1 invested in the programs.
- In aggregate, BCS programs served more than 2,900 business and community clients in FY 2006.
- Communities and businesses in all 99 counties were served.
- 140 faculty members and more than 1,450 students participated in economic development and technology transfer projects.

Entrepreneurship, Business Incubation and Intellectual Property

- The UNI Regional Business Center launched the statewide rollout of MyEntreNet a rural entrepreneurship program. 4 new counties were selected for participation in the program Poweshiek, Carroll, Decatur and Marion Counties.
- 800 rural entrepreneurs and small business owners registered on MyEntreNet and 268 were provided one-on-one technical assistance.
- The 3 incubator/accelerator programs helped start or expand 80 ventures, which have created more than 200 jobs. An additional 1,200 small businesses received counseling and training through the Small Business Development Center and John Pappajohn Entrepreneurial Center.
- 11 new disclosures were received in FY 2006.
- 3 new patents were filed.
- 2 new license agreements were negotiated.
- The Regional Business Center's downtown Waterloo incubator graduated 3 additional tenants into commercial space.
- Incubator graduates occupy more than 13,000 square feet of commercial space downtown commercial space.
- An urban accelerator program was launched in Northeast Waterloo.
- Incubator and MyEntreNet programs helped launch 44 new businesses into the Iowa economy.



Student Entrepreneurship

- 5 student entrepreneurs were tenants in the temporary student business incubator this year and 1 launched a business in the Iowa economy.
- Permanent student incubator space is under construction.

Market Research

- Strategic Marketing Services (SMS) assisted 21 business clients with 50 projects.
- Companies using the services of SMS report an average increase in employment of 16%.
- Market research was provided to 6 UNI tech transfer projects.

Local Economic Development

- The Institute for Decision Making (IDM) added 35 new community clients to its Community Partners Program.
- IDM has served more than one-half of the communities in Iowa since inception.
- Community economic development organizations report that 1,500-2,000 jobs per year are created as a result of IDM's technical assistance.
- IDM assisted eight regional economic development groups with planning, marketing and capacity building.
- The highly regarded Heartland Economic Development Course, a nationally accredited economic development course created and directed by IDM, achieved record enrollment of 71 participants.

Waste Reduction and Environmental Assistance

- The Iowa Waste Reduction Center (IWRC) provided environmental technical assistance and on-site reviews to more than 276 small businesses in the past year.
- 20 companies adopted new environmental technologies through a special federal grant program.
- The IWRC developed and commercialized a virtual reality painting and coating training system.
- 100 military personnel received training through the STAR4D program in the past year.

Executive and Professional Development

• 85 workshops were provided to 1,400 business professionals in 60 businesses in the past year by the Executive Development Center.

Metal Casting/Foundry Assistance

- 50 individual research projects were conducted in 2006.
- Technical assistance was provided to 20 foundries.
- Federal funding was received to research bio-based foundry binders.



2. Technology Transfer and Intellectual Property

FY 2006

		ISU	UI	UNI
1.	Number of disclosures of intellectual			11
	property			11
2.	Number of patent applications filed			5
3.	Number of patents issued			5
4.	Number of license and option agreements			
	executed on institutional intellectual			2
	property			
5.	Number of license and option agreements			11
	yielding income			11
6.	Royalties/license fee income			\$32,004
7.	Revenue to Iowa companies as a result of			\$5,900,000
	licensed technologies			\$3,900,000
8.	Total sponsored funding			\$19,966,355
9.	Sponsored funding for research			\$1,113,248
10.	Corporate-sponsored funding for research			
	and economic development and revenue			\$1,760,925
	generation (excludes corporate			\$1,700,923
	philanthropy)			
11.	1 11 1			\$361,291
	development and technology transfer			φ301,291

FY 2007

1	2.	Iowa special appropriations for economic		\$361,291
		development and technology transfer		Ψ301,271

3. Overview of UNI's Economic Development Programs

UNI outreach services for community and economic development activity are outlined in a table format on the following five pages. The format provides a brief overview of each program, its purpose, who is served and outcomes (both FY 2006 and cumulative). Together, the programs served approximately 2,900 communities and/or businesses in the past year.





Overview of UNI's Economic Development Programs (continued)

Programs	Services	Those Typically Served	FY 2006 Results	Cumulative Results
National Ag- Based Lubricants (NABL) Center Formerly ABIL	Biobased lubricants research, testing services, performance standards and certification	Serving companies and individuals developing or using biobased lubricants	 ✓ Developed soy-based wood preservative technique to replace toxic creosote and CCA's currently in use. ✓ Investigated energy efficiency gains from use of soy-greases and industrial soy-based hydraulic fluids. ✓ Expanded laboratory capability to better serve biolubricants users and biolubricants industry. 	 ✓ Over 30 soy lubricants, greases, metalworking fluids and specialty products developed to date. ✓ Forming a national testing and certification center to become the national leader in biobased lubricants.
Institute for Decision Making (IDM)	Hands-on community and economic development guidance and research	Serving economic development organizations, chambers, communities and others	 ✓ Hands-on community and economic development assistance and research provided to 48 community partners and 9 regional development groups. ✓ 29 economic impact analyses were completed this year. 	 ✓ Served 475 communities, counties and groups in nearly all of Iowa's counties to date. ✓ Community clients report 1,500 – 2,000 new jobs annually as a result of IDM assistance.
John Pappajohn Entrepreneurial Center (JPEC)	Research, education and linkage to seed and venture capital resources	Serving student and faculty entrepreneurs at UNI, new ventures and rapidly growing small companies	 ✓ Three UNI student businesses entered the statewide business plan competition. ✓ More than 80 attendees enjoyed the UNI Entrepreneurship Symposium. ✓ 1239 businesses and individuals were assisted. ✓ 5 students were served as tenants in the temporary student business incubator. 	✓ The \$1.6 million Cedar Valley Venture Fund is managed by the UNI JPEC and has invested in five new Iowa business ventures.





UNI Regional Business Center/ Small Business Development Center (RBC/SBDC)	Rural Entrepreneurship development system, online entrepreneurship resources, business consulting, business training, incubator	Small and medium sized businesses, entrepreneurs, service providers to entrepreneurs	\[\lambda \]	Rural Entrepreneurship Development System (MyEntreNet) launched in Carroll, Decatur, Marion and Poweshiek counties in FY 2006. More than 800 rural entrepreneurs registered on <i>My</i> Entre.Net. 78 trainings, workshops or seminars hosted, serving 1,069 participants during FY 2006. 268 entrepreneurs served with 1:1 technical assistance.	✓	MyEntreNet system is active in 10 Iowa counties statewide. RBC incubator has graduated 25 companies, creating 47 new FTE jobs, \$1.9 million in investment and 9,000 sf in downtown infill. SBDC has served an average of 900 small companies annually since 1998, with technical assistance or training services.
Iowa Waste Reduction Center (IWRC)	Free, confidential, non-regulatory environmental assistance for small businesses	Serving small businesses throughout Iowa	✓	Environmental technical assistance and onsite reviews were provided to 276 small businesses. Approximately 100 military personnel received training at the STAR4D facility.	✓	More than 3,000 on-site reviews have been conducted with Iowa small businesses.
Iowa Center for Immigrant Leadership and Integration (ICILI)	Helping Iowa communities and businesses accommodate the needs of newcomers	Serving communities, faith-based organizations and businesses	✓	Jointly created a new manual for immigrant entrepreneurship in Iowa. Worked with 20 companies and communities to better meet the needs of newcomers.	✓	Assistance in accommodating the needs of newcomers has been provided to more than 100 Iowa companies. More than 20,000 copies to date of four different guides/manuals (and untold electronic copies).





Tallgrass Prairie Center (TPC)	Research, techniques, education and source-identified seed for restoration and preservation of native vegetation	Serving Iowa counties, state and federal agencies, commercial producers of source identified seed, the community of educators and students and others	✓	Roadside vegetation research for restoring right-of-ways was provided to the Iowa Department of Transportation and native seeds distributed to 50 counties in Iowa. Hosted National Roadside Vegetation Management Assoc. annual meeting in Des Moines.	✓	More than 10,000 acres of roadway right-of-way have been restored to native vegetation.
Center for Energy and Environmental Education (CEEE)	Innovative educational and technical advice related to energy, environment and community-based agriculture	Serving Iowa teachers, classrooms, and farmers	✓	Energy efficiency, environmental education assistance, and local economic development assistance was provided to 306 educational institutions, farmers, and food vendors in 121 different communities and 50 counties.	✓	Energy efficiency, environmental education assistance, and local economic development assistance has been provided to 2,016 educational institutions, farmers, and food vendors in 140 different communities and 56 counties.
Executive Development Center (EDC)	Management and professional training workshops and certificate programs	Serving Iowa businesses and organizations	✓	Specialized business management training provided in 85 workshops to 1,400 business professionals in 60 businesses during the past year.	✓	Since 1998, has provided training in 979 workshops to 17,255 business professionals.





Recycling and Reuse Technology Transfer Center (RRTTC)	Recycling and by- products research, education and outreach	Serving Iowa businesses the recycling industry and Iowa citizens.	✓	Research project funding and outreach services related to recycling and reuse were provided to 30 companies and organizations	✓	Over 35 RRTTC funded research projects. Over 160 reports and publications available. Outreach and services provided to over 3200 individuals each year, including business/industry, K-12 students and teachers, and Iowa citizens.
Metal Castings Center (MCC)	Metal casting technologies, applied research, testing and training	Serving Iowa foundries and foundry suppliers	✓	Maintained active contracts with 12 companies, provided outreach projects to 2 Iowa foundries and technical assistance to 20 additional foundries. Received federal funding for research into bio-based foundry binders.	✓	Over 50 industry funded research projects have been completed to date.
Strategic Marketing Services (SMS)	Market research and analysis	Serving businesses, entrepreneurs and non-profit organizations	✓	Market research and analysis services were provided to 18 Iowa companies.	✓	Since 1990, market research and analysis services have been provided to 242 Iowa companies.
Sustainable Tourism and Environment Program (STEP)	Sustainable tourism planning and policy assistance	Serving businesses, government and non- government organizations, and special interest and community groups	✓	Tourism training and technical assistance was provided to 5 county tourism groups and 1 multi-county regional sustainable tourism project.	✓	Market research feasibility and economic impact studies have been provided to 40 counties or communities.



Materials Innovation Service (MIS)	Mechanical, physical and chemical tests of metals, polymers and cementitious materials	Serving Iowa manufacturers and suppliers	✓	Technical assistance provided to more than 100 individuals. Testing contracts from nine companies.	√	Technical assistance or testing provided to approximately 100 individuals each year. Over 14,800 hours of testing provided since the beginning of the program.
Geoinformatics Training, Research, Education and Extension Center (GeoTREE)	Geospatial technologies, education, research, and outreach activities for federal, state, local and tribal agencies	Serving federal, state, local and tribal (FSLT) government agencies (NASA)	✓	5 educational workshops held at UNI in new computer teaching lab with over 100 people in attendance Worked in conjunction with the Iowa Department of Natural Resources and Department of Public Health to apply geospatial data to solve problems	✓	GeoTREE Center was established in January 2006.



4. Collaboration for Economic Development (Examples)

IDM and IDED Launch Existing Business Initiative

IDM provided six *Existing Business Initiative* workshops in a collaborative effort with the Iowa Department of Economic Development (IDED) during December 2005 and January 2006. More than 125 economic developers from utility companies, community colleges, Council's of Government, along with county-wide and city development groups attended the half day interactive sessions. These workshops are the initial proactive efforts by IDED to support local economic development organizations in implementing or increasing their existing business retention and expansion efforts. In addition, IDM worked with IDED to create an Existing Business Initiatives Tool Kit that is accessible through the www.iowalifechanging.com website.

IDM Collaborates with Iowa Workforce Development

The Institute for Decision Making (IDM) and Iowa Workforce Development (IWD) worked together on a number of projects in FY 2006. IDM worked with faculty and students from UNI's Mathematics Department. The Workforce Model that IWD uses to estimate the total potential labor force for laborshed analysis was updated by IDM staff. The update involved a statistical analysis of the laborshed surveys that have been completed over the previous two years. The results of that analysis are then utilized to make adjustments to the Workforce Model. IDM staff also completed a research report for IWD entitled *Characteristics of Laborshed Respondents Over Time: 1999-2005*. To complete the project, IDM staff created a master dataset of 39,000 laborshed surveys that had been completed between July 1999 and October 2005. As part of the report, IDM provided IWD staff with recommendations for tracking laborshed data trends and improving the laborshed sampling process to better reflect the population.

In addition to working with IWD on laborshed research, IDM partnered with IWD to conduct a regional cluster analysis for two different regional economic development efforts in Eastern Iowa. In completing the regional cluster analyses, IDM worked with IWD staff from multiple bureaus within IWD's Policy and Information Division as well as staff from the IWD Workforce Center that serves the two regions.

UNI and ISU Conduct Collaborative Laboratory Tests

The National Agriculture-Based Lubricants Center's (NABL) collaboration with Iowa State University is an example of UNI's cooperation with other educational institutions. In one of several ongoing projects, NABL scientists are conducting laboratory tests as part of research being conducted by Dr. Robert Brown, ISU Office of Biorenewables Programs. This testing will investigate the potential to collect byproduct gases from the gasification and eventual pyrolysis as a revenue-bearing addition to future biorefinery processes. Two distinct joint projects are on the horizon requiring teamwork from both Iowa State University and NABL: one involves research at both institutions, targeted at eventual bioproduct development and commercialization; the second project involves educational outreach for biolubricants and the state's growing bioeconomy. The NABL Center has collaborated with ISU professors on at least two research grant proposals submitted in the past year.

GeoTREE Assists Iowa DNR

Surface water quality in agricultural states like Iowa ranks among the worst in the nation. The Geoinformatics Traning, Research, Education and Extension (GeoTREE) center at UNI is closely working with the Iowa DNR

University of Northern

Annual Economic Development Report to the Board of Regents

to explore whether the combination of satellite data and water sampling and analysis can simplify and accelerate the protocol for assessing water quality in Clear Lake. Traditional methods, such as water sample collection and analysis in the lab, for water quality assessment yield accurate measurements for one point in time and space and is expensive, laborious, and does not provide temporal or spatial overviews of water-quality trends. In order to overcome these problems, the GeoTREE members are studying the relationships between satellite data and laboratory measurements using geostatistical models that can provide information in an understandable form for decision-makers. We anticipate several outcomes from these research efforts including: (1) development of new water quality assessment and prediction methodologies beneficial to local, regional, and national agencies across the country and the world; (2) establishment of collaborations and partnerships between researchers at UNI, NASA-Kennedy Space Center (KSC) and IDNR; and (3) experiential learning for undergraduate and graduate students.

Tallgrass Prairie Center and Iowa DOT Pursue joint Projects

In cooperation with the Iowa DOT, the Tallgrass Prairie Center (TPC) reconstructed a 20 acre prairie in Plainfield, Iowa (Bremer County) and will monitor the long-term effects of mowing, haying and burning on native plant composition. In addition, a study of the effects Canada Wild Rye has on native plant establishment and growth when seeded as a nurse crop in a reconstructed prairie is ongoing with the DOT. Over the duration of this partnership, more than 10,000 acres of roadway right-of-way have been restored to native vegetation.

5. Client and Project Summary

See Appendix A for a complete list of UNI clients and projects by county.



Section 2: Grow Iowa Values Projects

Overview: Pursuant to its FY 2006 Grow Iowa Values Fund proposal, the University of Northern Iowa used its expertise to expand and stimulate economic growth across the state in these areas:

- Technology transfer and business incubation,
- Rural entrepreneurship,
- Market research,
- Regional development and
- National Ag-Based Lubricants Center.

Project 1. Technology Transfer and Business Incubation

Summary: Under Project 1 - Technology Transfer and Business Incubation, UNI focused on blending its new Intellectual Properties and Technology Transfer programs with its highly regarded Business and Community Services programs. Accomplishments in Technology Transfer and Business Incubation include:

- Hired a combined full-time Intellectual Property Officer (IPO) and Technology Transfer Coordinator (TTC)
- Developed and integrated a Tech Transfer Team
- Identified and developed a position classification for a Director of Tech Transfer and Business Incubation
- Awarded 5 competitive research incentive grants to spur intellectual properties
- Offered temporary Student Business Incubator space and services to inspire and educate UNI students interested in entrepreneurship
- Assigned staff to begin marketing and screening potential tenants for the Innovation Accelerator/Incubator
- Promoted campus-wide technology transfer education and marketing

Outcomes/Metrics: Following are specific accomplishments and outcomes of Technology Transfer and Business Incubation:

Area 1: Technology Transfer

Highlights from the UNI Technology Transfer Team and staff include the following.

- The Office of Intellectual Property received 11 invention disclosures from faculty and staff. Of these, 7 were judged to have market potential and were forwarded for development; 2 were returned to the inventors; 2 remain under consideration.
- Students submitted 4 disclosures. None were forwarded to the UNI Research Foundation.
- 5 patents were secured.
- 3 patents were licensed.
- 4 researchers or research groups are partnering with Iowa businesses to commercialize inventions.
- The first annual Commercializing Creative Endeavors conference was held in October 2005, drawing more than 50 faculty and staff attendees.
- 5 faculty researchers or research teams were awarded Grow Iowa Values Fund summer research grants. Please refer to Appendix B for further information.



Area 2: Business Incubation

Highlights from UNI's GIVF business incubation efforts focused primarily on students until the Innovation Accelerator is completed. These highlights include:

- 5 student entrepreneurs were tenants in temporary Student Business Incubator.
- 1 student graduated and launched his/her business in Iowa.
- Student businesses incubated or served with virtual incubator services launched or tested the following ventures: Spanish translation service, Spanish newspaper publication, internet/e-commerce investments and innovations, bookkeeping/accounting, financial planning services, commodity broker, bio-diesel production, catering & cookie bouquets, and sales.
- The Regional Business Center incubator in downtown Waterloo remains full with 3 recent graduates moving into commercial downtown space.

Technology Transfer and Business Incubation

Business incub	สนบบ
	As of 6/30/06
Revenue	
State appropriations	
GIVF	\$ 249,803.04
General Fund:	
Federal Support:	\$ 1,041,445.00
In-kind contributions	
Other:	
Total	\$ 1,291,248.04
Expenditures	
Salaries & Fringe Benefits	
Faculty	\$ 14,382.33
Professional and Scientific	\$ 225,305.19
General services	
Hourly (Student)	\$ 1,881.72
Supplies	\$ 2,276.99
Noncap equipment	\$ 5,796.01
Rentals/Travel	\$ 160.80
Utilities	
Equipment	
Other	\$ 1,041,445.00
Total	\$ 1,291,248.04

^{*}Matching funds are being provided by the Department of Energy (DOE) for the construction of an Innovation Accelerator and SBA for the Student Business Incubator. This amount is for construction and design of the Innovation Accelerator and Student Incubator for the period July 1, 2005 – June 30, 2006.



Project 2. Rural Entrepreneurship Development

Summary: Under Project 2 - Rural Entrepreneurship Development, the Regional Business Center focused on expanding access and services for rural entrepreneurs through its MyEntreNet program. MyEntreNet had the following accomplishments:

- Created community-based support networks for entrepreneurs
- Provided start-up and existing companies with advanced technical assistance and training
- Assisted potential and existing entrepreneurs with needed capital
- Connected entrepreneurs and resources in rural regions

Outcomes/Metrics: Following are specific outcomes and accomplishments of the Rural Entrepreneurship Development project:

Area 1: Continued technical assistance with the Northeast Iowa MyEntreNet six-county region previously launched in 2004-05

Highlights from the continuation of MyEntreNet efforts in a 6-county region of NE Iowa include:

- 101 regional leaders and 206 rural entrepreneurs from the 6 NE Iowa counties of Clayton, Delaware, Fayette, Allamakee, Howard and Winneshiek received training, technical assistance, or counseling.
- 23 major events were hosted onsite in NE Iowa, providing 3,335 hours of direct assistance.
- Over 100 NE Iowa entrepreneurs enrolled in NE Iowa's online MyEntreNet community, consisting of a regionally customized web application, a business library, online counseling and coaching, discussion forums, e-learning events and a listsery.

Area 2: Model Development

Highlights from the development of a replicable MyEntreNet model include:

- More than 600 Iowa entrepreneurs have registered at www.myentre.net.
- 3-4 working professionals from each of 9 different fields- in each region- were recruited and provided free email coaching to entrepreneurs via an interactive team coaching section of the MyEntreNet site.
- Regional Navigators will be identified and online in all 8 counties, resulting in over 200 professionals online serving new and existing rural business owners.

Area 3: A competitive RFP process for communities statewide to select and launch two new MyEntreNet regions

Highlights from the competitive RFP process and resulting addition of 2 new MyEntreNet regions include:

- 9 applications were received from all areas of the state.
- Carroll County in western Iowa and Poweshiek County in central Iowa were competitively selected to launch MyEntreNet systems in January, 2006.
- 2 Listening Posts were held in each county, engaging 82 individuals representing education, the existing business community, youth, minorities and political leadership.
- Both counties completed an annual work plan to support entrepreneurial development in the coming year.
- A total of 131 regional leaders and 155 rural entrepreneurs participated in one or more services since January of 2006.

A summary of the above Area 1 and Area 3 outcomes depicts that the demand for entrepreneurship services far outweighed our expectations as 232 regional leaders and 361 entrepreneurs were served with one or more onsite or online services during 2005-06.



2005-06 Rural Entrepreneurship Services	Community Leaders Served (50)	Entrepreneurs Served (100)	Total Served (150)
Assistance to NE Iowa Counties*	101	206	307
Carroll/Poweshiek Counties	131	155	286
Total Served	232	361	593

^{*}Howard, Winneshiek, Clayton, Allamakee, Fayette and Delaware Counties

Economic impact documented from these efforts is depicted in the following table:

2005-06 Economic Impact	New/Expanded Businesses (20)	Jobs Created (75)	Business Saved (10)	Jobs Saved (30)	Commercial/Equity Investment (\$3M)
NE Iowa Counties	34	58.5	4	32	\$2,043,000
Carroll/Poweshiek Counties*	2	13	0	0	100,000**
Total	36	71.5	4	32	\$2.14M

^{*} Carroll and Poweshiek have minimal economic impact to report as the first contact with regional entrepreneurs in those areas did not occur until early March of 2006.

Rural Entrepreneurial Development

Kurai Entrepreneuriai E	0 ; 010 p1110110
	As of 6/30/06
Revenue	
State appropriations	
GIVF	\$155,000.00
General Fund:	
Federal Support:	\$120,600.13
In-kind contributions	
Other: IWEC	\$34,525.87
Total	\$310,126.00
Expenditures	
Salaries	
Faculty	\$0.00
Professional and Scientific	\$184,832.06
General services	\$49,268.55
Hourly	\$0.00
Supplies	\$5,729.46
Rentals/Travel	\$9,073.00
Utilities	\$761.93
Equipment	\$1,712.00
Other	\$58,749.00
Total	\$310,126.00

Matching funds were provided by the Iowa Women's Enterprise Center and Federal funds (NASA and SBA).

^{**} Commercial investment information was not available for one of the Carroll County expansions.



Project 3. Market Research

Summary: Under Project 3 - Market Research, UNI focused on market research projects for start-up businesses, existing businesses and tourism/quality-of-life ventures to expand and stimulate economic growth across Iowa. Specific accomplishments during this project include:

- Improved competitive intelligence for Iowa companies.
- Provided initial market screening and identified potential competitors for UNI faculty and staff research.

Outcomes/Metrics: Following are specific outcomes and accomplishments of Market Research.

Area 1: Market Research Projects – Strategic Marketing Services (SMS) conducted 8 market research projects with Iowa companies using partial support from the GIVF and participation from the companies. 2 of the projects were related to advanced manufacturing and 1 related to the bioeconomy.

Projects Completed as of June 30, 2006

- Woodgrain Specialties, Cedar Falls
- IMT, Garner
- Iowa Metal Spinners, Cedar Falls
- Wayne's Wonder Water, Dike
- Swaledale Bio-Village, Swaledale
- Bandag-Speedco, Muscatine
- Bio-Village, Swaledale
- Port-A-Vet, Hudson

While it's still too early to document outcomes from most of the above companies, one company, Woodgrain Specialties has had early success. This small start-up company doubled sales, doubled the size of their production facility, and doubled the number of plant employees. They said SMS gave them the background information they needed, gave them direction, and opened the door for them to go from individual sales to commercial sales.

Area 2: Market Research Plans and Assessments - SMS consulted with 8 clients (Iowa companies and entrepreneurs) about their businesses and prepared a Market Research Plan/Strategic Plan, which was an assessment of their situation and a plan to address it, along with associated costs.

Projects Completed as of June 30, 2006

- Soy Basics, New Hampton
- Poe Construction, Montezuma
- Team Technologies, Cedar Falls
- Record Printing Company, Story City
- Metal Casting Center, Cedar Falls
- GMT, Waverly
- Iowa Stored Energy Plant
- Black Hawk Engineering, Cedar Falls



Area 3: Assistance to UNI's Technology Transfer Program - The UNI Research Foundation (UNIRF) supported 50% of Phase One research and GIVF supported 50%. SMS conducted 6 Phase One research projects for UNI Technology Transfer opportunities.

Market Research

Market Research	
	As of June 30, 2006
Revenue	
State appropriations	
GIVF	120,000.00
General fund:	8,632.59
Federal Support	
In-kind contributions	
Other	
Program Revenue	108,242.33
NASA	4,358.28
Totals	\$241,233.20
Expenditures	
Salaries	
Faculty	
Professional and	162,151.52
Scientific	
General services	14,338.43
Hourly	
Fringe Benefits	
Professional and scientific	58,251.77
General services	5,822.82
Supplies	9.99
Rentals	
Utilities	
Equipment	
Other (printing and travel)	658.67
Totals	\$241,233.20

Matching funds were provided by program revenue and Federal funds (part of \overline{NASA} funding) and the College of Business Administration.



Project 4. Capacity Building to Help Regions Succeed

Summary: Under Project 4 - Capacity Building to Help Regions Succeed, the Institute for Decision Making (IDM) committed to facilitate the formation or advancement of at least two economic regions in Iowa. As a result of GIVF, IDM built regional capacity for success in 8 regions and collaborated with Iowa Workforce Development (IWD) to serve another. IDM <u>directly</u> facilitated forming or advancing regional economic development capacity with regional partners in 53 counties.

Outcomes/Metrics: To best describe the work completed for Capacity Building to Help Regions Succeed, we have reported outcomes by region. Following are specific assistance and outcomes for regions.

North Central Iowa Growth Partnership Marketing Alliance—Counties of Cerro Gordo, Floyd, Franklin, Hancock, Mitchell, Winnebago, and Worth

- Provided specific research and analysis to enhance and focus on implementing the results of a recently completed Iowa Workforce Development cluster study of the region.
- Completed the targeting, meeting the region's needs for useful, implementation-focused specific industry information and identifying targeted industries compatible with labor availability and community assets.

Western Iowa Advantage Region—Counties of Adair, Audubon, Carroll, Crawford, Greene, Guthrie, Sac, and Ida

- Area developers, with IDM's advice and counsel, conducted an inventory of their major employers and unique products, services and processes companies might have in order to learn more about competitive advantages.
- IDM completed a cluster study update and a targeting study based on the regional cluster analysis.
- Provided extensive capacity building assistance to Ida County.

Northeast Iowa Business Network—Counties of Allamakee, Chickasaw, Clayton, Delaware, Fayette, Howard, and Winneshiek

- Assisted the marketing group/local developers on a monthly basis and maintained regular communication, providing advice and counsel.
- Collaborated with an advertising agency to work through creation of a regional logo, Web site, and brochure, as detailed in the adopted marketing plan.
- Assisted IWD to complete a cluster analysis to identify where and to whom to market.
- Assisted in implementing the marketing plan, finalizing the brochure, and setting the brand.

Southwest Iowa Marketing Group—Counties of Adams, Cass, Fremont, Ringgold, Montgomery, Shelby, Page and Taylor

- Engaged the group in teambuilding, developing collaboration, and building trust, along with communicating principles of economic development marketing.
- Gathered marketing input regarding audiences and strategies.
- Prepared a marketing overview.
- Developed and assisted the region in finalizing a marketing plan.
- Assisted in organizing a fund drive for the marketing match.

A quote from the President of the Southwest Iowa Coalition had this to say about IDM's assistance, "IDM's, technical assistance for community and economic development, is vitally important to rural areas in particular.

University of Northern

Annual Economic Development Report to the Board of Regents

Without these resources, we would have an even greater challenge taking advantage of opportunities that increase the quality of life for area residents and add to the state of Iowa's overall economy vitality." Testimonial letters have been received from all regions receiving IDM's assistance.

Iowa Northland Regional Economic Development Commission—Counties of Black Hawk, Bremer, Buchanan, Butler, Chickasaw, and Grundy

• Helped to organize and then facilitated collaboration for the region's successful marketing-grant application for \$150,000 with local match of \$150,000 (over 3 years).

Iowa Connections—Counties of Benton, Jasper, Marshall, Poweshiek, and Tama

- Facilitated and guided regional partners to make common-ground decisions.
- Developed the protocols and a formal memorandum of understanding for how marketing and prospect leads will be handled and what the responsibilities are for the partners.

Off-Shore Iowa (formerly Regional Info-Tech Centers)—Communities of Oelwein, Algona, Osceola, Mount Pleasant, and Harlan, which are located in the counties of Fayette, Kossuth, Clarke, Henry, and Shelby, respectively.

- Conducted in-depth community assessments for *Off-Shore Iowa*. *Off-Shore Iowa* involves the joint development and marketing of built-to-suit or speculative facilities suitable for the location of business operations that rely on the availability of significant telecommunications access in a place that also affords the labor skills necessary to support information related operations.
- Planned and facilitated meetings between involved organizations on at least a quarterly basis.
- Served as point of contact for working with various resources and agencies that may serve to enhance the *Off-Shore Iowa* efforts.
- Outlined the initial marketing approach to be used to promote *Off-Shore Iowa*.
- Developed an RFP for marketing assistance.
- Off-Shore Iowa recently received \$25,000 in cooperative entrepreneurial funding from IDED, through a grant application completed by IDM, to assist the group in developing and marketing build-to-suit proposals to companies with annual sales in excess of \$300 million.

River Hills Initiative—Counties of Appanoose, Davis, Jefferson, Keokuk, Lucas, Mahaska, Monroe, Van Buren, Wapello, and Wayne

• Finalized the regional economic development marketing plan.





Capacity Building to Help Regions Succeed

Finalized the regional economic development marketing plan.	As of 6/30/06
Revenue	
State appropriations	
GIVF	\$140,000.00
General Fund:	
Federal Support:	\$122,815.85
In-kind contributions	
Other:	\$ 17,615.44
Total	\$280,431.29
Expenditures	
Salaries	
Faculty	
Professional and Scientific	\$279,756.03
General services	
Hourly	\$39.27
Supplies	
Rentals/Travel	\$635.99
Utilities	
Equipment	
Other	
Total	\$280,431.29

Matching funds were provided by Federal funds (NASA, EDA, NETSB, COPC, Student Incubator) and contractual revenue.



Project 5. National Ag-based Lubricants (NABL) Center

Summary: Under Project 5 - National Ag-based Lubricants (NABL) Center, UNI focused on filling the bioproducts industry's need for expert support to assure renewable lubricants meet performance specifications; quality, certification and labeling requirements; and applicable regulatory measures. Accomplishments of this project included:

- Expanded biobased lubricant testing capability through equipment purchases and staff training
- Improved biobased lubricant testing credibility through standard operating procedures development and ISO 9001 certification work.

Outcomes/Metrics: Following are specific outcomes of the NABL accomplishments.

Area 1: Expanding the NABL Center's Technical Capability

- Existing tribology laboratory equipment was tested and calibrated by the appropriate equipment manufacturers.
- Specific pieces of laboratory and testing equipment have been identified for third-year acquisition. Equipment research is 100% completed.
- Equipment purchase process is ongoing, with 90% of planned purchases completed.
- Approximately 60% of purchased equipment has been installed.
- 2 additional pieces of test equipment have been donated to the Center as cost share.

Area 2: Developing NABL Center Scientific Staff Resources

NABL scientists completed manufacturers' on-site training sessions with the following test equipment:
 Compass Instruments training - Falex Wheel Bearing Test Apparatus; Koehler Instruments training - Grease
 Evaporation Loss Test, Grease Mobility Test, Oil Separation Test, Copper Corrosion Test; Tannas
 Instruments - Rotating Bomb Oxidation Tests (RBOT).

Area 3: Developing Standard Policies and Procedures Needed To Facilitate Development of the Nation's Biobased Lubricant Industry

- Standard operating procedures have been established and documented for 90% of planned laboratory equipment and processes.
- ISO 9001 certification was identified as a necessity for a provider of testing services. NABL has established a committee to prepare the Center for ISO certification. Internal evaluation is ongoing, and the NABL quality manual has been completed.
- NABL scientists are participating in round robin testing for ASTM 2983; Low Temperature Viscosity of Lubricants, Measured by Brookfield Viscometer.





UNI - National Ag-Based Lubricants

OTAT - TAUTOHAT TIG-DASCU	As of 6/30/06			
Revenue				
State appropriations				
GIVF	\$	194,229		
General fund:				
Federal Support: DOE	\$	248,344		
In-kind contributions				
Other:				
Totals	\$	442,573		
Expenditures				
Salaries				
Faculty				
Professional and scientific	\$	251,198		
General services				
Hourly				
Supplies	\$	186		
Rentals				
Utilities				
Equipment	\$	5,256		
Other	\$	185,934		
Totals	\$	442,573		

Note: Federal support was used to support the NABL project from July – October. The DOE would not allow the GIVF match until formal notification of funding was received from the Board of Regents.



Appendix A

Client and Project Summary

Key to Acronyms

CEEE - Center for Energy and Environemtnal Education Center

EDC - Executive Development Center

GeoTREE - GeoInformatics Training, Research, Educ & Exten

ICILI - Iowa Center for Immigrant Leadership and Integration

IDM - Institute for Decision Making

IWRC - Iowa Waste Reduction Center

JPEC - John Pappajohn Entrepreneurial Center

MCC - Metal Casting Center

NABL - National Ag-Based Industrial Lubricants

RBC/SBDC - Regional Business Center/Small Business Development Center

RRTTC - Recycling and Reuse Technology Transfer Center

MIS - Materials Innovation Services

SMS - Strategic Marketing Program

STEP - Sustainable Tourism and The Environment Program

TPC - Tallgrass Prairie Center

IRVM - Integrated Roadside Vegetation Management

Community or Business	County	State	Industry	Counseling Provided	Program
				Technical Education/Energy	
Orient-Macksburg - Orient	Adair	IA	Elementary School	Efficiency	CEEE
				Economic Development	
Western Iowa Advantage	Adair	IA	Economic Development	Assistance	IDM
County Roadside Mgrs. Winter Mtg.	Adair	IA	Roadside Vegetation Management	1-Day Training	IRVM
Adair	Adair	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
G i Fi c G i	A 1	TA		Technical Education/Energy	CEEE
Corning Elementary - Corning	Adams	IA	Elementary School	Efficiency	CEEE
Southwest Iowa Marketing Coalition	Adams	IA	Economic Development	Economic Development Assistance	IDM
				Economic Development	
Northeast Iowa Business Network	Allamakee	IA	Economic Development	Assistance	IDM
Postville	Allamakee	IA	Agriculture, Forestry, and Fishing (01-09)	Air Assistance	IWRC
Keystone Area Education Agency 1	Allamakee	IA	Education	Entrepreneurship Educational Tools	RBC/SBDC
				Business Succession Planning &	
NE Iowa Entrepreneurs	Allamakee	IA	Retail/Manufacturing/Service/Technology	Training	RBC/SBDC
NE Iowa Rural Roundtable- fall &					
Spring	Allamakee	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
Northern Iowa Entrepreneurs	Allamakee	IA	Retail/Manufacturing/Service/Technology	Hosted Entrepreneurship Roundtable	RBC/SBDC
Lansing Building Products - Lansing	Allamakee	IA	Manufacturing	Market Research	SMS
Appanoose County EDC	Appanoose	IA	Economic Development	Economic Impact	IDM



				Economic Development	
River Hills Initiative	Appanoose	IA	Economic Development	Assistance	IDM
Centerville	Appanoose	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Centerville	Appanoose	IA	Manufacturing (20-39)	Air Assistance	IWRC
Appanoose CCB	Appanoose	IA	Natural Resouce Management	Technical Workshop	TPC
Wild Design LandScaping	Appanoose	IA	Natural Resouce Management	Technical Workshop	TPC
				Economic Development	
Western Iowa Advantage	Audubon	IA	Economic Development	Assistance	IDM
County Roadside Managers Winter Mtg.	Audubon	IA	Roadside Vegetation Management	1-Day Training	IRVM
A & L Melons - Vinton	Benton	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
AnnaBeth's Gardens - Garrison	Benton	IA	Fruits & Vegetables & Garden Center	Buy Fresh/Buy Local Campaign	CEEE
Balvin, Denise - Belle Plaine	Benton	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Belle Plaine	Benton	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Bloomsbury Farm - Atkins	Benton	IA	Fruits & Vegetables & Garden Center	Buy Fresh/Buy Local Campaign	CEEE
Botanical Goodness - Keystone	Benton	IA	Fruits & Vegetables, Egg & Poultry, Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Cedar Valley Farm - Urbana	Benton	IA	Egg & Poultry Producers, Meat Prod	Buy Fresh/Buy Local Campaign	CEEE
Circle W Acres - Belle Plaine	Benton	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
JT's Weed Patch Gardens - Vinton	Benton	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Kleiner, Charles & Carolyn - Vinton	Benton	IA	Fruits & Vegetables, Egg & Poultry	Buy Fresh/Buy Local Campaign	CEEE
Little Red Barn - Vinton	Benton	IA	Fruits & Vegetables, Egg & Poultry Prod	Buy Fresh/Buy Local Campaign	CEEE
McClain's Gardens - Vinton	Benton	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Moser's Wildwood Gardens - Garrison	Benton	IA	Fruits & Vegetables, Egg & Poultry Prod	Buy Fresh/Buy Local Campaign	CEEE
Nature Trail Greenhouses, Inc Urbana	Benton	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Newhall Locker & Processing - Newhall	Benton	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Strawberry Acres - Shellsburg	Benton	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Vinton	Benton	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Vinton-Shellsburg Elementary - Vinton	Benton	IA	Elementary School	Solar Cooking	CEEE
Werner, Clint - Luzerne	Benton	IA	Fruits & Vegetables, Egg & Poultry Prod	Buy Fresh/Buy Local Campaign	CEEE
Womochil, Gene - Mount Auburn	Benton	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Youngville	Benton	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Iowa Connections	Benton	IA	Economic Development	Economic Development Assistance	IDM



County Roadside Managers Winter Mtg.	Benton	IA	Roadside Vegetation Management	1-Day Training	IRVM
Urbana	Benton	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
NE Iowa Rural Roundtable- fall & Spring	Benton	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
Abebe, Ruby - Waterloo	Black Hawk	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Allen Memorial Hospital - Waterloo	Black Hawk	IA	Health Care	Buy Fresh/Buy Local Campaign	CEEE
Barn Happy - Cedar Falls	Black Hawk	IA	Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Bena's Restaurant - Cedar Falls	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Black Hawk Farmers Market - Cedar Falls	Black Hawk	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Boeke, Phyllis - Cedar Falls	Black Hawk	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Bohr, Joseph - Cedar Falls	Black Hawk	IA	Fruits & Vegetables & Garden Center	Buy Fresh/Buy Local Campaign	CEEE
Brown's Garden - Waterloo	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Bunger Middle School ECHOES - W'loo	Black Hawk	IA	Middle School	Solar Model Car Construction	CEEE
C U Restaurant - Waterloo	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Cedar Falls	Black Hawk	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Cedar Falls Community Schools	Black Hawk	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
Central Middle - Wateroo	Black Hawk	IA	Middle School	Solar Model Car Construction	CEEE
Cottonwood Canyon Coffee - Cedar Falls	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Country Garden - LaPorte City	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
County Line Bison - Hudson	Black Hawk	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Cup of Joe - Cedar Falls	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
D & K Foods Gilbertville	Black Hawk	IA	Grocers	Buy Fresh/Buy Local Campaign	CEEE
Drinovsky, Roger & Peggy - Hudson	Black Hawk	IA	Fruits & Vegetables, Egg & Poultry Prod	Buy Fresh/Buy Local Campaign	CEEE
Evansdale	Black Hawk	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Fitkin, Jim - Cedar Falls	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Flower Farm - Cedar Falls	Black Hawk	IA	Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Friendship Village - Waterloo	Black Hawk	IA	Health Care	Buy Fresh/Buy Local Campaign	CEEE
Fuggiti Apple Orchard - Waterloo	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Garbes Herb Farm - Waterloo	Black Hawk	IA	Fruits & Vegetables & Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Gary Tedore Orchard - LaPorte City	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Gary's Café - Waterloo	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE



Gibson's Century Farm - Waterloo	Black Hawk	IA	Egg & Poultry Producers, Honey Farms	Buy Fresh/Buy Local Campaign	CEEE
Gilbertville Locker, Inc Gilbertville	Black Hawk	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Hand Krafted Treasures - Evansdale	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Hansen's Farm Fresh Dairy - Hudson	Black Hawk	IA	Dairy Producers	Buy Fresh/Buy Local Campaign	CEEE
Heartland Farms - Waterloo	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Heritage Farm - Hudson	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Hesse, Vern - Cedar Falls	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Hoffman Produce - Waterloo	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Holmes Junior High ECHOES - Cedar Falls	Black Hawk	IA	Middle School	Solar Model Car Construction	CEEE
Hometown Foods - Waterloo	Black Hawk	IA	Grocers	Buy Fresh/Buy Local Campaign	CEEE
Hoover Middle School - Waterloo	Black Hawk	IA	Middle School	Solar Model Car Construction	CEEE
J & B Goods - LaPorte City	Black Hawk	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Jag's Java Express - Cedar Falls	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Jefferson Greenhouse & Orchard - Dunkerton	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Jenkins, Bob - Gilbertville	Black Hawk	IA	Honey Farms	Buy Fresh/Buy Local Campaign	CEEE
Kiefer Produce - Waterloo	Black Hawk	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
L & L Fresh Vegetables - Waterloo	Black Hawk	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
La Porte City	Black Hawk	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Laura Lobeck - Waterloo	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Litteaur's Garden Produce - Waterloo	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
M.A.P.L.E.S. Neighborhood	Black Hawk	17.1	Trans & vegetables	Buy Fresh Buy Local Campaign	CELE
Association - W'loo	Black Hawk	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Montage - Cedar Falls	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Mt Vernon Road Country Market - CF	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Pablo's Mexican Café - Cedar Falls	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Peet Junior High School - Cedar Falls	Black Hawk	IA	Middle School	Solar Model Car Construction	CEEE
Price Laboratory School - Cedar Falls	Black Hawk	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
R.L. Smith, Ltd Cedar Falls	Black Hawk	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Root's Market - Cedar Falls	Black Hawk	IA	Grocers	Buy Fresh/Buy Local Campaign	CEEE
Rose Hill Farm - Hudson	Black Hawk	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Rudy's Tacos - Waterloo	Black Hawk	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Sage of the Woods Farm - Cedar Falls	Black Hawk	IA	Egg & Poultry Producers	Buy Fresh/Buy Local Campaign	CEEE



Sash's Garden Varieties - Cedar Falls	Black Hawk	IA		Fresh/Buy Local Campaign CEEE	
				hnical Education/Energy	
St. Patrick School - Cedar Falls	Black Hawk	IA		ciency CEEE	
Steamboat Gardens - Waterloo	Black Hawk	IA	Restaurants Buy	Fresh/Buy Local Campaign CEEE	
Stiles, Bruce T Waterloo	Black Hawk	IA	Garden Centers Buy	Fresh/Buy Local Campaign CEEE	
Tatonka Farm - Dunkerton	Black Hawk	IA	Fruits & Vegetables Buy	Fresh/Buy Local Campaign CEEE	
UNI Dining Services - Cedar Falls	Black Hawk	IA		Fresh/Buy Local Campaign CEEE	
Walnut Ridge Baptist - Waterloo	DI I II I	7.4	Effic	hnical Education/Energy ciency, Environmental Issues	
W. J. E.L. G. L. E.H.	Black Hawk	IA	,	ruction CEEE	
Water's Edge - Cedar Falls	Black Hawk	IA	,	Fresh/Buy Local Campaign CEEE	
Waterloo	Black Hawk	IA		Fresh/Buy Local Campaign CEEE	
Western Home - Cedar Falls	Black Hawk	IA		Fresh/Buy Local Campaign CEEE	
Advanced Heat Treat - Waterloo	Black Hawk	IA		ining EDC	
Allen Health System - Waterloo	Black Hawk	IA		ining EDC	
American HomePatient - Waterloo	Black Hawk	IA	Health Care Trai	ining EDC	
Bossard - Cedar Falls	Black Hawk	IA	Manufacturing Trai	ining EDC	
Building Products, Inc Evansdale	Black Hawk	IA	Manufacturing Trai	ining EDC	
Cedar Falls Utilities - Cedar Falls	Black Hawk	IA	Service Trai	ining EDC	
City of Cedar Falls - Cedar Falls	Black Hawk	IA	Service Trai	ining EDC	
ConAgra Grocery Products - Waterloo	Black Hawk	IA	Manufacturing Trai	ining EDC	
CUCCC - Cedar Falls	Black Hawk	IA	Service Trai	ining EDC	
Eagle Ottawa- Waterloo	Black Hawk	IA	Manufacturing Trai	ining EDC	
Emdeon Corporation - Waterloo	Black Hawk	IA	Manufacturing Trai	ining EDC	
Exceptional Persons, Inc Waterloo	Black Hawk	IA	Service Trai	ining EDC	
Ferguson - Waterloo	Black Hawk	IA	Service Trai	ining EDC	
John Deere Community Credit Union - Waterloo	Black Hawk	IA	Financial Trai	ining EDC	
John Deere Waterloo Works - Waterloo	Black Hawk	IA	Manufacturing Trai	ining EDC	
Liberty Bail Bonds - Waterloo	Black Hawk	IA	Service Trai	ining EDC	
Maid Pro - Waterloo	Black Hawk	IA	Service Trai	ining EDC	
ME&V - Cedar Falls	Black Hawk	IA	Service Trai	ining EDC	
NE Family Practice - Waterloo	Black Hawk	IA	Health Care Trai	ining EDC	
Rabo AgriFinance - Cedar Falls	Black Hawk	IA	Financial Trai	ining EDC	



The Mudd Group - Cedar Falls	Black Hawk	IA	Service	Training	EDC
University Book & Supply - Cedar					
Falls	Black Hawk	IA	Retail	Training	EDC
VGM Financial - Waterloo	Black Hawk	IA	Financial	Training	EDC
Viking Pump, Inc - Cedar Falls	Black Hawk	IA	Manufacturing	Training	EDC
Waterloo Implement - Hudson	Black Hawk	IA	Retail	Training	EDC
Waterloo Industries, Inc - Waterloo	Black Hawk	IA	Manufacturing	Training	EDC
Wheaton Franciscan Healthcare -					
Waterloo	Black Hawk	IA	Service	Training	EDC
				Education & Research activities	
Black Hawk County	Black Hawk	IA	County Government	in Geospatial technologies	GeoTREE
				Education & Research activities	
City of Cedar Falls	Black Hawk	IA	City Government	in Geospatial technologies	GeoTREE
				Education & Research activities	
City of Evansdale	Black Hawk	IA	City Government	in Geospatial technologies	GeoTREE
				Education & Research activities	
City of Waterloo	Black Hawk	IA	City Government	in Geospatial technologies	GeoTREE
Natural Resources Conservation				Education & Research activities	
Services	Black Hawk	IA	US Government Agency	in Geospatial technologies	GeoTREE
Radio La Buena	Black Hawk	IA	Workforce Development	Newcomer Worker Orientation	ICILI
Greater Cedar Valley Alliance -				Economic Development	
Waterloo & Cedar Falls	Black Hawk	IA	Economic Development	Assistance	IDM
NINGOG	D1 1 II 1	T.A.	F	Economic Development	IDM
INRCOG	Black Hawk	IA	Economic Development	Assistance Economic Development	IDM
Opportunity Works - Multi-community	Black Hawk	IA	Economic Development	Assistance	IDM
opportunity works want community	Diack Hawk	111	Beonomic Bevelopment	Economic Development	151/1
Waterloo, City of	Black Hawk	IA	City Government	Assistance	IDM
County Roadside Managers Winter	Black Hawk	IA	Roadside Vegetation Management	1-Day Training	IRVM
Mtg.					
Prescribed Fire Mgmt Workshop 1	Black Hawk	IA	Natural Resource Management	5-Day Training	IRVM
Cedar Falls	Black Hawk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Cedar Falls	Black Hawk	IA	Services (70-89)	On-Site Assistance	IWRC
Cedar Falls	Black Hawk	IA	Services (70-89)	On-Site Assistance	IWRC
Cedar Falls	Black Hawk	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Cedar Falls	Black Hawk	IA	Services (70-89)	Air Assistance	IWRC



Cedar Falls	Black Hawk	IA	Manufacturing (20-39)	Air Assistance	IWRC
Hudson	Black Hawk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Waterloo	Black Hawk	IA	Manufacturing (20-39)	Air Assistance	IWRC
Waterloo	Black Hawk	IA	Construction (15-17)	Air Assistance	IWRC
Waterloo	Black Hawk	IA	Construction (15-17)	On-Site Assistance	IWRC
Waterloo	Black Hawk	IA	Services (70-89)	Air Assistance	IWRC
Waterloo	Black Hawk	IA	Services (70-89)	On-Site Assistance	IWRC
Waterloo	Black Hawk	IA	Services (70-89)	On-Site Assistance	IWRC
Waterloo	Black Hawk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Waterloo	Black Hawk	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Waterloo	Black Hawk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Cedar Falls	Black Hawk	IA	Family History Preservation	Start-up	JPEC
Cedar Falls	Black Hawk	IA	Lanuage Translation	Start-up	JPEC
Cedar Falls	Black Hawk	IA	E-commerce	Start-up	JPEC
Cedar Falls	Black Hawk	IA	Accounting/Business Services	Start-up	JPEC
Cedar Falls	Black Hawk	IA	Public Relations	Succession Planning	JPEC
Waterloo	Black Hawk	IA	Non-Profit	Start-up	JPEC
Waterloo	Black Hawk	IA	Pet Product Manufacturing	Start-up	JPEC
Waterloo	Black Hawk	IA	Hobby Car Manufacturing	Start-up	JPEC
John Deere Waterloo Works	Black Hawk	IA	Consulting		MCC
Roskamp	Black Hawk	IA	Consulting		MCC
Black Hawk Engineering	Black Hawk	IA	Manufacturing	Testing/Research	NABL
Cedar Falls City Parks & Trails - CF	Black Hawk	IA	Manufacturing	Testing/Research	NABL
Dr. Budke	Black Hawk	IA	Manufacturing	Testing/Research	NABL
UNI Metal Casting Center - CABB	Black Hawk	IA	Manufacturing	Testing/Research	NABL
Cedar Falls High School	Black Hawk	IA	Education	Youth Entrepreneurship Training	RBC/SBDC
Cedar Valley Entrepreneurs (19)	Black Hawk	IA	Retail/Manufacturing/Service/Tech	Smart Start	RBC/SBDC
City of Waterloo	Black Hawk	IA	Muncipality	Entrepreneurship Development	RBC/SBDC
				Comprehensive Entrepreneurship	
Eastern Iowa Entrepreneurs	Black Hawk	IA	Retail/Manufacturing/Service/Technology	Training	RBC/SBDC
Main Street Waterloo	Black Hawk	IA	Downtown Development	Economic Restructuring Training	RBC/SBDC/IDM
Main Street Waterloo	Black Hawk	IA	Non-Profit	Entrepreneurship Development	RBC/SBDC
NE Iowa Rural Roundtable	Black Hawk	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
Professional Business Women Assoc.	Black Hawk	IA	Retail/Manufacturing/Service/Technology	Business Expansion Strategies	RBC/SBDC



Waterloo Neighborhood EDC	Black Hawk	IA	Economic Development	Neighborhood Revitalization	RBC/SBDC/IDM
Cedar Falls Utilities - Cedar Falls	Black Hawk	IA	Utility	Market Research	SMS
Iowa Metal Spinners - Cedar Falls	Black Hawk	IA	Manufacturing	Market Research	SMS
Porta Vet - Hudson	Black Hawk	IA	Manufacturing	Market Research	SMS
Ramps and Pathways - Cedar Falls	Black Hawk	IA	Education	Market Research	SMS
Western Home - Cedar Falls	Black Hawk	IA	Service	Market Research	SMS
Cedar Falls Tourism & Visitor Bureau	Black Hawk	IA	Tourism	Tourism Training	STEP
Waterloo Convention & Visitor Bureau					
- Waterloo	Black Hawk	IA	Tourism	Tourism Training	STEP
15 UNI Grounds	Black Hawk	IA	Natural Resource Management	Technical Workshop	TPC
20 CF residents	Black Hawk	IA	Natural Resource Management	Public Presentation	TPC
Black Hawk SWCD	Black Hawk	IA	Natural Resouce Management	Technical Workshop	TPC
Iowa Prairie Network	Black Hawk	IA	Natural Resouce Management	Technical Workshop	TPC
	Black Hawk &				
Cedar Falls & Carroll	Carroll	IA	Newspaper	Start-up	JPEC IRVM
Prescribed Fire Mgmt Workshop 2	Black Hawk (2)	IA	Natural Resource Management	5-Day Training	
Cedar Falls	Black Hawk	IA	Water Recreation	Start-up	JPEC
Cedar Falls	Black Hawk	IA	Evalution of Business Plan	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Home Maintenance	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Music	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	House Cleaning	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Music Marketing	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Dental	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Maintenance & Repair	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Daycare	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Motorcycle Retail	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Public Relations	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Information Technology	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Music Management	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Music/Band	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Dance Studio	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Welding & Fabrication	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Daycare	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	E-commerce	Start-up	JPEC



Cedar Falls/Waterloo	Black Hawk	IA	Dinner Theatre	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Rural Tourism	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	Personal Trainer	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Travel	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Non-Profit	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Clothing Retail	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Parking Facility	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Education	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Karoke	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	Clinical Practice	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Retail	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	Clinical Practice	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Personal Trainer	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	Advertising	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Painting	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	Sports	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Photography	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Photography	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	International Shipping	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Food Wholesale	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	Bridal Shop	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Water Recreation	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	E-commerce	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Photography	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	Food Co-op	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Consulting	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	ΙA	Non-Profit	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Karoke	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Publishing	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Technology Consulting	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Retail	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	E-commerce	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Vehicle Restoration Software	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Accounting/Business Services	Start-up	JPEC



Cedar Falls/Waterloo	Black Hawk	IA	Restaurant	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Consulting	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Restaurant	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Technology Consulting	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Veterinarian	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Retail	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Horse Training	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Art Retail	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Franchising	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Green Technology	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Accounting/Business Services	Start-up	JPEC
Cedar Falls/Waterloo	Black Hawk	IA	Restaurant	Start-up	JPEC
60 county residents	Black Hawk	IA	Nataural Resource Management	Seminar Presentation	TPC
*Iowa Waste Reduction Center - New Environmental Technologies for Small Business	Black Hawk	IA	Technical Assistance	Materials Testing & Consulting	MIS
Engineered Products	Black Hawk	IA	Manufacturing	Materials Testing	MIS
Omega Cabinets	Black Hawk	IA	Manufacturing	Materials Testing	MIS
Standard Golf	Black Hawk	IA	Manufacturing	Materials Testing	MIS
Howe Elementary - Ogden	Boone	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
Iowa 4H State Conference - Ames	Boone	IA	Middle School	Solar Model Car Construction	CEEE
Boone's Futures	Boone	IA	Economic Development	Economic Development Assistance	IDM
Boone	Boone	IA	Manufacturing (20-39)	Air Assistance	IWRC
Boone County Biodiesel	Boone	IA	Manufacturing	Testing/Research	NABL
Area Prairie Enthusiasts (12)	Boone	IA	Education	Presentation	IRVM
Bahr, Mark & Lois - Sumner	Bremer	IA	Egg & Poultry Producers	Buy Fresh/Buy Local Campaign	CEEE
Bartels Lutheran Home - Waverly	Bremer	IA	Health Care	Buy Fresh/Buy Local Campaign	CEEE
Blueridge Orchard - Denver	Bremer	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Cedar Valley Honey Farms - Waverly	Bremer	IA	Honey Farms	Buy Fresh/Buy Local Campaign	CEEE
Centennial Oaks Golf Club - Waverly	Bremer	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Clausing, Craig - Waverly	Bremer	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Community Lutheran - Readlyn	Bremer	IA	Elementary School	Technical Education/Energy Efficiency	CEEE



Flanscha, Lynn L Plainfield					
•	Bremer	IA	Egg & Poultry Producers, Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Frederika Locker - Frederika	Bremer	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Genuine Faux Farm - Tripoli	Bremer	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Janesville Locker, Inc Janesville	Bremer	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Kate McDonald & Matt Janssen -					
Janesville	Bremer	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Living Earth Farm - Waverly	Bremer	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
M & K Produce - Waverly	Bremer	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Marten's Brandenburg - Waverly	Bremer	IA	Restaurants	Buy Fresh/Buy Local Campaign	CEEE
Real World Education - Wavrly	Bremer	IA	High School	Electric Car Construction	CEEE
Roger's Drive Inn Market - Janesville	Bremer	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Roth, Duane & Shelly - Janesville	Bremer	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Roth, Melvin - Janesville	Bremer	IA	Egg & Poultry Producers	Buy Fresh/Buy Local Campaign	CEEE
Sonja & Otto Bast Farm - Readlyn	Bremer	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Steege's Meat Market & Locker					
Service-Readlyn	Bremer	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Sumner Locker - Sumner	Bremer	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Timber Ridge Bison - Waverly	Bremer	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Tripoli	Bremer	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Washington Irving - Waverly				Technical Education/Energy	
	Bremer	IA	Elementary School	Efficiency	CEEE
Waverly	Bremer	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
CUNA Mutual - Waverly	Bremer	IA	Service	Training	EDC
GMT Corporation - Waverly	Bremer	IA	Manufacturing	Training	EDC
Larabee Center - Waverly	Bremer	IA	Service	Training	EDC
Northern Iowa Therapy - Waverly	Bremer	IA	Health Care	Training	EDC
Schumacher Elevator - Denver	Bremer	IA	Manufacturing	Training	EDC
Terex Cranes - Koehring Cranes -					
Waverly	Bremer	IA	Manufacturing	Training	EDC
Waverly Health Center - Waverly	Bremer	IA	Service	Training	EDC
ELM	Bremer	IA	Economic Development	Economic Impact	IDM
INRCOG	Bremer	IA	Economic Development	Economic Development	IDM



				Assistance	
				Economic Development	
Opportunity Works - Multi-community	Bremer	IA	Economic Development	Assistance	IDM
				Economic Development	
Waverly Area Development Group	Bremer	IA	Economic Development	Assistance	IDM
Denver	Bremer	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Janesville	Bremer	IA	Manufacturing (20-39)	Air Assistance	IWRC
Waverly	Bremer	IA	Services (70-89)	On-Site Assistance	IWRC
Waverly	Bremer	IA	Manufacturing (20-39)	Air Assistance	IWRC
Do-it Corporation	Bremer	IA	Manufacturing	Materials Testing	MIS
Environmental Lubricants					
Manufacturing - Plainfield	Bremer	IA	Manufacturing	Testing/Research	NABL
GMT Corp Waverly	Bremer	IA	Manufacturing	Testing/Research	NABL
Iowa DOT- Waverly	Bremer	IA	Public Works	Testing/Research	NABL
Waverly City Parks - Waverly	Bremer	IA	Public Works	Testing/Research	NABL
				Comprehensive Entrepreneurship	
Eastern Iowa Entrepreneurs	Bremer	IA	Retail/Manufacturing/Service/Technology	Training	RBC/SBDC
•			-	Comprehensive Entrepreneurship	
NE Iowa Entrepreneurs	Bremer	IA	Retail/Manufacturing/Service/Technology	Training	RBC/SBDC
NE Iowa Rural Roundtable- fall &					
spring	Bremer	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
North Central Iowa Bankers	Bremer	IA	Banking	Financial Packaging	RBC/SBDC
GMT - Waverly	Bremer	IA	Manufacturing	Market Research	SMS
100 school children	Bremer/Butler	IA	Natural Resource Management	Technical Presentation	TPC
Wartburg Env. Biology Class	Bremer (30)	IA	Education	Lecture and Tour	IRVM
Bagge Strawberries - Independence	Buchanan	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Brewer, Jennifer & Lonnie - Hazleton	Buchanan	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Clampitt Beef - Independence	Buchanan	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Derflinger Asparagus - Stanley	Buchanan	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Fairbank Locker - Fairbank	Buchanan	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Marks Locker - Rowley	Buchanan	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Patrician Floral Greenhouses -					
Independence	Buchanan	IA	Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Priebe, Stan - Brandon	Buchanan	IA	Fruits & Vegetables, Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
St. John Elementary - Independence	Buchanan	IA	Elementary School	Technical Education/Energy	CEEE



				Efficiency	
Buchanan County Economic				Economic Development	
Development - Independence	Buchanan	IA	Economic Development	Assistance	IDM
				Economic Development	
INRCOG	Buchanan	IA	Economic Development	Assistance	IDM
	D 1	T.A.		Economic Development	IDM
Opportunity Works - Multi-community County Roadside Managers Winter	Buchanan	IA IA	Economic Development Roadside Vegetation Management	Assistance 1-Day Training	IDM IRVM
Mtg.	Buchanan	IA	Roadside Vegetation Management	1-Day Training	IK V IVI
Prescribed Fire Mgmt Workshop 1	Buchanan	IA	Natural Resource Management	5-Day Training	IRVM
Prescribed Fire Mgmt Workshop 2	Buchanan	IA	Natural Resource Management	5-Day Training	IRVM
Independence	Buchanan	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Independence	Buchanan	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Jesup	Buchanan	IA	Retail Trade (52-59)	Air Assistance	IWRC
Jesup	Buchanan	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Dan Roth Farms	Buchanan	IA	Farming	Testing/Research	NABL
John Engles	Buchanan	IA	Farming	Testing/Research	NABL
				Comprehensive Entrepreneurship	
Eastern Iowa Entrepreneurs	Buchanan	IA	Retail/Manufacturing/Service/Technology	Training	RBC/SBDC
			<i>g</i>	Entrepreneurship Educational	
Keystone Area Education Agency 1	Buchanan	IA	Education	Tools	RBC/SBDC
NE Iowa Rural Roundtable- fall &					
spring	Buchanan	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
BH NRCS Private Lands	Buchanan	IA	Natural Resouce Management	Technical Workshop	TPC
Buchanan CCB (31)	Buchanan	IA	Natural Resouce Management	Technical Workshop	TPC
Albert City/Truesdale - Albert City	D 17'	T.A.		Technical Education/Energy	CEEE
•	Buena Vista	IA	Elementary School	Efficiency	CEEE
Sioux Central - Sioux Rapids	Buena Vista	IA	High School	Electric Car Construction	CEEE
Buena Vista Regional Hospital	Buena Vista	IA	Health Care	Cultural Competency Training	ICILI
Storm Lake	Buena Vista	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Aplington	Butler	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Clarksville	Butler	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Daley's Shamrock Acres - New					
Hartford	Butler	IA	Egg & Poultry Producers, Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Dean's Grocery & Natural Foods -					
Aplington	Butler	IA	Grocers	Buy Fresh/Buy Local Campaign	CEEE



				Technical Education/Energy	
Green Elementary School - Greene	Butler	IA	Elementary School	Efficiency	CEEE
Janssen, Robert - Allison	Butler	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Martzahn, Harlan -Greene	Butler	IA	Egg & Poultry Producers	Buy Fresh/Buy Local Campaign	CEEE
Martzahn's Poultry Processing -					
Greene	Butler	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Orly's Meat Market & Locker -					
Clarksville	Butler	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Pleasant Valley Farm - Aplington	Butler	IA	Fruits & Vegetables, Egg & Poultry Prod	Buy Fresh/Buy Local Campaign	CEEE
Shell Rock Honey & Flowers - Shell					
Rock	Butler	IA	Garden Centers, Honey Farms	Buy Fresh/Buy Local Campaign	CEEE
Sterken, Paula - New Hartford	Butler	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Under the Spell Herb Shop - Greene	Butler	IA	Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Urban, Brenda - Clarksville	Butler	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Wedeking Buffalo Farm - Clarksville	Butler	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Wiese, Wayne - New Hartford	Butler	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
				Economic Development	
INRCOG	Butler	IA	Economic Development	Assistance	IDM
				Economic Development	
Opportunity Works - Multi-community	Butler	IA	Economic Development	Assistance	IDM
Allison	Butler	IA	Construction (15-17)	Air Assistance	IWRC
Shell Rock	Butler	IA	Services (70-89)	On-Site Assistance	IWRC
Iowa Northern Railroad	Butler	IA	Railroad	Testing/Research	NABL
Butler Country Resource and Devlop.	Butler	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
NE Iowa Rural Roundtable	Butler	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
North Central Iowa Bankers	Butler	IA	Banking	Financial Packaging	RBC/SBDC
100 school children	Butler/Bremer	IA	Natural Resource Management	Technical Presentation	TPC
Manson NW Webster - Manson	Calhoun	IA	High School	Electric Car Construction	CEEE
Pomeroy Palmer - Pomeroy	Calhoun	IA	High School	Electric Car Construction	CEEE
Manson	Calhoun	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
				Technical Education/Energy	
Kuemper Catholic Elementary - Carroll	Carroll	IA	Elementary School	Efficiency	CEEE
Kuemper Catholic High - Carroll	Carroll	IA	High School	Environmental Issues Instruction	CEEE
		1		Economic Development	
Carroll Area Development Corporation	Carroll	IA	Economic Development	Assistance	IDM
Western Iowa Advantage	Carroll	IA	Economic Development	Economic Development	IDM



				Assistance	
				Entrepreneurship Development,	
Caroll County Economic Development	Carroll	IA	Economic Development	MyEntreNeet	RBC/SBDC
	_			Economic Development	
Southwest Iowa Marketing Coalition	Cass	IA	Economic Development	Assistance	IDM
Plastic Professionals	Cass	IA	Consulting		MCC
D. I. D. I	G 1	T.4	F	Economic Development	TD) (
Prosperity Eastern Iowa	Cedar	IA	Economic Development	Assistance	IDM
Tipton Economic Development	Cedar	IA	Economic Development	Economic Development Assistance	IDM
Durant	Cedar	IA	Manufacturing (20-39)	Air Assistance	IWRC
Clear Creek Elementary - Clear Lake	Cerro Gordo	IA	Elementary School	Environmental Issues Instruction	CEEE
Newman Catholic - Mason City	Cerro Gordo	IA	High School	Environmental Issues Instruction	CEEE
NIACC - Mason City	Cerro Gordo	IA	Community College	Electric Car Construction	CEEE
NIACC - Mason City	Cerro Gordo	IA	Community College	Environmental Issues Instruction	CEEE
Randy Huling Racing - Clear Lake	Cerro Gordo	IA	High School	Electric Car Construction	CEEE
Trainey Truming Tracing Creat Earlie	Cerro Gordo	IA	Trigit School	Economic Development	CEEE
Clear Lake Economic Development	Cerro Gordo	IA	Economic Development	Assistance	IDM
Mason City Economic Development				Economic Development	
Corporation	Cerro Gordo	IA	Economic Development	Assistance	IDM
•				Economic Development	
North Central Iowa Growth Partnership	Cerro Gordo	IA	Economic Development	Assistance	IDM
County Roadside Managers Winter	Cerro Gordo	IA	Roadside Vegetation Management	1-Day Training	IRVM
Mtg.					
Clear Lake	Cerro Gordo	IA	Manufacturing (20-39)	Air Assistance	IWRC
Clear Lake	Cerro Gordo	IA	Public Administration (91-97)	Air Assistance	IWRC
Mason City	Cerro Gordo	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Mason City	Cerro Gordo	IA	Construction (15-17)	Air Assistance	IWRC
				MyEntreNet-Entrepreneurship	
NIACC	Cerro Gordo	IA	Economic Development	Development	RBC/SBDC
North Central Iowa Bankers	Cerro Gordo	IA	Banking	Financial Packaging	RBC/SBDC
Northern Iowa Entrepreneurs	Cerro Gordo	IA	Retail/Manufacturing/Service	Marketing	RBC/SBDC
Swaledale Bio Village- Swaledale	Cerro Gordo	IA	Tourism	Market Research	SMS
County Roadside Managers Winter	Cherokee	IA	Roadside Vegetation Management	1-Day Training	IRVM
Mtg.					
Cherokee	Cherokee	IA	Manufacturing (20-39)	Air Assistance	IWRC



Cherokee	Cherokee	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Marcus	Cherokee	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Burns Angus Farm - Lawler	Chickasaw	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Green Elementary School - Nashua	Chickasaw	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
Hawkeye Buffalo Ranch -					
Fredricksburg	Chickasaw	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Northeast Iowa Business Network	Chickasaw	IA	Economic Development	Economic Development Assistance	IDM
County Roadside Managers Winter Mtg.	Chickasaw	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 1	Chickasaw	IA	Natural Resource Management	5-Day Training	IRVM
New Hampton	Chickasaw	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
Progress Foundry	Chickasaw	IA	Consulting		MCC
NE Iowa Rural Roundtable- fall & Spring	Chickasaw	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
New Hampton High School	Chickasaw	IA	Education	Youth Entrepreneurship Training	RBC/SBDC
North Central Iowa Bankers	Chickasaw	IA	Banking	Financial Packaging	RBC/SBDC
Prescribed Fire Mgmt Workshop 2	Chickasaw (2)	IA	Natural Resource Management	5-Day Training	IRVM
Clarke County Economic Development - Osceola	Clarke	IA	Economic Development	Economic Development Assistance	IDM
Offshore Iowa Communities-Osceola	Clarke	IA	Economic Development	Economic Development Assistance	IDM
Osceola	Clarke	IA	Manufacturing (20-39)	Air Assistance	IWRC
IA Great Lakes Lutheran School - Spencer	Clay	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
County Roadside GPS/GIS Workshop	Clay	IA	Roadside Vegetation Management	2-Day Training	IRVM
County Roadside Managers Winter Mtg.	Clay	IA	Roadside Vegetation Management	1-Day Training	IRVM
Dickens	Clay	IA	Manufacturing (20-39)	Air Assistance, On-site Assistance	IWRC
Spencer	Clay	IA	Manufacturing (20-39)	On-Site Assistance, Air Assistance	IWRC
Spencer	Clay	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
MFL MarMac - Monona	Clayton	IA	High School	Electric Car Construction	CEEE
Natural Beef Home Farm Organics - Farmersburg	Clayton	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE



				Economic Development	
Northeast Iowa Business Network	Clayton	IA	Economic Development	Assistance	IDM
Garber	Clayton	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Keystone Area Education Agency 1	Clayton	IA	Education	Entrepreneurship Educational Tools	RBC/SBDC
NE Iowa Entrepreneurs	Clayton	IA	Retail/Manufacturing/Service/Technology	Business Succession Planning	RBC/SBDC
NE Iowa Entrepreneurs	Clayton	IA	Retail/Manufacturing/Service/Technology	Comprehensive Entrepreneurship Training	RBC/SBDC
NE Iowa Rural Roundtable- fall &	CI.	T.A.		E. I. D. I.	DDC/GDDC
Spring	Clayton	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
Northern Iowa Entrepreneurs	Clayton	IA	Retail/Manufacturing/Service/Technology	Hosted Entrepreneurship Roundtable	RBC/SBDC
Starmont School District	Clayton	IA	Education	Youth Entrepreneurship Training	RBC/SBDC
Delwood Elementary - Delmar	Clinton			Technical Education/Energy	CEEE
		IA	Elementary School	Efficiency	CEEE
Clinton Anna Danalannan Camanatian	Cli	TA	Francis Development	Economic Development	IDM
Clinton Area Development Corporation	Clinton	IA	Economic Development	Assistance Economic Development	IDM
DeWitt Development Company	Clinton	IA	Economic Development	Assistance	IDM
De witt Development Company	Ciliton	1/1	Leonomic Bevelopment	Economic Development	IDW
Prosperity Eastern Iowa	Clinton	IA	Economic Development	Assistance	IDM
County Roadside GPS/GIS Workshop	Clinton	IA	Roadside Vegetation Management	2-Day Training	IRVM
County Roadside Managers Winter Mtg.	Clinton	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 1	Clinton	IA	Natural Resource Management	5-Day Training	IRVM
Camanche	Clinton	IA	Services (70-89)	Air Assistance	IWRC
				On-Site Assistance, Air	
Clinton	Clinton	IA	Services (70-89)	Assistance	IWRC
De Witt	Clinton	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Schleswig Elementary - Schleswig	Crawford	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
				Economic Development	
Western Iowa Advantage	Crawford	IA	Economic Development	Assistance	IDM
Waukee High School - Waukee	Dallas	IA	High School	Electric Car Construction	CEEE
				Economic Development	
Waukee, City of	Dallas	IA	City Government	Assistance	IDM
County Roadside Managers Winter	Dallas	IA	Roadside Vegetation Management	1-Day Training	IRVM
Mtg.					



Prescribed Fire Mgmt Workshop 2	Dallas	IA	Natural Resource Management	5-Day Training	IRVM
Adel	Dallas	IA	Manufacturing (20-39)	Air Assistance	IWRC
Granger	Dallas	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Perry	Dallas	IA	Manufacturing (20-39)	Air Assistance	IWRC
Redfield	Dallas	IA	Manufacturing (20-39)	Air Assistance	IWRC
Waukee	Dallas	IA	Manufacturing (20-39)	Air Assistance	IWRC
Heartland Economic Development Institute	Dallas	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
30 county residents	Dallas	IA	Natural Resouce Management	Public Presentation	TPC
Dallas Co IRVM	Dallas	IA	Natural Resouce Management	Technical Workshop	TPC
County Roadside GPS/GIS Workshop	Dallas (2)	IA	Roadside Vegetation Management	2-Day Training	IRVM
River Hills Initiative	Davis	IA	Economic Development	Economic Development Assistance	IDM
Bloomfield	Davis	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Bloomfield	Davis	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Bloomfield	Davis	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Decatur	Decatur	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Leon	Decatur	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Decatur County Economic Development	Decatur	IA	Economic Development	MyEntreNet-Entrepreneurship Development	RBC/SBDC
Decatur County Economic Development	Decatur	IA	Economic Development	Economic Development Assistance	IDM
Earlville Elementary - Earlville	Delaware	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
Maquoketa Valley - Delhi	Delaware	IA	High School	Electric Car Construction	CEEE
Henderson Manufacturing - Manchester	Delaware	IA	Manufacturing	Training	EDC
Delaware County Economic Development	Delaware	IA	Economic Development	Economic Development Assistance	IDM
Prosperity Eastern Iowa	Delaware	IA	Economic Development	Economic Development Assistance	IDM
Delaware County Economic Development	Delaware	IA	Economic Development	MyEntreNet-Entrepreneurship Development	RBC/SBDC
Keystone Area Education Agency 1	Delaware	IA	Education	Entrepreneurship Educational Tools	RBC/SBDC
NE Iowa Entrepreneurs	Delaware	IA	Retail/Manufacturing/Service/Technology	Business Succession Planning	RBC/SBDC



NE Iowa Rural Roundtable- fall &		ĺ			
Spring	Delaware	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
				Economic Development	
Burlington Chamber of Commerce	Des Moines	IA	Chamber of Commerce	Assistance	IDM
County Roadside GPS/GIS Workshop	Des Moines	IA	Roadside Vegetation Management	2-Day Training	IRVM
County Roadside Managers Winter Mtg.	Des Moines	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 1	Des Moines	IA	Natural Resource Management	5-Day Training	IRVM
Burlington	Des Moines	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Burlington	Des Moines	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Burlington	Des Moines	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Burlington	Des Moines	IA	Services (70-89)	On-Site Assistance	IWRC
Burlington	Des Moines	IA	Manufacturing (20-39)	Air Assistance	IWRC
Okoboji Elementary - Milford	Dickinson	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
Milford	Dickinson	IA	Manufacturing (20-39)	Air Assistance	IWRC
Spirit Lake	Dickinson	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Spirit Lake	Dickinson	IA	Manufacturing (20-39)	Air Assistance	IWRC
Spirit Lake	Dickinson	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Dickinson CCB	Dickinson	IA	Natural Resouce Management	Technical Workshop	TPC
Delaware County Meats - Dyersville	Dubuque	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Dubuque Hempstead High - Asbury	Dubuque	IA	High School	Environmental Issues Instruction	CEEE
Eleanor Roosevelt Middle School - Dubuque	Dubuque	IA	Middle School	Environmental Issues Instruction	CEEE
Hoover School - Dubuque	Dubuque	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
Flexsteel Industries - Dubuque	Dubuque	IA	Manufacturing	Training	EDC
Prosperity Eastern Iowa	Dubuque	IA	Economic Development	Economic Development Assistance	IDM
Bernard	Dubuque	IA	Agriculture, Forestry, and Fishing (01-09)	On-Site Assistance	IWRC
Dubuque	Dubuque	IA	Manufacturing (20-39)	Air Assistance	IWRC
Dubuque	Dubuque	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Dubuque	Dubuque	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Dubuque	Dubuque	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Dyersville	Dubuque	IA	Manufacturing (20-39)	Air Assistance	IWRC



Armstrong	Emmet	IA	Manufacturing (20-39)	Air Assistance	IWRC
Estherville	Emmet	IA	Manufacturing (20-39)	Air Assistance	IWRC
Estherville	Emmet	IA	Retail Trade (52-59)	Air Assistance	IWRC
Estherville	Emmet	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Corner Market & Greenhouse -					
Oelwein	Fayette	IA	Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Edgewood Locker - Arlington	Fayette	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Nelson's Garden - West Union	Fayette	IA	Fruits & Vegetables, Egg & Poultry Prod	Buy Fresh/Buy Local Campaign	CEEE
Oelwein	Fayette	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Oelwein Greenhouse - Oelwein	Fayette	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Oran Locker - Oran	Fayette	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Rawson Berries - West Union	Fayette	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Schuchmann Farms - Arlington	Fayette	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Spain Family Meats - Clermont	Fayette	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Valley Community Elementary - Elgin	Fayette	IA	Elementary School	Environmental Issues Instruction	CEEE
Wadena Locker, Inc - Wadena	Fayette	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Wings Park Elementary - Oelwein	Fayette	IA	Elementary School	Environmental Issues Instruction	CEEE
Fayette County Economic	•				
Development	Fayette	IA	Economic Development	Economic Impact	IDM
Northeast Iowa Business Network	Fayette	IA	Economic Development	Economic Development Assistance	IDM
Oelwein Chamber & Area	Tayette	IA	Economic Development	Economic Development	IDM
Development Development	Fayette	IA	Economic Development	Assistance	IDM
			, , , , , , , , , , , , , , , , , , ,	Economic Development	
Offshore Iowa Communities-Oelwein	Fayette	IA	Economic Development	Assistance	IDM
County Roadside Managers Winter Mtg.	Fayette	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 1	Fayette	IA	Natural Resource Management	5-Day Training	IRVM
Oelwein	Fayette	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
Oelwein	Fayette	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
West Union	Fayette	IA	Services (70-89)	On-Site Assistance	IWRC
West Union	Fayette	IA	Retail Trade (52-59)	Air Assistance	IWRC
Heartland Economic Development Institute	Fayette	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
Indicate	1 ayenc	17.1	Donoine Development	Entrepreneurship Educational	RDC/SDDC
Keystone Area Education Agency 1	Fayette	IA	Education	Tools	RBC/SBDC



NE Iowa Entrepreneurs	Fayette	IA	Retail/Manufacturing/Service/Technology	Business Succession Planning	RBC/SBDC
				Comprehensive Entrepreneurship	
NE Iowa Entrepreneurs	Fayette	IA	Retail/Manufacturing/Service/Technology	Training	RBC/SBDC
NE Iowa Rural Roundtable- fall &					
spring	Fayette	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
N 4 I F		T A	D . 1104 C	Hosted Entrepreneurship	DDC/GDDC
Northern Iowa Entrepreneurs Nora Springs Elementary - Nora	Fayette	IA	Retail/Manufacturing/Service/Technology	Roundtable	RBC/SBDC
Springs Springs	Floyd	IA	Elementary School	Environmental Issues Instruction	CEEE
Springs	1 10yu	1/1	Lienchary School	Economic Development	CLLL
North Central Iowa Growth Partnership	Floyd	IA	Economic Development	Assistance	IDM
Prescribed Fire Mgmt Workshop 2	Floyd	IA	Natural Resource Management	5-Day Training	IRVM
Charles City	Floyd	IA	Manufacturing (20-39)	Air Assistance	IWRC
North Central Iowa Bankers	Floyd	IA	Banking	Financial Packaging	RBC/SBDC
Cambrex Charles City - Charles City	Franklin	IA	Manufacturing	Training	EDC
Franklin County Economic					
Development - Hampton	Franklin	IA	Economic Development	Economic Impact	IDM
				Economic Development	
North Central Iowa Growth Partnership	Franklin	IA	Economic Development	Assistance	IDM
Prescribed Fire Mgmt Workshop 2	Franklin	IA	Natural Resource Management	5-Day Training	IRVM
Hampton	Franklin	IA	Manufacturing (20-39)	Air Assistance	IWRC
Hampton	Franklin	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
Hampton	Franklin	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Hampton	Franklin	IA	Services (70-89)	Air Assistance	IWRC
private	Franklin	IA	Natural Resouce Management	Technical Workshop	TPC
private	Franklin	IA	Natural Resouce Management	Technical Workshop	TPC
			_	Economic Development	
Southwest Iowa Marketing Coalition	Fremont	IA	Economic Development	Assistance	IDM
East Greene School - Grand Junction	_			Technical Education/Energy	
2450 57000 50000 50000	Greene	IA	Elementary School	Efficiency	CEEE
Western Joseph Adventoge	Crooma	TA	Economic Development	Economic Development Assistance	IDM
Western Iowa Advantage	Greene	IA	Economic Development Manufacturing (20, 20)	Assistance Air Assistance	IWRC
Jefferson Lefferson	Greene	IA	Manufacturing (20-39)		
Jefferson L G	Greene	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Genesis Development - Jefferson	Greene	IA	Service	Market Research	SMS
AGWSR Middle School - Wellsburg	Grundy	IA	Elementary School	Technical Education/Energy Efficiency	CEEE



B & J Vegetables - Grundy Center	Grundy	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Grundy Center School - Grundy Center	Grundy	IA	Middle School	Model Solar Cars	CEEE
Grunklee's Greenhouse - Reinbeck	Grundy	IA	Fruits & Vegetables, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
Laughlin's Honey House - Grundy	•				
Center	Grundy	IA	Honey Farms	Buy Fresh/Buy Local Campaign	CEEE
Lean Pork Lane - Eldora	Grundy	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Reinbeck	Grundy	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Tapper, Vernon & Sue - Stout	Grundy	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Triplet Country Meats - Wellsburg	Grundy	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Van Deest Specialty Meats - Grundy	•				
Center	Grundy	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Lincoln Savings Bank - Reinbeck	Grundy	IA	Financial	Training	EDC
	•			Economic Development	
Grundy County Development Alliance	Grundy	IA	Economic Development	Assistance	IDM
nyn go g	G 1			Economic Development	TD14
INRCOG	Grundy	IA	Economic Development	Assistance Economic Development	IDM
Opportunity Works - Multi-community	Grundy	IA	Economic Development	Assistance	IDM
Conrad	Grundy	IA	Manufacturing (20-39)	Air Assistance	IWRC
Conrad	Grundy	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Dike	Grundy	IA	Retail Trade (52-59)	Air Assistance	IWRC
Reinbeck	Grundy	IA	Manufacturing (20-39)	Air Assistance Air Assistance	IWRC
Remocek	Grandy	IA	Wandracturing (20-39)	Economic Development	TWKC
Western Iowa Advantage	Guthrie	IA	Economic Development	Assistance	IDM
Webster City	Hamilton	IA	Manufacturing (20-39)	Air Assistance	IWRC
Webster City	Hamilton	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
			g (2 2 2)	Economic Development	-
North Central Iowa Growth Partnership	Hancock	IA	Economic Development	Assistance	IDM
Britt	Hancock	IA	Services (70-89)	Air Assistance	IWRC
Britt	Hancock	IA	Manufacturing (20-39)	Air Assistance	IWRC
Klemme	Hancock	IA	Manufacturing (20-39)	Air Assistance	IWRC
				MyEntreNet-Entrepreneurship	
Hancock	Hancock	IA	Economic Development	Development	RBC/SBDC
Heartland Economic Development					
Heartland Economic Development Institute	Hancock	IA	Economic Development	Entrepreneurship Development	RBC/SBDC



Hubbard-Radcliffe School - Radcliffe	Hardin	IA	High School	Electric Car Construction	CEEE
Lean Pork Lane - Eldora	Hardin	IA	Egg & Poultry Producers, Meat Prod	Buy Fresh/Buy Local Campaign	CEEE
Riverbend Middle School - Iowa Falls	Hardin	IA	Middle School	Environmental Issues Instruction	CEEE
Hardin County Savings Bank - Eldora	Hardin	IA	Financial	Training	EDC
Iowa Falls City	Hardin	IA	City Government	Economic Development Assistance	IDM
Iowa Falls Development Corporation	Hardin	IA	Economic Development	Economic Development Assistance	IDM
County Roadside Managers Winter Mtg.	Hardin	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 1	Hardin	IA	Natural Resource Management	5-Day Training	IRVM
Prescribed Fire Mgmt Workshop 2	Hardin	IA	Natural Resource Management	4-Day Training	IRVM
Alden	Hardin	IA	Mining (10-14)	Air Assistance	IWRC
Iowa Falls	Hardin	IA	Services (70-89)	Air Assistance	IWRC
Iowa Falls	Hardin	IA	Agriculture, Forestry, and Fishing (01-09)	Air Assistance	IWRC
Dunlap	Harrison	IA	Manufacturing (20-39)	Air Assistance	IWRC
Mt. Pleasant Christian School - Mt. Pleasant	Henry	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
WACO Secondary School - Wayland	Henry	IA	Middle School	Solar Model Car Construction	CEEE
Mt. Pleasant Area Economic Development	Henry	IA	Economic Development	Economic Development Assistance	IDM
Offshore Iowa Communities-Mount Pleasant	Henry	IA	Economic Development	Economic Development Assistance	IDM
County Roadside Managers Winter Mtg.	Henry	IA	Roadside Vegetation Management	1-Day Training	IRVM
Mount Pleasant	Henry	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Mount Pleasant	Henry	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
New London	Henry	IA	Manufacturing (20-39)	Air Assistance	IWRC
Golden Ridge Cheese COOP - Cresco	Howard	IA	Dairy Producers	Buy Fresh/Buy Local Campaign	CEEE
Need-More Land & Cattle Co Chester	Howard	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
North River Produce, Ltd Cresco	Howard	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Northeast Iowa Business Network	Howard	IA	Economic Development	Economic Development Assistance	IDM
NE Iowa Entrepreneurs	Howard	IA	Retail/Manufacturing/Service/Technology	Business Succession Planning	RBC/SBDC



NE Iowa Rural Roundtable- fall &					
Spring	Howard	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
Dakota City	Humboldt	IA	Manufacturing (20-39)	Air Assistance	IWRC
Gilmore City	Humboldt	IA	Mining (10-14)	Air Assistance	IWRC
Humboldt	Humboldt	IA	Manufacturing (20-39)	Air Assistance	IWRC
Humboldt	Humboldt	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
City of Humboldt - Humboldt	Humboldt	IA	City Government	Tourism Training	STEP
Western Iowa Advantage	Ida	IA	Economic Development	Economic Development Assistance	IDM
Galva	Ida	IA	Manufacturing (20-39)	Air Assistance	IWRC
Midwest Industries	Ida	IA	Manufacturing	Materials Testing	MIS
Heartland Economic Development Institute	Ida	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
Clear Creek Amana School - Amana	Iowa	IA	Middle School	Solar Model Car Construction	CEEE
County Roadside Managers Winter Mtg.	Iowa	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 2	Iowa	IA	Natural Resource Management	4-Day Training	IRVM
Marengo	Iowa	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
North English	Iowa	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
North English	Iowa	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Victor	Iowa	IA	Construction (15-17)	Air Assistance	IWRC
Williamsburg	Iowa	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Gateway Natural Meats - Bellevue	Jackson	IA	Egg & Poultry Producers	Buy Fresh/Buy Local Campaign	CEEE
Gateway Natural Meats - Bellevue	Jackson	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
St. Joseph Catholic - Bellevue	Jackson	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
Prosperity Eastern Iowa	Jackson	IA	Economic Development	Economic Development Assistance	IDM
Maquoketa	Jackson	IA	Manufacturing (20-39)	Air Assistance	IWRC
Maquoketa	Jackson	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Maquoketa	Jackson	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
private	Jackson	IA	Natural Resouce Management	Technical Workshop	TPC
private	Jackson	IA	Natural Resouce Management	Technical Workshop	TPC
Iowa Connections	Jasper	IA	Economic Development	Economic Development Assistance	IDM
Jasper County Economic Development	Jasper	IA	Economic Development	Economic Development	IDM



				Assistance	
Colfax	Jasper	IA	Manufacturing (20-39)	Air Assistance	IWRC
Newton	Jasper	IA	Services (70-89)	Air Assistance	IWRC
Newton	Jasper	IA	Services (70-89)	On-Site Assistance	IWRC
Sully	Jasper	IA	Construction (15-17)	Air Assistance	IWRC
Newton	Jasper	IA	Museum	Growth & Relocation	JPEC
Jasper SWCD	Jasper	IA	Natural Resouce Management	Technical Workshop	TPC
Fairfield High School - Fairfield	Jefferson	IA	High School	Electric Car Construction	CEEE
Fairfield Economic Development Association	Jefferson	IA	Economic Development	Economic Development Assistance	IDM
River Hills Initiative	Jefferson	IA	Economic Development	Economic Development Assistance	IDM
Fairfield	Jefferson	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
Iowa City High - Iowa City	Johnson	IA	High School	Environmental Issues Instruction	CEEE
Iowa City West - Iowa City	Johnson	IA	High School	Electric Car Construction	CEEE
ACT - Iowa City	Johnson	IA	Service	Training	EDC
Integrated DNA Technologies - Iowa City	Johnson	IA	Manufacturing	Training	EDC
				Economic Development	
Iowa City Area Development Group	Johnson	IA	Economic Development	Assistance	IDM
County Roadside GPS/GIS Workshop	Johnson	IA	Roadside Vegetation Management	2-Day Training	IRVM
County Roadside Managers Winter Mtg.	Johnson	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 1	Johnson	IA	Natural Resource Management	5-Day Training	IRVM
Iowa City	Johnson	IA	Services (70-89)	Air Assistance	IWRC
Iowa City	Johnson	IA	Services (70-89)	On-Site Assistance	IWRC
City of Iowa City	Johnson	IA	Muncipality	Entrepreneurship Development	RBC/SBDC
Iowa City Chamber of Commerce	Johnson	IA	Chamber of Commerce	Entrepreneurship Development	RBC/SBDC
Red Tail Restorations	Johnson	IA	Natural Resouce Management	Technical Workshop	TPC
Energy Manufacturing - Monticello	Jones	IA	Manufacturing	Training	EDC
Prosperity Eastern Iowa	Jones	IA	Economic Development	Economic Development Assistance	IDM
County Roadside GPS/GIS Workshop	Jones	IA	Roadside Vegetation Management	2-Day Training	IRVM
County Roadside Managers Winter Mtg.	Jones	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 2	Jones	IA	Natural Resource Management	4-Day Training	IRVM



Anamosa	Jones	IA	Manufacturing (20-39)	Air Assistance	IWRC
Monticello	Jones	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Monticello	Jones	IA	Finance, Insurance, & Real Estate (60-67)	On-Site Assistance	IWRC
Monticello	Jones	IA	Manufacturing (20-39)	Air Assistance	IWRC
20 county residents	Jones	IA	Natural Resource Management	Public Presentation	TPC
Anamosa NRCS	Jones	IA	Natural Resouce Management	Technical Workshop	TPC
Pekin School - Packwood	Keokuk	IA	High School	Electric Car Construction	CEEE
Sigourney Elementary - Sigourney	Keokuk	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
River Hills Initiative	Keokuk	IA	Economic Development	Economic Development Assistance	IDM
Sigourney Area Development Corporation	Keokuk	IA	Economic Development	Economic Development Assistance	IDM
County Roadside Managers Winter Mtg.	Keokuk	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 1	Keokuk	IA	Natural Resource Management	5-Day Training	IRVM
Harper	Keokuk	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Keokuk IRVM	Keokuk	IA	Natural Resouce Management	Technical Workshop	TPC
Algona	Kossuth	IA	City Government	Economic Development Assistance	IDM
Kossuth County Economic				Economic Development	
Development	Kossuth	IA	Economic Development	Assistance	IDM
Offshore Iowa Communities-Algona	Kossuth	IA	Economic Development	Economic Development Assistance	IDM
Algona	Kossuth	IA	Manufacturing (20-39)	Air Assistance	IWRC
Algona	Kossuth	IA	Mining (10-14)	Air Assistance	IWRC
Algona	Kossuth	IA	Construction (15-17)	Air Assistance	IWRC
Algona	Kossuth	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Algona	Kossuth	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Algona	Kossuth	IA	Services (70-89)	Air Assistance	IWRC
County Roadside Managers Winter Mtg.	Lee	IA	Roadside Vegetation Management	1-Day Training	IRVM
Fort Madison	Lee	IA	Manufacturing (20-39)	Air Assistance	IWRC
Fort Madison	Lee	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Keokuk	Lee	IA	Nonclassified Establishments (99-99)	Air Assistance	IWRC
Pilot Grove	Lee	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC



West Point	Lee	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
				Technical Education/Energy	
Harding Middle School - Cedar Rapids	Linn	IA	Middle School	Efficiency	CEEE
Heritage Point Farm - Center Point	Linn	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Kennedy - Cedar Rapids	Linn	IA	High School	Electric Car Construction	CEEE
Prairie - Cedar Rapids	Linn	IA	High School	Electric Car Construction	CEEE
Rehberg, Dennis & Lea - Walker	Linn	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
St. Ludmila School - Cedar Rapids	Linn	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
Alliant Energy - Cedar Rapids	Linn	IA	Service	Training	EDC
Gazette Communications - Cedar					
Rapids	Linn	IA	Publishing	Training	EDC
GE Capital - Cedar Rapids	Linn	IA		Training	EDC
General Mills - Cedar Rapids	Linn	IA	Manufacturing	Training	EDC
Intermec Technologies - Cedar Rapids	Linn	IA	Manufacturing	Training	EDC
Linn Area Credit Union - Cedar Rapids	Linn	IA	Financial	Training	EDC
Midland Forge - Cedar Rapids	Linn	IA	Manufacturing	Training	EDC
Quaker Oats - Cedar Rapids	Linn	IA	Manufacturing	Training	EDC
St. Luke's Hospital - Cedar Rapids	Linn	IA	Health Care	Training	EDC
United Fire & Casualty Co - Cedar					
Rapids	Linn	IA	Service	Training	EDC
Worley Warehousing - Cedar Rapids	Linn	IA	Service	Training	EDC
Alliant Energy - Multi-community	Linn	IA	Utility	Economic Development Assistance	IDM
County Roadside Managers Winter Mtg.	Linn	IA	Roadside Vegetation Management	1-Day Training	IRVM
Cedar Rapids	Linn	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Cedar Rapids	Linn	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Cedar Rapids	Linn	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Cedar Rapids	Linn	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Cedar Rapids	Linn	IA	Manufacturing (20-39)	Air Assistance	IWRC
Hiawatha	Linn	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Hiawatha	Linn	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Cedar Rapids	Linn	IA	Lawn Products	Start-up	JPEC
Iowa Interstate Railroad - Cedar Rapids	Linn	IA	Railroad	Testing/Research	NABL
PMX Industries, Inc.	Linn	IA	Manufacturing	Testing/Research	NABL



Cedar Rapids Area Visitor & Conv					
Bureau - Cedar Rapids	Linn	IA	Tourism	Tourism Training	STEP
Linn CCB	Linn	IA	Natural Resouce Management	Technical Workshop	TPC
Marion 2ndary Rds	Linn	IA	Natural Resouce Management	Technical Workshop	TPC
Prescribed Fire Mgmt Workshop 2	Linn (4)	IA	Natural Resource Management	4-Day Training	IRVM
Prescribed Fire Mgmt Workshop 1	Linn (8)	IA	Natural Resource Management	5-Day Training	IRVM
private	Linn?	IA	Natural Resouce Management	Technical Workshop	TPC
Wapello	Louisa	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Wapello	Louisa	IA	Manufacturing (20-39)	Air Assistance	IWRC
River Hills Initiative	Lucas	IA	Economic Development	Economic Development Assistance	IDM
Chariton	Lucas	IA	Services (70-89)	Air Assistance	IWRC
Chariton	Lucas	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
private	Lucas	IA	Natural Resouce Management	Technical Workshop	TPC
George	Lyon	IA	Manufacturing (20-39)	Air Assistance	IWRC
Rock Rapids	Lyon	IA	Manufacturing (20-39)	Air Assistance	IWRC
Winterset	Madison	IA	Manufacturing (20-39)	Air Assistance	IWRC
River Hills Initiative	Mahaska	IA	Economic Development	Economic Development Assistance	IDM
County Roadside GPS/GIS Workshop	Mahaska	IA	Roadside Vegetation Management	2-Day Training	IRVM
County Roadside Managers Winter Mtg.	Mahaska	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 2	Mahaska	IA	Natural Resource Management	4-Day Training	IRVM
New Sharon	Mahaska	IA	Manufacturing (20-39)	Air Assistance	IWRC
Oskaloosa	Mahaska	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Oskaloosa	Mahaska	IA	Manufacturing (20-39)	Air Assistance	IWRC
Oskaloosa	Mahaska	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
Oskaloosa	Mahaska	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Clow Valve Co Oskaloosa	Mahaska	IA	Manufacturing	Testing/Research	NABL
Mahaska IRVM	Mahaska	IA	Natural Resouce Management	Technical Workshop	TPC
Knoxville	Marion	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
Pella	Marion	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
Pella	Marion	IA	Retail Trade (52-59)	Air Assistance	IWRC
Pella	Marion	IA	Manufacturing (20-39)	Air Assistance	IWRC



Marion County Economic Development	Marion	IA	Economic Development	MyEntreNet-Entrepreneurship Development	RBC/SBDC
West Marshall Middle School - State	Willion	17.1	Economic Bevelopment	Technical Education/Energy	RECIBER
Center	Marshall	IA	Elementary School	Efficiency	CEEE
				Economic Development	<u> </u>
Iowa Connections	Marshall	IA	Economic Development	Assistance	IDM
Prescribed Fire Mgmt Workshop 1	Marshall	IA	Natural Resource Management	5-Day Training	IRVM
Albion	Marshall	IA	Manufacturing (20-39)	Air Assistance	IWRC
Marshalltown	Marshall	IA	Manufacturing (20-39)	Air Assistance	IWRC
Marshalltown	Marshall	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Technology Association of Iowa - Rhodes	Marshall	IA	Service	Market Research	SMS
Marshall CCB	Marshall	IA	Natural Resouce Management	Technical Workshop	TPC
Silver City	Mills	IA	Retail Trade (52-59)	Air Assistance	IWRC
Riceville School - Riceville	Mitchell	IA	High School	Electric Car Construction	CEEE
Ricevine School Ricevine	Witchen	IA	High School	Economic Development	CEEE
North Central Iowa Growth Partnership	Mitchell	IA	Economic Development	Assistance	IDM
	36.1.11	Ŧ.	Transportation and Public Utilities (40-		W.D.C
Osage	Mitchell	IA	49)	Air Assistance	IWRC
Osage	Mitchell	IA	Services (70-89)	On-Site Assistance	IWRC
Saint Ansgar	Mitchell	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
North Central Iowa Bankers	Mitchell	IA	Banking	Financial Packaging	RBC/SBDC
County Roadside Managers Winter Mtg.	Monona	IA	Roadside Vegetation Management	1-Day Training	IRVM
River Hills Initiative	Monroe	IA	Economic Development	Economic Development Assistance	IDM
Albia	Monroe	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Albia	Monroe	IA	Manufacturing (20-39)	Air Assistance	IWRC
7 HOIL	Willing	1/1	174411414141111g (20-37)	Economic Development	1 11 100
Southwest Iowa Marketing Coalition	Montgomery	IA	Economic Development	Assistance	IDM
			•	Env. Education regarding recycling, water quality and	
Iowa Schools	Multi-county	IA	Education	health	RRTTC
UNI Foundation	Multi-county	IA	Service	Market Research	SMS
Iowa Citizens, Businesses and		1		Technical Assistance, & Env.	
Industries	Multi-county	IA		Education	RRTTC



Multi-county	IA	Tourism	Tourism Training	STEP
Muscatine	IA	Elementary School		CEEE
Muscatine	IA	Elementary School		CEEE
Muscatine	IA	Elementary School		CEEE
3.6	T.			CEEE
Muscatine	IA	Elementary School		CEEE
3.6	T.A.			CEEE
Muscatine	IA	Elementary School		CEEE
Marantina	т л	Elamantama Cala al		CEEE
Muscanne	IA	Elementary School		CEEE
Musastina	TA	Elamantamy Cahaol		CEEE
	_	Ž	·	
				CEEE
Muscatine	IA	Middle School		CEEE
				~~~~
Muscatine	IA	Elementary School		CEEE
Muscatine				IDM
Muscatine	IA		2-Day Training	IRVM
Muscatine	IA	Roadside Vegetation Management	1-Day Training	IRVM
Muscatine	IA	Services (70-89)	On-Site Assistance	IWRC
Muscatine	IA	Construction (15-17)	On-Site Assistance	IWRC
Muscatine	IA	Manufacturing (20-39)	Air Assistance	IWRC
Muscatine	IA	Manufacturing (20-39)	Air Assistance	IWRC
Muscatine	IA	Manufacturing	Market Research	SMS
O'Brien	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
<u> </u>	+			1120,5220
Page	IA	Elementary School		CEEE
		-	-	JPEC
8-	+		Economic Development	
			Economic Development	
	Muscatine  Muscatine	Muscatine IA  Muscatine IA	Muscatine IA Elementary School  Muscatine IA High School  Muscatine IA Middle School  Muscatine IA Elementary School  Muscatine IA Elementary School  Muscatine IA Roadside Vegetation Management  Muscatine IA Roadside Vegetation Management  Muscatine IA Services (70-89)  Muscatine IA Construction (15-17)  Muscatine IA Manufacturing (20-39)  Muscatine IA Manufacturing  O'Brien IA Economic Development  Page IA Elementary School	Muscatine         IA         Elementary School         Technical Education/Energy Efficiency           Muscatine         IA         Elementary School         Efficiency           Muscatine         IA         High School         Electric Car Construction           Muscatine         IA         Middle School         Solar Model Car Construction           Muscatine         IA         Elementary School         Efficiency           Muscatine         IA         Chamber of Commerce         Assistance           Muscatine         IA         Roadside Vegetation Management         2-Day Training           Muscatine         IA         Roadside Vegetation Management         1-Day Training           Muscatine         IA         Construction (15-17)         On-Site Assistance



Area Prairie Enthusiasts	Page (15)	IA	Education	Presentation	IRVM
Palo Alto Conservation Board -					
Ruthven	Palo Alto	IA	Middle School	Solar Model Car Construction	CEEE
Prescribed Fire Mgmt Workshop 2	Palo Alto	IA	Natural Resource Management	4-Day Training	IRVM
Emmetsburg	Palo Alto	IA	Manufacturing (20-39)	Air Assistance	IWRC
Emmetsburg	Palo Alto	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Le Mars	Plymouth	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Le Mars	Plymouth	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Iowa Assoc. of Business & Industry- Des Moines	Polk	IA	Service	Training	EDC
Downtown Employers	Polk	IA	Private and Public Sector Employers	Measuring Diversity Training	ICILI
Iowa Center for Ag Safety	Polk	IA	Health Care	Cultural Competency Training	ICILI
Iowa Department of Economic Development	Polk	IA	Economic Development	Immigration & Workforce in Iowa	ICILI
Iowa Hospice Association	Polk	IA	Health Care	Cultural Competency Training	ICILI
Iowa Pharmacy Association	Polk	IA	Health Care	Cultural Competency Training	ICILI
Iowa State Gerontology Association	Polk	IA	Human Services	Cultural Competency Training	ICILI
Iowa State Gerontology Association	Polk	IA	Human Services	Measuring Diversity Training	ICILI
<u> </u>				Economic Development	
Aquila - Multi-community	Polk	IA	Utility	Assistance	IDM
County Roadside Managers Winter Mtg.	Polk	IA	Roadside Vegetation Management	1-Day Training	IRVM
Ankeny	Polk	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Clive	Polk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Services (70-89)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Services (70-89)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Services (70-89)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Agriculture, Forestry, and Fishing (01-09)	Air Assistance	IWRC
Des Moines	Polk	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Manufacturing (20-39)	Air Assistance	IWRC



Des Moines	Polk	IA	Retail Trade (52-59)	Air Assistance	IWRC
Urbandale	Polk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Urbandale	Polk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Urbandale	Polk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
West Des Moines	Polk	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Des Moines	Polk	IA	Bar & Grill	Start-up	JPEC
Des Moines	Polk	IA	Retail	Start-up	JPEC
Barton Solvents	Polk	IA	Chemicals	Testing/Research	NABL
Iowa Dept. of Economic Development	Polk	IA	Service	Market Research	SMS
Prescribed Fire Mgmt Workshop 2	Polk (3)	IA	Natural Resource Management	4-Day Training	IRVM
Iowa Natural Heritage Foundation Interns	Polk (8)	IA	Education	Presentation	IRVM
Council Bluffs Chamber of Commerce	Pottawattamie	IA	Chamber of Commerce	Economic Development Assistance	IDM
Carter Lake	Pottawattamie	IA	Services (70-89)	On-Site Assistance	IWRC
Heartland Economic Development Institute	Pottawattamie	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
B & B Farms - Grinnell	Poweshiek	IA	Egg & Poultry Producers	Buy Fresh/Buy Local Campaign	CEEE
Grinnel High School - Grinnell	Poweshiek	IA	High School	Electric Car Construction	CEEE
Iowa Connections	Poweshiek	IA	Economic Development	Economic Development Assistance	IDM
Brooklyn	Poweshiek	IA	Public Administration (91-97)	Air Assistance	IWRC
Grinnell	Poweshiek	IA	Manufacturing (20-39)	Air Assistance	IWRC
Grinnell	Poweshiek	IA	Services (70-89)	Air Assistance	IWRC
Grinnell	Poweshiek	IA	Wholesale Trade (50-51)	Air Assistance	IWRC
Grinnell	Poweshiek	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
POW I 80	Poweshiek	IA	Economic Development	MyEntreNet-Entrepreneurship Develop	RBC/SBDC
ASI Signs - Grinnell	Poweshiek	IA	Manufacturing	Market Research	SMS
private	Poweshiek	IA	Natural Resouce Management	Technical Workshop	TPC
private	Poweshiek	IA	Natural Resouce Management	Technical Workshop	TPC
Southwest Iowa Marketing Coalition	Ringgold	IA	Economic Development	Economic Development Assistance	IDM
Western Iowa Advantage	Sac	IA	Economic Development	Economic Development Assistance	IDM
County Roadside Managers Winter	Sac	IA	Roadside Vegetation Management	1-Day Training	IRVM



Mtg.					
Heartland Economic Development					
Institute	Sac	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
County Roadside GPS/GIS Workshop	Sac (2)	IA	Roadside Vegetation Management	2-Day Training	IRVM
Davenport Central - Davnport	Scott	IA	High School	Electric Car Construction	CEEE
JK Kennedy Catholic - Davenport	Scott	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
St. Paul the Apostle School -	Scott				-
Davenport		IA	Middle School	Environmental Issues Instruction	CEEE
Wilson Elementary - Davenport	Scott	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
County Health Department	Scott	IA	Health Care	Cultural Competency Training	ICILI
MidAmerica Energy - Multi- community	Scott	IA	Utility	Economic Development Assistance	IDM
Quad City Development	Scott	IA	Construction - Payroll Spending	Economic Impact	IDM
Bettendorf	Scott	IA	Retail Trade (52-59)	Air Assistance	IWRC
Bettendorf	Scott	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Davenport	Scott	IA	Services (70-89)	Air Assistance	IWRC
Davenport	Scott	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Davenport	Scott	IA	Retail Trade (52-59)	Air Assistance	IWRC
Davenport	Scott	IA	Nonclassified Establishments (99-99)	Air Assistance	IWRC
Davenport	Scott	IA	Manufacturing (20-39)	Air Assistance	IWRC
Davenport	Scott	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Davenport	Scott	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Eldridge	Scott	IA	Manufacturing (20-39)	Air Assistance	IWRC
Eldridge	Scott	IA	Services (70-89)	Air Assistance	IWRC
			Transportation and Public Utilities (40-		
Eldridge	Scott	IA	49)	Air Assistance	IWRC
Offshore Iowa Communities-Harlan	Shelby	IA	Economic Development	Economic Development Assistance	IDM
Shelby County DevelopSource	Shelby	IA	Economic Development	Economic Development Assistance	IDM
				Economic Development	
Southwest Iowa Marketing Coalition	Shelby	IA	Economic Development	Assistance	IDM
County Roadside Managers Winter Mtg.	Shelby	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 2	Shelby	IA	Natural Resource Management	4-Day Training	IRVM



Harlan	Shelby	IA	Mining (10-14)	On-Site Assistance	IWRC
Harlan	Shelby	IA	Mining (10-14)	Air Assistance	IWRC
Harlan	Shelby	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Heartland Economic Development					
Institute	Shelby	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
Alton	Sioux	IA	Services (70-89)	On-Site Assistance	IWRC
Alton	Sioux	IA	Services (70-89)	Air Assistance	IWRC
Granville	Sioux	IA	Services (70-89)	Air Assistance	IWRC
Granville	Sioux	IA	Services (70-89)	On-Site Assistance	IWRC
Hull	Sioux	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Orange City	Sioux	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Orange City	Sioux	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Orange City	Sioux	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Orange City	Sioux	IA	Manufacturing (20-39)	Air Assistance	IWRC
Orange City	Sioux	IA	Retail Trade (52-59)	Air Assistance	IWRC
Orange City	Sioux	IA	Retail Trade (52-59)	On-Site Assistance	IWRC
Sioux Center	Sioux	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Alton	Sioux	IA	Truck & Pet Wash	Start-up	JPEC
DNR Private Lands Biologist	Sioux	IA	Natural Resouce Management	Technical Workshop	TPC
Sioux County Hospital	Sioux	IA	Health Care	Cultural Competency Training	ICILI
				Education & Research	
Iowa Department of Natural	G			activities in Geospatial	G TENER
Resources	Statewide	IA	State Government	technologies  Education & Research	GeoTREE
US Fish and Wildlife Service and				activities in Geospatial	
NASA	Statewide	IA	US Government Agency	technologies	GeoTREE
	2000			Economic Development	
Iowa Area Development Group	Statewide	IA	<b>Economic Development</b>	Assistance	IDM
Iowa Department of Economic				<b>Economic Development</b>	
Development	Statewide	IA	State Agency	Assistance	IDM
Iowa Workforce Development	Statewide	IA	State Agency	Update Laborshed Analysis	IDM
	a			<b>Economic Development</b>	
Professional Developers of Iowa	Statewide	IA	Economic Development	Assistance	IDM
County Engineer's Conference	Statewide	IA	Roadside Vegetation Management	Technical Pesentation	IRVM IRVM
County Weed Commissioner's Conf.	Statewide	IA		Roadside Vegetation Management Technical Presentation	
DOT Living Roadway Trust Fund	Statewide	IA	Roadside Vegetation Management Grant writing instruction		IRVM



				mailing	
IRVM Calendar/Poster	Statewide	IA	Roadside Vegetation Management	Education/Promotion Material	IRVM
Native Seed Distribution for Roadsides	Statewide	IA	Roadside Vegetation Management	Wrote grant, bought their seed	IRVM
Roader's Digest Newsletter	Statewide	IA	Roadside Vegetation Management	Informational Networking	IRVM
Roadside Conference	Statewide	IA	Roadside Vegetation Management	2-Day Technical Training	IRVM
Entrepreneurial Hot Team	Statewide	IA	Economic Development	MyEntreNet-Entrepreneurship Development	RBC/SBDC
Professional Developers of Iowa	Statewide	IA	<b>Economic Development</b>	Rural Entrepreneurship Development	RBC/SBDC
Statewide Press Conference	Statewide	IA	Economic Development	MyEntreNet- statewide rollout presentation	RBC/SBDC
Pheasants Forever St. Meet	Statewide	IA	Natural Resource Management	<b>Technical Presentation</b>	TPC
Collins-Maxwell CSD - Maxwell	Story	IA	Elementary School	Technical Education/Energy Efficiency	CEEE
County Roadside Managers Winter Mtg.	Story	IA	Roadside Vegetation Management	1-Day Training	IRVM
Prescribed Fire Mgmt Workshop 2	Story	IA	Natural Resource Management	4-Day Training	IRVM
Ames	Story	IA	Manufacturing (20-39)	Air Assistance	IWRC
Ames	Story	IA	Public Administration (91-97)	On-Site Assistance	IWRC
Ames	Story	IA	Retail Trade (52-59)	Air Assistance	IWRC
Ames	Story	IA	Construction (15-17)	Air Assistance	IWRC
Huxley	Story	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Huxley	Story	IA	Retail Trade (52-59)	Air Assistance	IWRC
Nevada	Story	IA	Manufacturing (20-39)	Air Assistance	IWRC
Iowa State University: Office of Biorenewable Programs	Story	IA	Research	Testing/Research	NABL
Vibroaccoustics - Ames	Story	IA	Manufacturing	Testing/Research	NABL
AgFlex/American Farmland Trust - Ames	Story	IA	Ag Insurance/Warranty	Market Research	SMS
Iowa Energy Center - Ames	Story	IA	Service	Market Research	SMS
Record Printing - Story City	Story	IA	Publishing	Market Research	SMS
Grad Student, ISU (6)	Story	IA	Natural Resouce Management	Technical Workshop	TPC
private	Story	IA	Natural Resouce Management	Technical Workshop	TPC
Professor, ISU	Story	IA	Natural Resouce Management	Technical Workshop	TPC



Story CCB	Story	IA	Natural Resouce Management	Technical Workshop	TPC
Adolph's Produce and Bakery - Traer	Tama	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
C & T Farm - Toledo	Tama	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Dreesman Buffalo Ranch - Tama	Tama	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Dysart	Tama	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Heritage Farm - Clutier	Tama	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Hinegardner Orchard - Montour	Tama	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Lorenz Produce - Traer	Tama	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Monat Natural Beef - Traer	Tama	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Poduska Farm - Chelsea	Tama	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Porkland Farms, Inc Buckingham	Tama	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Richardson, Rod - Tama	Tama	IA	Fruits & Vegetables, Egg & Poultry Prod	Buy Fresh/Buy Local Campaign	CEEE
Sienknecht, Alan & Kristi - Clutier	Tama	IA	Fruits & Vegetables	Buy Fresh/Buy Local Campaign	CEEE
Storjohan, Don - Garwin	Tama	IA	Honey Farms	Buy Fresh/Buy Local Campaign	CEEE
Swale, Tom - Traer	Tama	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Toledo	Tama	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Traer	Tama	IA	Farmers Market	Buy Fresh/Buy Local Campaign	CEEE
Van's Locker, Inc Dysart	Tama	IA	Meat Lockers	Buy Fresh/Buy Local Campaign	CEEE
Vienna Farms - Gladbrook	Tama	IA	Egg & Poultry Producers, Meat Prod	Buy Fresh/Buy Local Campaign	CEEE
Werner, Eric & Michele - Toledo	Tama	IA	Fruits & Vegetables, Egg & Poultry Producers, Meat Producers, Garden Centers	Buy Fresh/Buy Local Campaign	CEEE
				Economic Development	
Iowa Connections	Tama	IA	Economic Development	Assistance	IDM
Opportunity Works - Multi-community	Tama	IA	Economic Development	Economic Development Assistance	IDM
Prescribed Fire Mgmt Workshop 1	Tama	IA	Natural Resource Management	5-Day Training	IRVM
Tama	Tama	IA	Manufacturing (20-39)	Air Assistance	IWRC
Toledo	Tama	IA	Services (70-89)	Air Assistance	IWRC
1 Oledo	1 ailia	IA	Transportation and Public Utilities (40-	All Assistance	IWKC
Traer	Tama	IA	49) Air Assistance		IWRC
NE Iowa Rural Roundtable- fall &					
spring	Tama	IA	Economic Development Entrepreneurship Development		RBC/SBDC
Tama County Entrepreneurs	Tama	IA	Retail/Manufacturing/Service/Technology	Marketing/Branding	RBC/SBDC
Bedford Area Economic Development	Taylor	IA	Economic Development	Economic Development Assistance	IDM



Southwest Iowa Marketing Coalition	Taylor	IA	Economic Development	Economic Development Assistance	IDM
The state of the s	Taylor	IA	Economic Development		IDM
Union County Economic Development - Creston	Union	IA	Economic Development	Economic Development Assistance	IDM
	Union		Services (70-89)		IWRC
Creston		IA	` /	On-Site Assistance	
Creston	Union	IA	Manufacturing (20-39)	On-Site Assistance Economic Development	IWRC
River Hills Initiative	Van Buren	IA	Economic Development	Assistance	IDM
River Tims initiative	van Buren	1/1	Economic Development	Economic Development	IDWI
River Hills Initiative	Wapello	IA	Economic Development	Assistance	IDM
Prescribed Fire Mgmt Workshop 1	Wapello	IA	Natural Resource Management	5-Day Training	IRVM
Eddyville	Wapello	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Eddyville	Wapello	IA	Manufacturing (20-39)	Air Assistance	IWRC
Ottumwa	Wapello	IA	Services (70-89)	Air Assistance	IWRC
Carlisle	Warren	IA	Manufacturing (20-39)	Air Assistance	IWRC
Indianola	Warren	IA	Manufacturing (20-39)	Air Assistance	IWRC
Mid Prairie Middle School - Kalona	Washington	IA	Middle School	Technical Education/Energy Efficiency	CEEE
	<u> </u>			Technical Education/Energy	
Riverside Elementary - Riverside	Washington	IA	Elementary School	Efficiency	CEEE
Modine Manufacturing - Washington	Washington	IA	Manufacturing	Training	EDC
Washington	Washington	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Washington	Washington	IA	Manufacturing (20-39)	Air Assistance	IWRC
Washington County Engineer	Washington (2)	IA	Roadside Vegetation Management	Program Implementation Mtg	IRVM
River Hills Initiative	Wayne	IA	Economic Development	Economic Development Assistance	IDM
Prescribed Fire Mgmt Workshop 2	Wayne	IA	Natural Resource Management	4-Day Training	IRVM
Allerton	Wayne	IA	Manufacturing (20-39)	Air Assistance	IWRC
Corydon	Wayne	IA	Manufacturing (20-39)	Air Assistance	IWRC
Seymour	Wayne	IA	Manufacturing (20-39)	Air Assistance	IWRC
Iowa Central Community College -	•				
Fort Dodge	Webster	IA	Community College	Electric Car Construction	CEEE
Prescribed Fire Mgmt Workshop 2	Webster	IA	Natural Resource Management	4-Day Training	IRVM
F. (D. L.	XX.1	T A	Transportation and Public Utilities (40-	Aim Assistance	IWDC
Fort Dodge	Webster	IA	49)	Air Assistance	IWRC
Fort Dodge	Webster	IA	Manufacturing (20-39)	Air Assistance	IWRC



Fort Dodge	Webster	IA	Mining (10-14)	Air Assistance	IWRC
Gowrie	Webster	IA	Public Administration (91-97)	Air Assistance	IWRC
Lake Mills High School - Lake Mills	Winnebago	IA	High School	Environmental Issues Instruction	CEEE
Lake Mills Middle School - Lake Mills	Winnebago	IA	Middle School	Environmental Issues Instruction	CEEE
North Central Iowa Growth Partnership	Winnebago	IA	Economic Development	Economic Development Assistance	IDM
Winn-Worth Betco	Winnebago	IA	Economic Development	Economic Development Assistance	IDM
Forest City	Winnebago	IA	Services (70-89)	On-Site Assistance	IWRC
Lake Mills	Winnebago	IA	Manufacturing (20-39)	Air Assistance	IWRC
Forest City Economic Development Corp.	Winnebago	IA	Economic Development	MyEntreNet-Entrepreneurship Develop	RBC/SBDC
Winnebago	Winnebago	IA	Economic Development	MyEntreNet-Entrepreneurship Develop	RBC/SBDC
Northeast Iowa Business Network	Winnesheik	IA	Economic Development	Economic Development Assistance	IDM
Lubke's Natural Beef - Decorah	Winneshiek	IA	Meat Producers	Buy Fresh/Buy Local Campaign	CEEE
Prescribed Fire Mgmt Workshop 2	Winneshiek	IA	Natural Resource Management	4-Day Training	IRVM
Calmar	Winneshiek	IA	Construction (15-17)	Air Assistance	IWRC
Decorah	Winneshiek	IA	Manufacturing (20-39)	On-Site Assistance	IWRC
Decorah	Winneshiek	IA	Food Manufacturing	Start-up	JPEC
Keystone Area Education Agency 1	Winneshiek	IA	Education	Entrepreneurship Educational Tools	RBC/SBDC
NE Iowa Entrepreneurs	Winneshiek	IA	Retail/Manufacturing/Service/Technology	Business Succession Planning	RBC/SBDC
NE Iowa Rural Roundtable- fall & spring	Winneshiek	IA	Economic Development	Entrepreneurship Development	RBC/SBDC
South Winneshiek High School	Winneshiek	IA	Education	Youth Entrepreneurship Training	RBC/SBDC
Winneshiek County Businesses	Winneshiek	IA	Retail/Manufacturing/Service/Technology	Business Succession Planning	RBC/SBDC
Sergeant Bluff/Luton - Sergeant Bluff	Woodbury	IA	High School	Electric Car Construction	CEEE
Dakota Valley	Woodbury	IA	Economic Development	Economic Impact	IDM
Hornick	Woodbury	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Sioux City	Woodbury	IA	Services (70-89)	Air Assistance	IWRC
Sioux City	Woodbury	IA	Wholesale Trade (50-51)	On-Site Assistance	IWRC
Sioux City	Woodbury	IA	Services (70-89)	On-Site Assistance	IWRC
Sioux City	Woodbury	IA	Services (70-89)	On-Site Assistance	IWRC
Sioux City	Woodbury	IA	Manufacturing (20-39)	Air Assistance	IWRC



private	Woodbury	IA	Natural Resouce Management	Technical Workshop	TPC
				Technical Education/Energy	
				Efficiency, Environmental Issues	
Northwood-Kensett Elementary	Worth	IA	Elementary School	Instruction	CEEE
				Economic Development	
North Central Iowa Growth Partnership	Worth	IA	Economic Development	Assistance	IDM
Hanlontown	Worth	IA	Manufacturing (20-39)	Air Assistance	IWRC
Northwood	Worth	IA	Manufacturing (20-39)	Air Assistance	IWRC
Worth County Board of Supervisors	Worth	IA	Roadside Vegetation Management	IRVM Educational Presentation	IRVM
				Technical Education/Energy	
Clarion Elementary - Clarion	Wright	IA	Elementary School	Efficiency	CEEE
Clarion/Goldfield Middle School -					
Clarion	Wright	IA	Middle School	Environmental Issues Instruction	CEEE
Clarion	Wright	IA	Manufacturing (20-39)	Air Assistance	IWRC
Goldfield	Wright	IA	Manufacturing (20-39)	On-Site Assistance	IWRC



#### Appendix B

#### **Grow Iowa Values Fund – Technology Transfer**

#### **UNI Applied Research Projects**

# Dual Stage Phenolic Urethane Cold Box Process, Dr. Scott Giese and Jerry Thiel UNI Metal Casting Center

The dual stage phenolic urethane cold box process improves the core production process by efficiently distributing an amine catalyst through an air blown sand core. The first phase of the developmental project explored the design of a pressure relief core vent to regulate the air flow rate through the core. Utilizing this approach, the original spring valve was replaced with a leaf spring, reducing the complexity and assembly steps of the core vent. In the second phase, metallic tooling was designed and manufactured to better understand the operation of the vents and their influence on volumetric flow rate within a permeable media. The research group is still working with industrial partners, Ashland Chemicals and John Deere. Once the operating conditions are measured at the core vents, this information will be supplied to Ashland Chemicals for process simulation.

#### Nanoscale Surface Profiling by Laser Interferometry - Dr. Fred Behroozi, Physics

The purpose of the research project was to demonstrate the ability to detect very minute vibrations of solid surfaces by laser interferometry. Tests were performed on a piezoelectric disk which allowed precise control of the vibration amplitude and frequency. Amplitude of vibration to better than 5 nanometers was detected without surface contact. The vibration profile of the vibrating surface was mapped to determine the maxima and minima in vibration amplitudes over a surface area of about one square inch. Local slope variations on the surface area were detected on a surface area of about one square micron. Nanoscale detection of surface vibrations has possible applications in early detection of miniature cracks and other surface defects. The feasibility study is complete and the researcher will proceed with disclosure and patent application.

# Creating a Proof of Concept: the Augmented Sock—a Pressure-Equalizing Insert for Leg Prostheses - Dr. Cliff Chancy and Dr. Nancy Hamilton

The purpose of the research project was to develop a sock or insert to equalize pressures for prostheses patients. During the project, a prototype sock was created and shared with Dennis Clark of Clark & Associates Prosthetics & Orthotics (Waterloo, IA). Clark & Associates provided some material support to the project (stump molds). Mr. Clark has expressed great satisfaction and a strong desire to purse further development of the joint project. A new, robust "sock" for prostheses; one that more effectively equalizes pressure along the load-bearing areas of a limb is under development. Applying simple physics may revolutionize this area of health engineering. Clark & Associates are national players and will continue to work with the researchers.



# Development of a low-cost microcontroller-based data acquisition system for machine condition monitoring – Dr. Julie Zhang, Industrial Technology

The project focused on developing a cost-competitive data acquisition system for monitoring machining processes by integrating off-shelf components. Through the developed data acquisition system, machining condition signals can be visualized in real time. The system helped diagnose and predict cutting tool conditions so as to replace the cutting tools as needed. The prototyping approach of hardware integration, interface and software creation generated in the research project has a potential for commercialization, but strain gage sensors for cutting force measurement have some installation problems and were not included in real time testing. The project concluded that the data acquired by the accelerometer was a cost effective method of monitoring machining processes and the interface of hardware systems and software programs was successful. Enhancements to the software and mounting sensors are needed to help commercialize this research.

#### Robotics- Deployed Detection of Biological Agents – Dr. Michael Walter, Biology

The purpose of this project is to design and develop robotics-deployed detection systems for sensing the presence of dangerous bio-agents, particularly anthrax spores. There is precedence established that this kind of process works. Similar detection methods developed elsewhere for other kinds of dangerous bacteria have been proven by other researchers. The proposed method of detection is very similar, but the specific phages are unique using the phage-QCM design but make use of phages of *Bacillus anthracis* (causal agent of anthrax) isolated from soil, subjected to a selection process that requires the phages to bind first to the QCM electrode, then to *B. anthracis*. The robot-deployed PBAD being developed at UNI offers a unique niche benefit of a very rapid response time (150 seconds) and highly accurate readings. Civilian first responders have no anthrax vaccination, nor are they as thoroughly trained as soldiers with protective attire, masks, etc. Initial contracts with Recon Robotics will develop working prototypes of robot-deployed PBADs, but the right to decide final licensing, manufacturing and distribution of the units has been reserved.

**Update Period:** July 01, 2006 – December 31, 2006

Title: Large Animal Genomics Models for Animal and Human Health

Platform: Animal Systems
Platform Chair: Max F. Rothschild

Platform Expenditures: \$ Platform Funding: \$620,000
Project Allocated: \$450,000
Project Obligated: \$80,000
Inf. Allocated: \$47,000
Inf. Obligated: \$ -

#### **Progress Report:**

This grant supports animal models in four different areas including 1) cat and dog models for neuropathic and ophthalmologic diseases in humans, 2) animal models for prediction of TSE 3) obesity research using pigs, and 4) use of pig models to predict bone disorders. Reports from each are as follows. Each of these projects has different principal investigators.

Support from this grant in the area of canine and feline models of neuropathic and ophthalmologic diseases in humans has allowed for the requests of bids through FP&M for the improvement of facilities in the Kildee Hall to allow expanded housing of canine and feline models. We are waiting for the finalizing of the bids. Grant and research activity in this period relevant to these animal models has seen one grant contract finalized, and a second grant contract under negotiation, both with Biomarin Pharmaceuticals. One grant was finalized and awarded for a period of two years (Sanfilippo Children's Research Foundation).

We have begun the process of hiring a graduate student for the development of non-invasive antemortem ocular screening test for TSEs and are currently considering several candidates, all with DVM degrees. We have established a protocol for collecting electroretinography data and have begun to collect normative data. Using normative data, we have begun to optimize the analysis process to develop an automated, non-biased waveform analysis to evaluate ERGs obtained from experimental animals. We have completed necessary confidentiality agreements with I Optix (and Iowa City-based company) and are in the process of trying to schedule a meeting with them to begin work.

We are evaluating the effects of high-carbohydrate versus high-fat diets on the expression of the adipokine adiponectin, and on inflammation located in adipose and skeletal muscle of pigs which are genetically predisposed to obesity. We have procured fourteen swine, which are housed in an Iowa State University facility. We have also hired an experienced animal caretaker to oversee the daily feeding and care of the pigs. The swine are divided into two experimental groups, one of which is allowed to eat ad libitum. The second group is restricted to a quantity of feed that maintains their body weight but does not promote weight gain. The swine will be fed in this manner, until their diets are switched to the high-fat or high-carbohydrate diets.

We have obtained strong preliminary data indicating that a single nucleotide polymorphism (SNP) that we discovered is strongly associated with bone integrity and bone mineral content in growing pigs. This SNP may help explain differences seen in pigs growth response and bone integrity when fed sub adequate levels of dietary phosphorus. We have bred animals to allow for a more comprehensive investigation of this SNP to take place. This should allow us to develop genotype specific nutrient management plans as well as breeding programs to produce pigs that will require, and therefore excrete, less phosphorus. This will allow us to achieve our goal of producing more environmentally friendly pork for commercialization.

Platform leader Rothschild has met with several group concerning expanded commercial activities in Iowa.

**Update Period:** July 01, 2006 – December 31, 2006 **Title:** Advanced Carbohydrates for Health

**Platform:** Advanced Food and Feed

\$ -

Platform Expenditures: \$ -

Platform Co-Chairs: Ruth MacDonald and Michael Budnick

Platform Funding: \$1,007,000 Project Allocated: \$365,201 Project Obligated: \$641,799 Inf. Allocated: \$ -

#### **Progress Report:**

Inf. Obligated:

The project that received funding included 6 research projects focused on addressing the role of dietary carbohydrates in health (total \$310,000). These projects are being administered by individual faculty researchers through the Grow Iowa Values Fund and are being reported on separately. The funds provided directly from Battelle for this project include \$365,201 for personnel and \$300,000 in startup funding for a new faculty hire (NWRC Director).

Progress to date: The Nutrition and Wellness Research Center (NWRC) renovations began on November 6, 2006 and are expected to be completed in late February 2007. The modifications to the building were of significant magnitude that no activities could be done in the building during the remodeling, therefore no research projects have yet begun at the location. Similarly, we have not hired any staff using the Battelle funding. Hiring will be done in time to coincide with the opening of the center, and/or the hiring of the NWRC Director.

The search for the NWRC Director began in late November 2006. The Dean of the College of Human Sciences retained the Baker-Parker search firm to manage the search and they have planned to provide lists of potential candidates to the faculty search committee by February 22, 2007 with intent to interview candidates in mid-March. It is anticipated that the hire could be negotiated with the top candidate by May when the start-up package will be negotiated.

Other activities that have occurred are plans to seek donations of equipment and furnishing for the building to begin in January 2007. Plans to work with the ISU Foundation to seek private donations for the NWRC will develop in January 2007. Also, continuing contacts with industry partners to identify research projects for the NWRC are ongoing. Discussions have occurred with ADM, Tate & Lyle, GPC, Caremoli, Kellogg's Kemin and Proliant.

A symposium is being planned for May 2007 focused on resistant starches in food and health. This will be the first of an annual symposium to be managed by the NWRC.

Update Period: July 01, 2006 – December 31, 2006

**Title:** Thermochemical Technologies for the Bioeconomy

Platform: BioEconomy
Platform Chair): Robert Brown

Platform Expenditures: \$ -

Platform Funding: \$2,012,000
Project Allocated: \$910,000
Project Obligated: \$-

Inf. Allocated: \$390,000 Inf. Obligated: \$712,000

#### **Progress Report:**

Our supplementary budgets been signed and funds made available to this project. However, we have initiated design of new apparatus to be constructed, prepared purchase orders for new equipment, and recruited new students to the project.

We have also identified several industrial partners for our work in thermochemical processing of biomass, including ethanol producers and petroleum companies. Based on these discussions, we anticipate that one or more contracts will be signed with these companies as early as January 2007. Areas of interest include bio-oil production, syngas fermentation, and syngas to ethanol.

**Update Period:** July 01, 2006 – December 31, 2006

Title:

Platform: BioSecurity
Platform Chair): Manjit Misra

Platform Expenditures: \$ -

 Platform Funding:
 \$944,000

 Project Allocated:
 \$400,000

 Project Obligated:
 \$50,000

 Inf. Allocated:
 \$271,000

 Inf. Obligated:
 \$123,000

#### **Progress Report:**

The goal of the Iowa Livestock traceability project (ILTP) is to develop a web-based system for Iowa Veterinary Medical Association's (IVMA) preconditioning calf program. Following are the accomplishments: The software prototype was pilot tested on December 2 at the Spencer Livestock sale barn. The prototype will be refined based on the input received by Jean Brudvig (research associate affiliated with this project at ISU) at the sale barn. Incorporation of the ILTP into the U.S. National Animal Identification Systems (NAIS) and for Global VetLink (GVL) to be USDA/NAIS certified, are in progress. GVL has recently completed a technical audit of their web based systems by USDA contract auditors and was informed that GVL was going to be recommended for approval and participation into the interim development phase of NAIS. A planning meeting was held for designing training workshops for veterinarians in information technology. Dr. Marilyn Drury, IT director at UNI and Dr. Tom Johnson of IVMA participated in the planning discussions. IVMA will conduct a need assessment and three training workshops will be conducted during spring, summer and fall 2007.

In project 2 (Antimicrobial discovery), we have interviewed three candidates for the Assistant Scientist II position just this week. We anticipate to fill this position by early next year. We have had one meeting with our commercial partners, Kemin and Ag Resources. Dr. DiSpirito gave an overview of methanobactin and planning discussions were held with next meeting scheduled for January 18, 2007. IFSS is supporting one graduate student in Dr. DiSpirito's lab to work on the methanobactin. He is working with Dr. John Strohl, manager of the ISU Fermentation Facility and Dr. Tony Pometto to start pilot scale project of methanobactin.

**Update Period:** July 01, 2006 – December 31, 2006

Title:

**Platform:** Information Solutions

**Platform Chair):** Jim Oliver

Platform Expenditures: \$ -

Platform Funding: \$1,727,000 Project Allocated: \$650,000 Project Obligated: \$-Inf. Allocated: \$350,000 Inf. Obligated: \$727,000

#### **Progress Report:**

Efforts to date have focused on establishing the Institute, administratively and operationally. The core team of PIs, Oliver, Somani, Jacobson, Honavar and Rajan, have met regularly through the fall, approximately once per month. The goal of these meetings was to formalize our shared vision for the Institute, especially our unique emphasis on economic development, and to establish basic shared needs and operational procedures. This work will result in formal request to the Iowa Board of Regents to establish the Institute in early 2007.

Necessary infrastructure identified includes additional space on campus (ideally in Howe Hall) to serve as a centralized "home" for the centers comprising the institute, as well research space off campus to house the industrially supported projects and relationships. We also defined our needs for initial support personnel and associated start-up expenditures.

A primary goal during this initial period was to engage a core industrial constituency to solicit input and establish mutually beneficial operational procedures. A kick-off workshop was hosted at VRAC on November 15 and, in addition to the project PIs, was attended by diverse cross-section of regional industrial IT leaders including:

- Jerry Duncan Deere Manager, Collaborative Science Product Technology Department
- David Jensen Rockwell Principal Engineering Manager, Advanced Technology Center
- Andrew Meldrum Wells Fargo Vice President, Home Mortgage Division
- Chris Clover Fakespace Systems Founder and CEO
- Mark Kittrell Team Technologies Founder and CEO
- Atul Gupta ATG Founder and CEO
- Allen Bierbaum Infiscape Founder and CEO

The workshop yielded valuable input for structuring the institute for maximum economic development impact, spanning entrepreneurial start-ups to national corporations with major regional IT focus. All of the attendees were enthusiastic about the potential for the institute and agreed to continue to represent their company's interests by advising the institute on an on-going basis. The recommendations of the workshop are being incorporated into the organizational structure of the institute. Progress is also underway for an initial institute web-site and associated promotional materials.

In addition to formal Regents approval for establishing the institute, activities for the next quarter will focus on the tactical startup process including securing a lease in a commercial building adjacent to the ISU Research Park (as well as space on-campus), commitments from initial industrial partners, and hiring support personnel. We are also continuing our efforts to secure additional start-up funds from foundations, and state and federal sources.

**Update Period:** July 01, 2006 – December 31, 2006

Title:

Platform: Advanced Manufacturing

Platform Chair): Ron Cox Platform Expenditures: \$ -

Platform Funding: \$100,000

Project Allocated: \$100,000 Project Obligated: \$ -Inf. Allocated: \$ -Inf. Obligated: \$ -

#### **Progress Report:**

The Advanced Manufacturing platform received \$100,000 of a request for \$300,000 to develop and implement innovation and supply chain programming for manufacturers in Iowa. The funding has been received and the appropriate accounts have been set up. Decisions are currently being made on what to eliminate from the proposal due to the funding reduction.

CIRAS staff have participated in two lean design and innovation activities in preparation for this work.

Lean Product-Process Development - This seminar focused on the Toyota Product Development System as a tool for understanding and implementing a fully integrated product development system that is a foundation for a Lean Enterprise business operation. All aspects of the product life planning were presented with attention to how the product development process interacts with all functional areas of a business.

Lean Innovation - This seminar focused on understanding and implementing a repeatable innovation process that accounts for varying levels of innovation experience and skills. A step-by-step method was provided to identify, evaluate and present product and process improvements that have higher corporate impact then commonly known processes for continuous improvement. In short, a process to generate "discontinuous" improvement.

**Update Period:** July 01, 2006 – December 31, 2006

Purpose: Endowed Chairs
Purpose Funding: \$2,000,000

Purpose Expenditures: \$ -

**Purpose Obligations:** \$ 500,000

#### **Progress Report:**

Iowa State University received \$2 million in funding to be used for matching dollars for endowed chairs. ISU determined that these dollars would be used to leverage private gifts with a \$2 private to \$1 public match to create a total of \$6 million for endowed faculty positions. One million was allocated to the general university and the remainder was allocated to the Bioeconomy Initiative. Deans and others submit their proposals for consideration to the Provost and President for approval before presenting to donors. The ISU Foundation has offered this incentive to donors on a basis that the first to commit will receive the matching dollars.

General University Endowed Chair Activity: Two proposals with matching components have been discussed with donors. A commitment of \$1,000,000 for a chair in Veterinary Medicine has been received. The \$500,000 match will come from the general university pool. No faculty has been named to this endowed chair nor have there been expenditures. In addition, another endowed chair is proposed in Seed Science and this request will be presented to the donor in early 2007. We expect a decision on this proposal by February 2007.

**Bioeconomy Endowed Chair Activity:** Discussions are on-going with numerous individuals and companies regarding this opportunity. Interest is high but no commitments have been received at this time. Two proposals were presented during the fall and one was declined. One proposal is pending until after a January campus visit. A campus visit and formal proposal is planned for another company in January 2007. We expect decisions from both donors by February, 2007.

## The University of Iowa

### Information for the Legislative Services Agency Battelle-funded projects

The University of Iowa received a total of \$8,410,000 to support three primary areas including the endowed chairs (\$2,000,000), Infrastructure (\$2,720,000) and the Platforms (\$3,690,000). As of December 15, 2006, all of the Battelle funds have been obligated with a total of \$2,194,349 being spent or encumbered.

## Brief description of progress of the projects through December 15

PI	Title of Battelle Proposal	Battelle Funds Awarded	Platform	Progress Update – December 2006
Abdel- Malek Team	Commercialization of Santos, a Human Simulation Environment	\$370,000	IT, AM	The Virtual Soldier Research (VSR) program is looking for qualified individuals to help in advancing the Santos software system under the Battelle Funds. Candidates are being interviewed.
Leno Team	Designing Transgenic Cells for Biomedical Applications	\$400,000	Bio-genetics- transgenic cell lines	<ul> <li>Hiring Research Assistant for the funded position. Currently interviewing candidates.</li> <li>Purchasing and setting up project-related equipment.</li> <li>Establishing assays for TNFa and Luc reporter expression in virus-infected HeLa cells.</li> <li>Developing business model for <i>RepGenix</i>.</li> <li>Discussing business opportunities with potential partners, i.e., Trans Ova Genetics and iPig, and customers, e.g., NuPotential, LLC – Baton Rouge.</li> <li>Obtaining primary porcine fibroblasts with high cloning potential.</li> <li>Preparing a STTR grant application in collaboration with <i>RepGenix</i> to fund production of targeted transgenic cells.</li> </ul>
O'Dorisio Team	Development of Peptides for Diagnosis and Therapy of Cancer	\$400,000	Bio-imaging & drug discovery	<ul> <li>Identified three peptides to use as first candidate drugs.</li> <li>Submitted an NIH grant to support the preclinical studies.</li> <li>Developed specifications for the synthesizer to be used in the research.</li> <li>Identified person to operate the synthesizer.</li> </ul>
Sharpe	Build-Out Space in Myriad Building in the Oakdale Research Park	\$1,090,000		<ul> <li>Renovation of space in Myriad Building progressing.</li> <li>Dermacia/NGI expected to move into this space in early 2007.</li> <li>Upon vacating this space for space in a new building, the UI Center for Advanced Drug Development will occupy the Myriad Building space.</li> </ul>
Shields	Iowa Neuro- Musculoskeletal Therapeutic Training System: Impact on Commercialization in Iowa	\$130,000	Bio-therapeutic/ medical device	<ul> <li>Developed the computer drawings (CAD) of a hinged-type knee brace that will attach to the leg below and above the knee. Preparing to send this out for manufacturing.</li> <li>Designed a brake power controller in the inventor software that will be built after January 1. Included in this design is a controller circuit that uses modern surface mount components.</li> </ul>

				Designed all of the algorithms, and are searching for the key engineer/programmer to write the new software for this project.
Van Beek Team	Iowa Imaging-Based Multi-center Trials Organization	\$400,000	IT; Bio- imaging	<ul> <li>Established a solid database that can be used for clinical trials. Hired 1 FTE (two people; both IT programmers) to work with VIDA to explore pros and cons of commercially available or free software versus an in-house developed archiving/reporting database. A report and decision on this is due shortly.</li> <li>Established regulatory affairs position, advertised the position, and identified several potential candidates. Interviews to commence shortly.</li> <li>On track for receiving a first VIDA Diagnostics trial through a contract with GlaxoSmithKline.</li> </ul>
Welsh	Porcine Models of Human Disease	\$400,000	Bio-genetics- animal models	Report delayed because of a death in the immediate family.
Griffith Team	Development of AD5- Trail as a Cancer Therapeutic	\$400,000	Bio- genetics- cancer therapy	<ul> <li>Commenced testing on the next lot of clinical vector.         This testing will be performed by AppTec.     </li> <li>Communicated with Cedar Croft Capital regarding possible financial support for company development.</li> </ul>
Weiss Team	Design and Testing of Novel Toll-like Receptor 4-Directed Immunomodulators	\$100,000	Bio- drug delivery, genomics	<ul> <li>Using leveraged NIH funds, prepared for animal experiments that will soon follow by completing the following: prepared and purified needed amounts of wild-type and variant endotoxin:MD-2 complexes, tested <i>in vitro</i> for quality control characterization and prepared chemically cross-linked complexes.</li> <li>Immunogen and immunization experiments to begin in February and March.</li> </ul>

#### Progress on Battelle Projects as of December 15, 2006 University of Northern Iowa December 19, 2006 Jill Trainer

#### I. Salary Support (Total=\$1,000,000)

Funds expended for salaries by December 15, 2006: \$240,169.44 Funds obligated for salaries by December 15, 2006: \$60,042.36

During the Fall 2006 semester 17 faculty members received salary support to work on Battelle related research. The following are the research projects conducted by these faculty members.

Biology: 5 faculty supported

- Identifying drought tolerance genes in the reproductive structures of barley
- Robotics-deployed detection of biological agents
- Genetic engineering of hop (*Humulus lupulus*) for the production of plant made pharmaceuticals
- Isolation of disease resistance genes (R genes) conferring resistance to *Fusarium* verticillioides in corn
- Grape identification center

Chemistry: 2 faculty supported

- Isolation of disease resistance genes (R genes) conferring resistance to *Fusarium* verticillioides in corn
- Development and Commercialization of a foundry Binder System Based on Polysaccharide bio-feed stock

Computer Science: 3 faculty supported

- Commercial Computing Grids
- Commercialization of protein structure prediction technology

Industrial Technology: 5 faculty supported

- A Novel Automatic Utility Data Collection and Management System using IEEE 802.15.4-compliant Wireless Mesh Networks
- Establishment of a Bio-based Metal Working Fluid Research Program

Physics: 2 faculty supported

•	Development of a Comprehensive Nanoscience Laboratory for Basic and Applied Research

#### **II. Infrastructure (Total =\$1,360,000)**

Funds expended for infrastructure by December 15, 2006: \$23,118.08 Funds obligated for infrastructure by December 15, 2006: \$0

Of the total allocation for infrastructure, \$620,000 is designated for the following renovation projects. The University of Northern Iowa has not yet applied for reimbursement for renovations; therefore there are few expenditures to report. The state of completion of the construction is shown below.

- Greenhouse Research Lab Exterior walls and roof membrane in place
- McCollum Science Hall #107 90% complete
- McCollum Science Hall #109 80% complete
- McCollum Science Hall #109-A 70% complete
- McCollum Science Hall #260 Awaiting approval to begin construction

The following research projects were supported by Battelle Infrastructure funds and renovation:

- Identifying drought tolerance genes in the reproductive structures of barley
- Robotics-deployed detection of biological agents
- Genetic engineering of hop (*Humulus lupulus*) for the production of plant made pharmaceuticals
- Isolation of disease resistance genes (R genes) conferring resistance to *Fusarium* verticillioides in corn
- Grape identification center

#### III. Platform Research Projects (Total = \$820,000)

Funds expended for infrastructure by December 15, 2006: \$5,579.33 Funds obligated for infrastructure by December 15, 2006: \$0

#### Ethanol & Biodiesel Byproducts as Base Oils for Biobased Industrial Lubricants-

Testing methodologies have been identified for evaluation of ethanol processing byproducts. West Central Cooperative of Ralston, Iowa, and Golden Grains Energy, of Mason City, Iowa, have agreed to provide NABL Center scientists with process information and byproduct samples as necessary for the research project. The NABL Center has obtained approval from the U.S. Department of Energy to match the Battelle funds, dollar for dollar, leveraging an additional \$125,147 for this project.

**Development and Commercialization of a foundry Binder System Based on Polysaccharide bio-feed stock--**Intellectual property disclosures on three different types of the polysaccharide binder systems have been submitted to the University of Northern Iowa Technology Transfer Team. The first draft of the commercialization marketing plan has been completed and is awaiting final review. This plan addresses collaborations with providers of the binder raw materials and the companies likely to introduce the new

binder to the industry. Preliminary technology has been presented to three international suppliers of resin coated sands to stimulate their interest in developing and marketing the new binder systems.

Robotics-Deployed Detection of Biological Agents— Test chambers have been purchased and set up to test several combinations of bacteriophages and electrode metal for the effectiveness at binding the bio-agent, *Bacillus anthracis* Sterne (safe strain, similar to anthrax bacteria). Gold-titanium electrodes were successful at binding the bacteria, which is necessary for rapid transmission of electronic signals through a sensitive detection instrument. The particular strains of Bacteriophages that bind with Gold-titanium are being characterized. Contract negotiations have been completed between UNI and Recon Robotics, LLC, which will integrate the detector system into robots.

Commercialization of protein structure prediction technology—A research group consisting of two UNI professors, four undergraduate research assistants and one graduate research assistant has been established to build a computer cluster that will be used for benchmarking and software development. A discussion of future plans and strategy for incorporating a new methodology into Bio:Neos product line have begun with Mr. Steven Davis, CEO of Bio:Neos.

**Identifying drought tolerance genes in the reproductive structures of barley**—Barley was planted in a controlled environmental chamber, and will be ready for drought stress testing in less than a week. At that time drought stress will be applied for 4-6 days, and RNA extracted in order to determine gene expression that accounts for drought tolerance of the barley flowers. An undergraduate student has joined the research team, and approval of the job announcement for a post-doctoral position is expected shortly.

Commercial Computing Grids—A research team of one UNI professor, one graduate student and two undergraduate students has been assembled. Most of the components for the computing cluster have been ordered. The research team has been using a portable cluster to promote the vision of the commercial computing cluster, sparking the interest of VIA Technologies in the commercial aspects of the portable version itself.

Commercialization of Leading Edge Paint Removal Technologies--Discussions have been begun with Marco Inc., the nation's largest distributor of blasting equipment, located in Davenport, IA to integrate the VirtualBlast system into Marco's product line. A collaboration has been established in which Marco will provide subject matter expertise for the development of the research and software. The Iowa Waste Reduction Center (IWRC) has begun designing the data collection to be used to create the "blasting model". Contractual arrangements are in the final stages with Southwest Research Institute, which will create the software component. The IWRC has filed intellectual property disclosure to the UNI Technology Transfer Team for laser guided depainting. The IWRC has begun instrumentation of Marco blast nozzle to be used for the simulator

**Faculty/Student Collaboration on Commercializable Research**—Two Professional Science Masters students and two undergraduates worked on several Battelle related research projects. The following are their achievements:

- Created a feedback controlled electrochemical etching system to create tips suitable for scanning tunneling microscopy (STM) from tungsten wire.
- Helped design and upgrade the an existing ultra high vacuum system
- Upgraded the chamber bakeout wiring and converting the existing equipment to work with the 120V circuits available in the laboratory
- Helped demonstrate the ability to detect very minute vibrations of no more than 5 nanometers using a novel devise based on laser interferometry.
- Helped excite and measure the resonance frequency of a very small volume of fluid with no contact with the fluid.

#### Other accomplishments of these projects include:

- Recruited one graduate student to help develop a novel automatic utility data collection and management system.
- Recruited 3 undergraduate students to assist in the development of a comprehensive nanoscience laboratory for basic and applied research in the spring of 2007.
- Intellectual discloser of a unique miniature laser interferometer
- Literature review on methods of applying cutting fluids and the experimental procedures and mathematical modeling methods in metal cutting.
- Successful preproposal for \$60,000/year to the Iowa Energy Center for the purposes of synthesizing and characterization of solar cells using self assembled quantum dots. The full proposal is pending approval.

# Governing lowa's public universities and special schools

University of Iowa Iowa State University University of Northern Iowa Iowa School for the Deaf Iowa Braille and Sight Saving School Lakeside Laboratory Quad-Cities Graduate Center Southwest Iowa Regents Resource Center Tri-State Graduate Center



Michael G. Gartner, President, *Des Moines*Teresa A. Wahlert, Pro Tem, *Waukee*Amir I. Arbisser, M.D., *Davenport*Mary Ellen Becker, Ph.D., *Oskaloosa*Tom W. Bedell, *Spirit Lake*Jenny L. Connolly, *Cedar Falls*Robert N. Downer, *Iowa City*Ruth R. Harkin, *Cumming*Rose A. Vasquez, *Des Moines* 

Gary W. Steinke, Executive Director

December 19, 2006

Joint Appropriations Subcommittee on Transportation, Infrastructure, and Capitals State Capitol Des Moines IA 50319

Re: Iowa Safe Surfacing Initiative

Dear Members of the Committee:

In accordance with 2006 <u>lowa Acts</u>, Chapter 1179 §1(13), this annual report for the National Program for Playground Safety at the University of Northern lowa is hereby submitted to the Joint Appropriations Subcommittee on Transportation, Infrastructure, and Capitals.

The Iowa Legislature has supported a project to provide safe outdoor education and playground environments for elementary schools, child care centers, and state parks in the State of Iowa by the Rebuild Iowa Infrastructure (RIIF) fund. The National Program for Playground Safety has worked in collaboration with Welch Products (Carlisle, Iowa) to provide playground safety training as well as Welch's rubber safety tiles at selected sites throughout the state.

Legislation passed in 2006 (HF 2782) required the submission of a report detailing the use of the appropriation of \$500,000 and specified that not more than 2.5 percent of the funding shall be used by the national program for administrative costs associated with the lowa safe surfacing initiative. As shown in the attached summary sheet for FY 2006, total expenditures were \$500,000 (\$373,404.70 expended and \$126,595.30 obligated) and administrative costs were \$12,377.26 (\$9,057.42 expended and \$3,329.84 obligated), which is 2.5 percent. Most of the tiles have been installed or delivered to the sites. The estimated completion date for the project is May 31, 2007.

Schools and child care centers were selected randomly. To qualify for selection, the schools and centers needed to be willing to send pre- and post-injury data and attend the National Playground Safety School. Their equipment also needed to be in compliance with the U.S. Consumer Product Safety Commission's (CPSC) Handbook for Public Playground Safety's guidelines (the standard of care for the nation).

Iowa Safe Surfacing Initiative December 19, 2006 Page 2

A report of the findings and a chart detailing the use of the moneys is attached. A chart detailing the use of the moneys is attached. The University of Northern Iowa and the Board of Regents appreciate the support.

If you have any questions or need more information, please don't hesitate to contact this office.

Sincerely,

Gary W. Steinke

jaf\H:\BF\Legislative\2006 Session\Responses\playgrounds_020306.doc Attachment

cc: LSA and Caucus Staff Legislative Liaisons Legislative Log To: The Board of Regents

From: The National Program for Playground Safety (NPPS)

Re: Monies received from the Iowa Legislature

Date: December 12, 2006

- 1. The project that the Iowa Legislature funded for 2006-2007 is called the Iowa Safe Surfacing Project. Its purpose is to provide safe play environments for children in elementary schools and child care centers by providing education about playground safety for the individuals who work in those centers and rubber tile surfacing.
- 2. Much progress has been made. Adults from all of the schools or child care centers have received education regarding Supervision, Age appropriate design, Falls surfacing and Equipment maintenance. Most of the tiles have been installed or delivered to the agencies involved. If installation was not possible, because of weather, the tiles will be installed in the spring of 2007.
- 3. The total cost of the project is \$500,000.00. The NPPS received 2.5% of thee monies for administration. The remaining monies were spent on materials and services related to the tile surfacing.
- 4. All the monies from the legislature were used to fund this project. Sites selected for the project were required to cost-share in the project by providing the cement base for the tiles.
- 5. The amount of funds expended at this point is: \$373,404.70
- 6. The amount of funds obligated at this point is: \$126,595.30
- 7. Estimated completion of the project is: May 31, 2007.

Sincerely yours,

Donna Thompson, Ph.D. Executive Director National Program for Playground Safety School of HPELS University of Northern Iowa Cedar Falls, IA-50614-0618

## 0564 Iowa Surfacing Initiative \$500,000 2006

۱۸	le.	lch	Р	rod	LIC	ts l	Inc.

Weich Products inc.				
	Monticello	\$14,008.62	*	
	Ossian	\$28,014.24		
	Sheldon	\$14,008.62	*	
	Sioux City	\$11,206.90		
	Urbandale	\$14,008.62	*	
	Winterset	\$28,017.24		
	Stockport	\$28,017.24		
	Mondamin	\$28,017.24		
	Missouri Valley	\$28,017.24		
	Waukee	\$11,206.90		
	Altoona	\$28,017.24		
	Lincoln - CF	\$28,017.24		
	Hansen - CF	\$14,008.62	*	
	Clarksville	\$11,206.90		
	Creston	\$11,206.90		
	Dakota City	\$11,206.90		
	Keota	\$14,008.62	*	
	Long Grove	\$28,017.24		
	S. Tama	\$14,008.62	*	
Invoices paid		\$364,221.14		
Other Direct Expenses				
Heather Olson Travel		\$7.98		
Susan Hudson Travel		\$7.43		
Donna Thompson Travel		\$110.33		
Borna mompoon mavor				
	Total	\$125.74		
Administrative Expenses				
Payroll		\$2,371.29		
Add'l administrative exp		\$6,686.13		
	Total	\$9,057.42		
	Total	\$9,057.4Z		
Total expended		\$373,404.30		
Accrued site exp second half			\$84,051.72	*
Add'l site to be selected			\$11,206.90	
Add'l site to be selected			\$28,017.24	
Payroll encumbered			\$3,319.84	
Total obligated			\$126,595.70	
			ψ·=0,000ii 0	

Total Project \$500,000.00

# Department of Veterans Affairs

#### Iowa Veterans Home Iowa's Health Restricted Capitals Fund Report FY07 (July 1, 2006 thru June 30, 2007)

#### **Dack Dining & Activity Room Expansion Project**

#### **Description of the Project**

* The Iowa Veterans Home Dack Care Building currently houses 168 nursing care residents on three floors. The existing dayrooms serve multiple resident needs with their primary function being a dining facility for those residents requiring feeding assistance. Each area is approximately 900 sq. ft. Iowa Veterans Home intends to add an additional 1,057 sq. ft. to each resident level. This would create sufficient space to accommodate all activities, recreational purposes and dining of residents on each unit. At present, we are restricted to allowing 23 residents to dine in each of these units, currently 40% of the need depending on the unit.

#### **Progress of Work Completed**

- IVH is currently in negotiations with an architectural firm.
- * DAS Design and Construction Department is assisting IVH with negotiations.

#### **Total Estimated Cost of the Project**

\$3.8 million broken down to \$2,470,000 federal funded and \$1,330,000 state funded

NOTE: Federal government matches state funds 65%/35% (as shown above). We are in the queue for federal funding on this project (61st in ranking for 2007). However, we do not anticipate the funds prior to the project being completed. Thus, funds will not advance immediately to the state. IVH plans to use state funds to proceed with the project and reimburse the state when federal funds become available.

#### List All Revenue Sources Being Used to Fund the Project

* \$6,200,000 appropriation from the tobacco settlement. Approximately \$3.8 million will be used for the Dack Dayroom Expansion Project. The balance of the infrastructure account will be applied towards future building improvements. IVH is presently negotiating with an architectural firm to assist us in master planning. The master plan will identify future veteran population trends, health care needs etc. One aspect of the master plan will be assisting us in identifying infrastructure improvements needed to address future health care needs.

#### Amount of Funds Expended through November 30, 2006

\$8,004.25 to DAS Design and Construction Department for fees associated with procurement and contract negotiations.

#### **Amount of Funds Obligated**

* Currently zero is obligated although we are in the process of finalizing the contract very soon.

#### **Estimated Completion Date of the Project**

* FY08

# Department of Transportation

January 19, 2007

TO:

Joint Transportation, Infrastructure, and Capitals Appropriations Subcommittee

Representative Dennis Cohoon, House Chair Representative Nathan Reichert, House Vice Chair Representative Dan Huseman, House Ranking Member

Senator Matt McCoy, Senate Chair Senator Steve Warnstadt, Senate Vice Chair Senator John Putney, Senate Ranking Member

Legislative Capital Projects Committee of the Legislative Council Senator Tom Courtney, Chair

Representative Libby Jacobs, Vice Chair

Charles J. Krogmeier, Director Department of Management

FROM:

Nancy J. Richardson, Directo

RE:

HF 2782

House File 2782 (2007 Infrastructure Appropriations Act) requires state agencies that receive appropriations from specified funds to report that information. The Iowa Department of Transportation received funds from the Rebuild Iowa Infrastructure Fund, the Tobacco Settlement Trust Fund, and the State Recreational Trails Fund in FY2006. The attached sheets provide the required information.

Thank you.

NJR:jks

Attachment

cc: David Reynolds, Legislative Services Agency

FY 2006 Rebuild Iowa Infrastructure Fund (RIIF)

1 1 200	OILODAIIG	IVWE IIII	·uouuou		<u> </u>		
Description of Project	FY 2006 Appropriated Funds	Total Estimated Cost	List of all revenue sources	FY 2006 Funds used	FY 2006 Remaining Funds Obligated	Status of project	Estimated Completion Date
Airport improvement - Operation and maintenance of the network of automated weather observation and data transfer systems, the runway marking program for public airports, the windsock program for public airports, and the aviation improvement program	\$564,792	\$1,438,549	City funds, federal Airport Improvement Program grants	\$343,737	\$221,055	AWOS annual maintenance and runway marking completed; windsocks available as needed; 12 airport improvement project agreements - 5 completed, 7 in process; statewide studies - in process	6/30/2008
General Aviation Vertical Infrastructure (GAVI) - Vertical infrastructure improvement grant program for improvements at general aviation airports within the state	\$750,000	\$2,766,901	City funds, private donations, federal Airport Improvement Program	\$354,152	\$395,848	23 project agreements with airport sponsors executed 8/2005: 12 completed, 7 in process, 4 in design	12/31/2008
Rail Assistance and Economic  Development - Funds included in the Railroad Revolving Loan and Grant program	\$35,959	\$879,412	Private Funds, Other Rail Loan repayments.	\$35,959	C	Under Construction	6/1/2007

# FY 2006 Tobacco Settlement Trust Fund

	<b>2000 100</b>	acco cc		100001	4114		
Description of Project	FY 2006 Appropriated Funds	Total Estimated Cost	List of all revenue sources	FY 2006 Funds used	FY 2008 Remaining Funds Obligated	Status of project	Estimated Completion Date
Commercial Service Vertical Infrastructure (CSVI) - Vertical infrastructure improvements at the commercial air service airports			Airport funds,			Grants with eight airports executed 8/2005: two projects complete, two nearly complete, four	
within the state	\$1,500,000	\$4,101,875	federal funds	\$370,070	\$1,129,930	projects are in process	6/30/2007

lowa Department of Transportation

FY 2006 State Recreational Trails Fund (SRT)

112000	Juane Med	Teationai	TIMING I W	na (Orti)			
Description of Project	FY 2006 SRT Approprieted Funds	Total Estimated Cost	List of all Revenue Sources	FY 2006 SRT Funds Used	FY 2006 Remaining SRT Funds Obligated	Status of Project	Estimated Completion Date
Webster County Improvement - Phase I of the Gypsum City OHV Park.	\$250,000	\$1,660,250	SRT Fund and All-Terrain Vehicle Registration Funds SRT Fund.	\$0	\$250,000	Agreement signed 8/23/2006 - development in process	10/27/2007
Woodbury County - Trail construction connecting the Little Sioux County Park to the city of Correctionville.	\$150,000	\$1,027,760	Federal Transportation Enhancement Funds, REAP grant, county, city, and private funds	<b>\$</b> 0	\$150,000	Agreement signed 7/11/2006 - development in process	10/27/2007
City of Coralville - Phase 4 Of the Clear Creek Trail from Mormon Handcart Park to the Clear Creek bridge on U.S. Highway 6.	\$327,912	\$437,216	SRT Fund and city hotel/motel tax		\$327,912	Agreement signed 8/9/2006 - development in process	4/1/2007
Polk County Conservation Board - Construction of trail connecting existing trails in Johnston to the Neal Smith Trail in Des Moines.	\$346,739	\$1,406,960	SRT Fund, county funds, Federal Transportation Enhancement Funds and MPO Transportation Enhancement Funds	<b>\$</b> O	\$346,739	Agreement signed 8/2/2006 - development in process	<b>7/1/200</b> 7
Cerro Gordo County - Development of a trail to fill a gap in the trail network around Clear Lake and extending to Mason City.	\$50,000	\$71,167	SRT Fund and county funds	<b>\$</b> O	\$50,000	Agreement signed 7/11/2006 - development in process	10/27/2007

The FY 2006 SRT appropriation was for \$1,000,000. The total amount of SRT funding for projects listed in this report is over \$1,000,000 as result of awarding additional funding from previous project underrunns.