MICROFILM DIVIDER

OMB/RECORDS MANAGEMENT DIVISION
SFN 2053 (2/85) 5M

ROLL NUMBER

DESCRIPTION

2020

2005 SENATE APPROPRIATIONS

SB 2020

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

❑ Conference Committee

Hearing Date January 19, 2005

Tape Number	Side A	Side B	Meter #
2	A	B	
3	A		
Committee Clerk Signature			

Minutes:

Chairman Holmberg opened the hearing on SB 2020.

Gene Griffin, Upper Great Plains Transportation Institute, NDSU, provided written testimony in **support of SB 2020**. He reviewed highlights of some selected programs and their accomplishments; Agricultural Transport Center, Strategic Transportation Analysis Program, Small Urban and Rural Transit Center, Advanced Traffic Analysis Center, Department of Transportation Support Center, Transportation Safety Systems Center, Tel8 and Mountain-Plains Consortium. He then discussed their future direction, the budget, supplemental budget needs and shortfalls.

Questions were raised on cooperative efforts with NDSU, special funds, bus routing program, shuttle train issue, the railroad lawsuit.

John Melke updated the committee on the railroad lawsuit. (Meter Tape 2, side B 4720). He indicated the PSC has a budget request started in the house for $900,000 appropriation.

Tim Horner, concerned citizen, testified in support of SB 2020. (Meter 5453)

The hearing on SB 2020 closed for the morning.

Chairman Holmberg gave a few announcements. Next Wednesday the committee will hear the Bank of North Dakota and make a tour of the structure. Committee hearings will take place next week.

Joe Cichy, Executive Director, ND Dental Association, presented written documentation of testimony on behalf of SB 2003 and the ND University System.

The hearing closed.

Chairman Holmberg opened the afternoon meeting on SB 2020.

Tom Archebold, Chairman State Board for Agricultural Research appeared in support of SB 2020. Mr. Archebold provided the committee with written testimony.

Sen. Robert Ereble appeared in support of SB 2020.

Rep. Brandenburg, appeared in support of SB 2020.

Ken Grafton, Director ND Extension Center Dean of College of Agriculture, NDSU appeared in support of SB 2020. Written testimony was provided.

Tome Tiegen, Director Agronomy Seed Farm appeared in Support of SB 2020. Written testimony was provided regarding NDSU Ag budget.

Paul Nyren Director, NDSU Center Grasslands Research extension Center appeared in support of SB 2020.

Rep. Charging appeared in support of Center Grasslands Research Extension

Kris Ringwall, Director Dickinson Research and Extension Center appeared in support of SB 2020.

Richard Wardner appeared in support of SB 2020. Mr. Wardner commented on the building of a new office building.

Tim Fowler, Director, NDSU Research Center, Hettinger asked for continued support of SB 2020.

Randy Melhof, Director Langdon Extension Center appeared in support of SB 2020.

Jay Fischer, Minot Extension and Research Center appeared in support of SB 2020. Questions were raised regarding money in the executive budget.

Jerald Bergman, NDSU Williston Extension and Research Center appeared in support of SB 2020. Mr Bergman spoke of repairs for research centers, i.e. new shingles, driveways ect.

Blane Shatz, Carrington Extension and Research Center appeared in support of SB 2020. Mr. Shatz mention accomplishments to the committee.

Jody Gogler, Family Farmer/ Producer appeared in support of SB 2020. Ms. Gogler mentioned to the committee that her family has relied heavily on the support the Research and Extension facility in her area.

Anthony Larson, Vice Director HREC appeared in support of SB 2020.

Duane Hauck, Director NDSU Extension Service Center appeared in support of SB 2020.

Keith Bartholomay, Chairman of the North Dakota State Soil Conservation Committee, appeared in support of SB 2020. Written testimony was provided.

Tom Hauge, Farmer / Rancher, south of Carson, ND appeared in support of SB 2020. Mr. Hauge stated that the extension center has provided many years on benefit to him, and his farm.

Jeffrey Klemetsrud, NDSU Rural Leadership Program, appeared in support of SB 2020.

Valerie Johnson appeared in support of SB 2020. Written testimony was provided

Aaron Chalange, Park River, ND 4-H, member appeared in support of SB 2020.

Pat Berlund, Director NCI appeared in support of SB 2020. Written testimony was provided.

Jody Hauge, Chair ND Ag Coalition, appeared in support of SB 2020. Written testimony was provided.

Jim Harman, Chair Advisory Committee, appeared in support of SB 2020.

Stan Melroe, Chairman Central Grasslands, Gwiner, appeared in support of SB 2020. Mr Melroe also offered support for the expansion of the current office.

Jim Broten, Chairman ND barley Council appeared in support of SB 2020.

Eric Barchem, ND Dry Pea and Lentil Assoc. appeared in support of SB 2020. Written testimony was provided. Mr. Barchem also commented of NCI and specialty crops.

NOTE Written testimony was provided after the committee meeting ended, those testimonies are attached at the end of these minuets.

Chairman Holmberg ended hearing on SB 2020.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

☐ Conference Committee

Hearing Date January 21, 2005

Tape Number	Side A	Side B	Meter #
1	A		
Committee Clerk Signature			

Minutes:

Chairman Holmberg opened the hearings with roll call; all were present.

Ken Bertsch, State Seed Commissioner, State Seed Department, presented written testimony in **support of SB 2020**. He presented an overview of the budget, the Seed Department Programs, laboratory services and the message to allow the State Seed Department the flexibility to operate effectively.

Senator Tallackson asked whose idea it was it or department comfort level in reducing FTE's.

Ken Bertsch is okay with reduction of two FTE's.

Senator Andrist refresh status of funding source and clarify $75 fee to Commissioners.

Ken Bertsch funding is totally service fees, no grants, general funds or federal money.

The $75 aid to commissioners is per diem compensation.

The hearing on SB 2020 closed with no further questions.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

❑ Conference Committee

Hearing Date January 24, 2005

Tape Number	Side A	Side B	Meter #
2		b	
Committee Clerk Signature			

Minutes: SUB COMMITTEE PRE-DISCUSSION

Chairman Holmberg called the subcommittee pre meeting to order on SB 2020.

Subcommittee members include: Senator Bowman, Senator Holmberg and Senator Lindaas.

Senator Fischer indicated the committee should look at all IT changes and get a hold on the directors of those extension services to see if they want videos or not.

Chairman Holmberg indicated that what the committee heard was kind of a disconnect, at the bottom of the pole they felt they had to have the equipment and at the top of the pole they felt it was all optional. Let's look at it.

Senator Tallackson indicated that at most of the experiment stations, they are in need of equipment.

Senator Robinson perhaps the committee might want to be aware, the presentation focused on the need for a conference facility at the grasslands station. I have been there and I agree. Is there

a schedule they have for making improvements. Why have we waited so long for a basic facility at central grasslands when other facilities are building more then one option.

Senator Bowman, asked of Celeste, doesn't the money generated from the sale in the cow/calf operation stay within the system. Do they set aside any of their revenue for equipment purchases or buildings. A few years ago, we set up a pool for purchasing equipment and how much money goes into the pool, how much equipment do they get to buy because they can transfer money from one station to the other.

Celeste indicated that whatever funds are produced is part of their appropriations. There was a pool designated in the early 1990's and it was increased a couple of biennium's ago and that goes in a rotating schedule and equipment purchases are typically matched (1/2 general funds, ½ local funds). We can look at some history on that.

Senator Grindberg, comments on extension, there was testimony that they were requesting funding for FTE's for the center of excellence for beef systems. One of the original premises was that they must be designed to be self supporting and not come back for funding for operations every two years. The other comments on the commerce budget about community fitness. We heard information on world leadership program and the community vitality program. Some of things I heard on this is commerce no longer does this. If the programs are worthy, we ought to talk to commerce and figure out a way to satisfy their request.

Senator Bowman, questions were raised about the control of wheat and Canadian thistle. It was felt that this should be in the ag dept bill.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SB 2020

Senate Appropriations Committee

☐ Conference Committee

Hearing Date 02/14/05

Tape Number	Side A	Side B	Meter #
3	x		5,930-end
		x	0-243
Committee Clerk Signature			

Minutes: **Chairman Holmberg** opened discussion of SB 2020.

Sen. Bowman walked the committee through the amendments, by reading them aloud. Stating that we need to go slow so that we do not make a mistake. A voice vote was taken, all were in favor. A **DO PASS as AMENDED** motion was made by Sen. Bowman, seconded by Sen. Mathern. There was no discussion. Vote was taken 15 yeas 0 nays. Sen. Bowman will carry the bill.

Chairman Holmberg closed meeting on SB 2020.

58020.0106
Title.
Fiscal No. 7

Prepared by the Legislative Council staff for
Senator Bowman
February 10, 2005

PROPOSED AMENDMENTS TO SENATE BILL NO. 2020

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Page 4, line 29, replace "1,763,585" with "1,893,947"

Page 4, line 30, replace "950,741" with "988,350"

Page 4, line 31, replace "812,844" with "905,597"

Page 5, line 3, replace "15,764,073" with "15,730,773"

Page 5, line 4, replace "15,263,028" with "15,231,150"

Page 5, line 5, replace "501,045" with "499,623"

Page 5, line 8, replace "66,572,180" with "67,611,170"

Page 5, line 9, replace "36,810,218" with "37,541,799"

Page 5, line 10, replace "29,761,962" with "30,069,371"

Page 5, line 13, replace "5,554,757" with "5,609,723"

Page 5, line 14, replace "1,982,689" with "1,979,234"

Page 5, line 15, replace "1,798,821" with "1,803,022"

Page 5, line 16, replace "1,332,702" with "1,328,486"

Page 5, line 17, replace "2,236,320" with "2,230,730"

Page 5, line 18, replace "2,091,298" with "2,205,875"

Page 5, line 19, replace "4,251,204" with "4,242,008"

Page 5, line 20, replace "19,247,791" with "19,399,078"

Page 5, line 21, replace "11,072,534" with "11,063,572"

Page 5, line 22, replace "8,175,257" with "8,335,506"

Page 5, line 25, replace "1,199,685" with "1,198,056"

Page 5, line 26, replace "1,199,685" with "1,198,056"

Page 5, line 27, replace "54,492,170" with "55,077,131"

Page 5, line 28, replace "88,285,434" with "88,961,538"

Page 5, line 29, replace "142,777,604" with "144,038,669"

Page 6, after line 21, insert:

"**SECTION 8. LEGISLATIVE INTENT - BEEF SYSTEMS CENTER OF EXCELLENCE.** It is the intent of the fifty-ninth legislative assembly that $800,000 of the appropriation provided in subdivision 4 of section 3 transferred from the agriculture partnership in assisting community expansion fund is a continuation of funding authority for the beef systems center of excellence as provided in section 9 of chapter 20 of the 2003 Session Laws.

SECTION 9. LEGISLATIVE COUNCIL STUDY - BRANCH RESEARCH CENTERS. The legislative council shall consider studying during the 2005-06 interim the branch research centers, including visiting each center to observe infrastructure needs and research conducted, and how the research may complement the beef systems center of excellence, and receive comments from area growers and producers. The legislative council shall report its findings and recommendations, together with any legislation required to implement the recommendations, to the sixtieth legislative assembly.

SECTION 10. AUTHORIZATION. The special funds spending authority of $1,400,000 included in subdivision 5 of section 1 of chapter 20 of the 2003 Session Laws for the Dickinson research center building project may come from any available source.

SECTION 11. EMERGENCY. Section 10 of this Act is declared to be an emergency measure."

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2020 - Summary of Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Transportation Institute			
Total all funds	$15,764,073	($33,300)	$15,730,773
Less estimated income	15,263,028	(31,878)	15,231,150
General fund	$501,045	($1,422)	$499,623
Branch Research Centers			
Total all funds	$19,247,791	$151,287	$19,399,078
Less estimated income	11,072,534	(8,962)	11,063,572
General fund	$8,175,257	$160,249	$8,335,506
NDSU Extension Service			
Total all funds	$38,230,290	($24,645)	$38,205,645
Less estimated income	22,989,228	(50,617)	22,938,611
General fund	$15,241,062	$25,972	$15,267,034
Northern Crops Institute			
Total all funds	$1,763,585	$130,362	$1,893,947
Less estimated income	950,741	37,609	988,350

General fund	$812,844	$92,753	$905,597
Main Research Station			
Total all funds	$66,572,180	$1,038,990	$67,611,170
Less estimated income	36,810,218	731,581	37,541,799
General fund	$29,761,962	$307,409	$30,069,371
Agronomy Seed Farm			
Total all funds	$1,199,685	($1,629)	$1,198,056
Less estimated income	1,199,685	(1,629)	1,198,056
General fund	$0	$0	$0
Bill Total			
Total all funds	$142,777,604	$1,261,065	$144,038,669
Less estimated income	88,285,434	676,104	88,961,538
General fund	$54,492,170	$584,961	$55,077,131

Senate Bill No. 2020 - Transportation Institute - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Transportation Institute	$15,764,073	($33,300)	$15,730,773
Total all funds	$15,764,073	($33,300)	$15,730,773
Less estimated income	15,263,028	(31,878)	15,231,150
General fund	$501,045	($1,422)	$499,623
FTE	48.50	0.00	48.50

Dept. 627 - Transportation Institute - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Transportation Institute	($33,300)	($33,300)
Total all funds	($33,300)	($33,300)
Less estimated income	(31,878)	(31,878)
General fund	($1,422)	($1,422)
FTE	0.00	0.00

Senate Bill No. 2020 - Branch Research Centers - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Dickinson Research Center	$5,554,757	$54,966	$5,609,723
Central Grasslands Research Center	1,982,689	(3,455)	1,979,234
Hettinger Research Center	1,798,821	4,201	1,803,022
Langdon Research Center	1,332,702	(4,216)	1,328,486
North Central Research Center	2,236,320	(5,590)	2,230,730
Williston Research Center	2,091,298	114,577	2,205,875
Carrington Research Center	4,251,204	(9,196)	4,242,008
Total all funds	$19,247,791	$151,287	$19,399,078
Less estimated income	11,072,534	(8,962)	11,063,572
General fund	$8,175,257	$160,249	$8,335,506
FTE	77.41	0.00	77.41

Dept. 628 - Branch Research Centers - Detail of Senate Changes

	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [1]	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Dickinson Research Center	$62,845	($7,879)	$54,966
Central Grasslands Research Center		(3,455)	(3,455)
Hettinger Research Center	8,000	(3,799)	4,201
Langdon Research Center		(4,216)	(4,216)
North Central Research Center		(5,590)	(5,590)
Williston Research Center	118,105	(3,528)	114,577
Carrington Research Center		(9,196)	(9,196)
Total all funds	$188,950	($37,663)	$151,287
Less estimated income		(8,962)	(8,962)
General fund	$188,950	($28,701)	$160,249

FTE	0.00	0.00	0.00

1 This amendment adds funding for western malting barley research.

Senate Bill No. 2020 - NDSU Extension Service - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Extension Service	$37,442,255	($124,036)	$37,318,219
Soil Conservation Committee	788,035	99,391	887,426
Total all funds	$38,230,290	($24,645)	$38,205,645
Less estimated income	22,989,228	(50,617)	22,938,611
General fund	$15,241,062	$25,972	$15,267,034
FTE	266.10	0.00	266.10

Dept. 630 - NDSU Extension Service - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	ADDS FUNDING FOR SOIL CONSERVATION DISTRICTS 1	TOTAL SENATE CHANGES
Extension Service	($124,036)		($124,036)
Soil Conservation Committee	(609)	$100,000	99,391
Total all funds	($124,645)	$100,000	($24,645)
Less estimated income	(50,617)		(50,617)
General fund	($74,028)	$100,000	$25,972
FTE	0.00	0.00	0.00

1 This amendment adds funding for soil conservation districts.

Senate Bill No. 2020 - Northern Crops Institute - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Northern Crops Institute	$1,763,585	$130,362	$1,893,947
Total all funds	$1,763,585	$130,362	$1,893,947
Less estimated income	950,741	37,609	988,350
General fund	$812,844	$92,753	$905,597
FTE	7.62	1.00	8.62

Dept. 638 - Northern Crops Institute - Detail of Senate Changes

	ADDS 1 FTE CROP QUALITY PROMOTION SPECIALIST 1	REMOVES FUNDING FOR LINKING CROPS TO LIVESTOCK RESEARCH 2	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Northern Crops Institute	$159,605	($24,469)	($4,774)	$130,362
Total all funds	$159,605	($24,469)	($4,774)	$130,362
Less estimated income	39,605		(1,996)	37,609
General fund	$120,000	($24,469)	($2,778)	$92,753
FTE	1.00	0.00	0.00	1.00

1 This amendment adds 1 FTE crop quality promotion specialist position at Northern Crops Institute.

2 This amendment removes $24,469 of funding for linking crops to North Dakota livestock development research costs.

Senate Bill No. 2020 - Main Research Station - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Main Research Station	$66,572,180	$1,038,990	$67,611,170
Total all funds	$66,572,180	$1,038,990	$67,611,170
Less estimated income	36,810,218	731,581	37,541,799

General fund	$29,761,962	$307,409	$30,069,371
FTE	339.05	2.00	341.05

Dept. 640 - Main Research Station - Detail of Senate Changes

	CONTINUES FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [1]	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [2]	ADDS POSITIONS AND FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [3]	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Main Research Station	$800,000	$39,251	$400,000	($200,261)	$1,038,990
Total all funds	$800,000	$39,251	$400,000	($200,261)	$1,038,990
Less estimated income	800,000			(68,419)	731,581
General fund	$0	$39,251	$400,000	($131,842)	$307,409
FTE	0.00	0.00	2.00	0.00	2.00

1 This amendment continues funding of $800,000 to the Main Research Center from the agriculture partnership in assisting community expansion (Ag PACE) fund for establishment of a beef systems center of excellence in the Department of Animal and Range Science. The funding was originally provided in 2003 House Bill No. 1021.

2 This amendment adds funding for western malting barley research.

3 This amendment adds funding for 2 FTE positions and related operating costs for the beef systems center of excellence. The beef systems center of excellence positions may not be filled until the State Board of Agricultural Research and Education enters into a business partnership agreement for the beef systems center of excellence.

Senate Bill No. 2020 - Agronomy Seed Farm - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Agronomy seed farm	$1,199,685	($1,629)	$1,198,056
Total all funds	$1,199,685	($1,629)	$1,198,056
Less estimated income	1,199,685	(1,629)	1,198,056
General fund	$0	$0	$0
FTE	2.97	0.00	2.97

Dept. 649 - Agronomy Seed Farm - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Agronomy seed farm	($1,629)	($1,629)
Total all funds	($1,629)	($1,629)
Less estimated income	(1,629)	(1,629)
General fund	$0	$0
FTE	0.00	0.00

58020.0107
Title.0200
Fiscal No. 7

Prepared by the Legislative Council staff for
Senator Bowman
February 10, 2005

PROPOSED AMENDMENTS TO SENATE BILL NO. 2020

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Page 5, line 13, replace "5,554,757" with "5,609,723"

Page 5, line 14, replace "1,982,689" with "1,979,234"

Page 5, line 15, replace "1,798,821" with "1,803,022"

Page 5, line 16, replace "1,332,702" with "1,328,486"

Page 5, line 17, replace "2,236,320" with "2,230,730"

Page 5, line 18, replace "2,091,298" with "2,205,875"

Page 5, line 19, replace "4,251,204" with "4,242,008"

Page 5, line 20, replace "19,247,791" with "19,399,078"

Page 5, line 21, replace "11,072,534" with "11,063,572"

Page 5, line 22, replace "8,175,257" with "8,335,506"

Page 5, line 25, replace "1,199,685" with "1,198,056"

Page 5, line 26, replace "1,199,685" with "1,198,056"

Page 5, line 27, replace "54,492,170" with "55,077,131"

Page 5, line 28, replace "88,285,434" with "88,961,538"

Page 5, line 29, replace "142,777,604" with "144,038,669"

Page 6, after line 21, insert:

"**SECTION 8. LEGISLATIVE INTENT - BEEF SYSTEMS CENTER OF EXCELLENCE.** It is the intent of the fifty-ninth legislative assembly that $800,000 of the appropriation provided in subdivision 4 of section 3 transferred from the agriculture partnership in assisting community expansion fund is a continuation of funding authority for the beef systems center of excellence as provided in section 9 of chapter 20 of the 2003 Session Laws.

SECTION 9. LEGISLATIVE COUNCIL STUDY - BRANCH RESEARCH CENTERS. The legislative council shall consider studying, during the 2005-06 interim, the branch research centers, including visiting each center to observe infrastructure needs and research conducted, addressing how the research may complement the beef systems center of excellence, and receiving comments from area growers and producers. The legislative council shall report its findings and recommendations, together with any legislation required to implement the recommendations, to the sixtieth legislative assembly.

SECTION 10. AUTHORIZATION. The special funds spending authority of $1,400,000 included in subdivision 5 of section 1 of chapter 20 of the 2003 Session Laws for the Dickinson research center building project may come from any available source.

SECTION 11. EMERGENCY. Section 10 of this Act is declared to be an emergency measure."

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2020 - Summary of Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Transportation Institute			
Total all funds	$15,764,073	($33,300)	$15,730,773
Less estimated income	15,263,028	(31,878)	15,231,150
General fund	$501,045	($1,422)	$499,623
Branch Research Centers			
Total all funds	$19,247,791	$151,287	$19,399,078
Less estimated income	11,072,534	(8,962)	11,063,572
General fund	$8,175,257	$160,249	$8,335,506
NDSU Extension Service			
Total all funds	$38,230,290	($24,645)	$38,205,645
Less estimated income	22,989,228	(50,617)	22,938,611
General fund	$15,241,062	$25,972	$15,267,034
Northern Crops Institute			
Total all funds	$1,763,585	$130,362	$1,893,947
Less estimated income	950,741	37,609	988,350

General fund	$812,844	$92,753	$905,597
Main Research Station			
Total all funds	$66,572,180	$1,038,990	$67,611,170
Less estimated income	36,810,218	731,581	37,541,799
General fund	$29,761,962	$307,409	$30,069,371
Agronomy Seed Farm			
Total all funds	$1,199,685	($1,629)	$1,198,056
Less estimated income	1,199,685	(1,629)	1,198,056
General fund	$0	$0	$0
Bill Total			
Total all funds	$142,777,604	$1,261,065	$144,038,669
Less estimated income	88,285,434	676,104	88,961,538
General fund	$54,492,170	$584,961	$55,077,131

Senate Bill No. 2020 - Transportation Institute - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Transportation Institute	$15,764,073	($33,300)	$15,730,773
Total all funds	$15,764,073	($33,300)	$15,730,773
Less estimated income	15,263,028	(31,878)	15,231,150
General fund	$501,045	($1,422)	$499,623
FTE	48.50	0.00	48.50

Dept. 627 - Transportation Institute - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Transportation Institute	($33,300)	($33,300)
Total all funds	($33,300)	($33,300)
Less estimated income	(31,878)	(31,878)
General fund	($1,422)	($1,422)
FTE	0.00	0.00

Senate Bill No. 2020 - Branch Research Centers - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Dickinson Research Center	$5,554,757	$54,966	$5,609,723
Central Grasslands Research Center	1,982,689	(3,455)	1,979,234
Hettinger Research Center	1,798,821	4,201	1,803,022
Langdon Research Center	1,332,702	(4,216)	1,328,486
North Central Research Center	2,236,320	(5,590)	2,230,730
Williston Research Center	2,091,298	114,577	2,205,875
Carrington Research Center	4,251,204	(9,196)	4,242,008
Total all funds	$19,247,791	$151,287	$19,399,078
Less estimated income	11,072,534	(8,962)	11,063,572
General fund	$8,175,257	$160,249	$8,335,506
FTE	77.41	0.00	77.41

Dept. 628 - Branch Research Centers - Detail of Senate Changes

	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [1]	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Dickinson Research Center	$62,845	($7,879)	$54,966
Central Grasslands Research Center		(3,455)	(3,455)
Hettinger Research Center	8,000	(3,799)	4,201
Langdon Research Center		(4,216)	(4,216)
North Central Research Center		(5,590)	(5,590)
Williston Research Center	118,105	(3,528)	114,577
Carrington Research Center		(9,196)	(9,196)
Total all funds	$188,950	($37,663)	$151,287
Less estimated income		(8,962)	(8,962)
General fund	$188,950	($28,701)	$160,249

FTE	0.00	0.00	0.00

1 This amendment adds funding for western malting barley research.

Senate Bill No. 2020 - NDSU Extension Service - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Extension Service	$37,442,255	($124,036)	$37,318,219
Soil Conservation Committee	788,035	99,391	887,426
Total all funds	$38,230,290	($24,645)	$38,205,645
Less estimated income	22,989,228	(50,617)	22,938,611
General fund	$15,241,062	$25,972	$15,267,034
FTE	266.10	0.00	266.10

Dept. 630 - NDSU Extension Service - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	ADDS FUNDING FOR SOIL CONSERVATION DISTRICTS 1	TOTAL SENATE CHANGES
Extension Service	($124,036)		($124,036)
Soil Conservation Committee	(609)	$100,000	99,391
Total all funds	($124,645)	$100,000	($24,645)
Less estimated income	(50,617)		(50,617)
General fund	($74,028)	$100,000	$25,972
FTE	0.00	0.00	0.00

1 This amendment adds funding for soil conservation districts.

Senate Bill No. 2020 - Northern Crops Institute - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Northern Crops Institute	$1,763,585	$130,362	$1,893,947
Total all funds	$1,763,585	$130,362	$1,893,947
Less estimated income	950,741	37,609	988,350
General fund	$812,844	$92,753	$905,597
FTE	7.62	1.00	8.62

Dept. 638 - Northern Crops Institute - Detail of Senate Changes

	ADDS 1 FTE CROP QUALITY PROMOTION SPECIALIST 1	REMOVES FUNDING FOR LINKING CROPS TO LIVESTOCK RESEARCH 2	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Northern Crops Institute	$159,605	($24,469)	($4,774)	$130,362
Total all funds	$159,605	($24,469)	($4,774)	$130,362
Less estimated income	39,605		(1,996)	37,609
General fund	$120,000	($24,469)	($2,778)	$92,753
FTE	1.00	0.00	0.00	1.00

1 This amendment adds 1 FTE crop quality promotion specialist position at Northern Crops Institute.

2 This amendment removes $24,469 of funding for linking crops to North Dakota livestock development research costs.

Senate Bill No. 2020 - Main Research Station - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Main Research Station	$66,572,180	$1,038,990	$67,611,170
Total all funds	$66,572,180	$1,038,990	$67,611,170
Less estimated income	36,810,218	731,581	37,541,799

General fund	$29,761,962	$307,409	$30,069,371
FTE	339.05	2.00	341.05

Dept. 640 - Main Research Station - Detail of Senate Changes

	CONTINUES FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [1]	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [2]	ADDS POSITIONS AND FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [3]	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Main Research Station	$800,000	$39,251	$400,000	($200,261)	$1,038,990
Total all funds	$800,000	$39,251	$400,000	($200,261)	$1,038,990
Less estimated income	800,000			(68,419)	731,581
General fund	$0	$39,251	$400,000	($131,842)	$307,409
FTE	0.00	0.00	2.00	0.00	2.00

[1] This amendment continues funding of $800,000 to the Main Research Center from the agriculture partnership in assisting community expansion (Ag PACE) fund for establishment of a beef systems center of excellence in the Department of Animal and Range Science. The funding was originally provided in 2003 House Bill No. 1021.

[2] This amendment adds funding for western malting barley research.

[3] This amendment adds funding for 2 FTE positions and related operating costs for the beef systems center of excellence. The beef systems center of excellence positions may not be filled until the State Board of Agricultural Research and Education enters into a business partnership agreement for the beef systems center of excellence.

Senate Bill No. 2020 - Agronomy Seed Farm - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Agronomy seed farm	$1,199,685	($1,629)	$1,198,056
Total all funds	$1,199,685	($1,629)	$1,198,056
Less estimated income	1,199,685	(1,629)	1,198,056
General fund	$0	$0	$0
FTE	2.97	0.00	2.97

Dept. 649 - Agronomy Seed Farm - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Agronomy seed farm	($1,629)	($1,629)
Total all funds	($1,629)	($1,629)
Less estimated income	(1,629)	(1,629)
General fund	$0	$0
FTE	0.00	0.00

SECTION 5. APPROPRIATION - REED ACT FUNDS - UNEMPLOYMENT INSURANCE COMPUTER MODERNIZATION PROCUREMENT PLANNING. There is appropriated out of moneys made available to the state by the federal Reed Act distributions made in federal fiscal years 1957, 1958, 1999, and 2002, pursuant to section 903 of the Social Security Act, the sum of $525,000, or so much of the sum as may be necessary, to job service North Dakota for the purpose of unemployment insurance computer system modernization procurement planning, for the biennium beginning July 1, 2005, and ending June 30, 2007.

Grand total general fund appropriation S.B. 2016	$1,255,340
Grand total estimated income appropriation S.B. 2016	$57,997,924
Grand total all funds appropriation S.B. 2016	$59,253,264"

Page 2, line 26, remove "line"

Page 2, line 27, replace "3" with "4"

Page 3, line 8, remove "line" and replace "3" with "5"

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2016 - Job Service North Dakota - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Salaries and wages	$34,846,714	($139,793)	$34,706,921
Operating expenses	13,238,913		13,238,913
Capital assets	225,000		225,000
Grants	9,047,165		9,047,165
Work Force 2000	1,480,724	(225,384)	1,255,340
Work First-Reed Act	256,560	(1,635)	254,925
Unemployment Insurance Modernization-Reed Act	525,000		525,000
Total all funds	$59,620,076	($366,812)	$59,253,264
Less estimated income	58,139,352	(141,428)	57,997,924
General fund	$1,480,724	($225,384)	$1,255,340
FTE	355.80	0.00	355.80

Dept. 380 - Job Service North Dakota - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	REDUCE FUNDING FOR WORKFORCE 2000 [1]	TOTAL SENATE CHANGES
Salaries and wages	($139,793)		($139,793)
Operating expenses			
Capital assets			
Grants			
Work Force 2000	(384)	($225,000)	(225,384)
Work First-Reed Act	(1,635)		(1,635)
Unemployment Insurance Modernization-Reed Act			
Total all funds	($141,812)	($225,000)	($366,812)
Less estimated income	(141,428)		(141,428)
General fund	($384)	($225,000)	($225,384)
FTE	0.00	0.00	0.00

[1] This amendment removes funding of $225,000 from the general fund for Work Force 2000 included in the executive budget recommendation to replace carryover funding used during the 2003-05 biennium.

This amendment removes the appropriation of Reed Act funds for the Work First demonstration project and the unemployment insurance computer modernization procurement planning from Section 3 of the bill and provides for the appropriation of the funds for the two issues in two new sections of the bill.

REPORT OF STANDING COMMITTEE

SB 2020: Appropriations Committee (Sen. Holmberg, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (15 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2020 was placed on the Sixth order on the calendar.

Page 1, line 3, after "farm" insert "; to provide legislative intent; to provide for a legislative council study; and to declare an emergency"

Page 3, line 5, replace "3,874,658" with "3,750,622"

Page 3, line 6, replace "9,356" with "108,747"

Page 3, line 7, replace "3,884,014" with "3,859,369"

Page 3, line 8, replace "2,502,398" with "2,451,781"

Page 3, line 9, replace "1,381,616" with "1,407,588"

Page 3, line 12, replace "240,238" with "370,600"

Page 3, line 13, replace "173,396" with "211,005"

Page 3, line 14, replace "66,842" with "159,595"

Page 3, line 17, replace "4,919,323" with "4,886,023"

Page 3, line 18, replace "4,901,377" with "4,869,499"

Page 3, line 19, replace "17,946" with "16,524"

Page 3, line 22, replace "6,054,966" with "7,093,956"

Page 3, line 23, replace "4,503,744" with "5,235,325"

Page 3, line 24, replace "1,551,222" with "1,858,631"

Page 3, line 27, replace "273,623" with "328,589"

Page 3, line 28, replace "315,302" with "311,847"

Page 3, line 29, replace "277,346" with "281,547"

Page 3, line 30, replace "49,817" with "45,601"

Page 3, line 31, replace "523,810" with "518,220"

Page 4, line 1, replace "448,223" with "562,800"

Page 4, line 2, replace "924,588" with "915,392"

Page 4, line 3, replace "2,812,709" with "2,963,996"

Page 4, line 4, replace "2,105,131" with "2,096,169"

Page 4, line 5, replace "707,578" with "867,827"

Page 4, line 8, replace "33,081" with "31,452"

Page 4, line 9, replace "33,081" with "31,452"

Page 4, line 10, replace "3,725,204" with "4,310,165"

Page 4, line 11, replace "14,219,127" with "14,895,231"

Page 4, line 12, replace "17,944,331" with "19,205,396"

Page 4, line 22, replace "37,442,255" with "37,318,219"

Page 4, line 23, replace "788,035" with "887,426"

Page 4, line 24, replace "38,230,290" with "38,205,645"

Page 4, line 25, replace "22,989,228" with "22,938,611"

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Page 4, line 29, replace "1,763,585" with "1,893,947"

Page 4, line 30, replace "950,741" with "988,350"

Page 4, line 31, replace "812,844" with "905,597"

Page 5, line 3, replace "15,764,073" with "15,730,773"

Page 5, line 4, replace "15,263,028" with "15,231,150"

Page 5, line 5, replace "501,045" with "499,623"

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Page 5, line 21, replace "11,072,534" with "11,063,572"

Page 5, line 22, replace "8,175,257" with "8,335,506"

Page 5, line 25, replace "1,199,685" with "1,198,056"

Page 5, line 26, replace "1,199,685" with "1,198,056"

Page 5, line 27, replace "54,492,170" with "55,077,131"

Page 5, line 28, replace "88,285,434" with "88,961,538"

Page 5, line 29, replace "142,777,604" with "144,038,669"

Page 6, after line 21, insert:

"**SECTION 8. LEGISLATIVE INTENT - BEEF SYSTEMS CENTER OF EXCELLENCE.** It is the intent of the fifty-ninth legislative assembly that $800,000 of the appropriation provided in subdivision 4 of section 3 transferred from the agriculture partnership in assisting community expansion fund is a continuation of funding authority for the beef systems center of excellence as provided in section 9 of chapter 20 of the 2003 Session Laws.

SECTION 9. LEGISLATIVE COUNCIL STUDY - BRANCH RESEARCH CENTERS. The legislative council shall consider studying, during the 2005-06 interim, the branch research centers, including visiting each center to observe infrastructure needs and research conducted, addressing how the research may complement the beef systems center of excellence, and receiving comments from area growers and producers. The legislative council shall report its findings and recommendations, together with any legislation required to implement the recommendations, to the sixtieth legislative assembly.

SECTION 10. AUTHORIZATION. The special funds spending authority of $1,400,000 included in subdivision 5 of section 1 of chapter 20 of the 2003 Session

Laws for the Dickinson research center building project may come from any available source.

SECTION 11. EMERGENCY. Section 10 of this Act is declared to be an emergency measure."

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2020 - Summary of Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Transportation Institute			
Total all funds	$15,764,073	($33,300)	$15,730,773
Less estimated income	15,263,028	(31,878)	15,231,150
General fund	$501,045	($1,422)	$499,623
Branch Research Centers			
Total all funds	$19,247,791	$151,287	$19,399,078
Less estimated income	11,072,534	(8,962)	11,063,572
General fund	$8,175,257	$160,249	$8,335,506
NDSU Extension Service			
Total all funds	$38,230,290	($24,645)	$38,205,645
Less estimated income	22,989,228	(50,617)	22,938,611
General fund	$15,241,062	$25,972	$15,267,034
Northern Crops Institute			
Total all funds	$1,763,585	$130,362	$1,893,947
Less estimated income	950,741	37,609	988,350
General fund	$812,844	$92,753	$905,597
Main Research Station			
Total all funds	$66,572,180	$1,038,990	$67,611,170
Less estimated income	36,810,218	731,581	37,541,799
General fund	$29,761,962	$307,409	$30,069,371
Agronomy Seed Farm			
Total all funds	$1,199,685	($1,629)	$1,198,056
Less estimated income	1,199,685	(1,629)	1,198,056
General fund	$0	$0	$0
Bill Total			
Total all funds	$142,777,604	$1,261,065	$144,038,669
Less estimated income	88,285,434	676,104	88,961,538
General fund	$54,492,170	$584,961	$55,077,131

Senate Bill No. 2020 - Transportation Institute - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Transportation Institute	$15,764,073	($33,300)	$15,730,773
Total all funds	$15,764,073	($33,300)	$15,730,773
Less estimated income	15,263,028	(31,878)	15,231,150
General fund	$501,045	($1,422)	$499,623
FTE	48.50	0.00	48.50

Dept. 627 - Transportation Institute - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Transportation Institute	($33,300)	($33,300)
Total all funds	($33,300)	($33,300)
Less estimated income	(31,878)	(31,878)
General fund	($1,422)	($1,422)
FTE	0.00	0.00

Senate Bill No. 2020 - Branch Research Centers - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Dickinson Research Center	$5,554,757	$54,966	$5,609,723

Central Grasslands Research Center	1,982,689	(3,455)	1,979,234
Hettinger Research Center	1,798,821	4,201	1,803,022
Langdon Research Center	1,332,702	(4,216)	1,328,486
North Central Research Center	2,236,320	(5,590)	2,230,730
Williston Research Center	2,091,298	114,577	2,205,875
Carrington Research Center	4,251,204	(9,196)	4,242,008
Total all funds	$19,247,791	$151,287	$19,399,078
Less estimated income	11,072,534	(8,962)	11,063,572
General fund	$8,175,257	$160,249	$8,335,506
FTE	77.41	0.00	77.41

Dept. 628 - Branch Research Centers - Detail of Senate Changes

	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [1]	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Dickinson Research Center	$62,845	($7,879)	$54,966
Central Grasslands Research Center		(3,455)	(3,455)
Hettinger Research Center	8,000	(3,799)	4,201
Langdon Research Center		(4,216)	(4,216)
North Central Research Center		(5,590)	(5,590)
Williston Research Center	118,105	(3,528)	114,577
Carrington Research Center		(9,196)	(9,196)
Total all funds	$188,950	($37,663)	$151,287
Less estimated income		(8,962)	(8,962)
General fund	$188,950	($28,701)	$160,249
FTE	0.00	0.00	0.00

[1] This amendment adds funding for western malting barley research.

Senate Bill No. 2020 - NDSU Extension Service - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Extension Service	$37,442,255	($124,036)	$37,318,219
Soil Conservation Committee	788,035	99,391	887,426
Total all funds	$38,230,290	($24,645)	$38,205,645
Less estimated income	22,989,228	(50,617)	22,938,611
General fund	$15,241,062	$25,972	$15,267,034
FTE	266.10	0.00	266.10

Dept. 630 - NDSU Extension Service - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	ADDS FUNDING FOR SOIL CONSERVATION DISTRICTS [1]	TOTAL SENATE CHANGES
Extension Service	($124,036)		($124,036)
Soil Conservation Committee	(609)	$100,000	99,391
Total all funds	($124,645)	$100,000	($24,645)
Less estimated income	(50,617)		(50,617)
General fund	($74,028)	$100,000	$25,972
FTE	0.00	0.00	0.00

[1] This amendment adds funding for soil conservation districts.

Senate Bill No. 2020 - Northern Crops Institute - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Northern Crops Institute	$1,763,585	$130,362	$1,893,947
Total all funds	$1,763,585	$130,362	$1,893,947
Less estimated income	950,741	37,609	988,350
General fund	$812,844	$92,753	$905,597

FTE	7.62	1.00	8.62

Dept. 638 - Northern Crops Institute - Detail of Senate Changes

	ADDS 1 FTE CROP QUALITY PROMOTION SPECIALIST [1]	REMOVES FUNDING FOR LINKING CROPS TO LIVESTOCK RESEARCH [2]	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Northern Crops Institute	$159,605	($24,469)	($4,774)	$130,362
Total all funds	$159,605	($24,469)	($4,774)	$130,362
Less estimated income	39,605		(1,996)	37,609
General fund	$120,000	($24,469)	($2,778)	$92,753
FTE	1.00	0.00	0.00	1.00

[1] This amendment adds 1 FTE crop quality promotion specialist position at Northern Crops Institute.

[2] This amendment removes $24,469 of funding for linking crops to North Dakota livestock development research costs.

Senate Bill No. 2020 - Main Research Station - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Main Research Station	$66,572,180	$1,038,990	$67,611,170
Total all funds	$66,572,180	$1,038,990	$67,611,170
Less estimated income	36,810,218	731,581	37,541,799
General fund	$29,761,962	$307,409	$30,069,371
FTE	339.05	2.00	341.05

Dept. 640 - Main Research Station - Detail of Senate Changes

	CONTINUES FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [1]	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [2]	ADDS POSITIONS AND FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [3]	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Main Research Station	$800,000	$39,251	$400,000	($200,261)	$1,038,990
Total all funds	$800,000	$39,251	$400,000	($200,261)	$1,038,990
Less estimated income	800,000			(68,419)	731,581
General fund	$0	$39,251	$400,000	($131,842)	$307,409
FTE	0.00	0.00	2.00	0.00	2.00

[1] This amendment continues funding of $800,000 to the Main Research Center from the agriculture partnership in assisting community expansion (Ag PACE) fund for establishment of a beef systems center of excellence in the Department of Animal and Range Science. The funding was originally provided in 2003 House Bill No. 1021.

[2] This amendment adds funding for western malting barley research.

[3] This amendment adds funding for 2 FTE positions and related operating costs for the beef systems center of excellence. The beef systems center of excellence positions may not be filled until the State Board of Agricultural Research and Education enters into a business partnership agreement for the beef systems center of excellence.

Senate Bill No. 2020 - Agronomy Seed Farm - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Agronomy seed farm	$1,199,685	($1,629)	$1,198,056
Total all funds	$1,199,685	($1,629)	$1,198,056
Less estimated income	1,199,685	(1,629)	1,198,056
General fund	$0	$0	$0
FTE	2.97	0.00	2.97

Dept. 649 - Agronomy Seed Farm - Detail of Senate Changes

	REDUCES COMPENSATION PACKAGE TO 3/4	TOTAL SENATE CHANGES
Agronomy seed farm	($1,629)	($1,629)
Total all funds	($1,629)	($1,629)
Less estimated income	(1,629)	(1,629)
General fund	$0	$0
FTE	0.00	0.00

REPORT OF STANDING COMMITTEE

SB 2021: Appropriations Committee (Sen. Holmberg, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (13 YEAS, 0 NAYS, 2 ABSENT AND NOT VOTING). SB 2021 was placed on the Sixth order on the calendar.

Page 2, line 3, replace "3,484,335" with "3,365,672"

Page 2, line 6, replace "202,429" with "187,400"

Page 2, line 7, replace "961,371" with "(57,814)"

Page 2, line 9, replace "107,191" with "106,238"

Page 2, line 11, replace "8,863" with "8,219"

Page 2, line 13, replace "(2,041,200)" with "(2,360,110)"

Page 2, line 14, replace "3,328,830" with "1,855,446"

Page 2, line 15, replace "713,274" with "585,355"

Page 2, line 16, replace "2,615,556" with "1,270,091"

Page 2, line 23, replace "29,200,029" with "29,081,366"

Page 2, line 26, replace "5,827,909" with "5,812,880"

Page 2, line 27, replace "1,755,189" with "736,004"

Page 2, line 29, replace "7,543,414" with "7,542,461"

Page 2, line 30, replace "687,206" with "686,562"

Page 2, line 31, replace "2,700,000" with "2,381,090"

Page 3, line 1, replace "109,640,934" with "108,167,550"

Page 3, line 2, replace "98,830,575" with "98,702,656"

Page 3, line 3, replace "10,810,359" with "9,464,894"

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2021 - Information Technology Department - Senate Action

	EXECUTIVE BUDGET	SENATE CHANGES	SENATE VERSION
Salaries and wages	$29,200,029	($118,663)	$29,081,366
Operating expenses	48,913,676		48,913,676
Capital assets	10,361,163		10,361,163
Division of Independent Study	5,827,909	(15,029)	5,812,880
Educational Technology Council	1,755,189	(1,019,185)	736,004
EduTech	2,652,348		2,652,348
Wide area network	7,543,414	(953)	7,542,461
Geographic information system	687,206	(644)	686,562
Criminal justice information	2,700,000	(318,910)	2,381,090

2005 HOUSE APPROPRIATIONS

SB 2020

2005 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SB2020

House Appropriations Committee
Education and Environment Division

☐ Check here for Conference Committee

Hearing Date March 24, 2005

Tape Number	Side A	Side B	Meter #
1	X		0-11
Committee Clerk Signature	Robin Puree		

Minutes: Chairman Martinson opened hearing on SB2020.

Vice Chairman Brusegaard I move amendment .0203 to SB2020.

Rep. Wald Second

Vice Chairman Brusegaard Amendments to the Extension and Research budget. I will go through changes made to the Senate bill. Health insurance benefits are part of it. Added funding Upper Great Plains Transportation Institute in the amount of $300,000 in General Funds. Allows them to meet required federal budget guidelines. They have to receive $400,000 a year in general fund steady income to be designated as a Regional University Transportation Center and that allows them to access about $5.5 million in federal grants. Beef Centers of Excellence - it appears we took money away. The Senate added $400,000 above the Governor's budget and added two FTEs. We took $200,000 of that back and took the FTEs out. They seem comfortable with the level of funding under these amendments. We added with that $200,000 a position for a

dry bean geneticist - $100, 000 will come from general fund and other $100,000 will be made up by driving group or by funds available to extension. We put in money for the Western Barley project and added some money for extraordinary repairs and for operating equipment. Another change I want to mention, we took out $100,000 that the Senate added to Soil Conservation Service line item. That was money added above the Governor's budget.

Rep. Rennerfeldt What was the total amount for extraordinary repairs

Vice Chairman Brusegaard We added $225,000 above the bill that came to us from the Senate.

Celeste (OMB) Extraordinary repairs that was in the Main Station in the Governor's budget was $415,300. That money is available for the branch stations also. Extraordinary repairs are always put in the Main Station budget and allocated out as prioritized to the most needed areas.

Rep. Aarsvold Some concerns expressed with regards to the Grower's Contribution to the dry bean breeder position.

Chairman Martinson What don't we just put the money in there?

Rep. Wald Another $100,000?

Vice Chairman Brusegaard I'm against doing that because trying to please membership and the full committee and getting a bill that does good things, and in my opinion, that does good things and is not ostentatious. The history of it is - the position that Ken Grafton had before he moved up. When he moved up and that position was vacant, they used that money to meet the 95% budget request last year. This is an attempt to attached funds to that, all be it a modest one.

Rep. Aarsvold North Dakota leads the whole country in dry bean production - it is an important crop. Bean acreage is extending far into the west and it has terrific potential. That is all I will say about the bean breeder situation but I do think it is an important investment.

Vice Chairman Brusegaard I think we are being very generous with agencies that deserve it, in a time where other agencies that deserve it are being stomped on. If there is money in the ERP fund, I'm unconvinced that this is where to spend it. One frustration I have with this bill is the lack of any amendments for biotech research.

Rep. Aarsvold It is important that we get this bill into conference committee and I would appreciate if the record would reflect that we did discuss full funding for that bean breeder.

Chairman Martinson These guys are going to do a lot better proportionately than other people because we are going above the Senate's level.

VOICE VOTE on amendments passed.

Vice Chairman Brusegaard I would like to move a Do Pass As Amended on SB2020.

Rep. Rennerfeldt Second.

VOTE 5 YES 0 NO with 1 absent and not voting. Vice Chairman Brusegaard will carry to the full committee.

2005 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SB2020
Extension Services and Other Institutes

House Appropriations Full Committee

☐ Conference Committee

Hearing Date March 24, 2005

Tape Number	Side A	Side B	Meter #
1		X	#9.2 - #39.9
Committee Clerk Signature	Chris Alexander		

Minutes:

Rep. Ken Svedjan, Chairman opened the discussion on SB2020.

Rep. Tom Brusegaard moved to adopt amendment #0203 to SB2020

Rep. Francis J. Wald seconded

Rep. Tom Brusegaard explained that the amendment significantly changes this bill. Our committee removed $200,000 and 2 FTEs for the Beef Systems project. Even with these decreases the beef system is receiving more than what the Governor recommended. This $200,000 was transferred, along with $200,000 in spending authority, to the line item for the dry bean geneticist position. $100,000 of this is from the general fund and the other $100,000 they would come up with either from check-off dollars or from within their budget. We added close to $60,000 for the Western Barley Malting project. And extraordinary repairs and operating equipment needs funds will be spread across the research stations to try and bring them up to speed. We removed $100,000 from extension that the Senate had added for the Soil

Conservation Service, so now it is back to the level of the Governor's recommendation. We removed language on page 6 that called for a study of research stations in connection with the Beef Center.

Rep. Al Carlson asked if the Beef Center of Excellence still had $800,000 set aside

Rep. Tom Brusegaard answered that this hasn't been used because they haven't yet found a partner. Apparently they are very close to signing on with Sysco. Rep Brusegaard continued to explain the amendment. There is also a $300,000 general fund increase to the Upper Great Plains Transportation Institute at NDSU. Their total executive budget recommendation for general funds is just over $500,000 and with this they leverage over $14 million. This $300,000 allows them to access $5 million of federal grants, because there is a federal program called The Regional University Transportation Centers. One requirement in this is that they receive at least $400,000 a year in consistent state general funding. Rep Brusegaard personally commented that the Beef System is something that research and extension should be doing whether it is a center of excellence or not.

Rep. Bob Skarphol commented that if the centers of excellence go forward as planned the current Beef Center would not qualify. The suggestion would be to maybe change their name, slightly. (meter Tape #1, side B, #13.8)

Rep. Tom Brusegaard agreed, but thought that this would be done in a Conference hearing

Rep. Ole Aarsvold commented that these amendments were not addressing the recommendations made by the State Board of Agricultural Research and Education (SBAR) group and this is a huge disappointment to the entirety of the agricultural community.

Rep. Jeff Delzer asked if the Upper Great Plains is assured getting the $5 million grant that we gave them the $300,000 to obtain, and how will they use it if they get it. If they don't receive the grant is there any language in the bill that will restrict them from using the $300,000 in another way.

Rep. Tom Brusegaard answered that there is no application here, it is a continuation. If we do not add the $300,000 they will lose the $5 million they have received in the past.

Rep. Jeff Delzer asked if the amount for re-authorization was changed, and what did it used to be.

Rep. Tom Brusegaard answered yes, it used to be $200,000.

Rep. Mike Timm, Vice Chairman asked where the SBAR dollars are in the budget.

Rep. Tom Brusegaard answered SBAR meets and provides a list of NDSU research.

Rep. Mike Timm, Vice Chairman commented that Rep Aarsvold was condemning the report because SBAR did not get the money they were requesting and this should be cleared up.

Rep. Ole Aarsvold explained that SBAR worked hard to come up with a plan of priorities for Agricultural research and extension across the state. They set up a list of priorities and as a committee we have not begun to address these adequately. (meter Tape #1, side A, #17.8)

Rep. Mike Timm, Vice Chairman asked if we were putting any dollars in this.

Rep. Ole Aarsvold answered that this was a money issue. For instance, the extraordinary repairs request was $425,000 after an extensive study of the needs in this area and the amendment to this bill provides only $250,000. These unmet needs are building up.

Rep. Al Carlson commented that SB2032 had $485,000 in it for a transportation study for the Upper Great Plains Institute. Is this in addition to this bill or is it included in it?

Rep. Tom Brusegaard answered that this is a project that the state is doing for the Transportation Center. The $300,000 we're giving to them is so that they will qualify for federal grant dollars.

Rep. Pam Gulleson asked if this had to do with the bus routes study in DPI.

Rep. Al Carlson answered no, this study is to improve the load carrying limits of our roads.

Rep. Tom Brusegaard commented regarding the SBAR priorities. If we were to fund all of the priorities at the grants research station it would take $1.5 million. At the main research station it would take $6.1 million. We are not addressing all of the priorities but we are putting something toward each of the top 6 priorities listed. We are making an attempt.

Rep. Mike Timm, Vice Chairman asked if this was more like a wish list kind of thing and we do what we can

Rep. Tom Brusegaard answered that this was correct.

Rep. Ole Aarsvold moved a substitute motion to add $100,000 for the dry bean geneticist position and remove the language that has to do with the industry providing the balance of the $40,000. Also that we add $200,000 to extraordinary repairs line item.

Rep. Bob Skarphol seconded

Rep. Ken Svedjan, Chairman clarifies that this would add $100,000 for the bean geneticist and $200,000 for extraordinary repairs for the main station and the research extension centers. This is for a total of $300,000.

Rep. Jeff Delzer opposes this. There is $300,000 in this motion and if we are going to spend this kind of money, it can be used to much better purposes in places like Human Services.

Rep. Bob Skarphol commented that conversations with these folks tell him that the buildings are deteriorating because repairs are not being made. Sometimes we lose sight of where we came from to do new things with technology, but there are times when we need to fund the good work that we have always been doing. We have good leaders in SBAR and we should support their recommendations.

Rep. Tom Brusegaard suggested that we pass the other amendments first and then further amend with the suggestions of Rep Aarsvold.

Rep. Ole Aarsvold withdraws motion

Rep. Ken Svedjan, Chairman called for a voice vote on the motion to adopt amendment #0203 to SB2020. Motion carried.

Rep. Ole Aarsvold moved to further amend by adding the $100,000 for the bean geneticist and the $200,000 for extraordinary repairs.

Rep. Bob Skarphol seconded

Rep. Bob Skarphol The retroactive bonus to state employees bill was introduced this session and the folks at the research centers all said they don't want the raise in this bill, but instead give us money to get the work done that needs to be done. There is $170,000 right there that could be used to make some of these repairs that we have mentioned.

Rep. Jeff Delzer asked if it was correct that the Main Research Center was to receive $30 million of general fund moneys and the research centers are receiving $8.3 million.

Rep. Tom Brusegaard answered that this was correct

Rep. Jeff Delzer commented that they could find the extra $100,000 within these moneys.

Rep. David Monson supports this motion because it is our intention to take the bonus bill moneys out of the other bill to help pay for these repairs.

Rep. Ken Svedjan, Chairman called for a voice vote to further amend SB2020. Motion carried.

Rep. Bob Skarphol moved to further amend by adding $100,000 to Western Malt Barley Initiative. This could be very helpful to the ethanol industry and research.

Rep. Earl Rennerfeldt seconded

Rep. Mike Timm, Vice Chairman asked where the money goes (meter Tape #1, side B, #32.0)

Rep. Bob Skarphol answered that it would go to the main research stations at Dickinson, Hettinger and Williston.

Rep. Mike Timm, Vice Chairman asked if we gave these institutions money in the last session for the same study.

Rep. Bob Skarphol explained that Ag research is not something that is done once and then is over. The development of varieties takes up to 12 years.

Rep. David Monson explained that barley wears out these plants but research can produce a new type of barley that is softer and will not tear up the plants. Rep Monson supports this amendment.

Rep. Tom Brusegaard commented that if the Governor's office thought these projects were a priority they would have been included in the executive recommendation. And while ag research is important it still doesn't hold a candle to things like human services and K-12 education. The Malt Barley project is not even in the SBAR priorities.

Rep. Al Carlson asked what the total amount was that is going into research right now.

Rep. Tom Brusegaard answered $54 million

Rep. Al Carlson commented that they should be able to find money with the $54 million to do this research.

Rep. Ken Svedjan, Chairman called for a voice vote on the motion to further amend SB2020. Motion carried.

Rep. Tom Brusegaard moved a Do Pass As Amended motion for SB2020

Rep. Bob Martinson seconded

Rep. Ken Svedjan, Chairman called for a roll call vote on the Do Pass As Amended motion for SB2020. Motion carried with a vote of 19 yeas, 3 neas and 1 absence. Rep Brusegaard will carry the bill to the house floor.

Rep. Ken Svedjan, Chairman closed the discussion on SB2020.

Prepared by the Legislative Council staff for
Representative Brusegaard
March 23, 2005

PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2020

Page 1, line 3, remove the second "to"

Page 1, line 4, remove "provide for a legislative council study;"

Page 3, line 5, replace "3,750,622" with "3,713,370"

Page 3, line 6, replace "108,747" with "8,559"

Page 3, line 7, replace "3,859,369" with "3,721,929"

Page 3, line 8, replace "2,451,781" with "2,427,076"

Page 3, line 9, replace "1,407,588" with "1,294,853"

Page 3, line 12, replace "370,600" with "369,602"

Page 3, line 13, replace "211,005" with "210,506"

Page 3, line 14, replace "159,595" with "159,096"

Page 3, line 17, replace "4,886,023" with "5,179,908"

Page 3, line 18, replace "4,869,499" with "4,863,538"

Page 3, line 19, replace "16,524" with "316,370"

Page 3, line 22, replace "7,093,956" with "7,683,493"

Page 3, line 23, replace "5,235,325" with "5,316,848"

Page 3, line 24, replace "1,858,631" with "2,366,645"

Page 3, line 27, replace "328,589" with "326,459"

Page 3, line 28, replace "311,847" with "310,855"

Page 3, line 29, replace "281,547" with "280,431"

Page 3, line 30, replace "45,601" with "44,611"

Page 3, line 31, replace "518,220" with "516,625"

Page 4, line 1, replace "562,800" with "561,809"

Page 4, line 2, replace "915,392" with "912,972"

Page 4, line 3, replace "2,963,996" with "2,953,762"

Page 4, line 4, replace "2,096,169" with "2,093,700"

Page 4, line 5, replace "867,827" with "860,062"

Page 4, line 8, replace "31,452" with "31,078"

Page 4, line 9, replace "31,452" with "31,078"

Page 4, line 10, replace "4,310,165" with "4,997,026"

Page 4, line 11, replace "14,895,231" with "14,942,746"

Page 4, line 12, replace "19,205,396" with "19,939,772"

Page 4, line 22, replace "37,318,219" with "37,280,967"

Page 4, line 23, replace "887,426" with "787,238"

Page 4, line 24, replace "38,205,645" with "38,068,205"

Page 4, line 25, replace "22,938,611" with "22,913,906"

Page 4, line 26, replace "15,267,034" with "15,154,299"

Page 4, line 29, replace "1,893,947" with "1,892,949"

Page 4, line 30, replace "988,350" with "987,851"

Page 4, line 31, replace "905,597" with "905,098"

Page 5, line 3, replace "15,730,773" with "16,024,658"

Page 5, line 4, replace "15,231,150" with "15,225,189"

Page 5, line 5, replace "499,623" with "799,469"

Page 5, line 8, replace "67,611,170" with "68,200,707"

Page 5, line 9, replace "37,541,799" with "37,623,322"

Page 5, line 10, replace "30,069,371" with "30,577,385"

Page 5, line 13, replace "5,609,723" with "5,607,593"

Page 5, line 14, replace "1,979,234" with "1,978,242"

Page 5, line 15, replace "1,803,022" with "1,801,906"

Page 5, line 16, replace "1,328,486" with "1,327,496"

Page 5, line 17, replace "2,230,730" with "2,229,135"

Page 5, line 18, replace "2,205,875" with "2,204,884"

Page 5, line 19, replace "4,242,008" with "4,239,588"

Page 5, line 20, replace "19,399,078" with "19,388,844"

Page 5, line 21, replace "11,063,572" with "11,061,103"

Page 5, line 22, replace "8,335,506" with "8,327,741"

Page 5, line 25, replace "1,198,056" with "1,197,682"

Page 5, line 26, replace "1,198,056" with "1,197,682"

Page 5, line 27, replace "55,077,131" with "55,763,992"

Page 5, line 28, replace "88,961,538" with "89,009,053"

Page 5, line 29, replace "144,038,669" with "144,773,045"

Page 6, remove lines 27 through 31

Page 7, removes lines 1 and 2

Page 7, line 6, replace "10" with "9"

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2020 - Summary of House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Transportation Institute				
Total all funds	$15,764,073	$15,730,773	$293,885	$16,024,658
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189
General fund	$501,045	$499,623	$299,846	$799,469
Branch Research Centers				
Total all funds	$19,247,791	$19,399,078	($10,234)	$19,388,844
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103
General fund	$8,175,257	$8,335,506	($7,765)	$8,327,741
NDSU Extension Service				
Total all funds	$38,230,290	$38,205,645	($137,440)	$38,068,205
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906
General fund	$15,241,062	$15,267,034	($112,735)	$15,154,299
Northern Crops Institute				
Total all funds	$1,763,585	$1,893,947	($998)	$1,892,949
Less estimated income	950,741	988,350	(499)	987,851
General fund	$812,844	$905,597	($499)	$905,098
Main Research Station				
Total all funds	$66,572,180	$67,611,170	$589,537	$68,200,707
Less estimated income	36,810,218	37,541,799	81,523	37,623,322
General fund	$29,761,962	$30,069,371	$508,014	$30,577,385
Agronomy Seed Farm				
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682
Less estimated income	1,199,685	1,198,056	(374)	1,197,682
General fund	$0	$0	$0	$0
Bill Total				
Total all funds	$142,777,604	$144,038,669	$734,376	$144,773,045
Less estimated income	88,285,434	88,961,538	47,515	89,009,053
General fund	$54,492,170	$55,077,131	$686,861	$55,763,992

Senate Bill No. 2020 - Transportation Institute - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Transportation Institute	$15,764,073	$15,730,773	$293,885	$16,024,658
Total all funds	$15,764,073	$15,730,773	$293,885	$16,024,658
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189
General fund	$501,045	$499,623	$299,846	$799,469
FTE	48.50	48.50	0.00	48.50

Dept. 627 - Transportation Institute - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	ADDS FUNDING FOR REGIONAL UNIVERSITY TRANSPORTATION CENTER STATUS [2]	TOTAL HOUSE CHANGES
Transportation Institute	($6,115)	$300,000	$293,885
Total all funds	($6,115)	$300,000	$293,885
Less estimated income	(5,961)		(5,961)
General fund	($154)	$300,000	$299,846
FTE	0.00	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The House increased the general fund appropriation for the Upper Great Plains Transportation Institute to meet the required funded budget guidelines to qualify as a regional university transportation center.

Senate Bill No. 2020 - Branch Research Centers - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Dickinson Research Center	$5,554,757	$5,609,723	($2,130)	$5,607,593
Central Grasslands Research Center	1,982,689	1,979,234	(992)	1,978,242
Hettinger Research Center	1,798,821	1,803,022	(1,116)	1,801,906
Langdon Research Center	1,332,702	1,328,486	(990)	1,327,496
North Central Research Center	2,236,320	2,230,730	(1,595)	2,229,135
Williston Research Center	2,091,298	2,205,875	(991)	2,204,884
Carrington Research Center	4,251,204	4,242,008	(2,420)	4,239,588
Total all funds	$19,247,791	$19,399,078	($10,234)	$19,388,844
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103
General fund	$8,175,257	$8,335,506	($7,765)	$8,327,741
FTE	77.41	77.41	0.00	77.41

Dept. 628 - Branch Research Centers - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL HOUSE CHANGES
Dickinson Research Center	($2,130)	($2,130)
Central Grasslands Research Center	(992)	(992)
Hettinger Research Center	(1,116)	(1,116)
Langdon Research Center	(990)	(990)
North Central Research Center	(1,595)	(1,595)
Williston Research Center	(991)	(991)
Carrington Research Center	(2,420)	(2,420)
Total all funds	($10,234)	($10,234)
Less estimated income	(2,469)	(2,469)
General fund	($7,765)	($7,765)
FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Senate Bill No. 2020 - NDSU Extension Service - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Extension Service	$37,442,255	$37,318,219	($37,252)	$37,280,967
Soil Conservation Committee	788,035	887,426	(100,188)	787,238
Total all funds	$38,230,290	$38,205,645	($137,440)	$38,068,205
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906
General fund	$15,241,062	$15,267,034	($112,735)	$15,154,299
FTE	266.10	266.10	0.00	266.10

Dept. 630 - NDSU Extension Service - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REMOVES FUNDING FOR SOIL CONSERVATION DISTRICTS [2]	TOTAL HOUSE CHANGES
Extension Service	($37,252)		($37,252)
Soil Conservation Committee	(188)	($100,000)	(100,188)
Total all funds	($37,440)	($100,000)	($137,440)
Less estimated income	(24,705)		(24,705)
General fund	($12,735)	($100,000)	($112,735)
FTE	0.00	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

[2] The House removed the additional $100,000 added by the Senate for soil conservation districts.

Senate Bill No. 2020 - Northern Crops Institute - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Northern Crops Institute	$1,763,585	$1,893,947	($998)	$1,892,949
Total all funds	$1,763,585	$1,893,947	($998)	$1,892,949
Less estimated income	950,741	988,350	(499)	987,851
General fund	$812,844	$905,597	($499)	$905,098
FTE	7.62	8.62	0.00	8.62

Dept. 638 - Northern Crops Institute - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL HOUSE CHANGES
Northern Crops Institute	($998)	($998)
Total all funds	($998)	($998)
Less estimated income	(499)	(499)
General fund	($499)	($499)
FTE	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Senate Bill No. 2020 - Main Research Station - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Main Research Station	$66,572,180	$67,611,170	$589,537	$68,200,707
Total all funds	$66,572,180	$67,611,170	$589,537	$68,200,707
Less estimated income	36,810,218	37,541,799	81,523	37,623,322
General fund	$29,761,962	$30,069,371	$508,014	$30,577,385
FTE	339.05	341.05	(1.00)	340.05

Dept. 640 - Main Research Station - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REMOVES POSITIONS AND FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [2]	ADDS 1 FTE DRY BEAN GENETICIST POSITION [3]	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [4]	ADDS FUNDING FOR EXTRAORDINARY REPAIRS [5]	ADDS FUNDING FOR OPERATING AND EQUIPMENT NEEDS [6]
Main Research Station	($45,427)	($200,000)	$200,000	$59,799	$225,165	$350,000
Total all funds	($45,427)	($200,000)	$200,000	$59,799	$225,165	$350,000
Less estimated income	(18,477)		100,000			
General fund	($26,950)	($200,000)	$100,000	$59,799	$225,165	$350,000
FTE	0.00	(2.00)	1.00	0.00	0.00	0.00

	TOTAL HOUSE CHANGES
Main Research Station	$589,537
Total all funds	$589,537
Less estimated income	81,523
General fund	$508,014
FTE	(1.00)

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The House removed $200,000 of funding and 2 FTE positions added by the Senate for the beef systems center of excellence.

3 The House added 1 FTE geneticist position and related operating expenses to conduct research and address issues related to dry edible beans.

4 The House added funding for western malting barley research at the Main Research Center.

5 The House added funding for extraordinary repairs to facilities.

6 The House added funding for operating and equipment infrastructure needs for the Main Research Center, branch research centers, and North Dakota State University Extension Service. The funding allocation is to be determined by the State Board of Agricultural Research and Education.

Senate Bill No. 2020 - Agronomy Seed Farm - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Agronomy Seed Farm	$1,199,685	$1,198,056	($374)	$1,197,682
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682
Less estimated income	1,199,685	1,198,056	(374)	1,197,682
General fund	$0	$0	$0	$0
FTE	2.97	2.97	0.00	2.97

Dept. 649 - Agronomy Seed Farm - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL HOUSE CHANGES
Agronomy Seed Farm	($374)	($374)
Total all funds	($374)	($374)
Less estimated income	(374)	(374)
General fund	$0	$0
FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Date: 3.24.05
Roll Call Vote #:

2005 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. SB2020

House Appropriations Education and Environment

☐ Check here for Conference Committee

Legislative Council Amendment Number 58020.0203

Action Taken Do Pass As Amended

Motion Made By Rep. Brusegaard Seconded By Rep. Rennerfeldt

Representatives	Yes	No	Representatives	Yes	No
Chairman Martinson	✓		Rep. Aarsvold	✓	
Vice Chairman Brusegaard	✓		Rep. Gulleson	absent	
Rep. Rennerfeldt	✓				
Rep. Wald	✓				

Total 6 (Yes) 5 No 0

Absent 1

Floor Assignment Rep. Brusegaard

If the vote is on an amendment, briefly indicate intent:

Date: **March 24, 2005**
Roll Call Vote #: **1**

2005 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. SB2020

House Appropriations - Full Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number 58020.0204

Action Taken **DO PASS AS AMENDED**

Motion Made By **Rep Brusegaard** Seconded By **Rep Martinson**

Representatives	Yes	No	Representatives	Yes	No
Rep. Ken Svedjan, Chairman		X	Rep. Bob Skarphol	X	
Rep. Mike Timm, Vice Chairman	X		Rep. David Monson	X	
Rep. Bob Martinson	X		Rep. Eliot Glassheim	X	
Rep. Tom Brusegaard	X		Rep. Jeff Delzer		X
Rep. Earl Rennerfeldt	X		Rep. Chet Pollert	X	
Rep. Francis J. Wald	X		Rep. Larry Bellew		X
Rep. Ole Aarsvold	X		Rep. Alon C. Wieland	X	
Rep. Pam Gulleson	X		Rep. James Kerzman	AB	
Rep. Ron Carlisle	X		Rep. Ralph Metcalf	X	
Rep. Keith Kempenich	X				
Rep. Blair Thoreson	X				
Rep. Joe Kroeber	X				
Rep. Clark Williams	X				
Rep. Al Carlson	X				

Total Yes **19** No **3**

Absent **1**

Floor Assignment **Rep Brusegaard**

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SB 2020, as engrossed: Appropriations Committee (Rep. Svedjan, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (19 YEAS, 3 NAYS, 1 ABSENT AND NOT VOTING). Engrossed SB 2020 was placed on the Sixth order on the calendar.

Page 1, line 3, remove the second "to"

Page 1, line 4, remove "provide for a legislative council study;"

Page 3, line 5, replace "3,750,622" with "3,713,370"

Page 3, line 6, replace "108,747" with "8,559"

Page 3, line 7, replace "3,859,369" with "3,721,929"

Page 3, line 8, replace "2,451,781" with "2,427,076"

Page 3, line 9, replace "1,407,588" with "1,294,853"

Page 3, line 12, replace "370,600" with "369,602"

Page 3, line 13, replace "211,005" with "210,506"

Page 3, line 14, replace "159,595" with "159,096"

Page 3, line 17, replace "4,886,023" with "5,179,908"

Page 3, line 18, replace "4,869,499" with "4,863,538"

Page 3, line 19, replace "16,524" with "316,370"

Page 3, line 22, replace "7,093,956" with "7,983,493"

Page 3, line 23, replace "5,235,325" with "5,216,848"

Page 3, line 24, replace "1,858,631" with "2,766,645"

Page 3, line 27, replace "328,589" with "326,459"

Page 3, line 28, replace "311,847" with "310,855"

Page 3, line 29, replace "281,547" with "280,431"

Page 3, line 30, replace "45,601" with "44,611"

Page 3, line 31, replace "518,220" with "516,625"

Page 4, line 1, replace "562,800" with "561,809"

Page 4, line 2, replace "915,392" with "912,972"

Page 4, line 3, replace "2,963,996" with "2,953,762"

Page 4, line 4, replace "2,096,169" with "2,093,700"

Page 4, line 5, replace "867,827" with "860,062"

Page 4, line 8, replace "31,452" with "31,078"

Page 4, line 9, replace "31,452" with "31,078"

Page 4, line 10, replace "4,310,165" with "5,397,026"

Page 4, line 11, replace "14,895,231" with "14,842,746"

Page 4, line 12, replace "19,205,396" with "20,239,772"

Page 4, line 22, replace "37,318,219" with "37,280,967"

Page 4, line 23, replace "887,426" with "787,238"

Page 4, line 24, replace "38,205,645" with "38,068,205"

Page 4, line 25, replace "22,938,611" with "22,913,906"

Page 4, line 26, replace "15,267,034" with "15,154,299"

Page 4, line 29, replace "1,893,947" with "1,892,949"

Page 4, line 30, replace "988,350" with "987,851"

Page 4, line 31, replace "905,597" with "905,098"

Page 5, line 3, replace "15,730,773" with "16,024,658"

Page 5, line 4, replace "15,231,150" with "15,225,189"

Page 5, line 5, replace "499,623" with "799,469"

Page 5, line 8, replace "67,611,170" with "68,500,707"

Page 5, line 9, replace "37,541,799" with "37,523,322"

Page 5, line 10, replace "30,069,371" with "30,977,385"

Page 5, line 13, replace "5,609,723" with "5,607,593"

Page 5, line 14, replace "1,979,234" with "1,978,242"

Page 5, line 15, replace "1,803,022" with "1,801,906"

Page 5, line 16, replace "1,328,486" with "1,327,496"

Page 5, line 17, replace "2,230,730" with "2,229,135"

Page 5, line 18, replace "2,205,875" with "2,204,884"

Page 5, line 19, replace "4,242,008" with "4,239,588"

Page 5, line 20, replace "19,399,078" with "19,388,844"

Page 5, line 21, replace "11,063,572" with "11,061,103"

Page 5, line 22, replace "8,335,506" with "8,327,741"

Page 5, line 25, replace "1,198,056" with "1,197,682"

Page 5, line 26, replace "1,198,056" with "1,197,682"

Page 5, line 27, replace "55,077,131" with "56,163,992"

Page 5, line 28, replace "88,961,538" with "88,909,053"

Page 5, line 29, replace "144,038,669" with "145,073,045"

Page 6, remove lines 27 through 31

Page 7, remove lines 1 and 2

Page 7, line 6, replace "10" with "9"

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2020 - Summary of House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Transportation Institute				
Total all funds	$15,764,073	$15,730,773	$293,885	$16,024,658
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189
General fund	$501,045	$499,623	$299,846	$799,469
Branch Research Centers				
Total all funds	$19,247,791	$19,399,078	($10,234)	$19,388,844
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103
General fund	$8,175,257	$8,335,506	($7,765)	$8,327,741
NDSU Extension Service				
Total all funds	$38,230,290	$38,205,645	($137,440)	$38,068,205
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906
General fund	$15,241,062	$15,267,034	($112,735)	$15,154,299
Northern Crops Institute				
Total all funds	$1,763,585	$1,893,947	($998)	$1,892,949
Less estimated income	950,741	988,350	(499)	987,851
General fund	$812,844	$905,597	($499)	$905,098
Main Research Station				
Total all funds	$66,572,180	$67,611,170	$889,537	$68,500,707
Less estimated income	36,810,218	37,541,799	(18,477)	37,523,322
General fund	$29,761,962	$30,069,371	$908,014	$30,977,385
Agronomy Seed Farm				
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682
Less estimated income	1,199,685	1,198,056	(374)	1,197,682
General fund	$0	$0	$0	$0
Bill Total				
Total all funds	$142,777,604	$144,038,669	$1,034,376	$145,073,045
Less estimated income	88,285,434	88,961,538	(52,485)	88,909,053
General fund	$54,492,170	$55,077,131	$1,086,861	$56,163,992

Senate Bill No. 2020 - Transportation Institute - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Transportation Institute	$15,764,073	$15,730,773	$293,885	$16,024,658

Total all funds	$15,764,073	$15,730,773	$293,885	$16,024,658
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189
General fund	$501,045	$499,623	$299,846	$799,469
FTE	48.50	48.50	0.00	48.50

Dept. 627 - Transportation Institute - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	ADDS FUNDING FOR REGIONAL UNIVERSITY TRANSPORTATION CENTER STATUS [2]	TOTAL HOUSE CHANGES
Transportation Institute	($6,115)	$300,000	$293,885
Total all funds	($6,115)	$300,000	$293,885
Less estimated income	(5,961)		(5,961)
General fund	($154)	$300,000	$299,846
FTE	0.00	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

[2] The House increased the general fund appropriation for the Upper Great Plains Transportation Institute to meet the required funded budget guidelines to qualify as a regional university transportation center.

Senate Bill No. 2020 - Branch Research Centers - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Dickinson Research Center	$5,554,757	$5,609,723	($2,130)	$5,607,593
Central Grasslands Research Center	1,982,689	1,979,234	(992)	1,978,242
Hettinger Research Center	1,798,821	1,803,022	(1,116)	1,801,906
Langdon Research Center	1,332,702	1,328,486	(990)	1,327,496
North Central Research Center	2,236,320	2,230,730	(1,595)	2,229,135
Williston Research Center	2,091,298	2,205,875	(991)	2,204,884
Carrington Research Center	4,251,204	4,242,008	(2,420)	4,239,588
Total all funds	$19,247,791	$19,399,078	($10,234)	$19,388,844
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103
General fund	$8,175,257	$8,335,506	($7,765)	$8,327,741
FTE	77.41	77.41	0.00	77.41

Dept. 628 - Branch Research Centers - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL HOUSE CHANGES
Dickinson Research Center	($2,130)	($2,130)
Central Grasslands Research Center	(992)	(992)
Hettinger Research Center	(1,116)	(1,116)
Langdon Research Center	(990)	(990)
North Central Research Center	(1,595)	(1,595)
Williston Research Center	(991)	(991)
Carrington Research Center	(2,420)	(2,420)
Total all funds	($10,234)	($10,234)
Less estimated income	(2,469)	(2,469)
General fund	($7,765)	($7,765)

FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Senate Bill No. 2020 - NDSU Extension Service - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Extension Service	$37,442,255	$37,318,219	($37,252)	$37,280,967
Soil Conservation Committee	788,035	887,426	(100,188)	787,238
Total all funds	$38,230,290	$38,205,645	($137,440)	$38,068,205
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906
General fund	$15,241,062	$15,267,034	($112,735)	$15,154,299
FTE	266.10	266.10	0.00	266.10

Dept. 630 - NDSU Extension Service - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE 1	REMOVES FUNDING FOR SOIL CONSERVATION DISTRICTS 2	TOTAL HOUSE CHANGES
Extension Service	($37,252)		($37,252)
Soil Conservation Committee	(188)	($100,000)	(100,188)
Total all funds	($37,440)	($100,000)	($137,440)
Less estimated income	(24,705)		(24,705)
General fund	($12,735)	($100,000)	($112,735)
FTE	0.00	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The House removed the additional $100,000 added by the Senate for soil conservation districts.

Senate Bill No. 2020 - Northern Crops Institute - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Northern Crops Institute	$1,763,585	$1,893,947	($998)	$1,892,949
Total all funds	$1,763,585	$1,893,947	($998)	$1,892,949
Less estimated income	950,741	988,350	(499)	987,851
General fund	$812,844	$905,597	($499)	$905,098
FTE	7.62	8.62	0.00	8.62

Dept. 638 - Northern Crops Institute - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE 1	TOTAL HOUSE CHANGES
Northern Crops Institute	($998)	($998)

Total all funds	($998)	($998)
Less estimated income	(499)	(499)
General fund	($499)	($499)
FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Senate Bill No. 2020 - Main Research Station - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Main Research Station	$66,572,180	$67,611,170	$889,537	$68,500,707
Total all funds	$66,572,180	$67,611,170	$889,537	$68,500,707
Less estimated income	36,810,218	37,541,799	(18,477)	37,523,322
General fund	$29,761,962	$30,069,371	$908,014	$30,977,385
FTE	339.05	341.05	(1.00)	340.05

Dept. 640 - Main Research Station - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REMOVES POSITIONS AND FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [2]	ADDS 1 FTE DRY BEAN GENETICIST POSITION [3]	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [4]	ADDS FUNDING FOR EXTRAORDINARY REPAIRS [5]	ADDS FUNDING FOR OPERATING AND EQUIPMENT NEEDS [6]
Main Research Station	($45,427)	($200,000)	$200,000	$59,799	$425,165	$350,000
Total all funds	($45,427)	($200,000)	$200,000	$59,799	$425,165	$350,000
Less estimated income	(18,477)					
General fund	($26,950)	($200,000)	$200,000	$59,799	$425,165	$350,000
FTE	0.00	(2.00)	1.00	0.00	0.00	0.00

	ADDS FUNDING FOR ETHANOL MALTING BARLEY RESEARCH [7]	TOTAL HOUSE CHANGES
Main Research Station	$100,000	$889,537
Total all funds	$100,000	$889,537
Less estimated income		(18,477)
General fund	$100,000	$908,014
FTE	0.00	(1.00)

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 This amendment removes $200,000 from the general fund and 2 FTE positions added by the Senate for the beef systems center of excellence.

3 Funding is added for 1 FTE geneticist position and related operating expenses to conduct research and address issues related to dry edible beans.

4 Funding is added for western malting barley research at the Main Research Center.

5 Funding is added for extraordinary repairs to facilities.

6 This amendment adds funding for operating and equipment infrastructure needs for the Main Research Center, branch research centers, and North Dakota State University Extension Service. The funding allocation is to be determined by the State Board of Agricultural Research and Education.

7 Funding is added for ethanol malting barley research. The funding is to be allocated to the Main Research Center and branch research centers as determined by the director of the North Dakota Agricultural Experiment Station.

Senate Bill No. 2020 - Agronomy Seed Farm - House Action

	EXECUTIVE BUDGET	SENATE VERSION	HOUSE CHANGES	HOUSE VERSION
Agronomy Seed Farm	$1,199,685	$1,198,056	($374)	$1,197,682
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682
Less estimated income	1,199,685	1,198,056	(374)	1,197,682
General fund	$0	$0	$0	$0
FTE	2.97	2.97	0.00	2.97

Dept. 649 - Agronomy Seed Farm - Detail of House Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL HOUSE CHANGES
Agronomy Seed Farm	($374)	($374)
Total all funds	($374)	($374)
Less estimated income	(374)	(374)
General fund	$0	$0
FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2005 SENATE APPROPRIATIONS

CONFERENCE COMMITTEE

SB 2020

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

☑ Conference Committee

Hearing Date April 5, 2005

Tape Number	Side A	Side B	Meter #
1	a		1550 - 3196
Committee Clerk Signature			

Minutes:

Conference Committee Members: Senator Bill Bowman, Senator Ray Holmberg, Senator Elroy Lindaas, Representative Thomas Brusegaard, Representative Earl Rennerfeldt, and Representative Pam Gulleson.

Senator Bowman called the conference committee to order on SB 2020, discussing the Senate's priority list of the bill. 1) the cost to continue which was included in the budget; 2) The beef Center of Excellence was extended $800,000 for one biennium to continue the start up program then two specialists need to be hired after a contractual agreement has been signed. The two specialists the Senate allowed are a geneticist and a meat specialists which will be added to the staff after the contractual agreement; 3) Money was added to start a multi barley program; 4) One FTE was added to the northern crop institute for specialty crops, $159,605. Did remove $24,469 for beef specialist for feeding livestock; 5) $100,000 was added to the soil conservation

program. With each dollar added money is generated to the program. All of the additions are over and above the initial budget.

Representative Brusegaard discussed the House amendments. He indicated the House removed the Senate increases for the Beef Centers and kept $200,000 to fund one position for the geneticist. He indicated money was added for the Upper Great Plains Institute, designated as a regional university transportation center. This helps them access over $5 million of federal funds. The problem was that it is important to show $400,000 per year of general fund money to allow the centers to continue receiving federal dollars. The House added $800,000 for the biennium to allow them to continue receiving the federal dollars.

Senator Holmberg asked if this was something through the budget process.

Representative Brusegaard indicated that at the time of the budget, this was still being written and so it was not in the original budget and Washington DC was still trying to fund their bill so it was not in the original request. He then indicated other things funded included the ethanol multi barley research program at $100,000. Funding for operating equipment needs and extraordinary repairs, decreased the soil conservation districts by $100,000, and the study portion was removed.

Senator Bowman asked if the ethanol request was from the barley group or a special interest group.

Senator Holmberg asked if the extraordinary repairs to facilities is for the main research center or if it was spread out to other stations. The response was it was in the main research line item but intent was to spread this out.

Senator Bowman indicated he knew there was a problem for repairs and there were plans to go out to the different stations during the next biennium to see what needs to be done and to determine what is needed for the next biennium.

Senator Rennerfeldt indicated there was a need for extra ordinary repairs. There was federal equipment donated and some of this is a money for a building to house the equipment otherwise they can't have the equipment. On the barley ethanol research plant, the $100,000 was placed there because there is barley about ready and a plant is scheduled for this area. On the operating and equipment needs, perhaps it should have part of it divided amid the stations with the remainder to the main station.

Senator Bowman indicated no one disagrees on the importance of this budget its just a matter of how many general fund dollars we can add to it and agree to get the budget out of here.

Senator Bowman closed the meeting with plans for another meeting.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

☑ Conference Committee

Hearing Date April 7, 2005

Tape Number	Side A	Side B	Meter #
1	a		137 - 2347
Committee Clerk Signature			

Minutes:

Conference Committee Members include Senators Bowman, Holmberg, Lindaas, Representatives Brusegaard, Rennerfeldt and Gulleson.

Senator Bowman opened the discussion on SB 2020 conference committee with roll call. He indicated that one initiative is the barley initiatives funded through oil proceeds at Dickinson. He asked how much is needed to make the program a success for the multi variety of barley. He needs to know what is in the budget, what the Senate said, what is still needed and what the House added. He asked if the House was aware of the $59,000 in the Northern Crops Improvement budget for Barley Initiatives. We'll see what tax is needed for these initiatives and see if we are closer or way over on that. One of the issues is the two FTE's on the beef center. Why were they taken out if the money is there for center why take the FTE positions out. They need to make the program work.

Representative Brusegaard was told in conversations with Esperaard and folks at NDSU that one of those FTE's was a drafting error and the other one wasn't needed. I was told they could proceed with the Beef Center at full speed with what was in there as the House presented it. If that is not true, then we do have work to do.

Representative Gulleson asked how many FTE's are currently assigned to that project.

Senator Holmberg indicated when they passed the Beef Centers there were no FTE's. If there are some there now, where did they come from.

Allen indicated that there were two FTE's.

Senator Bowman indicated that when the budget game to us there was a request for two specialists from the Senate a geneticist and a meat specialist to get it started. If the amendments said four, that is not the way it should have left here. The request was for $400,000 and if there was money from ERP, we have to make sure that if we agree on two positions we have the funding.

Representative Gulleson asked if there was two FTE's currently in there and the Senate added two more and the House removed two. So it is down to two.

Senator Bowman indicated that no way did the Senate want four positions. We were told there were no positions to begin with. The Senate intended to fund two positions a geneticists and a meat inspector. It was supposed to trigger these two positions when they had a contract for a business partnership. He further discussed the use of ERP money.

Representative Brusegaard indicated he would be happy to use ERP money to fund extraordinary repairs.

Senator Holmberg indicated if we look at the list of Governor's recommendations and what the Legislature has done up to this point, it is the budget that has by far the largest increase in the Governor's budget. We can justify every penny and could justify another two or three million. If we find something that is in error, we should at least discuss whether that money can be returned to the general fund rather then here.

Representative Brusegaard indicated he will make no apologies to the members of the house for loading up this budget, dollars put in research and extension should be a primary focus of research and extension. He indicated he was close to making a motion to make everyone happy. He asked how much money is in the ERP in the Beef Center.

Cecile (OMB) responded that currently there is $200,000, but legally we can't take funds designated for ERP for other projects. We do not recommend using a source of funds illegally. It needs to be used for a type of activity that qualifies as a designated activity.

Representative Brusegaard asked that if the bill were passed like the House amended it, when the budget was built for 2007-09 that would be general fund dollars.

Senator Bowman indicated another issue we should resolve is the money taken out for soil conservation which was $1.2 million and this was upped $100,000 knowing that gives them the availability to match a tremendous amount of federal dollars and enhance a lot more programs to that they do for rural ND. I don't know what the justification was in taking that out. Another thing I looked at was the list of priority rankings. The second ranking was the Center of Excellence, third was the Western Multi Barley , ten was extraordinary repair and 15 was the dry animal grain for $200,000. Why did the grain had a higher precedent then the other priorities from 3 - 15.

Representative Brusegaard indicated Espergard has really helped target legislation to prioritize needs, but we are still the Legislature and still in the end we make our priorities and it is the process of collaboration, cohesion and cooperation sometimes.

Senator Bowman asked if we should consider if ERP is appropriate to use the $200,000 to be used in the research program. The way I understand it the universities have the authority to use that money and pool it. Add that to the pool, cut it in half, that would cut part of the general fund concerns down and give them flexibility to utilize it the way they think it could be maximized.

Representative Brusegaard indicated he is not sure he completely understands the amendment and asked that it be bottom lined.

Senator Bowman indicated the House had two requests for money to the main station and one to the research center; $350,000 to the Main and $425,000 to the extraordinary repairs.

Representative Brusegaard indicated both are in the main station line item, but the intent is the main research station can spread that out amid the research stations. See footnote six.

Senator Bowman indicated what it boils down to is we would put $337,000 + the ERP fund which brings it to $537,000 to go into that pool of extraordinary repairs. It would then free up $380,000 general fund dollars.

The Legislative Council indicated those figures are not right, because the $200,000 is in the budget.

Senator Bowman indicated if everyone works on the figures, we can bring that back to committee next week.

Senator Bowman closed the discussion.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

☑ Conference Committee

Hearing Date April 11

Tape Number	Side A	Side B	Meter #
1	a		1,209
Committee Clerk Signature			

Minutes:

The Conference Committee consists of Senators Bowman, Holmberg, Lindaas, Representatives Brusegaard, Rennerfeldt, and Gulleson.

Senator Bowman called the conference committee to order with roll call. He reviewed what total dollars are in the budget for the two positions, the amount in the barley program. Currently there are two positions in the bill with $501,897 in the beef center of excellence. This would be for one geneticist and one meat specialist hired when the contractual agreement is with the company.

Representative Brusgaard felt it would be easier to get a company to contract if positions are already there.

Representative Gulleson asked if what the Senate wants is to have the language of intent in there.

Senator Bowman indicated he didn't want somebody saying, we have the positions filled, we have a program going, we don't need the center so lets drop everything and keep the positions filled. We are within that language and agree that the two positions are necessary if the program gets going and we agree on the funding mechanism, all we need to know is if we should add the language back from the Senate side to trigger the two FTE's.

Representative Gulleson asked if the statement had to be code of we could put legislative intent.

Senator Bowman indicated it is the intent of this Legislative session that the triggers those positions. Legislative Council was asked to write up the language.

Representative Brusegaard indicated the House would like to rename the Beef Center of Excellence to the Beef Systems Initiative.

Senator Bowman indicated that would take the language out of law and what does that do as far as obligations. Would they still be doing what was outlined for the center or are we opening the door and not following the guidelines of the centers of excellence.

Representative Brusegaard felt that the people on ESPAR have enough authority to keep it on track. My fear is by continuing to call it the Centers of Excellence, sooner or later, someone will want this to conform to requirements placed on every other Centers of Excellence and that will be increasingly difficult to do.

The Legislative Council and the Committee continued discussion on the possibility of a name change, the appropriations, and if there is a change it would involve Century Code changes, the feeling from NDSU and the resulting comment was if it doesn't change anything, why change the name.

Senator Bowman discussed the $288,000 budget for the Western Malt Barley and if that is the amount it will take to continue the program. When this started, it was a high priority. The response was this would be enough to maintain the program not to expand it.

Senator Bowman indicated if we expand the program, does it mean more FTE's or do we concentrate on and go at a more rapid pace. The response was to move at a more rapid pace.

Senator Bowman indicated if we move the program forward at a more advanced pace and got the job done, would it, through the process of ESPER, look at the ethanol plants and potential use of a holiste line of barley that is less abrasive to use for another ethanol plant. Are we looking at developing a less abrasive barley and producing ethanol at a more profitable rate compared to corn.

The University representative indicated this is an ongoing process, we are always looking for something better and the ultimate user is the brewing companies.

Senator Bowman asked about the total dollars for repairs and how that figure was reached and the priority list of projects. He then questioned the soil conservation.

Representative Brusgaard indicated it was a function of it being well thought out and being put in front of the full committee.

Senator Bowman asked if there was a way to agree on a number for the soil conservation.

Senator Lindaas also expressed concerns about the soil conversation moneys being reinstated.

Representative Gulleson questioned Celeste Kotraba about the $59,000 for the Western Malted Barley Project, it was to study for ethanol use? Why the additional $100,000 for ethanol study and the amendment 7 adds another $100,000 for the same program. Why are we doing that.

Celeste Kotraba indicated yes, in addition to the Western Malting Barley.

Senator Bowman indicated that most of that information is in the book. We don't need to waste money, we need to put it in properly. He asked that everyone think about the actual amount of money this bill will be increased by and see where we can give and take a little. He then closed the hearing.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

☑ Conference Committee

Hearing Date April 13, 2005

Tape Number	Side A	Side B	Meter #
1	a		0 - end
Committee Clerk Signature			

Minutes:

Senator Bowman opened the conference committee on SB 2020 with the roll call. He indicated that at the last meeting everyone agreed on the language of the beef center bill. The Malting Barley is an issue that we found $280,000 in the bill for that project. The amount for the extraordinary repairs $775,000 and one of the requests was for the extension bean greeter project and where does the money go. My question is if the bean breeder is one of your top priorities is it more important then the FTE in the specialty crops.

Representative Brusegaard the specialty crops position in the Northern Crops Institute really is a part of the differences between the chambers. Both Chambers agree with that. The Dry Bean check-off groups do contribute in excess of $300,000 for operating the research and extension. I would assume there is still an opportunity to flip some of that money around. One of the unfortunate things that has happened is that we have received some direction from above. They indicated the level the House is at is probably unattainable in the terms of the big budget and in

further conversations with leadership, I am no longer able to defend the position I was defending the last time we met. I look at the increases in this budget and a lions share of that goes to beef and there will be significant problems with that down the road. The dry bean deserves some consideration with funding.

Senator Bowman asked what is the bottom line for you.

Representative Brusgaard indicated the House could go down $600,000 on this budget. The other problem I am receiving is there is a push from our caucus that decrees the Beef Center of Excellence as a center and it means one time funding and we count the $800,000 funding from two years ago as one time funding. They believe the funding for the Center shouldn't be there.

Senator Bowman asked if it is their intention to shut down the program.

Representative Brusgaard indicated it was a one time funding.

Senator Bowman asked if the House would consider the bean breeder, $100,000 in the Barley initiative for ethanol, replace the money in the soil conversation for $100,000, the money for the beef center stay as is. The big difference would be a reduction of $775,000 for the repairs as that was not in the budget. If we put $350,000 to let them use as they want and they have the authority to do that. The other position is with the Northern Crops Institute. The reason I ask about that is that we should not be paying for all of that it should come from Montana, South Dakota, Minnesota, all of the groups involved in that.

Representative Gulleson clarified the areas that need to be adjusted.

Representative Rennerfeldt indicated if we put the pool of funds of $775,000 and pool $350,000 we would have each project we want.

Representative Gulleson asked where that puts us in regard to the House and Senate numbers..

The Legislative Council indicated the total general fund decrease would be $645,165.

Senator Holmberg asked if that was the total of Senator Bowman proposal. He then asked if the House proposal reduction is near that.

The Legislative Council was asked to total up the bill as it came from the House.

Senator Bowman distributed a page showing the figures and Don at the Legislative Council discussed the changes.

The first change is on page 3, section 9 which states that 2 full time equivalent positions for the Beef Centers of Excellence are not to be filled until a business partnership has been entered into by ESPAR.

The transportation institute and the branch research stays the same as the House version.

The NDSU extension we are adding back $100,000 which was removed for soil conversation districts.

The North Crops Institute, we are removing the one FTE crop quality promotion specialist position. The position was added by the Senate. It means a $120,000 general fund reduction.

On page 6, footnote #3, funding source for the dried beans geneticist position went from special funds to general funds.

The total amount for extraordinary repairs was reduced from $775.155 to $350,000.

Footnote #7, the reduction in funding from the ERP fund went from $200,000 to $150,000.

For the main research station we are looking at a net reduction of $625,165 in general fund monies as compared to the House version.

Representative Gulleson questioned the $100,000 from the growers.

Senator Bowman indicated he had talked to Rep. Monson in the House and he said make it special funds if you have to get It in there. If you think that one position isn't important, we could fund some money in that and let them come up with money from the other states to support it too. It may be a negotiating area as I understand it with three other states.

Senator Holmberg indicated that in looking at these amendments and to Representative Brusegaard it doesn't appear that our argument is going to be over the amount of money involved it is just if it is the right configuration or is there a better one within the dollars. The increase would be $600,000 over the Government's budget.

Senator Bowman closed the conference committee meeting on SB 2020.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

☑ Conference Committee

Hearing Date April 14, 2005

Tape Number	Side A	Side B	Meter #
a	a		1,726 - 4000
Committee Clerk Signature			

Minutes:

Senator Bowman opened the conference committee on SB 2020 with roll call. He distributed an amendment. He discussed the amendment reduction in the budget by $650,000, the Beef Centers of Excellence becoming self-sufficient, the barley initiative, the ethanol initiative, the bean breeder, the Northern Crop and stated that all issues could be addressed. He indicated there is room to add back to the highest priority.

Senator Holmberg discussed the consultant that came in from out of state and talked about the Centers of Excellence. He mentioned that sometimes there is a project that is unique that cannot get going within a short time frame. If this was two years from now, I would be motioning to take money out if the project hadn't gotten going. To put them in a position that they will fail without trying one more biennium would be a disservice to those who have an interest in this.

Representative Brusegaard distributed a handout for consideration and discussed the proposal. He indicated that one of the goals is to centralize the centers of excellence in one place. The

Governor made a long-term commitment to put $50 million over however many years for the Centers of Excellence. The pool of dollars is for research and extension to go around the process and access dollars that aren't part of the pool and take away from other projects is to me redundant. This would allow after they matched the $800,000 on a one to two basis brings that to $2.4 million for startup costs. Over four years, I don't think that is strangling a project to death. I think they are getting a good chance to get up and running and become self sustaining. He also asked if it was the intention to vote on the amendment.

Senator Bowman stated that the new Centers of Excellence bill is for new Centers and this project was added to the Centers of Excellence because of its uniqueness in the last biennium, as a model. We are looking at it for increased knowledge in the livestock industry and the meat part of it. We are opening the door to a broader opportunity for the cow-calf producer. The one thing we fail to realize is that in order to get that opportunity for that beef and market the meat, it also opens the door to the farmers that produce the feed which takes millions of pounds of feed to feed the cattle. This is an opportunity for agriculture to expand its base. It would provide two market systems to the farmer, marketing to the feed lot or the elevator. We have to allow the time to get the right contract and that does take time. He felt it would be better if the committee could reach an agreement first before voting on the amendment..

Representative Brusegaard indicated what he would like to see on this bill.

Senator Bowman indicated there was no testimony on the ethanol malt barley initiative. If we decide to work with a project, we need to have patience to do it right.

Representative Brusegaard indicated that we obviously are not going to solve this bill this meeting but he would take his list back and revise the priorities.

Senator Bowman indicated we have added more money then the Governor's budget. The beef initiative needs more time, but if they are not through in two years, I won't pull for them at that time. If they can't get the project done, we will be looking at an alternative. We know this is a risk, but we know the benefits to North Dakota, in looking at the data, could increase the flow to the ND producer by $900 million. That is a risk I am willing to take to move toward that goal. He felt the amendments he put together will address all of the needs and may possibly be able to add more funds to some of the projects and still be under the budget by $500 - $600,000.

Representative Gulleson indicated for the bean breeder position, she would like to see to be a shared funding and not all special funding.

Representative Brusegaard did not think the bean people would be in a position to fund that. The frustration on their part is they have been putting $300-$400 a biennium into research and extension, with no position to show for it. We need to respect that amount they have put into research and extension and give them something tangible for that. Our market share needs to be protected.

Representative Rennerfeldt indicated that agriculture in our state is a basis for everything.

Senator Bowman asked if within the study in this bill, we ought to include how the funding source actually works with the research centers to have a better handle on it He indicated that this is one of the most important budgets we will pass. It is just coming up with that final dollar and how we right these initiatives we want everyone on the floor to understand the importance, that this is where our investment is that pays for all of our other spending bills that come to the floor. Agriculture is the number one industry. He adjourned the conference committee on SB 2020 until Monday afternoon.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

☑ Conference Committee

Hearing Date April 18, 2005

Tape Number	Side A	Side B	Meter #
3	a	b	5475 - 2460
Committee Clerk Signature			

Minutes:

Senator Bowman opened the conference committee on SB 2020 with roll call. He indicated there were concerns on the House side and an amendment is on the way. If the goal of the House is to reduce the budget, there are several variations to still maintain the programs that are essential for meeting our goals as a state. The Bean breeders program has $150,000 in general funds and $50,000 in special funds. The western malted barley program is funded at $288,000 and that is what was requested to continue the program. The Upper Great Plains program has $550,000 which is the amount needed to match federal dollars

Representative Brusegaard discussed the Upper Great Plains Transportation Institute does a variety of things. The advisory board includes members from across the state. The institute provides analysis of logistics and transportation as it relates to its services. They provide service to local elevators, railroads, and DOT. They offer graduate level experience for students. In

order to access $5.5 million in federal funds, they are required to get $400,000 a year in general fund recurring revenue.

Senator Bowman indicated if we pass the amendments the way they are to day, we wouldn't reach what you wanted to reach from the House side. This includes every program we had and it left $325,000 for extraordinary repairs, $200,000 for operating. The ethanol barley program is in there. We need to cut at least $100 to $200,000 out of this to get this through the House. We can look at the budgets with the most money in and that is the extraordinary repairs and operating. The NCI position is back in at $65,000 but he feels that other states need to contribute to the program.

Discussion followed as to where funding could be cut as well as funding that should come from other states for the Northern Tier program that benefits other states.

Representative Brusgaard distributed amendments and reviewed them. There is a total decrease from the house version of $449,000, money is added for the transportation institute, $100,000 from the barley, and added $100,000 for ethanol. It leaves $447,000 for barley. We decreased the funding for the bean breeder, increased soil conservation service, decreased the proposals on extraordinary repairs and operating and reduced the beef centers initiative. This proposal would eliminate the centers of excellence language.

Senator Bowman indicated every project has merit, some programs can bring in $15 million in funds, the beef program has the potential to bring in $900 million.

Representative Rennerfeldt indicated if we take $100,000 from the ethanol project it would eliminate the program.

Senator Bowman asked what it was about the beef program that the house keeps coming back and wanting to cut funding. It has been the number one attack by the House. It is a number one priority at NDSU, the requested positions will not be effective until after contracts are signed.

Representative Brusgaard the beef center of excellence is a center of excellence and should be funded at the level the other centers of excellence are funded. I need to justify funding levels to the House and provide them with funding they need and they may have to come up with something from their budget.

Additional discussion continued as to what budgets to cut to come to a consensus on the committee.

Senator Bowman closed the conference committee discussion.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. **SB 2020**

Senate Appropriations Committee

☑ Conference Committee

Hearing Date **04-19-05**

Tape Number	Side A	Side B	Meter #
2	x		379-3325
Committee Clerk Signature			

Minutes: **Sen. Bowman, (Conference Committee Chair)** opened the hearing of SB 2020.

Roll was taken, all members were present.

Sen. Bowman decided that the committee will vote on each line item of the budget. If a line item receives the majority of the vote, it will stay on the table. If it doesn't it will be off the table and the bill.

Rep. Brusegaard: As far as I am concerned, NCI is not deserving of a discussion, and therefor off the table.

Sen. Bowman: OK, it will be left as is in the bill.

Rep. Brusegaard: Just so we are clear, were will deal with ethanol and barley as two separate issues.

Sen. Bowman: Yes.

Malt Barley:

Voice vote was taken to leave the $288,999 in the bill, it passed.

Ethanol:

Voice vote was taken for the $100,000 for ethanol, it passed.

Sen. Bowman: One question that I have is that I think it will take more than $100,000. I would like to see us Finnish one before we start another. How long will it take until it is productive?

Rep. Rennefeldt: There has been a lot of work already, about 4 years.

Sen. Bowman: I am afraid that next session each institution will come and have their own priorities. Why do we have ESPAR if we are not going to rely on ESPAR, we will have problems.

Rep. Brusegaard: the equipment and machinery will come from federal dollars.

Rep. Gulleson: The moneys for extraordinary repairs and equipment needs, so that is legitimate.

Sen. Bowman: I do not mind that, but this was never talked about in the budget.

Soil Conservation:

Rep. Brusegaard: This is something that everyone has used, flat lining them is not fair. We could maybe do $50,000.

Voice vote was taken, for $100,000, $50,000 and $75,000 nothing was resolved. Soil conservation is still on the table.

$100,000 Building:

Sen. Bowman: I would like the language to reflect "ut to $100,000." If it does not an $80,000 building will cost us $100,000.

Voice vote was taken, the language is in the bill

Upper Great Plains Institute:

For $300,5500. Voice vote was taken, it is in the bill.

Bean Breeder:

This was originally requested by the Senate. $150,000 of General Funds and $50,00 from Special Funds. Voice vote was taken, it is in the bill.

Beef Center of Excellence:

Of the $301,897 proposed in the governor's budget the Senate added $400,000. The House took it down to $501,897.

Sen. Bowman adjourned the meeting due to time constraints.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2020

Senate Appropriations Committee

☑ Conference Committee

Hearing Date April 20, 2005

Tape Number	Side A	Side B	Meter #
1	a		0 - 1780
Committee Clerk Signature			

Minutes:

Senator Bowman called the conference committee on SB 2020 to order with roll call. He discussed coming to terms with the beef centers of excellence, the extraordinary repairs, the ethanol, the soil conservation. He then asked if there was any thought to cutting the ethanol and soil conversation in half as both had $100,000 and if they are cut to $50,000 it gives both of them seed money.

Representative Brusegaard felt that was incredibly wise except one small change that he had done on the amendment he presented. There will be $59,000 in ethanol barley and $380,000 in western malt barley.

Discussion took place on various options to come to terms on funding for the different line items, the option of leaving in or omitting the language of intent, the extraordinary repairs, the machinery that needs to be shedded,

Senator Bowman indicated if the totals for operating, extraordinary repairs including the building is $525,165 we could call a roll on that. A show of hands indicated that is approved.

Senator Bowman asked how many want to leave the intent statement. A show of hands indicated this should be left in.

Senator Bowman then opened the discussion on the Beef Centers of Excellence indicating this is a special project of his and he will be willing to negotiate a little by $50,000 if that will get the budget out of this committee. Discussion continued on a potential vote.

Senator Bowman asked for a show of hands for those who approve of the beef centers of excellent budget at $450,000 and the language would stay the same. All approved.

The committee then discussed the soil conservation and ethanol indicating the suggestion of $50,000 for soil conservation and $59,000 for the barley which would give them a start. A show of hands indicated everyone unanimously agreed on the figures for the budget.

Representative Brusgaard asked if anyone had thought anymore on changing the name of the beef centers of excellence to the beef system center. No further discussion on this until next biennium because the language is in the bill as beef centers of excellence as it will change the terms of the original contract.

Senator Bowman asked that a roll call vote be taken on the amendments as we have approved them and the dollar figures in the line items.

Representative Brusgaard moved the house recede from the house amendments and that we further amend 2020 as discussed in committee. The motion was seconded. A roll call vote was taken resulting in a 6 yes 0 no vote. The motion carried and Senator Bowman will carry the bill.

Brusgaard

Ammend 2020

-$125,000 from beef system initiative
Already designated as A COE
Got $800,000 last session must eliminate COE language to keep this
$500,000+ in budget right now. Assume we couple the positions to accessing
matching funds will take 6 months. (1/4 of biennium) (1/4 of 500,000= 125,000)

-$150,000 operating

-$100,000 extraordinary repairs

+$75,000 Soil Conservation service

-$50,000 from bean breeder (leave $150,000 GF - leave extra $50,000 in spending authority)

-$100,000 ethanol barley

+$532 for UGPTI

A total of from house version $449,468

Barley funding in Ag Research

Current biennium*	$	250,000	one-time money - funding source switch (with minor use pesicide fund)
Executive Recommendation	$	59,799	oil revenue from Dickinson
Senate increase	$	228,201	general fund
House Increase	$	59,799	general fund
	$	288,000	

+59799 oil revenue

* actual total $ will exceed $288,000 this biennium

+ 100,000 Ethanol

288 000
59 000
~~100 000~~
447 000

347 000

58020.0206
Title.
Fiscal No. 2

Prepared by the Legislative Council staff for
Conference Committee
April 12, 2005

PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2020

That the House recede from its amendments as printed on pages 1149-1154 of the Senate Journal and pages 1353-1359 of the House Journal and that Engrossed Senate Bill No. 2020 be amended as follows:

Page 1, line 3, remove the second "to"

Page 1, line 4, remove "provide for a legislative council study;"

Page 3, line 5, replace "3,750,622" with "3,713,370"

Page 3, line 6, replace "108,747" with "108,559"

Page 3, line 7, replace "3,859,369" with "3,821,929"

Page 3, line 8, replace "2,451,781" with "2,427,076"

Page 3, line 9, replace "1,407,588" with "1,394,853"

Page 3, line 12, replace "370,600" with "209,997"

Page 3, line 13, replace "211,005" with "170,901"

Page 3, line 14, replace "159,595" with "39,096"

Page 3, line 17, replace "4,886,023" with "5,179,908"

Page 3, line 18, replace "4,869,499" with "4,863,538"

Page 3, line 19, replace "16,524" with "316,370"

Page 3, line 22, replace "7,093,956" with "7,508,328"

Page 3, line 23, replace "5,235,325" with "5,366,848"

Page 3, line 24, replace "1,858,631" with "2,141,480"

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Page 3, line 31, replace "518,220" with "516,625"

Page 4, line 1, replace "562,800" with "561,809"

Page 4, line 2, replace "915,392" with "912,972"

Page 4, line 3, replace "2,963,996" with "2,953,762"

Page 4, line 4, replace "2,096,169" with "2,093,700"

Page 4, line 5, replace "867,827" with "860,062"

Page 4, line 8, replace "31,452" with "31,078"

Page 4, line 9, replace "31,452" with "31,078"

Page 4, line 10, replace "4,310,165" with "4,751,861"

Page 4, line 11, replace "14,895,231" with "14,953,141"

Page 4, line 12, replace "19,205,396" with "19,705,002"

Page 4, line 22, replace "37,318,219" with "37,280,967"

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Page 4, line 24, replace "38,205,645" with "38,168,205"

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Page 4, line 26, replace "15,267,034" with "15,254,299"

Page 4, line 29, replace "1,893,947" with "1,733,344"

Page 4, line 30, replace "988,350" with "948,246"

Page 4, line 31, replace "905,597" with "785,098"

Page 5, line 3, replace "15,730,773" with "16,024,658"

Page 5, line 4, replace "15,231,150" with "15,225,189"

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Page 5, line 25, replace "1,198,056" with "1,197,682"

Page 5, line 26, replace "1,198,056" with "1,197,682"

Page 5, line 27, replace "55,077,131" with "55,518,827"

Page 5, line 28, replace "88,961,538" with "89,019,448"

Page 5, line 29, replace "144,038,669" with "144,538,275"

Page 6, replace lines 27 through 31 with:

"SECTION 9. LEGISLATIVE INTENT - BEEF SYSTEMS CENTER OF EXCELLENCE POSITIONS. It is the intent of the fifty-ninth legislative assembly that the two full-time equivalent positions for the beef systems center of excellence not be filled and the related funding for salaries and wages not be spent until the state board of agricultural research and education enters into a business partnership agreement for the beef systems center of excellence."

Page 7, remove lines 1 and 2

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2020 - Summary of Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Transportation Institute						
Total all funds	$15,764,073	$15,730,773	$293,885	$16,024,658	$16,024,658	$0
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189	15,225,189	
General fund	$501,045	$499,623	$299,846	$799,469	$799,469	$0
Branch Research Centers						
Total all funds	$19,247,791	$19,399,078	($10,234)	$19,388,844	$19,388,844	$0
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103	11,061,103	
General fund	$8,175,257	$8,335,506	($7,765)	$8,327,741	$8,327,741	$0
NDSU Extension Service						
Total all funds	$38,230,290	$38,205,645	($37,440)	$38,168,205	$38,068,205	$100,000
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906	22,913,906	
General fund	$15,241,062	$15,267,034	($12,735)	$15,254,299	$15,154,299	$100,000
Northern Crops Institute						
Total all funds	$1,763,585	$1,893,947	($160,603)	$1,733,344	$1,892,949	($159,605)
Less estimated income	950,741	988,350	(40,104)	948,246	987,851	(39,605)
General fund	$812,844	$905,597	($120,499)	$785,098	$905,098	($120,000)
Main Research Station						
Total all funds	$66,572,180	$67,611,170	$414,372	$68,025,542	$68,500,707	($475,165)
Less estimated income	36,810,218	37,541,799	131,523	37,673,322	37,523,322	150,000
General fund	$29,761,962	$30,069,371	$282,849	$30,352,220	$30,977,385	($625,165)
Agronomy Seed Farm						
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	$0
Less estimated income	1,199,685	1,198,056	(374)	1,197,682	1,197,682	

General fund	$0	$0	$0	$0	$0	$0
Bill Total						
Total all funds	$142,777,604	$144,038,669	$499,606	$144,538,275	$145,073,045	($534,770)
Less estimated income	88,285,434	88,961,538	57,910	89,019,448	88,909,053	110,395
General fund	$54,492,170	$55,077,131	$441,696	$55,518,827	$56,163,992	($645,165)

Senate Bill No. 2020 - Transportation Institute - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Transportation Institute	$15,764,073	$15,730,773	$293,885	$16,024,658	$16,024,658	
Total all funds	$15,764,073	$15,730,773	$293,885	$16,024,658	$16,024,658	$0
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189	15,225,189	
General fund	$501,045	$499,623	$299,846	$799,469	$799,469	$0
FTE	48.50	48.50	0.00	48.50	48.50	0.00

Dept. 627 - Transportation Institute - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	ADDS FUNDING FOR REGIONAL UNIVERSITY TRANSPORTATION CENTER STATUS [2]	TOTAL CONFERENCE COMMITTEE CHANGES
Transportation Institute	($6,115)	$300,000	$293,885
Total all funds	($6,115)	$300,000	$293,885
Less estimated income	(5,961)		(5,961)
General fund	($154)	$300,000	$299,846
FTE	0.00	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The House increased the general fund appropriation for the Upper Great Plains Transportation Institute to meet the required funded budget guidelines to qualify as a regional university transportation center.

Senate Bill No. 2020 - Branch Research Centers - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Dickinson Research Center	$5,554,757	$5,609,723	($2,130)	$5,607,593	$5,607,593	
Central Grasslands Research Center	1,982,689	1,979,234	(992)	1,978,242	1,978,242	
Hettinger Research Center	1,798,821	1,803,022	(1,116)	1,801,906	1,801,906	
Langdon Research Center	1,332,702	1,328,486	(990)	1,327,496	1,327,496	
North Central Research Center	2,236,320	2,230,730	(1,595)	2,229,135	2,229,135	
Williston Research Center	2,091,298	2,205,875	(991)	2,204,884	2,204,884	
Carrington Research Center	4,251,204	4,242,008	(2,420)	4,239,588	4,239,588	
Total all funds	$19,247,791	$19,399,078	($10,234)	$19,388,844	$19,388,844	$0
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103	11,061,103	
General fund	$8,175,257	$8,335,506	($7,765)	$8,327,741	$8,327,741	$0
FTE	77.41	77.41	0.00	77.41	77.41	0.00

Dept. 628 - Branch Research Centers - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL CONFERENCE COMMITTEE CHANGES
Dickinson Research Center	($2,130)	($2,130)
Central Grasslands Research Center	(992)	(992)
Hettinger Research Center	(1,116)	(1,116)
Langdon Research Center	(990)	(990)
North Central Research Center	(1,595)	(1,595)
Williston Research Center	(991)	(991)
Carrington Research Center	(2,420)	(2,420)
Total all funds	($10,234)	($10,234)
Less estimated income	(2,469)	(2,469)
General fund	($7,765)	($7,765)

FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Senate Bill No. 2020 - NDSU Extension Service - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Extension Service	$37,442,255	$37,318,219	($37,252)	$37,280,967	$37,280,967	
Soil Conservation Committee	788,035	887,426	(188)	887,238	787,238	$100,000
Total all funds	$38,230,290	$38,205,645	($37,440)	$38,168,205	$38,068,205	$100,000
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906	22,913,906	
General fund	$15,241,062	$15,267,034	($12,735)	$15,254,299	$15,154,299	$100,000
FTE	266.10	266.10	0.00	266.10	266.10	0.00

Dept. 630 - NDSU Extension Service - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL CONFERENCE COMMITTEE CHANGES
Extension Service	($37,252)	($37,252)
Soil Conservation Committee	(188)	(188)
Total all funds	($37,440)	($137,440)
Less estimated income	(24,705)	(24,705)
General fund	($12,735)	($12,735)
FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

The House removed $100,000 of funding for soil conservation districts. The conference committee did not provide for this reduction.

Senate Bill No. 2020 - Northern Crops Institute - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Northern Crops Institute	$1,763,585	$1,893,947	($160,603)	$1,733,344	$1,892,949	($159,605)
Total all funds	$1,763,585	$1,893,947	($160,603)	$1,733,344	$1,892,949	($159,605)
Less estimated income	950,741	988,350	(40,104)	948,246	987,851	(39,605)
General fund	$812,844	$905,597	($120,499)	$785,098	$905,098	($120,000)
FTE	7.62	8.62	0.00	8.62	8.62	0.00

Dept. 638 - Northern Crops Institute - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REMOVES 1 FTE CROP QUALITY PROMOTION SPECIALIST POSITION [2]	TOTAL COMMITTEE COMMITTEE CHANGES
Northern Crops Institute	($998)	($159,605)	($160,603)
Total all funds	($998)	($159,605)	($159,603)
Less estimated income	(499)	(39,605)	(40,104)
General fund	($499)	($120,000)	($120,499)
FTE	0.00	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The conference committee removed 1 FTE crop quality promotion specialist position at Northern Crops Institute, which was added by the Senate.

Senate Bill No. 2020 - Main Research Station - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Main Research Station	$66,572,180	$67,611,170	$414,372	$68,025,542	$68,500,707	($475,165)
Total all funds	$66,572,180	$67,611,170	$414,372	$68,025,542	$68,500,707	($475,165)
Less estimated income	36,810,218	37,541,799	131,523	37,673,322	37,523,322	150,000
General fund	$29,761,962	$30,069,371	$282,849	$30,352,220	$30,977,385	($625,165)
FTE	339.05	341.05	(1.00)	340.05	340.05	0.00

Dept. 640 - Main Research Station - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REMOVES POSITIONS AND FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [2]	ADDS 1 FTE DRY BEAN GENETICIST POSITION [3]	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [4]	ADDS FUNDING FOR EXTRAORDINARY REPAIRS, OPERATING, AND EQUIPMENT NEEDS [5]	ADDS FUNDING FOR ETHANOL MALTING BARLEY RESEARCH [6]
Main Research Station	($45,427)	($200,000)	$200,000	$59,799	$350,000	$100,000
Total all funds	($45,427)	($200,000)	$200,000	$59,799	$350,000	$100,000
Less estimated income	(18,477)		200,000			
General fund	($26,950)	($200,000)	$0	$59,799	$350,000	$100,000
FTE	0.00	(2.00)	1.00	0.00	0.00	0.00

	REDUCES FUNDING FROM THE ENVIRONMENT AND RANGELAND PROTECTION FUND [7]	TOTAL CONFERENCE COMMITTEE CHANGES
Main Research Station	($50,000)	$414,372
Total all funds	($50,000)	$414,372
Less estimated income	(50,000)	131,523
General fund	$0	$282,849
FTE	0.00	(1.00)

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 This amendment removes $200,000 from the general fund and 2 FTE positions added by the Senate for the beef systems center of excellence.

3 The House added funding for 1 FTE geneticist position and related operating expenses to conduct research and address issues related to dry edible beans. The conference committee changed the funding source from the general fund to other funds.

4 Funding is added for western malting barley research at the Main Research Center.

5 The House added $775,165 of funding for priority needs relating to extraordinary repairs, operating, and equipment infrastructure needs for the Main Research Center, branch research centers, and North Dakota State University Extension Service. The conference committee reduced this amount to $350,000.

6 Funding is added for ethanol malting barley research. The funding is to be allocated to the Main Research Center and branch research centers as determined by the director of the Agricultural Experiment Station.

7 The conference committee reduced the funding from the environment and rangeland protection fund by $50,000, from $200,000 to $150,000.

The conference committee added a section of intent that the 2 FTE positions for the beef systems center of excellence not be filled until the State Board of Agricultural Research and Education enters into a business partnership agreement for the beef systems center of excellence.

Senate Bill No. 2020 - Agronomy Seed Farm - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Agronomy Seed Farm	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	$0
Less estimated income	1,199,685	1,198,056	(374)	1,197,682	1,197,682	
General fund	$0	$0	$0	$0	$0	$0

FTE	2.97	2.97	0.00	2.97	2.97	0.00

Dept. 649 - Agronomy Seed Farm - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL CONFERENCE COMMITTEE CHANGES
Agronomy Seed Farm	($374)	($374)
Total all funds	($374)	($374)
Less estimated income	(374)	(374)
General fund	$0	$0
FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Bowman

58020.0207
Title.
Fiscal No. 3

Prepared by the Legislative Council staff for
Conference Committee
April 18, 2005

PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2020

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Transportation Institute						
Total all funds	$15,764,073	$15,730,773	$294,435	$16,025,208	$16,024,658	$550
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189	15,225,189	
General fund	$501,045	$499,623	$300,396	$800,019	$799,469	$550
Branch Research Centers						
Total all funds	$19,247,791	$19,399,078	($70,033)	$19,329,045	$19,388,844	($59,799)
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103	11,061,103	
General fund	$8,175,257	$8,335,506	($67,564)	$8,267,942	$8,327,741	($59,799)
NDSU Extension Service						
Total all funds	$38,230,290	$38,205,645	($37,440)	$38,168,205	$38,068,205	$100,000
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906	22,913,906	
General fund	$15,241,062	$15,267,034	($12,735)	$15,254,299	$15,154,299	$100,000
Northern Crops Institute						
Total all funds	$1,763,585	$1,893,947	($998)	$1,892,949	$1,892,949	$0
Less estimated income	950,741	988,350	54,501	1,042,851	987,851	55,000
General fund	$812,844	$905,597	($55,499)	$850,098	$905,098	($55,000)
Main Research Station						
Total all funds	$66,572,180	$67,611,170	$589,372	$68,200,542	$68,500,707	($300,165)
Less estimated income	36,810,218	37,541,799	(18,477)	37,523,322	37,523,322	
General fund	$29,761,962	$30,069,371	$607,849	$30,677,220	$30,977,385	($300,165)
Agronomy Seed Farm						
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	$0
Less estimated income	1,199,685	1,198,056	(374)	1,197,682	1,197,682	

General fund	$0	$0	$0	$0	$0	$0
Bill Total						
Total all funds	$142,777,604	$144,038,669	$774,962	$144,813,631	$145,073,045	($259,414)
Less estimated income	88,285,434	88,961,538	2,515	88,964,053	88,909,053	55,000
General fund	$54,492,170	$55,077,131	$772,447	$55,849,578	$56,163,992	($314,414)

Senate Bill No. 2020 - Transportation Institute - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Transportation Institute	$15,764,073	$15,730,773	$294,435	$16,025,208	$16,024,658	$550
Total all funds	$15,764,073	$15,730,773	$294,435	$16,025,208	$16,024,658	$550
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189	15,225,189	
General fund	$501,045	$499,623	$300,396	$800,019	$799,469	$550
FTE	48.50	48.50	0.00	48.50	48.50	0.00

Dept. 627 - Transportation Institute - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	ADDS FUNDING FOR REGIONAL UNIVERSITY TRANSPORTATION CENTER STATUS [2]	TOTAL CONFERENCE COMMITTEE CHANGES
Transportation Institute	($6,115)	$300,550	$294,435
Total all funds	($6,115)	$300,550	$294,435
Less estimated income	(5,961)		(5,961)
General fund	($154)	$300,550	$300,396
FTE	0.00	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

[2] The conference committee agreed with the House amendment to increase the general fund appropriation for the Upper Great Plains Transportation Institute to meet the required funded budget guidelines to qualify as a regional university transportation center. An additional $550 was added by the conference committee as compared to the House version.

Senate Bill No. 2020 - Branch Research Centers - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Dickinson Research Center	$5,554,757	$5,609,723	($61,929)	$5,547,794	$5,607,593	($59,799)
Central Grasslands Research Center	1,982,689	1,979,234	(992)	1,978,242	1,978,242	
Hettinger Research Center	1,798,821	1,803,022	(1,116)	1,801,906	1,801,906	
Langdon Research Center	1,332,702	1,328,486	(990)	1,327,496	1,327,496	
North Central Research Center	2,236,320	2,230,730	(1,595)	2,229,135	2,229,135	
Williston Research Center	2,091,298	2,205,875	(991)	2,204,884	2,204,884	
Carrington Research Center	4,251,204	4,242,008	(2,420)	4,239,588	4,239,588	
Total all funds	$19,247,791	$19,399,078	($70,033)	$19,329,045	$19,388,844	($59,799)
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103	11,061,103	
General fund	$8,175,257	$8,335,506	($67,564)	$8,267,942	$8,327,741	($59,799)
FTE	77.41	77.41	0.00	77.41	77.41	0.00

Dept. 628 - Branch Research Centers - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REDUCES FUNDING FOR WESTERN MALTING BARLEY PROJECT [2]	TOTAL CONFERENCE COMMITTEE CHANGES
Dickinson Research Center	($2,130)	($59,799)	($61,929)
Central Grasslands Research Center	(992)		(992)
Hettinger Research Center	(1,116)		(1,116)
Langdon Research Center	(990)		(990)
North Central Research Center	(1,595)		(1,595)
Williston Research Center	(991)		(991)
Carrington Research Center	(2,420)		(2,420)
Total all funds	($10,234)	($59,799)	($70,033)
Less estimated income	(2,469)		(2,469)

General fund	($7,765)	($59,799)	($67,564)
FTE	0.00	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The conference committee reduced the general fund appropriation for the western malting barley project at the Dickinson Research Center. The total funding at the Dickinson Research Center for the malting barley project is $62,845, $3,046 from the general fund and $59,799 from special funds.

Senate Bill No. 2020 - NDSU Extension Service - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Extension Service	$37,442,255	$37,318,219	($37,252)	$37,280,967	$37,280,967	
Soil Conservation Committee	788,035	887,426	(188)	887,238	787,238	$100,000
Total all funds	$38,230,290	$38,205,645	($37,440)	$38,168,205	$38,068,205	$100,000
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906	22,913,906	
General fund	$15,241,062	$15,267,034	($12,735)	$15,254,299	$15,154,299	$100,000
FTE	266.10	266.10	0.00	266.10	266.10	0.00

Dept. 630 - NDSU Extension Service - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE 1	TOTAL CONFERENCE COMMITTEE CHANGES
Extension Service	($37,252)	($37,252)
Soil Conservation Committee	(188)	(188)
Total all funds	($37,440)	($37,440)
Less estimated income	(24,705)	(24,705)
General fund	($12,735)	($12,735)
FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

The conference committee amendment did not change the funding for the soil conservation districts. The House version provided for a $100,000 general fund reduction.

Senate Bill No. 2020 - Northern Crops Institute - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Northern Crops Institute	$1,763,585	$1,893,947	($998)	$1,892,949	$1,892,949	
Total all funds	$1,763,585	$1,893,947	($998)	$1,892,949	$1,892,949	$0
Less estimated income	950,741	988,350	54,501	1,042,851	987,851	55,000
General fund	$812,844	$905,597	($55,499)	$850,098	$905,098	($55,000)
FTE	7.62	8.62	0.00	8.62	8.62	0.00

Dept. 638 - Northern Crops Institute - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE 1	CHANGES FUNDING FOR 1 FTE CROP QUALITY PROMOTION SPECIALIST POSITION 2	TOTAL CONFERENCE COMMITTEE CHANGES
Northern Crops Institute	($998)		($998)
Total all funds	($998)	$0	($998)
Less estimated income	(499)	55,000	54,501
General fund	($499)	($55,000)	($55,499)
FTE	0.00	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The conference committee changed the funding source for 1 FTE crop quality promotion specialist position at Northern Crops Institute, which was added by the Senate. The funding source was changed to $65,000 from the general fund and $94,605 from special funds.

Senate Bill No. 2020 - Main Research Station - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Main Research Station	$66,572,180	$67,611,170	$589,372	$68,200,542	$68,500,707	($300,165)
Total all funds	$66,572,180	$67,611,170	$589,372	$68,200,542	$68,500,707	($300,165)
Less estimated income	36,810,218	37,541,799	(18,477)	37,523,322	37,523,322	
General fund	$29,761,962	$30,069,371	$607,849	$30,677,220	$30,977,385	($300,165)
FTE	339.05	341.05	(1.00)	340.05	340.05	0.00

Dept. 640 - Main Research Station - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REMOVES POSITIONS AND FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [2]	ADDS 1 FTE DRY BEAN GENETICIST POSITION [3]	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [4]	ADDS FUNDING FOR EXTRAORDINARY REPAIRS [5]	ADDS FUNDING FOR ETHANOL MALTING BARLEY RESEARCH [6]
Main Research Station	($45,427)	($200,000)	$200,000	$59,799	$325,000	$100,000
Total all funds	($45,427)	($200,000)	$200,000	$59,799	$325,000	$100,000
Less estimated income	(18,477)		50,000			
General fund	($26,950)	($200,000)	$150,000	$59,799	$325,000	$100,000
FTE	0.00	(2.00)	1.00	0.00	0.00	0.00

	REDUCES FUNDING FROM THE ENVIRONMENT AND RANGELAND PROTECTION FUND [7]	ADDS FUNDING FOR OPERATING AND EQUIPMENT NEEDS [8]	TOTAL CONFERENCE COMMITTEE CHANGES
Main Research Station	($50,000)	$200,000	$589,372
Total all funds	($50,000)	$200,000	$589,372
Less estimated income	(50,000)		(18,477)
General fund	$0	$200,000	$607,849
FTE	0.00	0.00	(1.00)

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The conference committee agreed with the House amendment removing $200,000 from the general fund and 2 FTE positions added by the Senate for the beef systems center of excellence.

3 The conference committee agreed with the House amendment to add funding for 1 FTE geneticist position and related operating expenses to conduct research and address issues related to dry edible beans. The conference committee changed $50,000 of the funding source from the general fund to special funds.

4 The conference committee agreed with the House amendment to add funding for western malting barley research at the Main Research Center.

5 The conference committee added $325,000 for extraordinary repairs to facilities. The House proposed to increase funding for extraordinary repairs by $425,165.

6 The conference committee agreed with the House amendment to add funding for ethanol malting barley research. The funding is to be allocated to the Main Research Center and branch research centers as determined by the director of the Agricultural Experiment Station.

7 The conference committee reduced the funding from the environment and rangeland protection fund by $50,000, from $200,000 to $150,000.

8 The conference committee added $200,000 of funding for operating and equipment infrastructure needs for the Main Research Center, branch research centers, and North Dakota State University Extension Service. The funding allocation is to be determined by the State Board of Agricultural Research and Education. The House amendment provided for $350,000 from the general fund.

The conference committee added a section of intent that the 2 FTE positions for the beef systems center of excellence not be filled until the State Board of Agricultural Research and Education enters into a business partnership agreement for the beef systems center of excellence.

Senate Bill No. 2020 - Agronomy Seed Farm - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE

Agronomy Seed Farm	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	$0
Less estimated income	1,199,685	1,198,056	(374)	1,197,682	1,197,682	
General fund	$0	$0	$0	$0	$0	$0
FTE	2.97	2.97	0.00	2.97	2.97	0.00

Dept. 649 - Agronomy Seed Farm - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL CONFERENCE COMMITTEE CHANGES
Agronomy Seed Farm	($374)	($374)
Total all funds	($374)	($374)
Less estimated income	(374)	(374)
General fund	$0	$0
FTE	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

REPORT OF CONFERENCE COMMITTEE
(ACCEDE/RECEDE) - 420

07398

(Bill Number) 2020 (, as (re)engrossed):

Your Conference Committee

For the Senate:		For the House:	
4/20	4/18	4/20	4/18
Y	Bowman	Y	Brusegaard
Y	Holmberg	Y	Renner Feldt
Y	Lindaas	Y	Gulleson

☐ recommends that the (SENATE/HOUSE) (ACCEDE to) (RECEDE from) (723/724 725/726 S724/H726 S723/H725) the (Senate/House) amendments on (SJ/HJ) page(s) _____ - _____

☐ and place _____ (727) on the Seventh order.

☐ , adopt (further) amendments as follows, and place _____ on the Seventh order:

☐ having been unable to agree, recommends that the committee be discharged and a new committee be appointed. (690/515)

((Re)Engrossed) _____ was placed on the Seventh order of business on the calendar.

DATE: ____/____/____

CARRIER: _____

LC NO. _____ . _____ of amendment

LC NO. _____ . _____ of engrossment

Emergency clause added or deleted _____

Statement of purpose of amendment _____

(1) LC (2) LC (3) DESK (4) COMM.

REPORT OF CONFERENCE COMMITTEE

SB 2020, as engrossed: Your conference committee (Sens. Bowman, Holmberg, Lindaas and Reps. Brusegaard, Rennerfeldt, Gulleson) recommends that the **HOUSE RECEDE** from the House amendments on SJ pages 1149-1154, adopt amendments as follows, and place SB 2020 on the Seventh order:

That the House recede from its amendments as printed on pages 1149-1154 of the Senate Journal and pages 1353-1359 of the House Journal and that Engrossed Senate Bill No. 2020 be amended as follows:

Page 1, line 3, remove the second "to"

Page 1, line 4, remove "provide for a legislative council study;"

Page 3, line 5, replace "3,750,622" with "3,713,370"

Page 3, line 6, replace "108,747" with "58,559"

Page 3, line 7, replace "3,859,369" with "3,771,929"

Page 3, line 8, replace "2,451,781" with "2,427,076"

Page 3, line 9, replace "1,407,588" with "1,344,853"

Page 3, line 12, replace "370,600" with "369,602"

Page 3, line 13, replace "211,005" with "210,506"

Page 3, line 14, replace "159,595" with "159,096"

Page 3, line 17, replace "4,886,023" with "5,180,440"

Page 3, line 18, replace "4,869,499" with "4,863,538"

Page 3, line 19, replace "16,524" with "316,902"

Page 3, line 22, replace "7,093,956" with "7,531,596"

Page 3, line 23, replace "5,235,325" with "5,216,848"

Page 3, line 24, replace "1,858,631" with "2,314,748"

Page 3, line 27, replace "328,589" with "266,660"

Page 3, line 28, replace "311,847" with "310,855"

Page 3, line 29, replace "281,547" with "280,431"

Page 3, line 30, replace "45,601" with "44,611"

Page 3, line 31, replace "518,220" with "516,625"

Page 4, line 1, replace "562,800" with "621,608"

Page 4, line 2, replace "915,392" with "912,972"

Page 4, line 3, replace "2,963,996" with "2,953,762"

Page 4, line 4, replace "2,096,169" with "2,093,700"

Page 4, line 5, replace "867,827" with "860,062"

Page 4, line 8, replace "31,452" with "31,078"

Page 4, line 9, replace "31,452" with "31,078"

Page 4, line 10, replace "4,310,165" with "4,995,661"

Page 4, line 11, replace "14,895,231" with "14,842,746"

Page 4, line 12, replace "19,205,396" with "19,838,407"

Page 4, line 22, replace "37,318,219" with "37,280,967"

Page 4, line 23, replace "887,426" with "837,238"

Page 4, line 24, replace "38,205,645" with "38,118,205"

Page 4, line 25, replace "22,938,611" with "22,913,906"

Page 4, line 26, replace "15,267,034" with "15,204,299"

Page 4, line 29, replace "1,893,947" with "1,892,949"

Page 4, line 30, replace "988,350" with "987,851"

Page 4, line 31, replace "905,597" with "905,098"

Page 5, line 3, replace "15,730,773" with "16,025,190"

Page 5, line 4, replace "15,231,150" with "15,225,189"

Page 5, line 5, replace "499,623" with "800,001"

Page 5, line 8, replace "67,611,170" with "68,048,810"

Page 5, line 9, replace "37,541,799" with "37,523,322"

Page 5, line 10, replace "30,069,371" with "30,525,488"

Page 5, line 13, replace "5,609,723" with "5,547,794"

Page 5, line 14, replace "1,979,234" with "1,978,242"

Page 5, line 15, replace "1,803,022" with "1,801,906"

Page 5, line 16, replace "1,328,486" with "1,327,496"

Page 5, line 17, replace "2,230,730" with "2,229,135"

Page 5, line 18, replace "2,205,875" with "2,264,683"

Page 5, line 19, replace "4,242,008" with "4,239,588"

Page 5, line 20, replace "19,399,078" with "19,388,844"

Page 5, line 21, replace "11,063,572" with "11,061,103"

Page 5, line 22, replace "8,335,506" with "8,327,741"

Page 5, line 25, replace "1,198,056" with "1,197,682"

Page 5, line 26, replace "1,198,056" with "1,197,682"

Page 5, line 27, replace "55,077,131" with "55,762,627"

Page 5, line 28, replace "88,961,538" with "88,909,053"

Page 5, line 29, replace "144,038,669" with "144,671,680"

Page 6, replace lines 27 through 31 with:

"**SECTION 9. LEGISLATIVE INTENT - BEEF SYSTEMS CENTER OF EXCELLENCE POSITIONS.** It is the intent of the fifty-ninth legislative assembly that the two full-time equivalent positions for the beef systems center of excellence not be filled and the related funding for salaries and wages not be spent until the state board of agricultural research and education enters into a business partnership agreement for the beef systems center of excellence.

SECTION 10. LEGISLATIVE INTENT - WILLISTON RESEARCH CENTER MACHINE STORAGE SHED. It is the intent of the fifty-ninth legislative assembly that an amount of up to $100,000 of the appropriation provided in subdivision 4 of section 3 of this Act for extraordinary repairs be used to construct an equipment storage facility at the Williston research center."

Page 7, remove lines 1 and 2

Page 7, line 6, replace "10" with "11"

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2020 - Summary of Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Transportation Institute						
Total all funds	$15,764,073	$15,730,773	$294,417	$16,025,190	$16,024,658	$532
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189	15,225,189	
General fund	$501,045	$499,623	$300,378	$800,001	$799,469	$532
Branch Research Centers						
Total all funds	$19,247,791	$19,399,078	($10,234)	$19,388,844	$19,388,844	$0
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103	11,061,103	
General fund	$8,175,257	$8,335,506	($7,765)	$8,327,741	$8,327,741	$0
NDSU Extension Service						
Total all funds	$38,230,290	$38,205,645	($87,440)	$38,118,205	$38,068,205	$50,000
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906	22,913,906	
General fund	$15,241,062	$15,267,034	($62,735)	$15,204,299	$15,154,299	$50,000
Northern Crops Institute						
Total all funds	$1,763,585	$1,893,947	($998)	$1,892,949	$1,892,949	$0
Less estimated income	950,741	988,350	(499)	987,851	987,851	

General fund	$812,844	$905,597	($499)	$905,098	$905,098	$0
Main Research Station						
Total all funds	$66,572,180	$67,611,170	$437,640	$68,048,810	$68,500,707	($451,897)
Less estimated income	36,810,218	37,541,799	(18,477)	37,523,322	37,523,322	
General fund	$29,761,962	$30,069,371	$456,117	$30,525,488	$30,977,385	($451,897)
Agronomy Seed Farm						
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	$0
Less estimated income	1,199,685	1,198,056	(374)	1,197,682	1,197,682	
General fund	$0	$0	$0	$0	$0	$0
Bill Total						
Total all funds	$142,777,604	$144,038,669	$633,011	$144,671,680	$145,073,045	($401,365)
Less estimated income	88,285,434	88,961,538	(52,485)	88,909,053	88,909,053	
General fund	$54,492,170	$55,077,131	$685,496	$55,762,627	$56,163,992	($401,365)

Senate Bill No. 2020 - Transportation Institute - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Transportation Institute	$15,764,073	$15,730,773	$294,417	$16,025,190	$16,024,658	$532
Total all funds	$15,764,073	$15,730,773	$294,417	$16,025,190	$16,024,658	$532
Less estimated income	15,263,028	15,231,150	(5,961)	15,225,189	15,225,189	
General fund	$501,045	$499,623	$300,378	$800,001	$799,469	$532
FTE	48.50	48.50	0.00	48.50	48.50	0.00

Dept. 627 - Transportation Institute - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	ADDS FUNDING FOR REGIONAL UNIVERSITY TRANSPORTATION CENTER STATUS [2]	TOTAL CONFERENCE COMMITTEE CHANGES
Transportation Institute	($6,115)	$300,532	$294,417
Total all funds	($6,115)	$300,532	$294,417
Less estimated income	(5,961)		(5,961)
General fund	($154)	$300,532	$300,378
FTE	0.00	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

[2] The conference committee agreed with the House amendment to increase the general fund appropriation for the Upper Great Plains Transportation Institute to meet the required funded budget guidelines to qualify as a regional university transportation center. An additional $532 was added by the conference committee as compared to the House version.

Senate Bill No. 2020 - Branch Research Centers - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Dickinson Research Center	$5,554,757	$5,609,723	($61,929)	$5,547,794	$5,607,593	($59,799)
Central Grasslands Research Center	1,982,689	1,979,234	(992)	1,978,242	1,978,242	
Hettinger Research Center	1,798,821	1,803,022	(1,116)	1,801,906	1,801,906	
Langdon Research Center	1,332,702	1,328,486	(990)	1,327,496	1,327,496	
North Central Research Center	2,236,320	2,230,730	(1,595)	2,229,135	2,229,135	
Williston Research Center	2,091,298	2,205,875	58,808	2,264,683	2,204,884	59,799
Carrington Research Center	4,251,204	4,242,008	(2,420)	4,239,588	4,239,588	
Total all funds	$19,247,791	$19,399,078	($10,234)	$19,388,844	$19,388,844	$0
Less estimated income	11,072,534	11,063,572	(2,469)	11,061,103	11,061,103	

General fund	$8,175,257	$8,335,506	($7,765)	$8,327,741	$8,327,741	$0
FTE	77.41	77.41	0.00	77.41	77.41	0.00

Dept. 628 - Branch Research Centers - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	CHANGES FUNDING FOR MALTING MALTING BARLEY PROJECTS[2]	TOTAL CONFERENCE COMMITTEE CHANGES
Dickinson Research Center	($2,130)	($59,799)	($61,929)
Central Grasslands Research Center	(992)		(992)
Hettinger Research Center	(1,116)		(1,116)
Langdon Research Center	(990)		(990)
North Central Research Center	(1,595)		(1,595)
Williston Research Center	(991)	59,799	58,808
Carrington Research Center	(2,420)		(2,420)
Total all funds	($10,234)	$0	($10,234)
Less estimated income	(2,469)		(2,469)
General fund	($7,765)	$0	($7,765)
FTE	0.00	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

[2] The conference committee reduced the general fund appropriation for the western malting barley project at the Dickinson Research Center. The total funding at the Dickinson Research Center for the malting barley project is $62,845, $3,046 from the general fund and $59,799 from special funds. The funding was moved to the Williston Research Center for ethanol malting barley research.

Senate Bill No. 2020 - NDSU Extension Service - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Extension Service	$37,442,255	$37,318,219	($37,252)	$37,280,967	$37,280,967	
Soil Conservation Committee	788,035	887,426	(50,188)	837,238	787,238	$50,000
Total all funds	$38,230,290	$38,205,645	($87,440)	$38,118,205	$38,068,205	$50,000
Less estimated income	22,989,228	22,938,611	(24,705)	22,913,906	22,913,906	
General fund	$15,241,062	$15,267,034	($62,735)	$15,204,299	$15,154,299	$50,000
FTE	266.10	266.10	0.00	266.10	266.10	0.00

Dept. 630 - NDSU Extension Service - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REDUCES FUNDING FOR SOIL CONSERVATION DISTRICTS [2]	TOTAL CONFERENCE COMMITTEE CHANGES
Extension Service	($37,252)		($37,252)
Soil Conservation Committee	(188)	($50,000)	(50,188)
Total all funds	($37,440)	($50,000)	($87,440)
Less estimated income	(24,705)		(24,705)
General fund	($12,735)	($50,000)	($62,735)
FTE	0.00	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

2 The conference committee added $50,000 for soil conservation districts. The Senate version added $100,000, which was removed by the House.

Senate Bill No. 2020 - Northern Crops Institute - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Northern Crops Institute	$1,763,585	$1,893,947	($998)	$1,892,949	$1,892,949	
Total all funds	$1,763,585	$1,893,947	($998)	$1,892,949	$1,892,949	$0
Less estimated income	950,741	988,350	(499)	987,851	987,851	
General fund	$812,844	$905,597	($499)	$905,098	$905,098	$0
FTE	7.62	8.62	0.00	8.62	8.62	0.00

Dept. 638 - Northern Crops Institute - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	TOTAL CONFERENCE COMMITTEE CHANGES
Northern Crops Institute	($998)	($998)
Total all funds	($998)	($998)
Less estimated income	(499)	(499)
General fund	($499)	($499)
FTE	0.00	0.00

1 This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Senate Bill No. 2020 - Main Research Station - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Main Research Station	$66,572,180	$67,611,170	$437,640	$68,048,810	$68,500,707	($451,897)
Total all funds	$66,572,180	$67,611,170	$437,640	$68,048,810	$68,500,707	($451,707)
Less estimated income	36,810,218	37,541,799	(18,477)	37,523,322	37,523,322	
General fund	$29,761,962	$30,069,371	$456,117	$30,525,488	$30,977,385	($451,897)
FTE	339.05	341.05	(1.00)	340.05	340.05	0.00

Dept. 640 - Main Research Station - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH INSURANCE [1]	REMOVES POSITIONS AND FUNDING FOR BEEF SYSTEMS CENTER OF EXCELLENCE [2]	ADDS 1 FTE DRY BEAN GENETICIST POSITION [3]	ADDS FUNDING FOR WESTERN MALTING BARLEY PROJECT [4]	ADDS FUNDING FOR EXTRAORDINARY REPAIRS [5]	REDUCES FUNDING FROM THE ENVIRONMENT AND RANGELAND PROTECTION FUND [6]
Main Research Station	($45,427)	($251,897)	$200,000	$59,799	$325,165	($50,000)
Total all funds	($45,427)	($251,897)	$200,000	$59,799	$325,165	($50,000)
Less estimated income	(18,477)		50,000			(50,000)
General fund	($26,950)	($251,897)	$150,000	$59,799	$325,165	$0

FTE	0.00	(2.00)	1.00	0.00	0.00	0.00

	ADDS FUNDING FOR OPERATING AND EQUIPMENT NEEDS [7]	TOTAL CONFERENCE COMMITTEE CHANGES
Main Research Station	$200,000	$437,640
Total all funds	$200,000	$437,640
Less estimated income		(18,477)
General fund	$200,000	$456,117
FTE	0.00	(1.00)

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

[2] The conference committee removed $251,897 and 2 FTE positions for the beef systems center of excellence. The Main Research Center is provided a total of $450,000 for salaries of 2 remaining authorized FTE positions and other operating costs of the center. The House version provided for a $200,000 reduction and removal of the 2 FTE positions.

[3] The conference committee agreed with the House amendment to add funding for 1 FTE geneticist position and related operating expenses to conduct research and address issues related to dry edible beans. The conference committee changed $50,000 of the funding source from the general fund to special funds.

[4] The conference committee agreed with the House amendment to add funding for western malting barley research at the Main Research Center.

[5] The conference committee added $325,165 for extraordinary repairs to facilities. The House proposed to increase funding for extraordinary repairs by $425,165.

[6] The conference committee reduced the funding from the environment and rangeland protection fund by $50,000, from $200,000 to $150,000.

[7] The conference committee added $200,000 of funding for operating and equipment infrastructure needs for the Main Research Center, branch research centers, and North Dakota State University Extension Service. The funding allocation is to be determined by the State Board of Agricultural Research and Education. The House amendment provided for $350,000 from the general fund.

The conference committee added a section of intent that the 2 FTE positions for the beef systems center of excellence not be filled until the State Board of Agricultural Research and Education enters into a business partnership agreement for the beef systems center of excellence.

The conference committee added a section of intent that $100,000 of funding provided to the Main Research Center for extraordinary repairs be used to construct a machine storage shed at the Williston Research Center.

Senate Bill No. 2020 - Agronomy Seed Farm - Conference Committee Action

	EXECUTIVE BUDGET	SENATE VERSION	CONFERENCE COMMITTEE CHANGES	CONFERENCE COMMITTEE VERSION	HOUSE VERSION	COMPARISON TO HOUSE
Agronomy Seed Farm	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	
Total all funds	$1,199,685	$1,198,056	($374)	$1,197,682	$1,197,682	$0
Less estimated income	1,199,685	1,198,056	(374)	1,197,682	1,197,682	
General fund	$0	$0	$0	$0	$0	$0
FTE	2.97	2.97	0.00	2.97	2.97	0.00

Dept. 649 - Agronomy Seed Farm - Detail of Conference Committee Changes

	REDUCES RECOMMENDED FUNDING FOR HEALTH	TOTAL CONFERENCE COMMITTEE

	INSURANCE [1]	CHANGES
Agronomy Seed Farm	($374)	($374)
Total all funds	($374)	($374)
Less estimated income	(374)	(374)
General fund	$0	$0
FTE	0.00	0.00

[1] This amendment reduces funding for state employee health insurance premiums from $559.15 to $553.95 per month.

Engrossed SB 2020 was placed on the Seventh order of business on the calendar.

2005 TESTIMONY

SB 2020

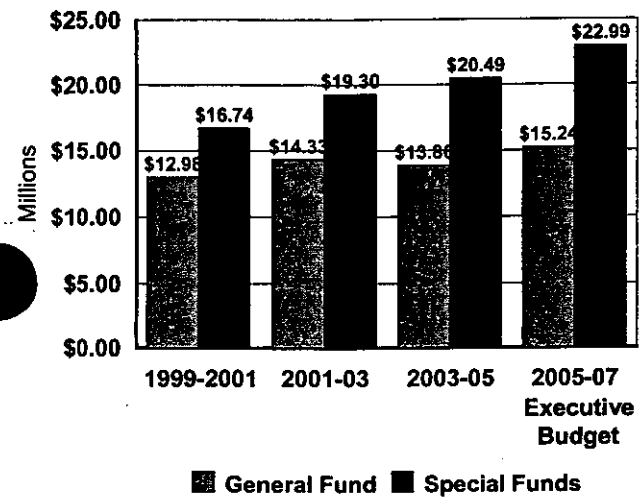
Department 630 - NDSU Extension Service
nate Bill No. 2020

	FTE Positions	General Fund	Other Funds	Total
2005-07 Executive Budget	266.10	$15,241,062	$22,989,228	$38,230,290
2003-05 Legislative Appropriations	266.10[1]	13,859,446[2]	20,486,830	34,346,276
Increase (Decrease)	0.00	$1,381,616	$2,502,398	$3,884,014

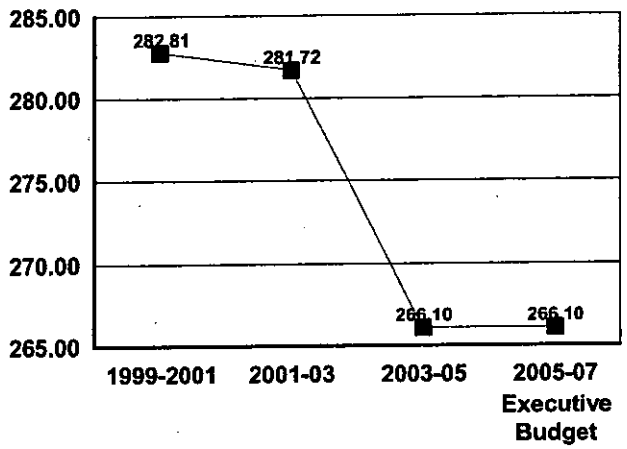
[1]The 2003-05 appropriation is based on 270.57 FTE positions. Section 4 of House Bill No. 1021 (2003) authorizes the State Board of Higher Education to adjust FTE positions as needed. A total of 4.47 FTE positions were reduced pursuant to this section.

[2]The Main Research Center allocated $255,000 of general fund appropriation to North Dakota State University Extension Service for critical needs. Section 3 of House Bill No. 1021 (2003) authorizes that upon approval of the State Board of Agricultural Research and Education and appropriate branch research directors, the director of the Main Research Center may transfer appropriation authority within the North Dakota State University Extension Service, Northern Crops Institute, Main Research Center, and branch research centers.

Agency Funding



FTE Positions



First House Action

Attached is a summary of the first house changes.

Executive Budget Highlights
(With First House Changes Noted)

	General Fund	Other Funds	Total
1. Increases special funds spending authority to deliver educational programs to rural North Dakota under partnership agreement with private organizations		$450,000	$450,000
2. Increases funding for operating costs due to inflation	$114,990		$114,990
3. Increases general fund spending authority for cost to continue expenses of the Soil Conservation Committee. The executive budget recommends a total of $788,035 for the Soil Conservation Committee. The Senate authorized an additional $100,000 from the general fund for the Soil Conservation Committee.	$9,356		$9,356

Other Sections in Bill

Section 4 of Senate Bill No. 2020 provides that, in addition to the amount appropriated as special funds, any other income received from federal acts, private grants, gifts, and donations, or from other sources received by the NDSU Extension Service is appropriated for the purpose designated in the act, grant, gift, or donation for the 2005-07 biennium.

Section 5 of Senate Bill No. 2020 authorizes the transfer of appropriation authority between the Main Research Center, the branch research centers, NDSU Extension Service, and Northern Crops Institute.

Section 6 of Senate Bill No. 2020 authorizes the State Board of Higher Education to adjust or increase full-time equivalent positions for the NDSU Extension Service and report any adjustments to the Office of Management and Budget.

Section 7 of Senate Bill No. 2020 authorizes the carryover of any unexpended general fund appropriation and excess income rece[illegible] by the NDSU Extension Service.

Prepared by the North Dakota Legislative Council
staff for House Appropriations
February 25, 2005

Department 628 - Branch Research Centers
Senate Bill Nos. 2020 and 2023

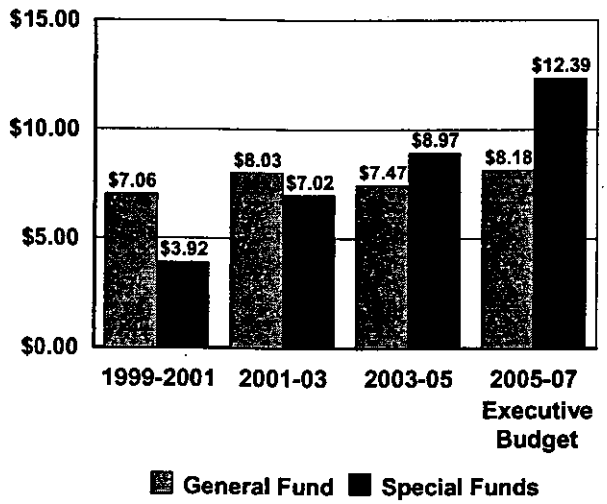
	FTE Positions	General Fund	Other Funds	Total
2005-07 Executive Budget	77.41	$8,175,257	$12,392,534	$20,567,791
2003-05 Legislative Appropriations	77.41[1]	7,467,679[2]	8,967,403[3]	16,435,082
Increase (Decrease)	0.00	$707,578	$3,425,131	$4,132,709

[1]The 2003-05 appropriation is based on 73.65 FTE positions. Section 4 of House Bill No. 1021 (2003) authorizes the State Board of Higher Education to adjust FTE positions as needed. A total of 3.76 FTE positions were added pursuant to this section and reported to the Office of Management and Budget.

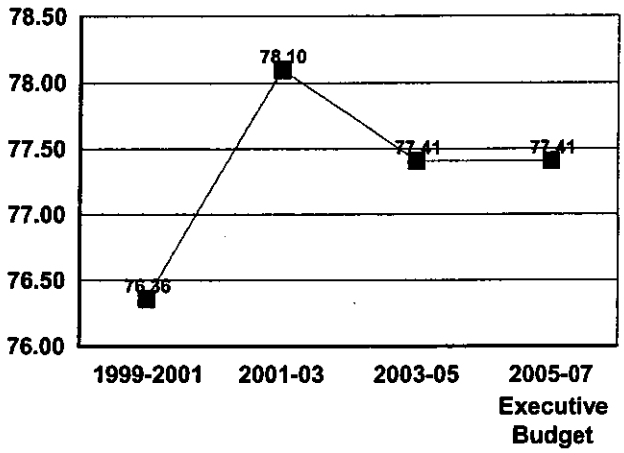
[2]The Main Research Center allocated $237,408 of general fund appropriation to branch research centers for critical needs. Section 3 of House Bill No. 1021 (2003) authorizes that upon approval of the State Board of Agricultural Research and Education and appropriate branch research directors, the director of the Main Research Center may transfer appropriation authority within the North Dakota State University Extension Service, Northern Crops Institute, Main Research Center, and branch research centers.

[3]The 2003-05 appropriation amounts do not include $461,471 of 2001-03 carryover authority related to the Langdon Learning Center project.

Agency Funding



FTE Positions



First House Action

Attached is a summary of the first house changes.

Executive Budget Highlights
(With First House Changes Noted)

	General Fund	Other Funds	Total
Dickinson Research Center			
1. Increases special funds spending authority from oil revenues for operating expenses ($1,049,651) and equipment over $5,000 ($350,349) needed to convert the Manning Ranch from a conventional minimal tillage operation to no till, developing sustainable and integrated production strategies that match current conditions of western North Dakota, and grant-funded research activities		$1,400,000	$1,400,000
2. Removes one-time 2003-05 biennium funding for the Dickinson Research Center headquarters office and multipurpose room building		($1,400,000)	($1,400,000)
3. Adds funding for various farm equipment over $5,000	$88,333	$350,318	$438,651

4. Increases special funds spending authority and the salary and wages line item ($35,364) and operating line item ($29,343) for the ethanol and malting barley initiative. The Senate authorized $188,950 of general fund money to the Dickinson ($62,845), Williston ($118,105), and Hettinger ($8,000) branch research centers for the western malting barley initiative.		$64,707	$64,707
Central Grasslands Research Center			
5. Increases special funds spending authority from livestock trades and grants for increased cost of livestock and related operations		$300,000	$300,000
6. Adds funding for various farm equipment over $5,000. (The Senate authorized $350,000 from bond proceeds in Senate Bill No. 2023 for an office addition at the Central Grasslands Research Center.)		$101,000	$101,000
Hettinger Research Center			
7. Increases special funds spending authority from gifts, grants, and contracts for the "Southwest Feeders" project and multistate feeding initiatives		$200,000	$200,000
8. Adds funding for various farm equipment over $5,000		$97,000	$97,000
Langdon Research Center			
9. Removes one-time funding for land and buildings due to completion of the Langdon Learning Center	($11,004)	($450,471)	($461,475)
10. Adds funding for various farm equipment over $5,000		$66,000	$66,000
North Central Research Center			
11. Adds special funds spending authority for an agronomy laboratory and greenhouse. The funding source is from gifts, grants, and contracts ($880,000) and bond proceeds ($440,000) included in Senate Bill No. 2023. The Senate increased special funds spending authority for the project by $370,000, from $880,000 to $1,250,000.		$1,320,000	$1,320,000
12. Increases special funds spending authority from gifts, grants, and contracts for operations ($138,210) and equipment over $5,000 ($235,681)		$373,891	$373,891
13. Adds funding for various farm equipment over $5,000		$103,319	$103,319
Williston Research Center			
14. Increases special funds spending authority for operating costs to reflect anticipated increases in gifts, grants, contracts, and agricultural product sales		$300,000	$300,000
15. Adds funding for various farm equipment over $5,000	$40,500	$130,000	$170,500
Carrington Research Center			
16. Increases special funds spending authority from gifts, grants, and contracts for operations ($247,333) and equipment over $5,000 ($152,667)		$400,000	$400,000
17. Adds funding for various farm equipment over $5,000	$128,333	$200,000	$328,333

Other Sections in Bill

Section 4 of Senate Bill No. 2020 provides that, in addition to the amount appropriated as special funds, any other income received from federal acts, private grants, gifts, and donations, or from other sources received by the branch research centers is appropriated for the purpose designated in the act, grant, gift, or donation for the 2005-07 biennium.

Section 5 of Senate Bill No. 2020 authorizes the transfer of appropriation authority between the Main Research Center, the branch research centers, NDSU Extension Service, and Northern Crops Institute.

Section 6 of Senate Bill No. 2020 authorizes the State Board of Higher Education to adjust or increase full-time equivalent positions for the branch research centers and report any adjustments to the Office of Management and Budget.

Section 7 of Senate Bill No. 2020 authorizes the carryover of any unexpended general fund appropriation and excess income received by the branch research centers.

Section 9 of Engrossed Senate Bill No. 2020 provides for a Legislative Council study of the branch research centers, including visits to each center.

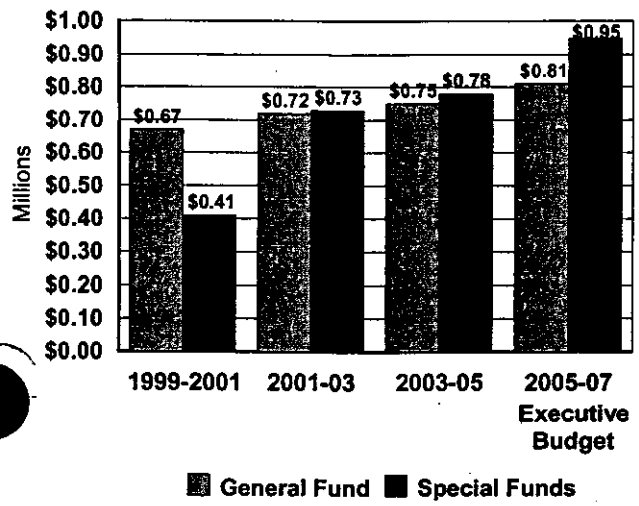
Prepared by the North Dakota Legislative Council
staff for House Appropriations
February 25, 2005

oartment 638 - Northern Crops Institute
nate Bill No. 2020

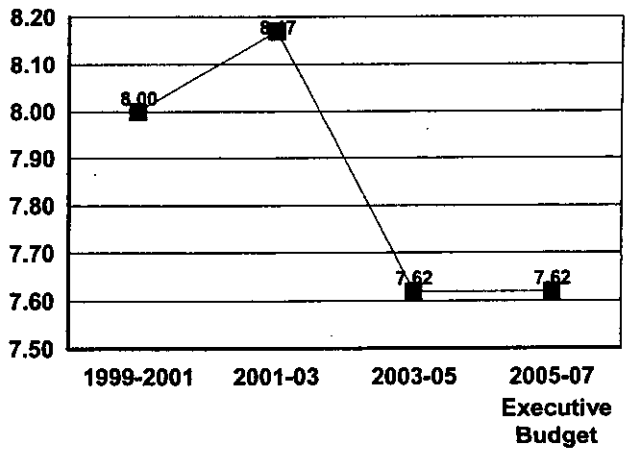
	FTE Positions	General Fund	Other Funds	Total
2005-07 Executive Budget	7.62	$812,844	$950,741	$1,763,585
2003-05 Legislative Appropriations	7.62[1]	746,002	777,345	1,523,347
Increase (Decrease)	0.00	$66,842	$173,396	$240,238

[1]The 2003 appropriation is based on 8.17 FTE positions. Section 4 of House Bill No. 1021 (2003) authorizes the State Board of Higher Education to adjust FTE positions as needed. A total of .55 FTE position was reduced pursuant to this section.

Agency Funding



FTE Positions



First House Action

Attached is a summary of the first house changes.

Executive Budget Highlights
(With First House Changes Noted)

	General Fund	Other Funds	Total
1. Increases special funds spending authority from fee-for-service technical projects for operating costs ($30,000) and equipment over $5,000 ($126,500)		$156,500	$156,500
2. Increases funding for operating costs due to inflation and to conduct processing research which would better link the diversity of North Dakota crops to livestock development. The Senate removed $24,469 of funding for linking crops to livestock research.	$29,200		$29,200

Other Sections in Bill

Section 4 of Senate Bill No. 2020 provides that, in addition to the amount appropriated as special funds, any other income received from federal acts, private grants, gifts, and donations, or from other sources received by the Northern Crops Institute is appropriated the purpose designated in the act, grant, gift, or donation for the 2005-07 biennium.

ction 5 of Senate Bill No. 2020 authorizes the transfer of appropriation authority between the Main Research Center, the branch esearch centers, NDSU Extension Service, and Northern Crops Institute.

Section 6 of Senate Bill No. 2020 authorizes the State Board of Higher Education to adjust or increase full-time equivalent positions for the Northern Crops Institute and report any adjustments to the Office of Management and Budget.

Section 7 of Senate Bill No. 2020 authorizes the carryover of any unexpended general fund appropriation and excess income received by the Northern Crops Institute.

Prepared by the North Dakota Legislative Council
staff for House Appropriations
February 25, 2005

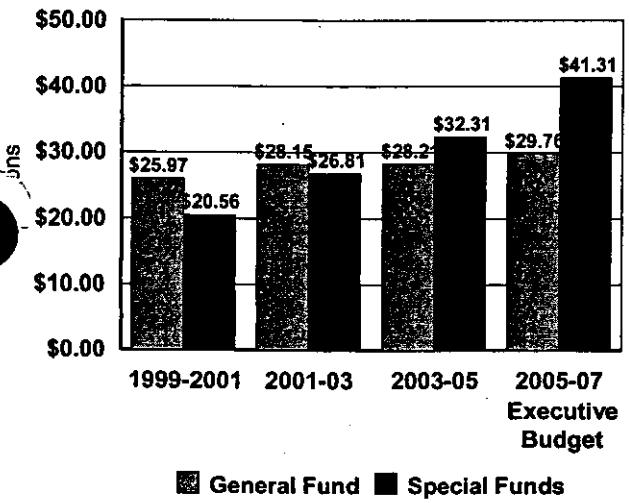
ɔartment 640 - NDSU Main Research Center
,nate Bill Nos. 2020 and 2023

	FTE Positions	General Fund	Other Funds	Total
2005-07 Executive Budget	339.05	$29,761,962	$41,310,218	$71,072,180
2003-05 Legislative Appropriations	337.05[1]	28,210,740[2]	32,306,474	60,517,214
Increase (Decrease)	2.00	$1,551,222	$9,003,744	$10,554,966

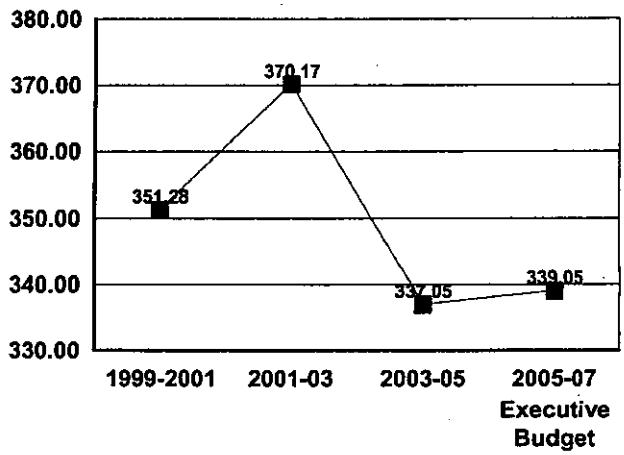
[1]The 2003 appropriation is based on 349.19 FTE positions. Section 4 of House Bill No. 1021 (2003) authorizes the State Board of Higher Education to adjust FTE positions as needed. A total of 12.14 FTE positions were reduced pursuant to this section.

[2] The Main Research Center allocated $492,408 of general fund appropriation to North Dakota State University Extension Service ($255,000) and the branch research centers ($237,408) for critical needs. Section 3 of House Bill No. 1021 (2003) authorizes that upon approval of the State Board of Agricultural Research and Education and appropriate branch research directors, the director of the Main Research Center may transfer appropriation authority within the North Dakota State University Extension Service, Northern Crops Institute, Main Research Center, and branch research centers.

Agency Funding



FTE Positions



First House Action

Attached is a summary of the first house changes.

Executive Budget Highlights
(With First House Changes Noted)

	General Fund	Other Funds	Total
1. Adds funding for new greenhouses and renovation of selected existing greenhouses. The funding source for the project is bond proceeds ($2 million), federal funds ($2 million), and gifts, grants, and contracts ($500,000) included in Senate Bill No. 2023. The Senate increased the total funding for the greenhouse project to $7 million, $2 million from bond proceeds and $5 million from federal or other funds.		$4,500,000	$4,500,000
Increases special funds spending authority from gifts and grants and other special funds authorization for operating expenses		$4,677,000	$4,677,000
Adds funding for extraordinary repairs and other general maintenance	$415,300		$415,300
4. Adds funding for equipment over $5,000 for various farming and research equipment		$2,400,000	$2,400,000

5. Adds 2 FTE beef research positions	$320,427		$320,427
6. Replaces general fund spending authority with funding from the environment and rangeland protection fund for existing environmental research	($200,000)	$200,000	$0
Adds funding for inflationary increases in operating costs	$107,754		$107,754
8. Removes one-time funding for 2003-05 capital projects, including the Nestles' research building ($1 million) and pesticide handling facilities ($120,000)		($1,120,000)	($1,120,000)

Other Sections in Bill

Section 4 of Senate Bill No. 2020 provides that, in addition to the amount appropriated as special funds, any other income received from federal acts, private grants, gifts, and donations, or from other sources received by the Main Research Center is appropriated for the purpose designated in the act, grant, gift, or donation for the 2005-07 biennium.

Section 5 of Senate Bill No. 2020 authorizes the transfer of appropriation authority between the Main Research Center, the branch research centers, NDSU Extension Service, and Northern Crops Institute.

Section 6 of Senate Bill No. 2020 authorizes the State Board of Higher Education to adjust or increase full-time equivalent positions for the Main Research Center and report any adjustments to the Office of Management and Budget.

Section 7 of Senate Bill No. 2020 authorizes the carryover of any unexpended general fund appropriation and excess income received by the Main Research Center.

Section 8 of Engrossed Senate Bill No. 2020 continues funding of $800,000 to the Main Research Center from the agriculture partnership in assisting community expansion (Ag PACE) fund for establishment of a beef systems center of excellence in the Department of Animal and Range Science. The funding was originally provided in 2003 House Bill No. 1021. The Senate also added $400,000 of funding from the general fund for 2 FTE positions and related operating costs for the beef systems center of excellence. The beef systems center of excellence positions may not be filled until the State Board of Agricultural Research and Education enters into a business partnership agreement for the beef systems center of excellence.

Prepared by the North Dakota Legislative Council
staff for House Appropriations
February 25, 2005

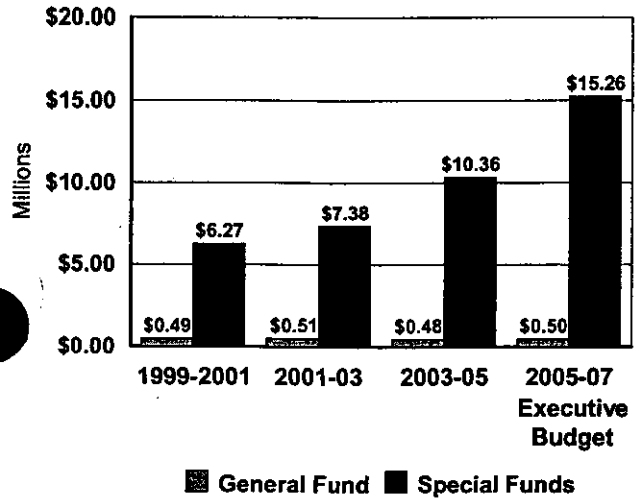
Department 627 - Upper Great Plains Transportation Institute
Senate Bill No. 2020

	FTE Positions	General Fund	Other Funds	Total
2005-07 Executive Budget	48.50	$501,045	$15,263,028	$15,764,073
2003-05 Legislative Appropriations	41.50[1]	483,099[2]	10,361,651	10,844,750
Increase (Decrease)	7.00	$17,946	$4,901,377	$4,919,323

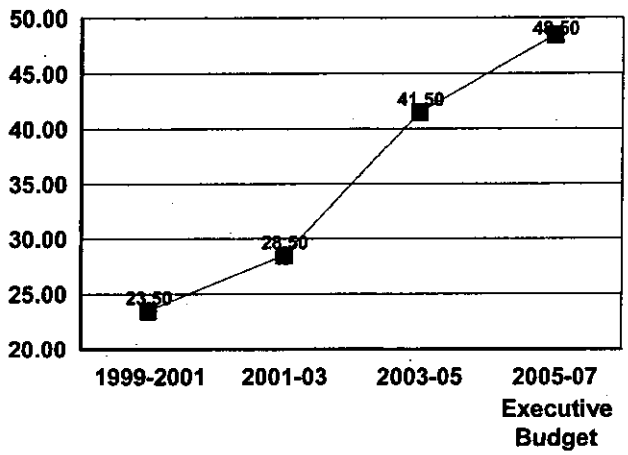
[1]The 2003-05 appropriation is based on 31.50 FTE positions. Section 4 of House Bill No. 1021 (2003) authorizes the State Board of Higher Education to adjust FTE positions as needed. A total of 10 FTE positions were added to this section and reported to the Office of Management and Budget.

[2]The 2003-05 appropriation amounts do not include $43,496 of 2001-03 carryover authority.

Agency Funding



FTE Positions



First House Action

Attached is a summary of the first house changes.

Executive Budget Highlights
(With First House Changes Noted)

	General Fund	Other Funds	Total
1. Adds federal and special funds spending authority for equipment over $5,000 ($100,000) and information technology equipment over $5,000 ($181,000) for laboratory, traffic data collection, and videoconference equipment		$281,000	$281,000
2. Adds federal funds spending authority for grants related to the Mountain-Plains Consortium		$1,290,000	$1,290,000
3. Adds 7 FTE positions and funding for salaries and wages primarily from anticipated new and increases in existing federal grants		$955,514	$955,514
Increases federal funds spending authority for operating costs		$1,749,419	$1,749,419

Other Sections in Bill

Section 4 of Senate Bill No. 2020 provides that, in addition to the amount appropriated as special funds, any other income received, including funds from federal acts, private grants, gifts, and donations, or from other sources received by the Upper Great Plains Transportation Institute is appropriated for the purpose designated in the act, grant, gift, or donation for the 2005-07 biennium.

Section 6 of Senate Bill No. 2020 authorizes the State Board of Higher Education to adjust or increase full-time equivalent positions for the Upper Great Plains Transportation Institute and report any adjustments to the Office of Management and Budget.

Section 7 of Senate Bill No. 2020 authorizes the carryover of any unexpended general fund appropriation and excess income received by the Upper Great Plains Transportation Institute to the 2007-09 biennium.

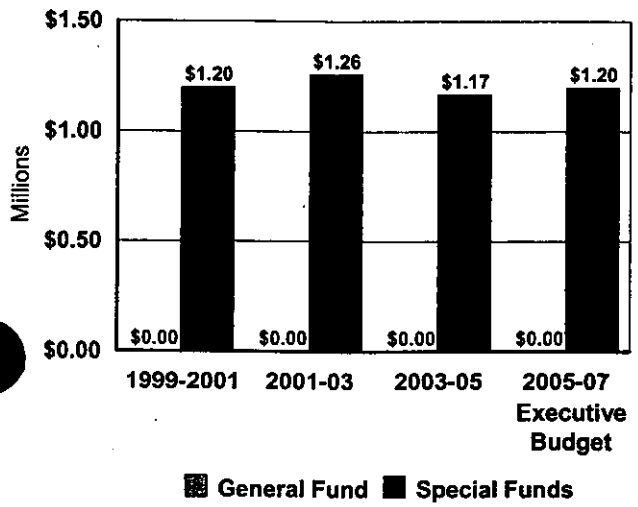
Prepared by the North Dakota Legislative Council
staff for House Appropriations
February 25, 2005

ıartment 649 - Agronomy Seed Farm
ɛnate Bill No. 2020

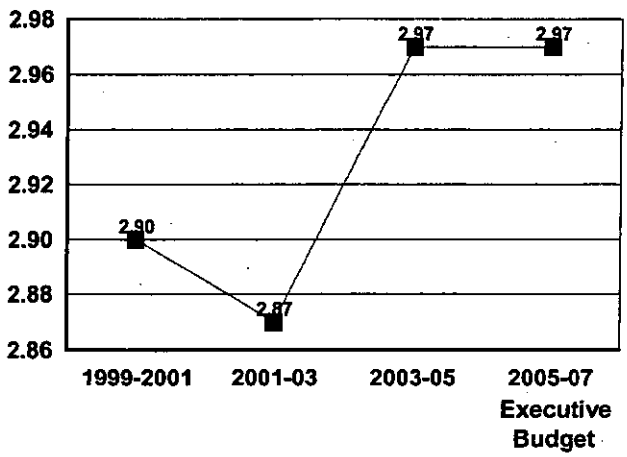
	FTE Positions	General Fund	Other Funds	Total
2005-07 Executive Budget	2.97	$0	$1,199,685	$1,199,685
2003-05 Legislative Appropriations	2.97[1]	0	1,166,604	1,166,604
Increase (Decrease)	0.00	$0	$33,081	$33,081

[1]The 2003 appropriation is based on 2.87 FTE positions. Section 4 of House Bill No. 1021 (2003) authorizes the State Board of Higher Education to adjust FTE positions as needed. A total of .10 FTE position was added pursuant to this section and reported to the Office of Management and Budget.

Agency Funding



FTE Positions



First House Action

Attached is a summary of the first house changes.

Executive Budget Highlights
(With First House Changes Noted)

	General Fund	Other Funds	Total
1. Adds special funds spending authority for equipment over $5,000 to purchase a combine ($125,000) and two tractors ($120,000)		$245,000	$245,000

Other Sections in Bill

Section 4 of Senate Bill No. 2020 provides that, in addition to the amount appropriated as special funds, any other income received from federal acts, private grants, gifts, and donations, or from other sources received by the Agronomy Seed Farm is appropriated for the purpose designated in the act, grant, gift, or donation for the 2005-07 biennium.

Section 6 of Senate Bill No. 2020 authorizes the State Board of Higher Education to adjust or increase full-time equivalent positions for the Agronomy Seed Farm and report any adjustments to the Office of Management and Budget.

tion 7 of Senate Bill No. 2020 authorizes the carryover of any unexpended general fund appropriation and excess income received ne Agronomy Seed Farm.

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2020 - Summary of Senate Action

	Executive Budget	Senate Changes	Senate Version
Transportation Institute			
Total all funds	$15,764,073	($33,300)	$15,730,773
Less estimated income	15,263,028	(31,878)	15,231,150
General fund	$501,045	($1,422)	$499,623
Branch Research Centers			
Total all funds	$19,247,791	$151,287	$19,399,078
Less estimated income	11,072,534	(8,962)	11,063,572
General fund	$8,175,257	$160,249	$8,335,506
NDSU - Extension Service			
Total all funds	$38,230,290	($24,645)	$38,205,645
Less estimated income	22,989,228	(50,617)	22,938,611
General fund	$15,241,062	$25,972	$15,267,034
Northern Crops Institute			
Total all funds	$1,763,585	$130,362	$1,893,947
Less estimated income	950,741	37,609	988,350
General fund	$812,844	$92,753	$905,597
Main Research Station			
Total all funds	$66,572,180	$1,038,990	$67,611,170
Less estimated income	36,810,218	731,581	37,541,799
General fund	$29,761,962	$307,409	$30,069,371
Agronomy Seed Farm			
Total all funds	$1,199,685	($1,629)	$1,198,056
Less estimated income	1,199,685	(1,629)	1,198,056
General fund	$0	$0	$0
Bill total			
Total all funds	$142,777,604	$1,261,065	$144,038,669
Less estimated income	88,285,434	676,104	88,961,538
General fund	$54,492,170	$584,961	$55,077,131

Senate Bill No. 2020 - Transportation Institute - Senate Action

	Executive Budget	Senate Changes	Senate Version
Transportation institute	$15,764,073	($33,300)	$15,730,773
Total all funds	$15,764,073	($33,300)	$15,730,773
Less estimated income	15,263,028	(31,878)	15,231,150
General fund	$501,045	($1,422)	$499,623
FTE	48.50	0.00	48.50

Department No. 627 - Transportation Institute - Detail of Senate Changes

	Reduces Compensation Package to 3/4	Total Senate Changes
Transportation institute	($33,300)	($33,300)
Total all funds	($33,300)	($33,300)
Less estimated income	(31,878)	(31,878)
General fund	($1,422)	($1,422)
FTE	0.00	0.00

Senate Bill No. 2020 - Branch Research Centers - Senate Action

	Executive Budget	Senate Changes	Senate Version
Dickinson research center	$5,554,757	$54,966	$5,609,723
Central grasslands research center	1,982,689	(3,455)	1,979,234
Hettinger research center	1,798,821	4,201	1,803,022
Langdon research center	1,332,702	(4,216)	1,328,486
North central research center	2,236,320	(5,590)	2,230,730
Williston research center	2,091,298	114,577	2,205,875
Carrington research center	4,251,204	(9,196)	4,242,008
Total all funds	$19,247,791	$151,287	$19,399,078
Less estimated income	11,072,534	(8,962)	11,063,572
General fund	$8,175,257	$160,249	$8,335,506
FTE	77.41	0.00	77.41

Department No. 628 - Branch Research Centers - Detail of Senate Changes

	Adds Funding For Western Malting Barley Project[1]	Reduces Compensation Package to 3/4	Total Senate Changes
Dickinson research center	$62,845	($7,879)	$54,966
Central grasslands research center		(3,455)	(3,455)
Hettinger research center	8,000	(3,799)	4,201
Langdon research center		(4,216)	(4,216)
North central research center		(5,590)	(5,590)
Williston research center	118,105	(3,528)	114,577
Carrington research center		(9,196)	(9,196)
Total all funds	$188,950	($37,663)	$151,287
Less estimated income	0	(8,962)	(8,962)
General fund	$188,950	($28,701)	$160,249
FTE	0.00	0.00	0.00

[1] This amendment adds funding for western malting barley research.

Senate Bill No. 2020 - NDSU - Extension Service - Senate Action

	Executive Budget	Senate Changes	Senate Version
Extension service	$37,442,255	($124,036)	$37,318,219
Soil conservation committee	788,035	99,391	887,426
Total all funds	$38,230,290	($24,645)	$38,205,645
Less estimated income	22,989,228	(50,617)	22,938,611
General fund	$15,241,062	$25,972	$15,267,034
FTE	266.10	0.00	266.10

Department No. 630 - NDSU - Extension Service - Detail of Senate Changes

	Reduces Compensation Package to 3/4	Adds Funding for Soil Conservation Districts[1]	Total Senate Changes
Extension service	($124,036)		($124,036)
Soil conservation committee	(609)	100,000	99,391
Total all funds	($124,645)	$100,000	($24,645)
Less estimated income	(50,617)	0	(50,617)
General fund	($74,028)	$100,000	$25,972
FTE	0.00	0.00	0.00

[1] This amendment adds funding for soil conservation districts.

Senate Bill No. 2020 - Northern Crops Institute - Senate Action

	Executive Budget	Senate Changes	Senate Version
Northern crops institute	$1,763,585	$130,362	$1,893,947
Total all funds	$1,763,585	$130,362	$1,893,947
Less estimated income	950,741	37,609	988,350
General fund	$812,844	$92,753	$905,597
FTE	7.62	1.00	8.62

Department No. 638 - Northern Crops Institute - Detail of Senate Changes

	Adds 1 FTE Crop Quality Promotion Specialist[1]	Removes Funding For Linking Crops to Livestock Research[2]	Reduces Compensation Package to 3/4	Total Senate Changes
Northern crops institute	$159,605	($24,469)	($4,774)	$130,362
Total all funds	$159,605	($24,469)	($4,774)	$130,362
Less estimated income	39,605	0	(1,996)	37,609
General fund	$120,000	($24,469)	($2,778)	$92,753
FTE	1.00	0.00	0.00	1.00

[1] This amendment adds 1 FTE crop quality promotion specialist position at Northern Crops Institute.

[2] This amendment removes $24,469 of funding for linking crops to North Dakota livestock development research costs.

Senate Bill No. 2020 - Main Research Station - Senate Action

	Executive Budget	Senate Changes	Senate Version
Main research station	$66,572,180	$1,038,990	$67,611,170
Total all funds	$66,572,180	$1,038,990	$67,611,170
Less estimated income	36,810,218	731,581	37,541,799
General fund	$29,761,962	$307,409	$30,069,371
FTE	339.05	2.00	341.05

Department No. 640 - Main Research Station - Detail of Senate Changes

	Continues Funding For Beef Systems Center of Excellence[1]	Adds Funding For Western Malting Barley Project[2]	Adds Positions and Funding For the Beef Systems Center of Excellence[3]	Reduces Compensation Package to 3/4	Total Senate Changes
Main research station	$800,000	$39,251	$400,000	($200,261)	$1,038,990
Total all funds	$800,000	$39,251	$400,000	($200,261)	$1,038,990
Less estimated income	800,000	0	0	(68,419)	731,581
General fund	$0	$39,251	$400,000	($131,842)	$307,409
FTE	0.00	0.00	2.00	0.00	2.00

[1] This amendment continues funding of $800,000 to the Main Research Center from the agriculture partnership in assisting community expansion (Ag PACE) fund for establishment of a beef systems center of excellence in the Department of Animal and Range Science. The funding was originally provided in 2003 House Bill No. 1021.

[2] This amendment adds funding for western malting barley research.

This amendment adds funding for 2 FTE positions and related operating costs for the beef systems center of excellence. The beef systems center of excellence positions may not be filled until the State Board of Agricultural Research and Education enters into a business partnership agreement for the beef systems center of excellence.

Senate Bill No. 2020 - Agronomy Seed Farm - Senate Action

	Executive Budget	Senate Changes	Senate Version
Agronomy seed farm	$1,199,685	($1,629)	$1,198,056
Total all funds	$1,199,685	($1,629)	$1,198,056
Less estimated income	1,199,685	(1,629)	1,198,056
General fund	$0	$0	$0
FTE	2.97	0.00	2.97

Department No. 649 - Agronomy Seed Farm - Detail of Senate Changes

	Reduces Compensation Package to 3/4	Total Senate Changes
Agronomy seed farm	($1,629)	($1,629)
Total all funds	($1,629)	($1,629)
Less estimated income	(1,629)	(1,629)
General fund	$0	$0
FTE	0.00	0.00

10

NDSU Agriculture
BIENNIAL BUDGET

NDSU Extension Service
North Dakota Agricultural Experiment Station

NORTH DAKOTA STATE UNIVERSITY
FARGO, ND

2005-2007

Prepared for the
House Appropriations Education Subcommittee
Bob Martinson, chairman

S.B. 2020 – March 1, 2005

Biennial Budget 2005-07

NDSU Agriculture
North Dakota Agricultural Experiment Station and NDSU Extension Service

As an 1862 land-grant institution,

North Dakota State University continues to address the issues of North Dakotans across the state through its seven Research Extension Centers, the Agronomy Seed Farm, 52 county Extension offices and the Fort Berthold Extension office, and the faculty and staff at NDSU. Research and Extension efforts focus on the needs of agricultural producers, business leaders, consumers, community leaders, youth, parents, volunteers and families. A number of those efforts are profiled in this book.

Although issues such as low farm prices, lack of markets, weather conditions that favor crop disease and pests, lack of better paying jobs and youth outmigration are being addressed, the seriousness of these problems is compounded by the manner in which they are interrelated. The concerns of agriculture cannot be separated from the problems of rural communities.

Through various multidisciplinary research and Extension efforts, the faculty and staff involved in NDSU agriculture share relevant data, offer positive alternatives, provide a variety of environments for learning and facilitate dialogue about public issues.

State general fund dollars are extremely valuable for these research and Extension programs. They provide the ongoing support to maintain programs and projects; offer opportunities to pilot new efforts around emerging concerns; and serve as leverage for additional resources from county, federal and grant sources.

The 2005-07 governor's budget provides a good base to continue existing programs, but additional funding will help better meet the needs of North Dakotans.

NDSU
NDSU Extension Service
North Dakota Agricultural Experiment Station

www.ndsu.edu/legislators

AGENCY OVERVIEW

Main Research Station

North Dakota Agricultural Experiment Station

Agency Statutory Authority

North Dakota Constitution, Article XIX; North Dakota Century Code Chapter 4-05.1

Agency Description

The North Dakota State University Main Research Station is located on the campus of the North Dakota State University of Agriculture and Applied Science. The station is the administrative location of the Agricultural Experiment Station. The station conducts research and coordinates all research activities of the Agricultural Experiment Station. The research has, as a purpose, the development and dissemination of technology important to the production and utilization of food, feed, fiber, and fuel from crop and livestock enterprises. The research provides for an enhancement of economic development, quality of life, sustainability of production, and protection of the environment. The Main Research Station keeps detailed records of all activities and publishes the information that will be of value to the residents of this state.

Agency Mission Statement

The Agricultural Experiment Station shall develop and disseminate technology important to the production and utilization of food, feed, fiber, and fuel from crop and livestock enterprises. The research must provide for an enhancement of the quality of life, sustainability of production, and protection of the environment

Agency Performance Measures

Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

Agency Future Critical Issues

NDAES continues to face the challenges in sustaining an infrastructure in which to do quality research. Shortfalls occur in quality greenhouse and plant research facilities, especially those for transgenic plants which will be more frequently introduced. Studies on transgenic crops will increase as methods to incorporate disease, insect and environmental stress resistance are more available. Our scientists travel farther each year in the state to conduct site-specific research. Major problems occur in acquisition of costly field and laboratory equipment that cannot be obtained through grants. NDAES has insufficient laboratory space to meet the needs of 21st Century agriculture. North Dakota is becoming increasingly urban, and urban populations require some products and services that are

NDSU
North Dakota State University
ND Agricultural Experiment Station

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AGENCY OVERVIEW: Main Research Station

fferent than those needed by livestock and crop producers. Continual efforts to improve horticultural research are occurring, and NDAES is addressing the needs of campus research and demonstration plots. However, these efforts need to continue in order to allow NDAES to serve this segment of agriculture well. Increased focus on food safety and on natural resources management provides opportunities for growth and response to pressing national needs. Food safety and natural resources will attract doctoral students who will significantly enhance research efforts. Continued improvements in nutrition and feeding facilities for livestock research are needed. This is particularly needed when quality control feedlot trials and consistent product evaluation is required for scientific evaluations. The Center of Excellence for Beef Systems will fill a void in the research and education mission of our animal scientists. This Center also will provide much-needed information to beef cattle producers on how to improve herds for improved quality traits. Our strength is in our researchers, but they are too few to cover all of the critical issues facing North Dakota agriculture, and the lack of adequate numbers precludes important faculty development. Over years, faculty positions have been lost, and lost positions cannot be redirected. For some units, additional technical support would significantly increase productivity of researchers. Faculty are responsible for attracting external funding, and their success during this biennium is impressive; however, the commensurate effort to write more and larger grants is apparent, and we have concerns about additional pressures that fundraising has on faculty burnout. Rural populations continue to decline, and the dynamics of the farming population are changing. Economic realities often place NDAES in a position of responding rather than being proactive in affecting positive change. Communication to help sustain farmers/communities is critical, and the need to translate research information into useful formats is apparent. In addition to building the technologies for communication, we need to promote the development of quality information that is transmitted by the technologies.

North Dakota Agricultural Experiment Station

Impacts of Reinvesting in Critical Areas

With the $1.245 million that the 2003 Legislature provided, NDSU Agriculture was able to reinvest in several critical areas. The North Dakota Agricultural Experiment Station received $990,000 of that. This funding made it possible to focus additional effort on the following key issues important to North Dakota:

BeefLine

Feedlot Trials

Continuing research into different feedlot regimes and supplementation include:

- **The use of pulse grains, (field pea, chickpea and lentil) in receiving diets in calves** — Cattle fed pulse grain-based diets in a 40-day receiving trial gained an average of 9.2 percent faster (0.38 pounds per day) than cattle fed corn-canola-based diets. Pulse-fed cattle continued to have increased gains for up to seven weeks after the termination of the pulse diet.
- **Conventional vs. natural feeding regimes for finishing cattle** — With today's emphasis on natural products, trials are exploring differences in finishing cattle using conventional management versus a nonconventional/natural approach, which uses yeast and enzyme products to replace ionophores and antibiotics. Feeding calves using these natural products can result in equal animal performance and carcass quality.
- **The effect of degradable vs. nondegradable protein** — Precise levels of rumen-degradable and nondegradable protein improve efficiency and animal performance. Barley-based diets provide adequate rumen-degradable protein, but new research with nondegradable protein supplemented in the form of distillers' grains improved animal performance and carcass traits.
- **Investigating alternatives or co-product feeds in feedlot diets** — Various additives, such as soybean hulls, barley malt and cocoa cake, are being researched as alternative sources of proteins and minerals in feedlot diets. Other research includes the effect of processing and the particle size of field peas in the digestive process and their effect on performance.
- **Breed evaluation** — The breed, or combination of breeds, has a significant impact on the efficiency and profitability of the beef herd; therefore, selecting appropriate breeds is an important decision for beef cattle producers. Research continues to monitor breed performance and to increase producer understanding of genetic and carcass quality.

Impacts of Reinvesting in Critical Areas

Environmental Management Strategies

The beef industry must have a good relationship with the soil, water and air resources, which involves animal performance, nutrient retention and waste composting. An environmental management strategies study shows properly managing waste and coordinating the care and disposal of such waste can impact the environment. It also shows that the care cattle receive can have an impact on performance. For example, bedding material, which captures nutrient matter for composting and placement on land, could reduce the need for synthetic fertilizer. With 937,000 cows in the state each generating 55 pounds of waste (including water, straw and solid manure), the potential value of waste byproducts could be $20 million.

■ Biofuels

Use of biofuels has increased throughout North Dakota and the nation. Ethanol production nationally was 2.8 billion gallons in 2003, a 72 percent increase since 2000. Increases in use of biodiesel in North Dakota varied between 50 percent and 60 percent in 2004.

NDSU research is investigating the establishment of a "biorefinery," which would enable wheat straw, an abundant resource in North Dakota, to be refined to produce many products, including:

- Ethanol (used in automotive fuel)
- A bio-based cellulose nanofiber (a substitute for fiberglass) for use in automotive construction
- Byproducts of high-value chemicals, such as Succinic acid (used in polyester-based plastics – estimated $1 billion potential market), Butanetriol (used in rocket propellants – estimated $150 million) and Xylitol (a non-nutritive sweetener – estimated $150 million)

Biodiesel is made from vegetable oil. Research is continuing in the use of soybean oil and expanding to include canola and other oils.

Biofuels are classified as "carbon neutral" – CO_2 is produced upon combustion; plants require CO_2 to grow. Benefits are:

1. Compatibility with clean-air controls and concerns regarding carbon dioxide emission
2. Renewable resource base
3. Decreased dependency on international supplies of fuel
4. Increased use of grain crops to include residues
5. Increased revenue for producers

Biofuels are a valuable commodity and are creating a great deal of interest at the national level. North Dakota needs to act quickly to ensure it is among the leaders in research in this area.

■ Cereal Production Constraints

Plant Disease Forecasting

Plant disease forecasting has resulted in a $21 million increase in profit annually for wheat producers in North Dakota as the result of providing timely information on the need for fungicide application to control plant diseases.

The accurate forecasting of disease probability and insect infestations provides valuable economic and environmental benefits. The disease forecasting system was developed in conjunction with NDAWN (North Dakota Agricultural Weather Network), a climate-monitoring system that the Soil Science Department at NDSU developed.

The Web site map this system produces shows the degree of disease risk of wheat Tan Spot, Septoria Blotch, Leaf Rust and Fusarium head blight in different parts of North Dakota. The benefits of this system are:

- Timely application: With the weather information NDAWN provides, producers can predict disease probability or insect infestation accurately, which enables them to apply fungicide when it has the most impact to reduce disease damage. In addition, accurate predictions prevent under- or over-application. Applying the correct amount of fungicide results in lower costs and/or reduced environmental threats to the land.
- Yield increase: Higher crop yields result from the elimination or better management of disease. Researchers have shown an estimated 20 percent yield response on popular, commercially-grown cultivars.

Grower groups and the North Dakota Wheat Commission support this model.

Web address: **www.ag.ndsu.nodak.edu/cropdisease/cropdisease.htm**

Western Malting Barley Initiative

Continuing intensive research focuses on developing malting cultivars specifically adapted to the climate and soils of western North Dakota. Research includes:

- Developing six- and two-rowed malting barley cultivars for dryland and irrigated production
  - A new six-rowed malting barley (ND16301) with excellent agronomic and malt quality characteristics will be recommended for release in January 2005.
  - A new two-rowed barley (ND19119) with potential for use in ethanol production will be recommended for release in January 2005.

Impacts of Reinvesting in Critical Areas

- Identifying barley diseases that may threaten crop production
  - The barley disease survey has been increased significantly to include western North Dakota and provides weekly reports that farmers can use to make management decisions.
  - Disease data are being used to develop disease-resistant barley varieties adapted to the region.
- Developing management strategies, including fertilizer requirements and predictive risk models
  - Preliminary data indicate that to optimize quality and financial returns, fertilizer recommendations for malting barley should be reduced from 1.5 pounds of nitrogen per bushel of yield goal to 1.2 to1.3 pounds of nitrogen per bushel of yield goal.

North Dakota Agricultural Experiment Station

2003-05 Centers of Excellence Funding
NDSU Beef Systems Center of Excellence

Progress

- Raised $500,000 in private funds and $1 million in federal funds to match the $800,000 appropriated in the 2003 biennium. Another $500,000 needs to be raised to meet our match requirements.
- Continue to look for a business partner. The main criteria include:
  1. A partner who has experience operating small beef cattle packing facilities efficiently and cost effectively
  2. A partner who has brand equity and an existing label in a major beef market

Accomplishments

- Feasibility analysis indicates that there are two major barriers to profitability in small processing facilities. They are:
  1. Identification of a market for the beef products produced, which has potential for market premiums
  2. Garnering value for offal (byproducts)
- A survey of the state's slaughter facilities indicates most garner little or no value from offal. In fact, many pay to landfill the material at a substantial cost. The center continues to explore ways for smaller processors to add value to byproducts.
- A year-round supply of fed cattle is critical to the success of any beef cattle slaughter facility. Data gathered by our research team indicate growth in the state's feedlot capacity. An ample supply of fed cattle is available in the region to support the scale of the facility the center proposes.

Construction of Headquarters Building

NDSU Agriculture
North Dakota Agricultural Experiment Station and NDSU Extension Service

Dickinson Research Extension Center

FACILITIES

Will be acted on by the Board of Higher Education on their Jan. 27-28 date.

Requested Action:

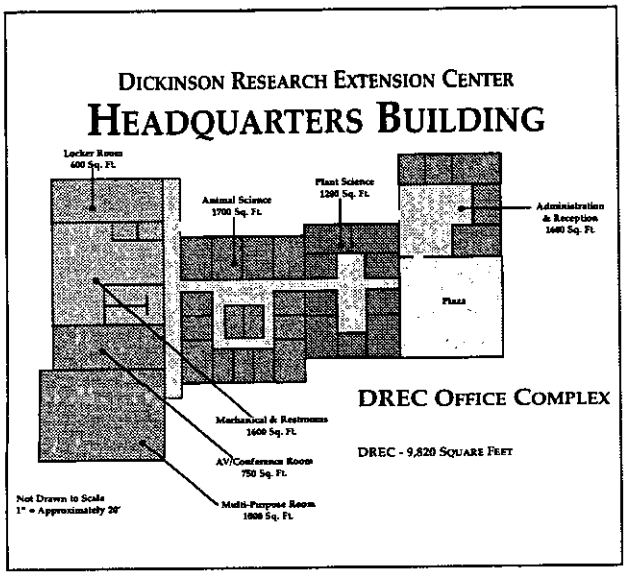
Request legislative authorization to use $400,000 in other funds for the Dickinson Research Extension Center Headquarters Building.

Background Information:

The Dickinson Research Extension Center's (DREC) headquarters building was included as priority No. 2 in the 2002 Campus Master Plan for the North Dakota Agricultural Experiment Station. It originally was submitted to the 2003 Legislative Assembly in HB1021 in the amount of $1.4 million. The sources of funding stated at that time were $1 million from the Dickinson station's oil revenues and $400,000 from local contributions. DREC had expected to receive these contributions during fall 2004, but the funding did not occur. Therefore, it will be necessary to use $400,000 from other internally reallocated sources to complete this project.

The project will combine Center offices currently in four older buildings presently used for research faculty and staff offices. The first is a 2,304 square foot, two-story wood frame building constructed in 1904 as staff housing. This facility was converted into office space in the 1960s and later renovated in the early 1990s. It accommodates 15 employees and is insured at a value of $187,000. The second existing office building was constructed in 1917 as a granary and seed processing facility. The building later was renovated into office space for the Extension center director and eight staff members. This building encompasses 787 square feet and has an insured value of $57,645. Two other older buildings also have facility offices. The proposed new facility will be a 10,000 square foot building designed to include 30 offices for research and Extension staff, along with meeting and technology transfer rooms. The existing 1904 two story building will be repaired and utilized as a conference center, data storage, data processing and temporary graduate type offices and the 1917 field office will be utilized as a communication center and technology hub for the center. The other buildings will maintain current usage.

The $1.4 million project will be funded from Dickinson oil revenue and other internally reallocated funds.



Construction Cost Options

DREC Office Complex

	Sq. Ft.	Cost
Lockerroom	600	$78,000
Mechanical	1600	$208,000
Classroom	1000	$130,000
AV & Conference Room	750	$97,500
Animal Science	1700	$221,000
Plant Science	1200	$156,000
Hallways, etc	1370	$178,100
Administration/Reception	1600	$208,000
Design Fee		$91,754
TOTAL	**9820**	**$1,368,354**

2005 Request

Remodel Existing Headquarters Building	$143,775
New Hdqts Bldg, Parking Lot/Landscaping	$319,500

Phase 2 (New Hdqts Meeting Room) To Be Determined

These numbers and schematic do not represent final figures or design.

2005-07 Executive Recommendation

Northern Crops Institute, NDSU Extension Service, North Dakota Agricultural Research Stations and Agronomy Seed Farm

- The executive recommendation includes a general fund increase of $3,707,258 (or 7.37%) over the 2003-05 adjusted appropriation. This increase will fund the following:
  - $2,649,521 for 4% and 3% salary increases for 2005-06 and 2006-07, respectively.
  - $658,367 for 7% annual increase in employee health insurance.
  - $273,004 for 2.2% annual operating inflation.
  - $326,366 for the following initiatives: Main Research Center – $301,897 for 2 FTE for beef initiative (one-time funding for 2005-07 only); NCI – $24,469 for linking crops to livestock development.
  - **$200,000 decrease** to general fund base operations, which will be replaced with other "ERP" funds for one biennium only.
- The executive recommendation includes $59,799 other fund authority for an ethanol and malting barley initiative at the Dickinson Research Extension Center, to be funded with Dickinson oil revenues.
- The executive recommendation includes funding authority for the following capital projects:
  - $4.5 million Research Greenhouse Complex for the Main Research Station, including $2 million state bonding, $2 million federal funds and $500,000 other funds. ***(This was half of what was requested for each of the funding sources. The request was for a $9 million project.)***
  - $1,320,000 North Central Agronomy Lab and Greenhouse, including $440,000 state bonding and $880,000 other funds.
  - The Central Grasslands headquarters office addition ($250,000 state bonding and $60,000 other funds) was not included in the executive recommendation.

Main Research Station

2005-07 Needs-Based Budget

An increase of $6,181,774 would provide funds to address the following priorities of the State Board of Agricultural Research and Education and related needs of North Dakota agriculture.

SBARE ranked all of the projects for Main Station, Branch Station and Extension together since a lot of the projects are joint efforts. Please refer to the ranked projects by reviewing the narrative in all of the agencies.

 # 1 ranked: Costs to Continue (2.2% Operating Inflation)

$107,754 Total General Fund Increase

Estimated costs to continue of 2.2% for the biennium (2.1% for FY'06 and 2.3% for FY'07) are needed to allow the Agricultural Experiment Station to complete its research mission. These inflationary costs affect the ability to purchase needed equipment, fuel, supplies and other items necessary to conduct research across the state. The cost to continue represents $153,283 for the Main Station and the seven Research Extension Centers in the state. If cost to continue was not included in the recommended budget, the Agricultural Experiment Station would address this shortfall by identifying and implementing cuts in operating and salary.

 # 2 ranked: Center of Excellence for Beef Systems

$600,000 Total General Fund Increase

Geneticist ($160,000 salary and fringe benefits, 1.0 FTE, $40,000 operating)

Meat Quality and Muscle Physiology ($320,000 salary & fringe benefits, 2.0 new FTE, $80,000 operating)

In order to effectively utilize North Dakota's investment in the Beef Systems Center of Excellence, which will allow for state-of-the-art evaluation of beef products, an investment in faculty to provide expertise in meat quality, muscle physiology, and animal genetics is required. Scientists involved in meat quality and muscle physiology will focus on developing nutritional and other production parameters that will result in high-quality meat products. A research animal geneticist working with nutritionists and other animal scientists could effectively associate genotype with desired meat quality traits. The geneticist could develop appropriate selection criteria to ensure desired market quality traits are present in North Dakota beef herds.

 # 3 ranked: Crop Quality and Consumer Needs - Western Malting Barley Project

$99,050 Total General Fund Increase

($6,050 salary and fringe benefits, no new FTE, $57,300 operating, $35,700 equipment)

This project, initiated in the 2001-03 biennium, has been progressing well. Additional time is necessary to allow for some research activities to be completed. Identifying better fertilizer recommendations for the western production areas is of primary importance to improve the probability of producing malting quality barley in the short term. Development of malting barley cultivars with improved traits allowing for better adaptation to the more arid areas of western North Dakota is an ongoing process. Development of high-yielding, high-quality malting barley cultivars for production using irrigation is a second thrust of this research effort.

 # 4 ranked: Crop Quality and Consumer Needs - Potato Genetics

$200,000 Total General Fund Increase

($160,000 salary and fringe benefits, 1.0 new FTE, $40,000 operating)

The success of any cultivar development program resides in the ability to create, identify and utilize genetic variability. Geneticists and plant breeders work as a team to better utilize and incorporate desirable germplasm into adapted material. This research position, located at the Main Station, is critical to the long-term success of the potato improvement program by using genes of importance from wild species of potato and incorporating them into materials that can be used effectively by the breeder.

 # 5 ranked: Investing in Infrastructure Needs for the 21st Century
$1,480,000 Total General Fund Increase
($680,000 operating and $800,000 equipment)

An enhancement of operating funds from $6,100/SY to $10,000/SY ($610,000 to $1,000,000) would provide greater flexibility for NDAES scientists to remain productive and competitive, and allow for improved opportunities to leverage these research dollars with additional grants and contracts. Increased operating funds will offer a broader baseline of support to programs that are critical to fulfill the specific research objectives of the NDAES. This would also assist in the delivery of quality Extension programs across the state.

Costs continue to increase in both operating expenses and technological changes. This requires an investment in equipment and enhancement of operating funds. This infrastructural investment would allow scientists and staff in the NDAES and NDSUES to meet their missions for the future of North Dakota. It is virtually impossible to fund equipment purchases using competitive grant sources as most granting agencies assume that research labs have the equipment, such as autoclaves, centrifuges, high-performance liquid chromatography (HPLCs) and real-time polymerase chain reaction (PCRs), necessary to carry out the proposed research. Also, necessary field equipment such as tractors, combines and planters are heavily used, yet no plan or funds for replacement of field equipment has occurred. Equipment enhancement funds for the Main Station would be used to establish a funding pool to equip Main Station scientists with much needed state-of-the-art equipment. This would allow these excellent researchers to continue their success in leveraging state support with federal and non-federal dollars.

 # 6 ranked: Investing in Infrastructure Needs for the 21st Century - Increased Research Support Staff
$1,147,055 Total General Funds Increase (13.0 new FTE)

Many Main Station and REC research projects do not have state supported technical staff. This requires the scientist to continue to write grants that go toward funding research support staff (a subsistence approach) rather than being allowed to enhance their respective project with non-state funds. Also, this soft support provides no continuity to the research program, in that if a permanent position becomes available, the grant-supported technician often vies for that position. The goal of having a state-funded research support staff person for every scientist (21 more are needed, 13 on and 8 off) would improve the overall research effort, allow for continuity of the program and provide a synergy of effort and improved productivity (two people working together can accomplish more than each one working alone).

 # 7 ranked: Community Vitality and Economic Development - Eductional Program Design
$24,000 Total General Fund Increase
($20,000 salary and fringe benefits, 0.2 new FTE, $4,000 operating)

A specialist in Agriculture Communication would work with NDSUES and NDAES faculty and staff to identify target audiences, determine desired outcomes, select the most appropriate teaching tools (CDs, videoconferencing, Web lessons, public programs, printed materials, media releases, etc.), coordinate development of the educational programs, market the programs to targeted North Dakotans and conduct follow-up evaluation(s). Much of the focus would be on non-credit distance education to reach people across the state (possibly even across the region, nation or world).

 # 8 ranked: Investing in Infrasture Needs for the 21st Century - Graduate Students
$650,000 Total General Fund Increase
(22, 50% part-time Graduate Students @ $13,773/year average salary)

State support of graduate students provides scientists with a highly motivated, highly educated support person. These individuals typically work at least 20 hours a week for the overall project; the remainder of the time is spent in class and/or work on their own research topic. These research topics are relevant topic areas that need to be investigated usually to solve a problem identified in North Dakota. As such, these student workers are an excellent low-cost investment for the state.

 # 9 ranked: Investing in Infrastructure Needs for the 21st Century - Increased Office Staff
$232,000 Total General Funds Increase
(4.0 new FTE, $232,000 salary and fringe benefits)

Effects of attrition and additional responsibilities for data entry, North Dakota Department of Transportation record keeping, and on-line data and billing management have negatively affected many departments and RECs. Increased workloads have impacted the efficiencies of these units, requiring overtime to meet deadlines. Four research office staff would be located in departments/RECs identified as having the greatest need.

 # 10 ranked: Investing in Infrastructure Needs for the 21st Century - Extraordinary Repairs and Deferred Maintenance

$425,165 Total General Fund Increase

($425,165 extraordinary repairs)

Funding for repairs to facilities at the Main Station and each REC has been inadequate to meet all of the needs. Continual deterioration of buildings through age and use affects the long-term viability of research programs. Renovating laboratory space to meet ongoing and future research needs is a continual problem. Increased state support to meet these building needs is critical. Currently, the Main Station is funded at 25% of the OMB building and infrastructure formulas, and has an outstanding deferred maintenance balance of $1,775,260.

 # 11 ranked: Community Rural Vitality and Economic Development - Enhancing ND Communities

$50,000 Total General Fund Increase - (Operating)

Healthy communities are critical to the future of North Dakota and the agriculture industry. This program effort would connect NDSU expertise and resources to communities, provide education, develop collaborations, and build partnerships with communities to help address critical issues. Community economic development research, which would support Extension outreach efforts, would be conducted by the Department of Agribusiness and Applied Economics.

 # 13 ranked: Cropping Systems and Sustainablity - Soil Biology

$150,000 Total General Fund Increase

($120,000 salary and fringe benefits, .75 new FTE, $30,000 operating)

The soils of North Dakota are one of its great natural resources. Crop and livestock systems are rooted in healthy soils. Every project in soil fertility, carbon sequestration or conservation eventually encounters a microbiology roadblock. A scientist working in the area of microbiology, bioremediation, and soil/water contamination from agricultural, industrial and residential sources would provide expertise to a wide range of collaborators, including range scientists, agronomists, microbiologists and agricultural engineers. Lack of a scientist trained in this critical area limits our ability to use a "systems" approach to some of the state's important production and environmental problems.

 # 14 ranked: Cropping Systems and Sustainability - Canola Pathology

$200,000 Total General Fund Increase

($160,000 salary and fringe, 1.0 new FTE, $40,000 operating)

North Dakota leads the nation in the production of canola. This crop, grown on more than 1.2 million acres, is an important alternative to small grain crops, particularly in the northern tier of counties. Success or failure of the crop is often determined by the successful control of disease and insect pests. While scientists are determining best control measures for insect pests of canola, no consistent, sustained effort is placed on developing, testing and reporting on control measures of canola diseases. A research scientist located at the Main Station working specifically in canola pathology would work with REC scientists and staff, and coordinate efforts to determine most appropriate control measures, including genetic control of canola diseases.

 # 15 ranked: Crop Quality and Consumer Needs - Dry Bean Breeding/Genetics

$200,000 Total General Fund Increase

($160,000 salary and fringe 1.0 new FTE, $40,000 operating)

North Dakota leads the nation in the production of dry edible bean, accounting for more than 40 percent of the total U.S. crop. NDSU-developed cultivars dominate the navy bean and pinto bean acreage with as much as 60 percent of the pinto bean acreage planted to NDSU cultivars. Continuing efforts to provide new, improved cultivars that better withstand the environmental constraints in the northern Great Plains and the disease problems associated with the crop justify the need for a research scientist to help address the problems associated with a crop worth in excess of $150-$225 million annually.

 # 19 ranked: Cropping Systems and Sustainability - Range Extension/Research for the Coteau

$56,250 Total General Fund Increase

($40,000 salary and fringe benefits, 0.25 new FTE, $16,250 operating)

The five million acres of the Coteau region of North Dakota is home to 42 percent of the state's cattle and 38 percent of the farms, and represents 44 percent of the state's rangeland. A focused research/Extension position to provide information to clientele on rangeland issues, coordinated with activities of Main Station scientists, would enhance the overall outreach effort of this large, diverse region of the state.

 # 20 ranked: Livestock Systems Development - Non-Ruminant Nutrition, Swine Emphasis
$80,000 Total General Fund Increase
($64,000 salary and fringe, 0.4 new FTE, $16,000 operating)
The swine industry in North Dakota is in a state of transition. The industry is poised to make major strides in production by utilizing new technologies and marketing arrangements. A research scientist with Extension responsibilities to investigate specific problems associated with swine production in North Dakota and disseminate information concerning swine production is requested.

 # 24 ranked: Cropping Systems and Sustainability - Environmental Toxicology
$200,000 Total General Fund Increase
($160,000 salary and fringe, 1.0 new FTE, $40,000 operating)
Understanding the fate of pesticides in urban, agricultural and natural ecosystems is critical to maintaining a safe environment and healthy citizenry. A research environmental toxicologist would work closely with NDSU soil scientists to monitor and assess the impact of agricultural materials through our air, water and soil systems. The research scientist would also interact with entomologists and geneticists to design plants with better defense mechanisms.

The following are unranked by SBARE:

Crop Quality and Consumer Needs

Economic analyses will focus on developing NDSU expertise in understanding global impacts of biotechnology development, evaluating new markets for bio-based products and evaluating processor and consumer willingness to pay for traditional and novel food and industrial products.

Food Systems and Its Impact on Food Security

Strengthening research in bacterial pathogenesis is critical to ongoing programs in animal health, animal production and food safety. Monitoring animal and zoonotic diseases would provide crucial information on improving diagnostic methods and identifying methods to prevent pathogenic organisms. This research position, located at the Main Station, would work on monitoring animal and zoonotic diseases and provide crucial information on improving diagnostic methods and identifying methods to prevent pathogenic organisms.

Livestock Systems Development - Animal Composting

Concern has been raised by the North Dakota Department of Health about the appropriateness of burying dead animals as an acceptable method of disposal on state-operated research centers. Since current methods have been deemed inadequate, developing new methods that meet the requirements of the health department, the environment and society would be beneficial.

Bio-based Industrial Products

Great potential exists in utilizing plant products for non-traditional uses, including energy and industrial purposes (sources of plastics, polymers, industrial oils, etc.). These new uses would provide opportunities for producers in the state to diversify their markets. Investments in this avenue of research would meld agriculture with engineering and chemistry to identify new uses for existing crops and markets for new crops with special traits. A research scientist located at the Main Station in agricultural and biosystems engineering would provide the expertise in identifying new processing techniques.

Budget Reconciliation

NDSU Agriculture

North Dakota Agricultural Experiment Station and NDSU Extension Service

General Fund — Main Research Station

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

2003-05 Original General Fund Appropriation	$ 28,210,740
Base Adjustments:	
Transfer from Main Research Center to Extension Service and Branch Research Centers	(492,408)
2003-05 Adjusted General Fund Appropriation	27,718,332
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	1,467,507
Health insurance and EAP increases	366,472
Operating inflation	107,754
Initiatives[1]	301,897
GF Operating Reduction (Offsetting Incr to Other Funds)	(200,000)
Total Increases (Decreases)	2,043,630
2005-07 Executive Recommendation - General Fund	**$ 29,761,962**
Increase (Decrease) From 2003-05 Adjusted Appropriation	**$ 2,043,630**
Percent Increase (Decrease)	**7.37%**

[1]Initiatives (general fund) include the following: Main Research Center - $301,897 for 2 FTE for beef initiative (one-time funding for 2005-07 only).

Other Funds — Main Research Station

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

2003-05 Original Other Fund Appropriation	$ 32,306,474
Increases (decreases) included in budget request:	
2003-05 Capital projects	(1,120,000)
2005-07 Capital projects	9,000,000
One-time funding for Centers for Excellence	(800,000)
Other increases in estimated income	5,212,364
2005-07 Budget Request	44,598,838
Executive Recommendation Increases (Decreases):	
Compensation Package (4%-FY06 & 3%-FY07)	760,38
Health insurance and EAP increases	250,996
Initiatives	
ERP One-time Operating Funding (Offset to GF Reduction)	200,000
Increase (decrease) capital projects-State Bonding	(2,000,000)
Increase (decrease) capital projects-Other Funds	(2,500,000)
Total Increases (Decreases)	(3,288,620)
2005-07 Executive Recommendation - Other Funds	**$ 41,310,218**

Main Research Station
2005-07 Budget Changes Narrative

OTHER REV - $4,677,000

The North Dakota Agricultural Experiment Station requests an increase in grants and other special fund authorization by $4.677 million. Grants written and received by faculty in the NDAES have driven this increase, as well increases in the size of awards. For example, the NDAES has received substantial grants in Food Safety ($1.5 million) and Biosurveillance ($1.7 million). Also, scientists have received substantial awards from the National Science Foundation ($1.8 million) for wheat research. We anticipate that our scientists will continue to remain successful for grants in the future.

North Dakota Agricultural Experiment Station
2003-05 Impacts

The North Dakota Agricultural Experiment Station develops and disseminates technology that is vital to the production and use of food, feed, fiber and fuel from crop and livestock operations.

To do that, the Agricultural Experiment Station has eight Research Extension Centers strategically placed throughout the state. Researchers at these centers work on solving problems the state faces and test new management techniques and crop varieties. The centers are the Main Station in Fargo, Agronomy Seed Farm (Casselton) and the Carrington, Central Grasslands (Streeter), Dickinson, Hettinger, Langdon, North Central (Minot) and Williston Research Extension Centers.

The centers work with the NDSU College of Agriculture, Food Systems, and Natural Resources' nine departments: Agribusiness and Applied Economics, Agricultural and Biosystems Engineering, Animal and Range Sciences, Cereal and Food Sciences, Entomology, Plant Pathology, Plant Sciences, Soil Science and Veterinary and Microbiological Sciences.

■ Main Station - Fargo

The Main Station at Fargo conducts research in all basic sciences and applied sciences.

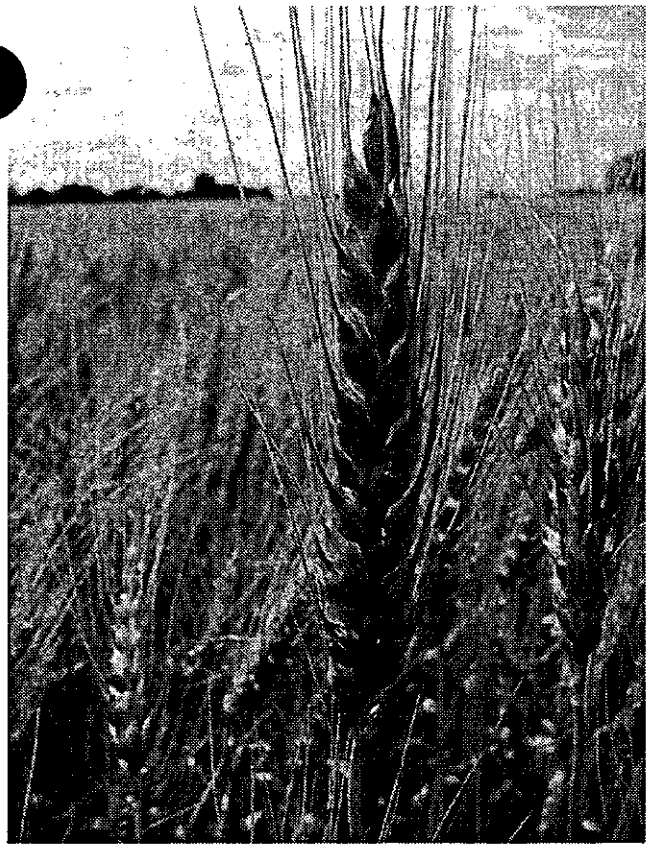
- Plant Sciences - plant breeding and genetics, weed science, biotechnology, crop production and physiology, horticulture
- Plant Pathology - disease forecasting and management, biological control of plant diseases, molecular genetics
- Soil Science - soil fertility, soil management, wetlands/groundwater.
- Cereal and Food Sciences - cereal grain quality, processing, product development
- Entomology - insect pest management ecology
- Animal and Range Sciences - reproductive physiology, genetics, meat processing, animal nutrition, range science, natural resource management
- Agribusiness and Applied Economics - grain and livestock marketing, risk management, global trade
- Agricultural and Biosystems Engineering - bioprocessing, agricultural waste management, irrigation systems and water management
- Veterinary and Microbiological Sciences - microbiology, food safety, veterinary diagnostics

Faculty and staff of the Agricultural Experiment Station work closely with Extension personnel to provide scientifically-based, unbiased information that is needed by North Dakota producers and agribusinesses to make sound management decisions.

IMPACTS: North Dakota Agricultural Experiment Station

Biotechnology

- Several projects addressing genetically enhanced crops added a research base to debates surrounding the release of genetically engineered wheat. Researchers analyzed testing and segregation strategies, concluding that a logistics system based on testing and segregation efficiently can assure buyers of acceptable GE tolerance levels at low cost (between 0.5 percent and 1 percent).
- In a new application of biotechnology, Research was initiated to base cattle feedlot management on animal genetics. The research explores newly available data demonstrating linkages among genotype, feed conversion and carcass grading. The results could encourage widespread adoption of genetic testing and significantly improve feedlot profitability.



NDSU researchers strive to develop wheat varieties that ow better in this region while meeting the market's emand for certain characteristics.

International Trade

The Center for Agricultural Policy and Trade Studies evaluated the impacts of exchange rates on U.S. agricultural competitiveness in world markets. Since a quarter of U.S. production is exported, understanding factors most important in improving U.S. competitiveness is vital. The study found that exchange rates were one of the major factors affecting U.S. competitiveness. The North Dakota congressional delegation has used the results to formulate policy alternatives enhancing U.S. competitiveness.

Variety Development

Markets for agricultural products may be inefficient when signals do not adequately reflect product characteristics important to market participants. A procedure to derive the value of different varieties in meeting buyer demands was developed. Compared to Russ, popular wheat varieties Oxen, Grandin, Butte 86, Amindon, 2375, Reeder, Alsen, Keene, Parshall and Gunner imposed added costs to processors, ranging from 1.1 percent to 4.9 percent, to meet specified levels of absorption, peak time and mix tolerance. Farmers adopt varieties based on agronomic traits, which may differ in end-use traits that processors prefer. The research underscores the need for plant breeders, producers and end users to collaborate on variety development.

North Dakota

A study examined the local socioeconomic impacts of new agricultural processing plants in four communities and new or expanded manufacturing and/or exported service facilities in three other communities. Researchers compared this information to economic trends in communities with no new development. Improved job opportunities and enhanced incomes generally were seen as major positive effects of each of the economic development initiatives. Aside from some management and engineering positions, most of the new jobs appeared to represent employment opportunities for area workers. Residents' incomes were enhanced both by the plants' jobs and payroll and by increased incomes for area farmers. Local leaders indicated community-based plants had stabilized the local economy and population.

IMPACTS: North Dakota Agricultural Experiment Station

Research

Three years of plot-scale research at Tappen and Dawson show that furrow planting of potatoes can increase gross income by $310 per acre, compared with hill planting, as a result of yield gains and shifts in tuber size distributions that garner premiums from processors. Planting in the furrow has the effect of "harvesting" rain or irrigation water and delivering it directly to the plant, compared with hill planting, where the water flows away from the plant and into the furrow. This practice still is in the development phase.

Quality Sensors of Agricultural/Food Products

- Developed a prototype sensor for determining sugar content of sugar beets in the field. One U.S. patent has been issued and another has been approved and is in the final stages of issuance.
- Developed proof-of-the-concept for another sensor to determine protein content of wheat during harvesting. A U.S. and an Australian patent have been approved and are in the final stages of issuance.

Advanced Technologies for Effective Management of Agricultural Production

Nutrient (such as nitrogen, potassium, etc.) management is a critical process for increased production of quality agricultural products. Effective ways for applying nutrients (where and when) is very important. A novel method for predicting residual nitrogen content of soil after the crop's harvest has been developed. This method is in the process of validation for multiple sites and crops.

Advanced Technologies for Controlling Diseases in Crops of Interest to Our Region

Diseases are one of the biggest problems associated with crop production. Chemical application still is one of the most widely used methods to control disease. A technique for using fluorescence-based computer imaging to evaluate spray coverage has helped other scientists and researchers evaluate chemicals and their effectiveness on disease control. This technology has been used for diseases such as Fusarium in grains. Work continues to further develop these technologies.

NDSU associate professors Vern Hofman, left, and Suranjan Panigrahi demonstrate their invention, a sensor that can determine the sugar content in sugar beets almost instantaneously.

Center for Nutrition and Pregnancy

The Center for Nutrition and Pregnancy (CNP) was established recently in the Department of Animal and Range Sciences. The CNP has extensive research and educational efforts involving collaborators at NDSU and throughout North Dakota, as well as nationally and internationally. These research and teaching efforts address issues both critical to livestock production and human health.

Initial Studies and Ongoing Efforts of CNP

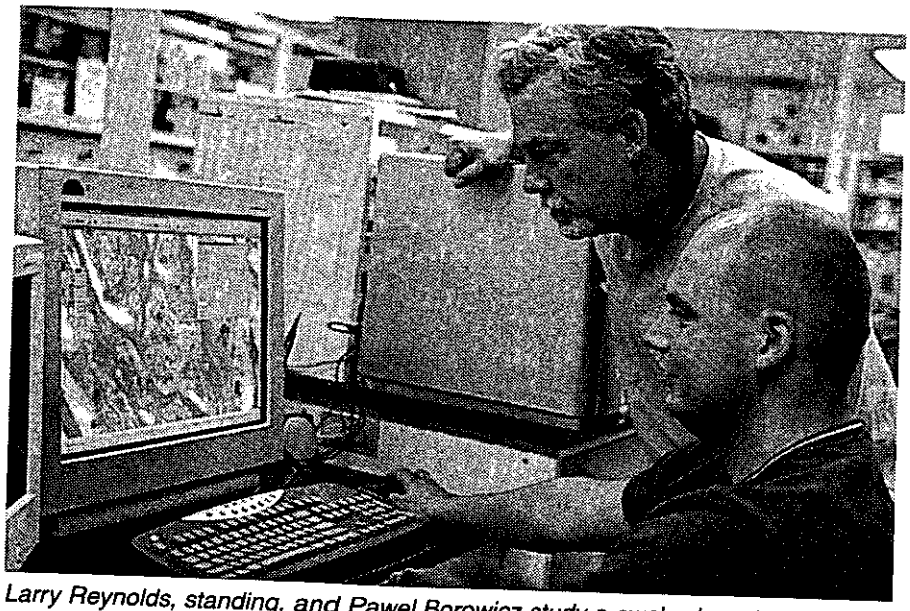
NDSU researchers are looking at how different levels of overall nutrition (both undernutrition and overnutrition), specific nutrients (such as selenium) and age of the dam at first mating impact the growth and development of the offspring. Studies are being conducted to look at oocyte quality, placental vascularity, lactational performance, growth efficiency of the offspring, carcass quality and reproductive performance of the offspring. NDSU is one of a few institutions in the United States where nutritionists and reproductive biologists are joining forces to better understand nutritional needs of the dam and offspring during pregnancy. The efforts of CNP already have secured more than $1.5 million in federal research funding to address this critical issue in livestock production and human health.

Flaxseed in Dairy

Incorporating a beneficial part of flaxseed (e.g., SDG) into yogurt could give humans an alternative to consuming whole flaxseed. However, no information is available on incorporating flaxseed extract (FE) into yogurt. Our research objectives were to determine if 1) adding flaxseed extract containing 20 percent SDG affects the pH, acidity level, lactic acid bacteria and acetaldehyde contents of yogurt; and 2) whether organisms during the fermentation process and the storage of yogurt affected the SDG contents. The fortification of yogurt with flaxseed extracts represents a new type of functional food. This work supports the incorporation of flaxseed extract (SDG) into yogurt. Additional work using in vivo models is needed to support the creation of lignan- fortified yogurt as a functional food.

Pea and Lentil Research

In pea and lentil research, sensory evaluation showed that pasta containing 15 percent to 20 percent peas, lentils or chickpeas has moderate acceptability among human consumers. Consumers seem to prefer the lentil flavor. Incorporating peas and lentils in pasta increased the nutritional value of the pasta products.



Larry Reynolds, standing, and Pawel Borowicz study a ewe's placenta using an image-analysis program to count blood vessels at the Center for Nutrition and Pregnancy.

Wheat

Scab has not been a problem in wheat and barley for the last three years. Alsen, an NDSU wheat release with good scab resistance and quality, occupied 38 percent of the state's spring wheat acreage, with 55 percent to 60 percent of the acreage in north central and northeastern North Dakota. Alsen's leaf rust resistance is starting to break down, however. The North Dakota Wheat Commission, at a meeting with NDSU department chairs, indicated that Alsen saved the North Dakota wheat industry.

Last spring, the Agricultural Experiment Station released Steele-ND as a replacement for Alsen. It has scab resistance about equal to Alsen, but is higher yielding and has a higher test weight and kernel size. The scab resistance is from a different genetic source than in Alsen. In a few years, Steele-ND could replace most acreage of Alsen. Steele-ND also has performed well in the western North Dakota and may begin to replace some acreage of Reeder, an NDSU variety commonly grown in western North Dakota and eastern Montana. NDSU varieties make up about 60 percent of the state's total spring wheat acreage. About 90 percent of the durum acreage is sown to NDSU varieties.

Wheat for the Asian Noodle Market

Hard red spring/hard white spring wheat quality characteristics desirable for the Asian noodle market are being identified. The effects of genotype, environment and flour particle size are being evaluated. The influence of dryland vs. irrigated produced wheat on noodle quality also is being evaluated.

New Soybean and Oat Releases

The Agricultural Experiment Station released a transgenic soybean variety, RG405RR, and a conventional soybean variety, LaMoure. This is the second transgenic variety released from the NDSU breeding program. It has resistance to the herbicide Roundup. About 80 percent of the state's soybean acreage has Roundup resistance.

The Agricultural Experiment Station also has released a hull-less oat variety named Stark. It has about a 10 percent yield advantage over Paul. Another oat variety, Beach, was released in 2004. This high yielding variety has performed especially well in western North Dakota.

A study involving indicated that the forage quality of dwarf oat lines is good -- they produce lower lignin and consequently higher relative feed value than conventional height oat lines in the same trial.

Weed Control

Salt cedar, an invasive weed that can use up to 8 million gallons of water per acre of infestation, has been found along Lake Sakakawea and in a wildlife preserve in Sargent County. Research is being conducted to attempt to control this rapidly spreading weed.

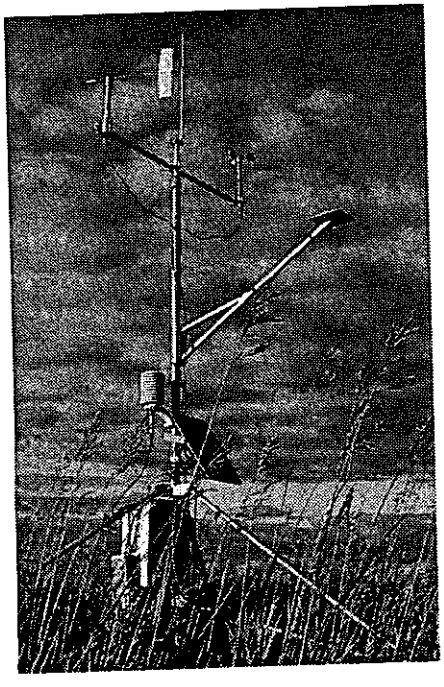
A crew uses equipment to test the water content of salt cedar, a weed that can take large amounts of water away from crops.

Agricultural Meteorology/Climatology Program

The North Dakota Agricultural Weather Network (NDAWN) has undergone monumental change during the past three years. Twelve new stations, making a total of 67, have improved network coverage greatly in western North Dakota. Voice modem upgrades provide callers with instant access to current weather conditions from all stations, an especially valuable service for pesticide applicators.

A new database and integrated Web site, http://ndawn.ndsu.nodak.edu, provide quick, easy access to all archived data and applications in both table and map formats. New growing degree day-crop development applications for barley, canola, corn, potatoes, sugar beets, sunflowers and wheat provide producers and consultants with pesticide decision support information based on their planting dates. Other applications assess the risk of disease development in sugar beets, potatoes, canola and small grains, and also provide fungicide management information.

These changes help maximize pesticide efficiency, which enhances crop yield and quality, reduces overall chemical use and saves producers time and money. All North Dakota residents, businesses and agencies benefit through documentation of hourly weather conditions and extremes, data summarization for any time period, and data analysis and plotting capabilities. From Jan. 1 through Nov. 16, 2004, the new NDAWN Web site had 328,685 page requests. This is a 50 percent increase from 2003.



The NDAWN system uses equipment like this to gather hourly weather data.

Fate and Transport of Bioactive Chemicals

Many of these substances are extremely potent and have been shown to impact aquatic organisms negatively at the part per trillion levels, and have been implicated as the cause of many human health concerns. Sources of these compounds vary, but agricultural practices have the potential of being a large contributor of pharmaceuticals and hormones. This research will help defend agriculture practices against baseless claims from environmental zealots while maintaining minimal impacts to the environment from these chemicals. The economic worth of such studies include the potential savings to human health-care costs; saving aquatic organism diversity, which impacts economics associated with it (e.g., fishing, water sports, lake property value); and the potential to protect agriculture from litigation.

Soil Fertility

Iron deficiency chlorosis is a common and destructive problem in soybean production in North Dakota. This problem likely will become more widespread as the acreage devoted to soybeans expands. Each year, the NDSU Soil Science Department screens about 200 commercial and public varieties, and as many breeding lines, for resistance to this deficiency. Greenhouse studies also are conducted year-round to study the physiological response of soybeans to high pH soils, and to evaluate new fertilizers. The department also provides information about varieties and breeding lines to scientists in the Plant Sciences Department as they look for the genetic markers related to chlorosis resistance.

Infectious Diseases

Infectious diseases are a major issue in animal agriculture, which is an important industry in North Dakota, potentially contributing more than $600 million to the economy. Infectious diseases most likely cause losses in the tens of millions of dollars due to vaccination, veterinary care and loss of animals. North Dakota is a border state and has one of the busiest livestock importation ports in the nation. Therefore, the potential is high for the introduction and spread of livestock pathogens into and beyond the state. Understanding the nature of these infectious disease-causing pathogens will help reduce their impact.

Approximately half of known pathogens, and a majority of the new or emerging pathogens, are zoonotic (transmissible between animals and people). Therefore, animal health and public health are closely linked. Much of the current work in molecular pathogenesis, disease surveillance and disease prevention provide direct benefits to areas of public health and human disease. In other cases, the work in this department serves as a model for related areas in people. As a result, the research in Veterinary and Microbiological Sciences impacts agriculture in the state, animal health and public health. The related work in food systems and food safety addresses additional critical needs in society.

Kris Ringwall, director of the Dickinson Research Extension Center, shows off the new mobile laboratory designed to fight bioterrorism and diseases in livestock. The self-powered lab is a collaborative effort involving North Dakota State University, Dickinson State University and the Research Extension Centers in Dickinson and Hettinger.

Veterinary Diagnostic Services

The primary service mission of Veterinary Diagnostic Services (VDS) is to provide quality and timely veterinary diagnosis support to veterinarians, animal owners and producers, and the public health sector, and function as an integral part of the local, regional, national and international biosurveillance network. In 2003, 10,767 cases were processed at the North Dakota Veterinary Diagnostic Laboratory (VDL). Approximately 20 percent of the cases were bovine, 17 percent canine, 30 percent equine, 5 percent feline, 5 percent porcine, 3 percent ovine and 0.3 percent caprine. About 10 percent of the cases were feed and water. Most cases were submitted from North Dakota (65 percent) and Minnesota (26 percent). The North Dakota/Minnesota veterinary profession and animal health communities depend on the lab. In some cases, such as toxicology, we provide a national/international level of service. The toxicology section provided diagnostic evaluation and interpretation of toxicology cases for multiple constituents, including veterinarians, specialists, agribusiness and NDSU researchers.

The VDL also has expanded collaborations with the North Dakota Department of Health and related disease surveillance programs. The VDL continues to conduct diagnostics of all nonhuman exposure rabies cases in North Dakota. The laboratory also is involved in a national surveillance network for chronic wasting disease (elk, deer) and bovine spongiform encephalopathy, and a federally-supported surveillance program for West Nile Virus (horses/birds). A biosafety level 3 suite was completed for handling of high-risk pathogens.

Research Focuses on Plant Disease Resistance, Forecasting and Control

Department of Plant Pathology research assists in the development of plant cultivars with genetic resistance to disease for major crops. Other research identifies new and more efficient plant disease management techniques for diseases that cannot be controlled with genetic resistance. All of these advances allow crop producers and homeowners to better control plant diseases with less economic inputs, including less fungicide use. Specific examples include:

- The wheat cultivar Steele-ND possesses genetic resistance to scab, a disease that has cost the North Dakota economy more than $1 billion since 1993, and to leaf rust, which caused $50 million in losses in 1999 alone. The department also assists in the development of new cultivars of wheat, barley, soybean, dry bean, potato and other crops. In the next few years alone, all disease-resistant varieties will save North Dakota producers hundreds of millions of dollars in yield and quality losses. Additional savings will be realized from reduced fungicide and other economic inputs.
- Disease forecasting models for wheat and barley scab and for white mold in canola and other row crops help producers maximize the effectiveness of fungicides that are applied to fields. These models tell producers when and where epidemics likely will develop so producers can make fungicide applications in a timely manner. Of equal importance, these models tell producers where disease pressure is expected to be low. This saves input costs and protects the environment by eliminating unnecessary fungicide application.
- Departmental researchers work with the federal Environmental Protection Agency to obtain special permission for producers to use effective fungicides off the product label to control plant diseases. These Section 18 registrations are critically important to producers. For example, a Section 18 registration in 2003 allowed the fungicide Folicur to be used to control wheat scab. The product then was applied to 1 million acres. These applications increased the value of North Dakota wheat by $23.5 million. Other Section 18 registrations have been obtained for diseases in sunflower, canola, dry beans and other crops.

AGENCY OVERVIEW

Agronomy Seed Farm

North Dakota Agricultural Experiment Station

Agency Statutory Authority

North Dakota Century Code 4-05.1.

Agency Description

The Agronomy Seed Farm is a 750 acre farm located near Casselton, ND which has been a part of the NDAES since it was gifted to the state in 1950. It was the result of a fund drive conducted by the North Dakota Crop Improvement Association who solicited farmers, seed companies and many others throughout the state to help establish a farm whose main purpose would be to increase seed of new varieties as they were developed by the plant breeding and supporting departments of the NDAES. The ASF also propagates older but still desirable varieties for the seedsmen of the area.

Agency Mission Statement

To produce an adequate supply of Foundation grade seed for the seedsmen of the state and area at a reasonable price.

Agency Performancy Measures

Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

Agency Future Critical Issues

The critical issues facing the ASF are a continued demand for Foundation grade seed, favorable weather for growing seed and an adequate supply of varieties that are in demand by the seed industry. If these three items are present and good commodity prices accompany them, the future of the ASF is secure.

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Agronomy Seed Farm

The Agronomy Seed Farm (ASF) remains committed to its primary function of producing Foundation grade seed of new and still popular older varieties of publicly developed seed in demand by the seed trade. This results in a consistent role year after year. The major change has been an increase in corn and soybean acreage over large areas of the state, with a corresponding decrease in some traditional cereal grain crops.

This trend has had a negative effect on the overall seed demand at the ASF in recent years because the seed farm doesn't produce corn seed and most of the soybean demand is for Roundup Ready (RR) varieties. NDSU has only recently obtained access to the marketing ability for the RR trait in soybeans, so we have fewer RR soybean varieties developed and available for sale.

Although the RR system has large appeal to the higher producing soybean areas of the state, recent increases in the price of RR seed make it cost-prohibitive for many of the fringe soybean producing areas of the state, where the additional cost for the seed cannot be recaptured at their normally lower-yield levels. These growers and some from the more productive areas are returning to conventional varieties to reduce their seed and total production costs. The ASF anticipated this and prepared for it by growing a larger supply of conventional soybean varieties to meet the demand.

Eleven of the 13 varieties grown in 2004 were conventional varieties and several are sold out. We see more demand for these varieties in future years and will continue to grow enough seed to meet the demand while also continuing to serve the needs of the Roundup Ready seed trade.

The Agronomy Seed Farm also will remain active in the seed production of our traditional crops, such as wheat, barley and oats, because they continue to be important across the state. But, as in the past, our role and crop mix will change as needed to serve the seed industry.

The secondary role of the ASF is to assist in the research efforts of the Main Station scientists, especially in the development, performance evaluations, initial increases and purifications of various crop varieties. This work complements the primary seed production function of the ASF.

Budget Reconciliation

NDSU Agriculture
North Dakota Agricultural Experiment Station and NDSU Extension Service

Other Funds — Agronomy Seed Farm

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

2003-05 Original Other Fund Appropriation	$ 1,166,604
Increases (decreases) included in budget request:	
2003-05 Capital projects	
2005-07 Capital projects	
One-time funding for Centers for Excellence	
Other increases in estimated income	9,868
2005-07 Budget Request	1,176,472
Executive Recommendation	
Increases (Decreases):	
Compensation Package (4%-FY06 & 3%-FY07)	18,131
Health insurance and EAP increases	5,082
Initiatives	
ERP One-time Operating Funding (Offset to GF Reduction)	
Increase (decrease) capital projects-State Bonding	
Increase (decrease) capital projects-Other Funds	
Total Increases (Decreases)	23,213
2005-07 Executive Recommendation - Other Funds	**$ 1,199,685**

2005-07 Executive Recommendation

Northern Crops Institute, NDSU Extension Service, North Dakota Agricultural Research Stations and Agronomy Seed Farm

- The executive recommendation includes a general fund increase of $3,707,258 (or 7.37%) over the 2003-05 adjusted appropriation. This increase will fund the following:
  - $2,649,521 for 4% and 3% salary increases for 2005-06 and 2006-07, respectively.
  - $658,367 for 7% annual increase in employee health insurance.
  - $273,004 for 2.2% annual operating inflation.
  - $326,366 for the following initiatives: Main Research Center – $301,897 for 2 FTE for beef initiative (one-time funding for 2005-07 only); NCI – $24,469 for linking crops to livestock development.
  - **$200,000 decrease** to general fund base operations, which will be replaced with other "ERP" funds for one biennium only.
- The executive recommendation includes $59,799 other fund authority for an ethanol and malting barley initiative at the Dickinson Research Extension Center, to be funded with Dickinson oil revenues.
- The executive recommendation includes funding authority for the following capital projects:
  - $4.5 million Research Greenhouse Complex for the Main Research Station, including $2 million state bonding, $2 million federal funds and $500,000 other funds. ***(This was half of what was requested for each of the funding sources. The request was for a $9 million project.)***
  - $1,320,000 North Central Agronomy Lab and Greenhouse, including $440,000 state bonding and $880,000 other funds.
  - The Central Grasslands headquarters office addition ($250,000 state bonding and $60,000 other funds) was not included in the executive recommendation.

Branch Research Centers
2005-07 Needs-Based Budget

An increase of $1,540,359 would provide funds to address the following priorities of the State Board of Agricultural Research and Education and related needs of North Dakota agriculture.

SBARE ranked all of the projects for Main Station, Branch Station and Extension together since a lot of the projects are joint efforts. Please refer to the ranked projects by reviewing the narrative in all of the agencies.

 # 1 ranked: Costs to Continue (2.2% Operating Inflation) **$45,529 Total General Fund Increase**

$5,320 operating Dickinson
$5,347 operating Central Grasslands
$8,830 operating Hettinger
$5,188 operating Langdon
$3,115 operating North Central
$6,184 operating Williston
$11,545 operating Carrington

Estimated costs to continue of 2.2% for the biennium (2.1% for FY'06 and 2.3% for FY'07) are needed to allow the Agricultural Experiment Station to complete its research mission. These inflationary costs affect the ability to purchase needed equipment, fuel, supplies and other items necessary to conduct research across the state. The cost to continue represents $45,529 for the seven Research Extension Centers in the state. If cost to continue was not included in the recommended budget, the Agricultural Experiment Station would address this shortfall by identifying and implementing cuts in operating and salary.

 # 3 ranked: Crop Quality and Consumer Needs - Western Malting Barley Project

$188,950 Total General Fund Increase

$62,845 Dickinson ($33,502 salary and benefits, no new FTE, $29,343 operating)
$118,105 Williston ($92,405 salary and benefits, no new FTE, $25,700 operating)
$8,000 Hettinger ($6,080 salary and benefits, no new FTE, $1,920 operating)

This project, initiated in the 2001-03 biennium, has been progressing well. Additional time is necessary to allow for some research activities to be completed. Identifying better fertilizer recommendations for the western production areas is of primary importance to improve the probability of producing malting quality barley in the short term. Development of malting barley cultivars with improved traits allowing for better adaptation to the more arid areas of western North Dakota is an ongoing process. Development of high-yielding, high-quality malting barley cultivars for production using irrigation is a second thrust of this research effort

 # 5 ranked: Investing in Infrastructure Needs for the 21st Century - Operating Enhancement

$420,000 Total General Fund Increase

$60,000 Dickinson operating
$60,000 Hettinger operating
$60,000 Williston operating
$60,000 North Central operating
$60,000 Carrington operating
$60,000 Central Grasslands operating
$60,000 Langdon operating

An enhancement of operating funds of $60,000 per agency would provide greater flexibility for NDAES scientists to remain productive and competitive, and allow for improved opportunities to leverage these research dollars with additional grants and contracts. Increased operating funds will reduce the impact of inflation and other rising costs that affect research activities and offer a broader baseline of support to programs that need to continue their efforts in attaining grant funds to fulfill their specific research objectives.

Costs continue to increase in both operating expenses and technological changes. This requires an investment in equipment and enhancement of operating funds. This infrastructural investment would allow scientists and staff in the NDAES and NDSUES to meet their missions for the future of North Dakota. This would allow these excellent researchers to continue their success in leveraging state support with federal and non-federal dollars.

 # 6 ranked: Investing in Infrasture Needs for the 21st Century - Increase Research Support Staff

$705,871 Total General Funds Increase 8.0 New FTE

Many Main Station and REC research projects do not have state supported technical staff. This requires the scientist to continue to write grants that go toward funding research support staff (a subsistence approach) rather than being allowed to enhance their respective project with non-state funds. Also, this soft support provides no continuity to the research program, in that if a permanent position becomes available, the grant-supported technician often vies for that position. A goal of having a state-funded research support staff person for every scientist (21 more are needed, 13 on and 8 off) would improve the overall research effort, allow for continuity of the program and provide a synergy of effort and improved productivity (two people working together can accomplish more than each one working alone). This would provide 1 FTE at each of the Centers (2 at Hettinger) at a cost of $88,234 for salary and fringe benefits for each fte.

 # 22 ranked: Livestock Systems Development - Transition Funding

$100,000 Total General Fund Increase - Carrington

$88,234 Salary and Wages 1.0 FTE, $11,766 Operating

Most of the beef calves born in the state are shipped to feedlots in other states. In order to add value to the beef cattle industry, to the wide array of grains produced in the state, and the by-products from numerous value-added companies, research on fed beef systems is needed to improve efficiencies of this production method in the state. Research programs at the Carrington REC, other centers, and the Main Station will focus on fed beef. The Carrington REC is ideally suited to this research endeavor, with the infrastructure necessary to support this intensive research program. This funding is to offset funding received from other research activities at the Carrington REC that would be reduced to allow the completion of the fed beef research agenda.

The following are unranked by SBARE:

Livestock Systems Development - Animal Composting

Concern has been raised by the North Dakota Department of Health about the appropriateness of burying dead animals as an acceptable method of disposal on state-operated research centers. Since current methods have been deemed inadequate, developing new methods that meet the requirements of the health department, the environment and society would be beneficial. Operating funds are included in each Center as follows: $12,501 at Dickinson, Central Grasslands, Hettinger and Carrington, and $10,001 at Langdon, North Central and Williston.

AGENCY OVERVIEW

Central Grasslands Research Extension Center - Streeter

North Dakota Agricultural Experiment Station

Agency Statutory Authority

Century Code 4-05.1

Agency Description

The Central Grasslands Research Extension Center (CGREC) conducts research for the Coteau Region of North Dakota. Research objectives are to increase the range-carrying capacity of native range emphasizing conservation and preservation, stabilize grass production to compensate for the vagaries of the weather and precipitation as it influences forage production in the rainfed agriculture, identify the impact of different management systems upon beef production in the central region and explore the increased use of crop residues and byproducts for the maintenance of the cow herd. CGREC's primary focus is management of grassland acreage, which occupies about one-third of the agricultural land in the state, with development of practices to improve production and increase returns to cattle.

Agency Mission Statement

The Central Grasslands Research Extension Center (CGREC) was established by the 1977 legislature in response to demands from producers in the Coteau region to "Fulfill those research needs which cannot be accomplished at any presently existing experimental facility, because of peculiar types of grasses, soils, precipitation, and climate."

There are over five million acres of native rangeland in the Coteau region of North Dakota constituting 40% of the state's rangeland and 38% of the states's farms. Livestock is the second largest ag industry in the state and 42% of the state's livestock is raised in the Coteau area.

The legislated mission of the CGREC is as follows: "The CGREC shall conduct research designed to fulfill needs within an area bounded by the Missouri River on the west and the James River on the east with research objectives as follows:

1. To increase the range-carrying capacity of native range with emphasis on conservation.
2. Stabilization of grass production to determine how to best compensate for the variability of the weather as it influences forage production.
3. Identification of different management systems on beef production in the central region of the state.

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4. Exploration of increased use of crop residues and by-products for the maintenance of the cow herd.
5. To disseminate research results and information for the benefit of the state of North Dakota."

Agency Performance Measures

Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

Agency Future Critical Issues

To facilitate this new program, an addition to the office/lab building at the CGREC is critically needed. This addition would include a meeting room on the ground floor large enough to accommodate groups of up to 100 and office and labs on the second floor for CGREC staff and visiting scholars. To be able to fully satisfy the goals set forth by HB 1528 which established the CGREC, a full-time Extension position is needed to assist in the delivery of research results. This position would also assist in facilitating communications and coordination of Extension programs within the NDSU range and livestock system. The needs based budget submitted contains a request for additional funding for operating and technical support. These funds are needed to continue the current program of support for graduate students studying rangeland ecology and the CGREC.

■ Central Grasslands Research Extension Center - Streeter

Proper Grazing Management Can Mean More Forage During a Drought

Research of the NDSU Soil Science Department conducted at the Central Grasslands Research Extension Center (CGREC) has revealed that grazing management affects a pasture's ability to provide forage during a drought. They conducted extensive studies in spring 2004 on three management systems: season-long, idle and four-pasture rotation. Data from this study revealed new information — soils on idle land such as CRP have high surface infiltration rates, but low below ground water flow; roots of the plants on the idle study site had shorter root penetration; and soils on a season-long study site had low surface water infiltration and low belowground water flow, and the plant roots were short with little depth and diversity. The study also showed that the plant community on a four-pasture rotation system had better diversity, water penetration was high at the surface, and belowground flow also was much better than at the other sites. But most importantly, plants on the rotation site had deep root penetration. What this means for producers is that during times of drought, plant communities under rotational grazing will have more soil moisture available and greater ability to extract that moisture and produce more forage.

Visiting Chinese scholar Guojie Wang collects plant samples for a grazing intensity study he worked on last fall at the Central Grasslands Research Extension Center near Streeter.

Demonstrating Best Management Practices for Range and Livestock Producers

To provide a response to producers requesting demonstrations on how they can make a prosperous living on rangeland, the CGREC applied for and was awarded a U.S. Department of Agriculture grant that will set up and monitor a model farm. The farm will evaluate best management practices that NDSU range and livestock researchers developed in the past decade. A committee of professionals, including representatives of the Natural Resources Conservation Service, NDSU and North Dakota Stockmen's Association, will help develop this model farm and provide production and marketing advice. Included in this grant is funding for an Extension Service specialist who will work one-on-one with producers throughout North Dakota to set up rangeland monitoring sites on their ranches and develop range management plans.

Assisting with the Development of Natural Resource-based Tourism

As an industry, tourism plays a major role in economic development and job creation in the United States. It has a direct and indirect economic impact exceeding $800 billion in this country. It is responsible for more than 10 million jobs and produces more than $20 billion in trade surplus. Tourism is a human-resource intensive industry and can create quality jobs across the full employment spectrum. According to an NDSU economist, the North Dakota tourism industry generates more than $1.28 billion in the sale of goods and services to out-of-state markets, more than any other primary industry in the state. The CGREC is developing programs to assist producers who wish to take advantage of the increased interest in natural resource-based tourism. The center is seeking resources to develop programs to train and assist with the development of accommodations, marketing, programs and cooperative ventures.

Central Grasslands Research Extension Center - Streeter

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

General Fund:	
2003-05 Original General Fund Appropriation	$ 911,996
Base Adjustments:	
Reallocation of revolving equipment pool	(88,334)
Transfer from Main Research Center to Extension Service and Branch Research Centers	19,382
2003-05 Adjusted General Fund Appropriation	843,044
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	35,137
Health insurance increases	11,646
Operating inflation	5,347
Initiatives	
Total Increases (Decreases)	52,130
2005-07 Executive Recommendation- General Fund	**$ 895,174**

Other Funds:	
2003-05 Original Other Fund Appropriation	$ 755,391
Increases (decreases) included in budget request:	
2003-05 Capital projects	
2005-07 Capital projects	310,000
Other increases in estimated income	326,936
2005-07 Budget Request	1,392,327
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	3,282
Health insurance and EAP increases	1,906
Initiatives	
Increase (decrease) capital projects-State Bonding[1]	(250,000)
Increase (decrease) capital projects-Other Funds	(60,000)
Total Increases (Decreases)	(304,812)
2005-07 Executive Recommendation-Other Funds	**$ 1,087,515**

[1]Eliminated $250,000 Central Grasslands Headquarters Office Addition.

Branch Research Centers
2005-07 Budget Changes Narrative

EQUIP REVOLVING FUND -
This represents the reallocation of the equipment revolving fund between the various branch research centers. During the 2003-05 biennium, Central Grasslands ($88,334), Langdon ($88,333) and North Central ($88,333) received allocations from the equipment revolving fund. During the 2005-07 biennium, the allocations will be made to (Dickinson $88,333), Carrington ($88,333) and Williston ($88,334).

Dickinson plans to use the funds to purchase a medium to high horse power field tractor for use in no till and forage research.

Williston plans to use the funds to purchase a 120 HP tractor and a disc or hoe drill.

Carrington plans to replace an irrigation center pivot and feedlot equipment.

AGENCY OVERVIEW

Dickinson Research Extension Center

North Dakota Agricultural Experiment Station

Agency Statutory Authority

Century Code 4-05.1

Agency Description

The Dickinson Research Extension Center (DREC) is a complex center with animal, agronomic, and range scientists working to improve aspects of management, breeding, feeding, and disease control of livestock, developing improved agronomic practices for production in western North Dakota, and evaluation and management of native rangeland, pasture, and forage production. The scientific diversity provides for a broad perspective in evaluating the various agricultural systems in southwest North Dakota. The Center operates 4,916 acres of land and works with 13 counties south and west of the Missouri River.

Agency Mission Statement

The DREC was aurhorized by the 1905 Legislature and shall conduct research and education on increasing the carrying capacity of native rangeland, with emphasis on conservation and preservation for future generations; on grass production to determine how to best compensate for the vagaries of the weather; on beef cattle breeding, cow/calf management and heifer development; on productivity of all agricultural products of the soil; and on profitable cropping systems that achieve the necessary balance between profitability and conservation of all natural resources.

Agency Performance Measures

Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

Agency Future Critical Issues

Western North Dakota is at another "fork in the road" dealing with problems associated with current and historical agricultural systems. Although these systems work for some, the end result has been accelerated depopulation, leaving an aging rural population. Leadership is needed, direction is needed, and answers are needed. The answer is not "more of the same."

The original premise under which this area of the country was settled did not account for regional differences in potential environmental fragility. From east to west, North Dakota presents several

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AGENCY OVERVIEW: Dickinson Research Extension Center

very different landscapes and most definitely transcends biomes. Agricultural practices which do not recognize limitations and opportunities for each specific biome are difficult to sustain. Sustainable production systems must be developed and market opportunities enhanced to ultimately support prairie communities and sustain viable societies.

The historical focus of most agricultural production systems has primarily been improving the efficiency of raw food production. Consequences of this focus have not always been desirable. Soil and water quality and the demographics of the rural landscape have all been negatively impacted to some degree by this somewhat limited, short-term emphasis. Expanding this focus to include the integration of environmental and urban needs and recreational demands is required to ensure true system sustainability in the future.

The current disengagement of the general population from agriculture within the United States means production systems must be self sustaining. These systems must produce high quality food, and in the future, meet urban needs to sequester carbon. Hopefully, a win/win situation, the "real" urban benefit from crops and forages grown in western North Dakota may be carbon stored in agricultural systems, and the "real" rural benefit the value of the products produced.

A shift from food production agricultural systems to those embracing the integration of agriculture with urban and recreational demands is needed. The past has successfully increased the efficiency of agricultural food production, but was the price worth the end result. For those in western North Dakota, the outcome is certainly being questioned. In response, a new approach needs to be embraced. A concept of integrated agricultural systems (sustainable at the local level, beneficial to our urban partners and capable of feeding the world's people) is needed. This production system must not only enhance production efficiency, but also integrate sequestration of carbon to offset the industrialization and concentration of the world's population (greenhouse effect) and reduce negative impacts on soil and water quality (environmental quality concerns). Furthermore, increased efficiency of energy capture within the carbon cycle must be sustainable and bring about a reduced dependence on nonrenewable energy use. And in today's environment, as recent events have so well documented, he system must offer greater protection from bio-terrorism threats by dispersing/decentralizing ood production.

"It's about people" is a phrase utilized by NDSU President Joe Chapman and this phrase is the core of what we do. To dismiss the need for people and minimize the importance of the sociological balance between urban and rural interaction oversimplifies and destroys the sustainability of any social and production system. The future of this region, and the world, must contain people, a population in balance with the total environment and sustaining dignified lifestyles.

■ Dickinson Research Extension Center

Electronic ID

Research into electronic identification to assist beef producers manage their herds is a reality at the Dickinson Research Extension Center (DREC). The North Dakota Beef Cattle Improvement Association and the center are working closely with industry leaders to standardize radio frequency signals and electronic identification methods. The technology will allow producers to evaluate and manage forage resources while measuring livestock performance. With 973,000 cows and nearly 889,000 calves annually, North Dakota beef producers can identify and cull animals that do not meet growth criteria and monitor cattle for performance as they move through the various stages of breeding and calf growth. This conservatively could mean savings of $20 per head and also increase value of an equal amount, which would mean an additional value for producers of $75 million.

A crew tags cattle for Calf Aid, the collaborative effort among beef producers, scientists and research entities to tag cattle electronically.

Integrating Crop and Livestock Systems with Forages in the Great Plains

Identifying barley as producing superior quality forage, compared with oats, should enhance barley production for forage and improve annual forage quality. Identifying birdsfoot trefoil as a potential forage legume that can be rotated with wheat and other grain crops could reduce dependence on synthetic fertilizer to supply the nitrogen needs of cereal grain crops. Introducing birdsfoot trefoil (or other forage legume that would fix nitrogen) could reduce synthetic nitrogen costs by $7.6 million statewide. This does not take into account the potential value of a forage crop as a source of livestock feed. The total impact could be three times higher when you consider the value of the forage.

Crop and Livestock System Integration with Annual Forages

Agricultural (arable and grazeable) land dominates the landscape in southwestern North Dakota. Appropriate integration of crop and livestock systems can be a valuable tool in increasing rural economic development. Including feed and forage production in cropping rotations would provide flexibility in developing cropping systems to help enhance the general sustainability of the underlying ecosystem. Coupling this feed and forage production with resident and value-added ruminant livestock production offers a tremendous springboard for capturing the real value of agricultural production and stimulating additional economic development. Implementing these management practices for 45 days during the nongrowing seasons could mean, conservatively, $8.5 million in savings to beef producers statewide.

Environmental Management Strategies

The beef industry must be in harmony with the environment. This harmonious relationship with the soil, water and air involves animal performance, nutrient retention and waste composting. This study shows how properly managing waste can impact the environment. It also shows that how cattle are cared for can have an impact on them. Bedding material, which captures nutrient matter for composting, and placement on land could reduce synthetic fertilizer needs. With 937,000 cows in the state generating 55 pounds of waste (including water, straw and solid manure), the potential value of waste byproducts would be $20 million.

Dickinson Research Extension Center

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

General Fund:	
2003-05 Original General Fund Appropriation	$ 1,601,257
Base Adjustments:	
Reallocation of revolving equipment pool	88,33
Transfer from Main Research Center to Extension Service and Branch Research Centers	963
2003-05 Adjusted General Fund Appropriation	1,690,553
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	71,160
Health insurance increases	24,703
Operating inflation	5,320
Initiatives	
Total Increases (Decreases)	101,183
2005-07 Executive Recommendation- General Fund	**$ 1,791,736**

Other Funds:	
2003-05 Original Other Fund Appropriation	$ 3,679,877
Increases (decreases) included in budget request:	
2003-05 Capital projects	(1,400,000)
2005-07 Capital projects	
Other increases in estimated income	1,400,000
2005-07 Budget Request	3,679,877
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	16,482
Health insurance and EAP increases	6,863
Initiatives[1]	59,799
Increase (decrease) capital projects-State Bonding	
Increase (decrease) capital projects-Other Funds	
Total Increases (Decreases)	83,144
2005-07 Executive Recommendation-Other Funds	**$ 3,763,021**

[1] Ethanol and malting barley initiative, funded from oil revenues.

Branch Research Centers

2005-07 Budget Changes Narrative

EQUIP REVOLVING FUND -

This represents the reallocation of the equipment revolving fund between the various branch research centers. During the 2003-05 biennium, Central Grasslands ($88,334), Langdon ($88,333) and North Central ($88,333) received allocations from the equipment revolving fund. During the 2005-07 biennium, the allocations will be made to (Dickinson $88,333), Carrington ($88,333) and Williston ($88,334).

Dickinson plans to use the funds to purchase a medium to high horse power field tractor for use in no till and forage research.

Williston plans to use the funds to purchase a 120 HP tractor and a disc or hoe drill.

Carrington plans to replace an irrigation center pivot and feedlot equipment.

AGENCY OVERVIEW

Hettinger Research Extension Center

North Dakota Agricultural Experiment Station

Agency Statutory Authority

Century Code 4-05.1

Agency Description

The Hettinger Research Extension Center (HREC) is a semi-arid site located in southwest North Dakota, providing the most southerly NDSU location in the non-glaciated portion of North Dakota as a site for its agronomy research program. The HREC also is appropriately located at the center of the North Dakota sheep industry, which is the focus of one of its animal research programs and in an area of rapidly growing livestock feeding ventures which is another focus of animal Research at the HREC. Research at HREC involves the disciplines of animal science, range science, agronomy, and agri-business and applied economics. Collaboration is with Main Station scientists and USDA research entities in these research diciplines to improve productivity of livestock and cropping systems and economic development of the region

Agency Mission Statement

The HREC, an outreach of North Dakota State University, provides applied research and education in agriculture and environmental sciences that will enrich the lives of North Dakotans and support economic development.

Agency Performance Measures

Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

Agency Future Critical Issues

- Loss of one complete crop during the current biennium due to drought and frost created special concerns because of unexpected reductions in available funding.
- Labor force deficiencies associated with balancing the current 95 percent budget level required staff reductions which have decreased morale and created constraints to new research initiatives.

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AGENCY OVERVIEW: Hettinger Research Extension Center

- Attempting to increase salary levels adequately to decrease issues of salary compression when compared to in-state peer groups.
- The 2005-2010 strategic plan for HREC suggests reallocation of existing resources from sheep to beef and adoption of an agricultural development philosophy. Changes of this magnitude are slowly accepted.

Hettinger Research Extension Center

Southwest Feeders Program

The Southwest Feeders Program is having a positive effect on the economy in southwestern North Dakota. Certified feed yard capacity continues to grow. Feed costs have averaged 30 cents per pound, using locally grown forages that have netted $50 per acre. A 10 percent increase in livestock fed in the area can expand the economy of the area by $12 million. To date, more than $500,000 in outside funding has been received to support this effort.

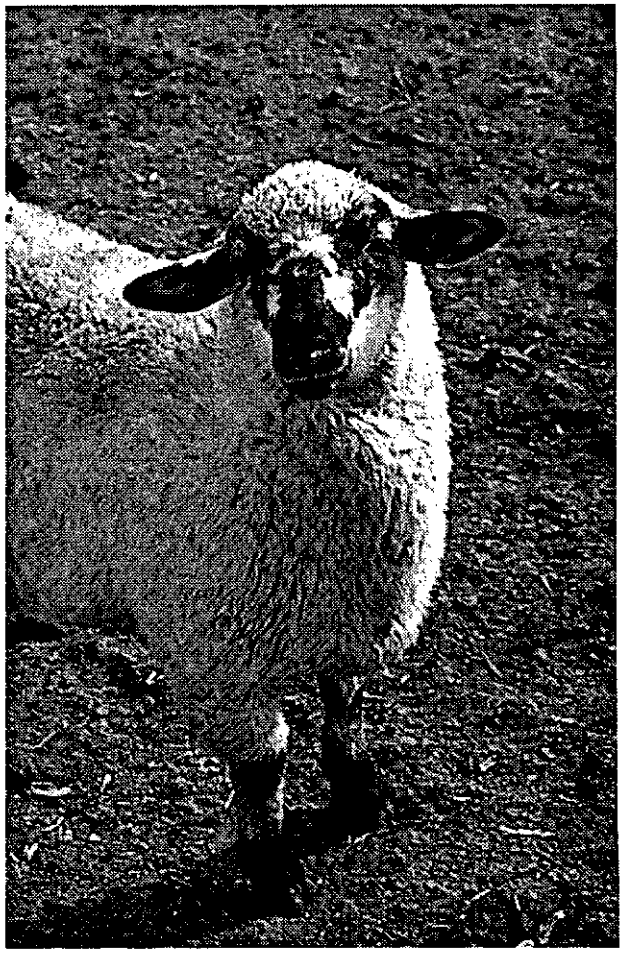
Agronomy

New fertilizer technology being studied has pointed to increased canola yields by optimizing nutrient uptake. Initial results indicate a 28 percent increase in yield with no additional fertilizer.

Animal Science

Cooperation with three neighboring states has resulted in funding from the U.S. Department of Agriculture establishing a regional initiative focused on enhanced, value-added animal production. More than $2 million has been made available to scientists in the region to pursue this objective.

We continue to monitor the "R" gene for resistance to scrapie in sheep. This work is in cooperation with the USDA-Agricultural Research Service disease research unit in Pullman, Wash.



NDSU researchers continue to work on eradicating scrapie, a disease in sheep.

Hettinger Research Extension Center

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

General Fund:	
2003-05 Original General Fund Appropriation	$ 868,573
Base Adjustments:	
Reallocation of revolving equipment pool	
Transfer from Main Research Center to Extension Service and Branch Research Centers	10,965
2003-05 Adjusted General Fund Appropriation	879,538
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	32,329
Health insurance increases	11,581
Operating inflation	8,830
Initiatives	
Total Increases (Decreases)	52,740
2005-07 Executive Recommendation- General Fund	**$ 932,278**

Other Funds:	
2003-05 Original Other Fund Appropriation	$ 652,902
Increases (decreases) included in budget request:	
2003-05 Capital projects	
2005-07 Capital projects	
Other increases in estimated income	200,000
2005-07 Budget Request	852,902
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	9,976
Health insurance and EAP increases	3,665
Initiatives	
Increase (decrease) capital projects-State Bonding	
Increase (decrease) capital projects-Other Funds	
Total Increases (Decreases)	13,641
2005-07 Executive Recommendation-Other Funds	**$ 866,543**

Branch Research Centers

2005-07 Budget Changes Narrative

EQUIP REVOLVING FUND -

This represents the reallocation of the equipment revolving fund between the various branch research centers. During the 2003-05 biennium, Central Grasslands ($88,334), Langdon ($88,333) and North Central ($88,333) received allocations from the equipment revolving fund. During the 2005-07 biennium, the allocations will be made to (Dickinson $88,333), Carrington ($88,333) and Williston ($88,334).

Dickinson plans to use the funds to purchase a medium to high horse power field tractor for use in no till and forage research.

Williston plans to use the funds to purchase a 120 HP tractor and a disc or hoe drill.

Carrington plans to replace an irrigation center pivot and feedlot equipment.

AGENCY OVERVIEW

Langdon Research Extension Center
North Dakota Agricultural Experiment Station

Agency Statutory Authority

Century Code 4-05.1

Agency Description

The Langdon Research Extension Center (LREC) was established in 1907 during the 10th Legislative Assembly of North Dakota. The 719-acre center conducts agricultural research designed to maintain and improve northeastern North Dakota's vital agricultural economy while preserving the region's natural resources for future generations. The Langdon Research Extension Center conducts agricultural research designed to increase productivity of all agricultural products of the soil while maintaining or improving the soil resource base in the dryland agricultural region of northeast North Dakota by the identification of adapted crop species and superior crop cultivars; develop profitable cropping systems that achieve the necessary balance between profitability and conservation of all natural resources. The center shall disseminate research results and information for the benefit of the state.

Agricultural research emphases are designed to assist the region's producers solve production problems unique to northeast North Dakota. The LREC collaborates with program efforts by Main Station scientists on breeding programs in barley, durum, HRSW, potato and alternative crops. In partnership with the NDSU Foundation Seedstocks Program, the LREC works to provide the region's producers with new and improved seedstocks. Additional work done in partnership with agricultural input firms provides the region's producers with dependable and unbiased information designed to assist them to become more profitable.

Recently, efforts have begun in earnest to combine the concepts of agricultural research, information technology and economic/community development. The focus of this effort is to foster opportunities for workforce training, long distance education, value added agriculture and economic sustainability in partnership with the region's producers, economic development groups and others.

Agency Mission Statement

The mission of the NDSU LREC is to enhance the quality of life for all North Dakota citizens with a responsive, flexible and accessible agricultural based research program that combines the concepts of agricultural research, information technology and economic and community development.

Agency Performance Measures

Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed

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out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

Agency Future Critical Issues

The LREC needs to be more progressive in connecting research for the improvement of rural communities and economic development. A major effort has just begun to implement new programming that brings together the concepts of agricultural research, economic and community development and technology transfer.

The mission of the facility includes dissemination of research results and information for the benefit of North Dakota. This will be achieved by utilizing communications technology to increase educational opportunities for the region's producers and the general public. The facility will be a resource to prepare agribusiness industries in northeastern North Dakota to compete globally, showcase new technologies to enhance the region's economy, bring additional educational opportunities to the region, and provide a research base for agriculturally based economic development in the region.

Crop disease pressures continue to increase with the development of new diseases such as black leg. Our ability to quickly respond our research efforts to address changing problems or opportunities will be a critical future issue. Our research is applied research and we will work hard to deliver those results in as quick as a time period as allowed.

The increase in operating dollars and new programs associated with the new learning center is at a critical stage. The extra cost in operating for all activities at the LREC, in addition to extremely high technology costs, is an issue that must be addressed immediately.

■ Langdon Research Extension Center

Agricultural Research

1. Research on spray technologies for crop disease management is allowing regional producers to better control disease and maximize their return on fungicide and application input costs for a variety of crops.
2. Significant increases in crop variety testing for soybeans and other crops at the Langdon Research Extension Center (LREC) and at five off-station locations in other counties are assisting producers in making better decisions on variety selection for traditional and new crops being grown in northeastern North Dakota.

Economic and Community Development and Sustainability

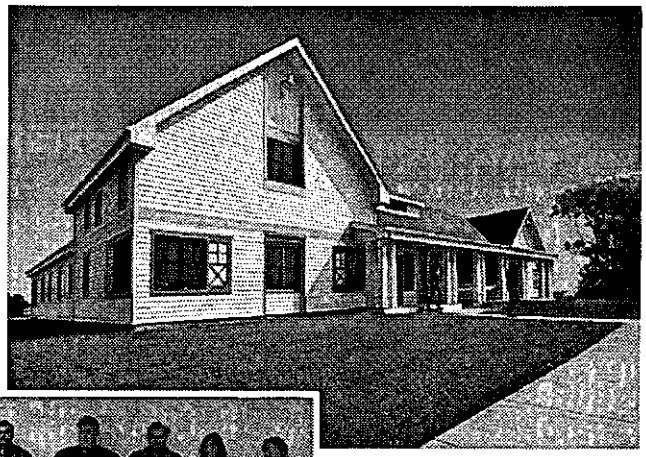
The LREC completed the Vic Sturlaugson Learning Center in early 2004. Between March 1 and Dec. 1, 2004, 184 meetings, seminars, computer classes, workshops, etc., were held at the new facility. More than 3,639 citizens took part in these events.

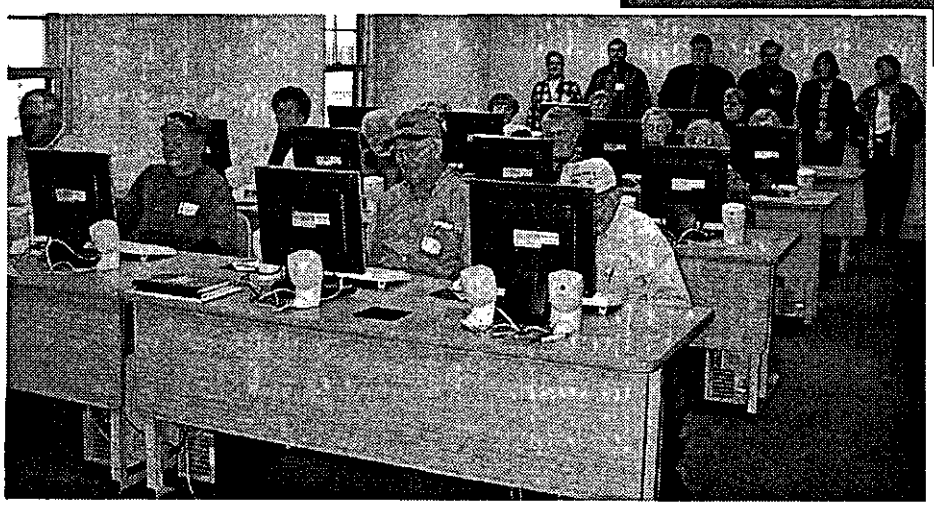
LREC partners with Lake Region State College

A new partnership with Lake Region State College has added a financial outreach program for the region's producers. A farm business management instructor was located at the LREC in 2004 and is working with more than 30 farm families to educate them on proper financial accounting and more effective marketing in their farming operations.

Learning center provides business incubator

An important component of the learning center is the business development incubator. From March to November 2004, the business development incubator housed DataTic Technologies, a Silicon Valley software company relocating to North Dakota, until its permanent facility was completed in Langdon. Plans are in the works to incubate other start-up business ventures at the new facility.





The Vic Sturlaugson Learning Center (above) contains space for a business incubator, a large meeting room for educational gatherings and Extension workshops, a computer and video conference classroom (right) and headquarters for the LREC.

Langdon Research Extension Center

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

General Fund:	
2003-05 Original General Fund Appropriation	$ 911,413
Base Adjustments:	
Reallocation of revolving equipment pool	(88,333)
Transfer from Main Research Center to Extension Service and Branch Research Centers	18,381
2003-05 Adjusted General Fund Appropriation	841,461
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	35,484
Health insurance increases	10,462
Operating inflation	5,188
Initiatives	
Total Increases (Decreases)	51,134
2005-07 Executive Recommendation- General Fund	**$ 892,595**

Other Funds:	
2003-05 Original Other Fund Appropriation	$ 371,472
Increases (decreases) included in budget request:	
2003-05 Capital projects	
2005-07 Capital projects	
Other increases in estimated income	54,156
2005-07 Budget Request	425,628
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	11,387
Health insurance and EAP increases	3,092
Initiatives	
Increase (decrease) capital projects-State Bonding	
Increase (decrease) capital projects-Other Funds	
Total Increases (Decreases)	14,479
2005-07 Executive Recommendation-Other Funds	**$ 440,107**

Branch Research Centers

2005-07 Budget Changes Narrative

EQUIP REVOLVING FUND -

This represents the reallocation of the equipment revolving fund between the various branch research centers. During the 2003-05 biennium, Central Grasslands ($88,334), Langdon ($88,333) and North Central ($88,333) received allocations from the equipment revolving fund. During the 2005-07 biennium, the allocations will be made to (Dickinson $88,333), Carrington ($88,333) and Williston ($88,334).

Dickinson plans to use the funds to purchase a medium to high horse power field tractor for use in no till and forage research.

Williston plans to use the funds to purchase a 120 HP tractor and a disc or hoe drill.

Carrington plans to replace an irrigation center pivot and feedlot equipment.

AGENCY OVERVIEW

North Central Research Extension Center - Minot
North Dakota Agricultural Experiment Station

Agency Statutory Authority
Century Code 4-05.1

Agency Description
North Central Research Extension Center (NCREC) is located one mile south of Minot on Highway 83. The 1,200-acre center specializes in crop research and Extension education activities and Foundation seed production. Approximately 1,500 owned, rented and contracted acres are planted for Foundation seed production each year. The NCREC evaluates conventional and new crops for production in the region and explores weed management and cropping systems to improve the economic potential of crop production in the north central region. The NCREC is a leader in North Dakota on production and disease research of canola, pea, lentil, and chickpea, in addition to the conventional crops of HRS and durum wheat, barley, flax, sunflower and oat. The NCREC works closely with business and economic development leaders in the region to improve the economic vitality of north central North Dakota.

Agency Mission Statement
The North Central Research Extension Center conducts research to increase agricultural productivity in north central North Dakota. The center serves agricultural producers in a 12-county region surrounding Minot through crop research, Foundation seed production and dissemination, and Extension education programs in crop and livestock production. Studies at the center focus on crop variety and new germplasm evaluation, weed control, cropping systems, crop pest management, reduced tillage and soil fertility. Research is conducted on cereal grains, oilseeds, legumes, forages and new specialty crops.

Agency Performance Measures
Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

Agency Future Critical Issues
1. The North Central Research Extension Center needs a new agronomy research laboratory and greenhouse to handle research plot seed, process data and conduct future research on crops, weeds, insects and diseases.

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2. A machine storage building for weather protection and security of farm machinery and equipment.
3. Rising operating, salary and equipment costs.
4. The opportunity (funding) to create Centers of Excellence in:
   - Bio-based products including biomass and bio-fuels
   - Pulse crop production, processing and intermodal transportation to markets
   - Biosecurity along our northern international border.
   - Invasive weed species such as salt cedar
   - Wind energy to hydrogen fuel cell powered equipment, vehicles
   - Biological pest control products and technology
   - New alternative crops
   - Agrotourism
5. Addition to office and technology transfer building.

North Central Research Extension Center - Minot

Pulse crop research

North Dakota has emerged rapidly as the No. 1 producer of pulse crops in the United States. The NCREC is leading agronomy, weed science, plant pathology and entomology research. The NCREC evaluates released varieties and advanced genetic materials adapted to North Dakota for disease resistance, seed quality and high-yield potentials. The NDREC also is evaluating advanced-line fall-seeded winter dry pea and lentil selections for winter-hardiness and yield. In addition, NCREC research has led to registration of new herbicide options in dry pea and chickpea, as well as an understanding of the herbicides' weed control capability and proper use in various soil types. This new registration gives no-till growers a tool to control economically important weeds, including kochia and wild buckwheat.

Statewide seed quality analysis

Seed oil and protein analyzers at the NCREC have saved North Dakota taxpayers about $350,000, compared with commercial analysis. Nuclear magnetic resonance for oil analysis and near-infrared reflectance for protein analysis machines evaluate subsamples from variety trials, seed company evaluations and crop production studies conducted at each of the research centers located across North Dakota. The NCREC has been instrumental in running thousands of seed quality evaluations to insure uniform test results across locations.

Alternative crops

Alternative crops are evaluated for their agronomic traits as potential food, oil and fiber crops adapted for the North Dakota environment. The NCREC conducts research evaluating fiber flax, chan, chia, cuphea, niger, sesame, sun hemp, teff, cumin and kenaf. Niger, cuphea, sun hemp and teff have demonstrated good potential for future crop production in our environment. Niger (finch birdseed) is imported exclusively into the United States. It has been evaluated in variety evaluations and production studies to determine what varieties, soil fertility levels for nitrogen response and the influences differential rates of seeding have on yield.

Minor crops

NCREC research has accelerated the availability of new crop protection products for minor crops such as sunflower, dry pea, chickpea, canola, crambe and flax. This research has helped producers control weeds in no-till systems where soil and moisture are conserved and used more efficiently.

Plant pathology

Fusarium head blight (scab) control research in wheat, durum and barley is ongoing. Fungicide efficacy work and application methodology have improved techniques to lower disease severity and increased seed quality. NCREC research scientists have been instrumental in evaluating pulse crop cultivars' influences by date of planting, seeding rate, fungicide use and efficacy against Ascochyta blight, a devastating disease that affects chickpea seed yield and quality.

Perennial weed control

Canada thistle has been the No. 1 weed problem in North Dakota. Studies at the NCREC from 1998-2004 showed that crop rotation, herbicide selection and timing can be used to reduce high Canada thistle densities to economically acceptable levels. High populations of Canada thistle were reduced more than 90 percent in three crop rotation studies. Crop rotations centered around canola and wheat were very effective in controlling Canada thistle. Some growers have found common milkweed more difficult to control than Canada thistle, but NCREC research demonstrated methods that reduced milkweed densities 42 percent to 93 percent.

Pulse crops, such as dry pea, are growing in popularity in North Dakota.

Budget Reconciliation

NDSU Agriculture
North Dakota Agricultural Experiment Station and NDSU Extension Service

North Central Research Extension Center - Minot

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

General Fund:	
2003-05 Original General Fund Appropriation	$ 856,960
Base Adjustments:	
Reallocation of revolving equipment pool	(88,333)
Transfer from Main Research Center to Extension Service and Branch Research Centers	25,381
2003-05 Adjusted General Fund Appropriation	794,008
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	35,276
Health insurance increases	17,943
Operating inflation	3,115
Initiatives	
Total Increases (Decreases)	56,334
2005-07 Executive Recommendation- General Fund	**$ 850,342**

Other Funds:	
2003-05 Original Other Fund Appropriation	$ 855,550
Increases (decreases) included in budget request:	
2003-05 Capital projects	
2005-07 Capital projects	750,000
Other increases in estimated income	500,000
2005-07 Budget Request	2,105,550
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	26,887
Health insurance and EAP increases	3,541
Initiatives	
Increase (decrease) capital projects-State Bonding[1]	440,000
Increase (decrease) capital projects-Other Funds[2]	130,000
Total Increases (Decreases)	600,428
2005-07 Executive Recommendation-Other Funds	**$ 2,705,978**

[1] State bonding - Increased $440,000 for North Central Agronomy Lab and Greenhouse and eliminated $250,000 Central Grasslands Headquarters Office Addition.
[2] Other funds - Increased $130,000 other funds for North Central Agronomy Lab and Greenhouse.

Branch Research Centers

2005-07 Budget Changes Narrative

EQUIP REVOLVING FUND -

This represents the reallocation of the equipment revolving fund between the various branch research centers. During the 2003-05 biennium, Central Grasslands ($88,334), Langdon ($88,333) and North Central ($88,333) received allocations from the equipment revolving fund. During the 2005-07 biennium, the allocations will be made to (Dickinson $88,333), Carrington ($88,333) and Williston ($88,334).

Dickinson plans to use the funds to purchase a medium to high horse power field tractor for use in no till and forage research.

Williston plans to use the funds to purchase a 120 HP tractor and a disc or hoe drill.

Carrington plans to replace an irrigation center pivot and feedlot equipment.

AGENCY OVERVIEW

Williston Research Extension Center

North Dakota Agricultural Experiment Station

Agency Statutory Authority

Century Code 4-05.1

Agency Description

The Williston Research Extension Center (WREC), established in 1907 and relocated to the present site in 1954, is an 800-acre rainfed farm located in northwest North Dakota near the city of Williston. In 2001, an additional 157 acres were purchased in the Nesson Valley to develop an irrigated research and development project. Studies at the WREC are conducted on crop variety evaluation, herbicide performance and other cultural management research, cropping systems and soil and water conservation practices. The main dryland crops are spring wheat and durum. Barley, oats, safflower, annual pulse crops, canola, flax, alfalfa and other alternative crops are also grown as cash crops or for livestock feed. WREC research is intended to increase the producer's net profit, support crop diversification and encourage more intensive cropping. Soil and crop management systems for sprinkler irrigation and alternative irrigated high value and value-added crop research studies, including the Western Malting Barley program, are also conducted in the MonDak Region, in cooperation with the Montana State University (MSU) Eastern Agricultural Research Center (EARC), Sidney. The Center also conducts safflower, winter wheat, and durum breeding research and variety evaluations, in cooperation with MSU and NDSU Main Station scientists. WREC produces and supplies area farmers Foundation seed of cultivars adapted to the region. Formal cooperation between the NDSU WREC and the MSU EARC was established in January 1994, with a single director responsible to coordinate, broaden, and enhance research programs, and educational delivery systems for the MonDak Region.

Agency Mission Statement

The WREC conducts research to increase agricultural productivity in the semi-arid region for northwestern North Dakota while achieving a necessary balance between profitability and conservation of natural resources.

Research on soil and crop management systems for sprinkler irrigation and alternative irrigated high value/value added crop production are also conducted in cooperation with the Montana State University Eastern Agricultural Research Center at Sidney, MT.

Agency Performance Measures

Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

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AGENCY OVERVIEW: Williston Research Extension Center

Agency Future Critical Issues

The NDSU MonDak Irrigation Research and Development Project in the Nesson Valley will be fully implemented in the 2005-2007 biennium and WREC's top priority is a budget change request in the amount of $150,000 for personnel support and operating and $88,000 for a machinery storage building at the project site 23 miles east of Williston. WREC also requests an agricultural technician position to support the research activities of the soil scientist at a budget cost of $47,269. Projected biennial cost: $197,269 for personnel support and operations and $88,000 for a machinery storage building.

Procurement of funding for T-1 transmission charges associated with our mission in technology transfer delivery is also needed. ITD cost: $20,160 ($840/mo x 24 mos).

A seed sample processing and soils lab building is needed to enhance and improve handling of research seed and soil samples and to provide a basic soils lab for WREC's soil scientist. Also needed is a seed and machinery storage building to enhance Foundation seed storage and additional machinery storage capacity for weather protection and security. Increased funding for the repair, maintenance and upkeep of existing facilities is also needed. Projected biennial cost: $240,000.

Williston Research Extension Center

MonDak Irrigation Research and Development Project

The MonDak Irrigation Research and Development Project obtained all the conditional water permits and purchased and installed the irrigation infrastructure in 2004. The Williston Research Extension Center (WREC) will initiate research and commercialization projects in 2005. Funding support totaling $725,000 was received from the North Dakota State Water Commission; state of North Dakota; U.S. Department of Agriculture-Agricultural Research Service's Northern Plains Agricultural Research Laboratory; the North Dakota Agricultural Experiment Station; NDSU Office of the President; Williston Star Fund; Valmont Industries/Agri-Industries; Busch Agricultural Resources Inc. (Anheuser-Busch Co.); Williams County Water Resource District; Mountrail Williams Electric Cooperative; Garrison Diversion Conservancy District, Carrington; and McKenzie County. Our vision of excellence and mission for this project is based on finding science-based solutions to critical issues facing irrigated agriculture and economic development opportunities for irrigation development and high-value/value-added crop production/processing in western North Dakota while protecting the environment and improving the quality of life for North Dakota citizens. The project will be regional in scope, focus on agricultural research and development and be linked to and supported by high-value/value-added food and other agricultural processing industries to promote growth and expansion of agricultural processing industries, create high-value private sector employment and create new wealth through new and expanded irrigation agriculture. The research staff of the WREC, Montana State University Eastern Agricultural Research Center in Sidney and the USDA-ARS Northern Plains Agricultural Research Laboratory in Sidney will work together with clientele to develop new and improved irrigation technologies and develop and commercialize high-value/value-added crops.

Durum Breeding and Development for the MonDak Region

The MSU EARC and NDSU initiated a conventional, nongenetically modified durum variety development program in 1997. Durum lines are being grown at the EARC for day-length insensitivity evaluation in the winter greenhouse season. Lines with good quality, disease resistance and good agronomic characteristics are tested during the summer growing season in preliminary yield trials under dryland and irrigated conditions. A new double-haploid technology is being used to provide double-haploid lines to produce a completely homozygous line in one generation. This will reduce the time needed for early generation selection to final variety release.

Western North Dakota Barley Project

The WREC staff work cooperatively with NDSU barley breeders, other NDSU scientists and MSU EARC scientists to: 1) develop six- and two-rowed malting barley cultivars for dryland and irrigated production in western North Dakota, 2) develop management strategies for producing malting barley under dryland and irrigated production conditions in western North Dakota, and 3) identify barley diseases present in western North Dakota that could threaten the barley crop. New cultivars for dryland production will have genes that reduce grain protein by up to 2 percentage units, compared with current cultivars. These cultivars also will be bred and developed to maintain acceptable levels of kernel plumpness under dryland growing conditions. Cultivars for irrigated production will be bred and selected to have improved straw strength and disease resistance. Finally, fertilizer recommendations will be developed for malt barley cultivars and predictive models will be developed that allow growers to determine the risk of developing malting barley based on spring stored soil moisture levels.

The Williston Research Extension Center is involved in durum variety development efforts. This durum field is ready for harvest.

Williston Research Extension Center

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

General Fund:	
2003-05 Original General Fund Appropriation	$ 913,010
Base Adjustments:	
Reallocation of revolving equipment pool	88,334
Transfer from Main Research Center to Extension Service and Branch Research Centers	964
2003-05 Adjusted General Fund Appropriation	1,002,308
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	39,189
Health insurance increases	13,552
Operating inflation	6,184
Initiatives	
Total Increases (Decreases)	58,925
2005-07 Executive Recommendation- General Fund	**$ 1,061,233**

Other Funds:	
2003-05 Original Other Fund Appropriation	$ 730,065
Increases (decreases) included in budget request:	
2003-05 Capital projects	
2005-07 Capital projects	
Other increases in estimated income	300,000
2005-07 Budget Request	1,030,065
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	
Health insurance and EAP increases	
Initiatives	
Increase (decrease) capital projects-State Bonding	
Increase (decrease) capital projects-Other Funds	
Total Increases (Decreases)	-
2005-07 Executive Recommendation-Other Funds	**$ 1,030,065**

Branch Research Centers

2005-07 Budget Changes Narrative

EQUIP REVOLVING FUND -

This represents the reallocation of the equipment revolving fund between the various branch research centers. During the 2003-05 biennium, Central Grasslands ($88,334), Langdon ($88,333) and North Central ($88,333) received allocations from the equipment revolving fund. During the 2005-07 biennium, the allocations will be made to (Dickinson $88,333), Carrington ($88,333) and Williston ($88,334).

Dickinson plans to use the funds to purchase a medium to high horse power field tractor for use in no till and forage research.

Williston plans to use the funds to purchase a 120 HP tractor and a disc or hoe drill.

Carrington plans to replace an irrigation center pivot and feedlot equipment.

AGENCY OVERVIEW

Carrington Research Extension Center
North Dakota Agricultural Experiment Station

Agency Statutory Authority

Century Code 4-05.1

Agency Description

The Carrington Research Extension Center (CREC) was established in 1960. The initial focus of the program was an irrigation research effort to support the Garrison Diversion Project plan to divert Missouri River water for irrigation. The Center's scope expanded significantly in the mid 1960's with additional responsibilities for dryland crop production research for central and south central North Dakota and again in 1972 to include livestock research. The central location of the Center is important in that the research program can address crops and issues that represent a significant part of agriculture in North Dakota.

The research effort at the Center focuses on these general program areas: traditional crop variety evaluation, crop production and management, alternative crop development, cropping systems, irrigation, integration of crop and livestock production, beef feedlot nutrition, cow/calf nutrition, feedlot management, foundation seedstocks production, and fostering development of new agricultural enterprises. Through these efforts the Center's research program has gained a national reputation for its involvement in agriculturally based economic development and study of a wide range of crops and cropping systems.

The Center maintains a strong Extension program as three area Extension specialists base their educational programming from the Center. The Extension program emphasis areas addressed by these specialists include agronomy (crop production and crop pest management), livestock (livestock systems), and nutrient management (livestock waste). The Extension specialists develop educational programs that are delivered to regional county Extension staff, individual producers and agribusinesses. Through their efforts, the latest research results and refined crop and livestock management guidelines are shared with all agricultural constituencies as their needs and concerns are identified.

The Center operates on a land base of around 1,400 acres. Of this total, about 700 acres are leased or rented to supplement the research, seed and forage production needs of the Center. The Center has infrastructure to irrigate about 260 acres with center-pivot systems and 120 acres by surface methods. The balance of the acreage is managed as traditional dryland and is utilized primarily for dryland field crop research activities.

CREC facilities include the headquarters unit with buildings and equipment for processing and storage of Foundation seedstocks, equipment maintenance and storage, research laboratory and a residence. The headquarters building has offices for research and Extension staff and large meeting

NDSU
North Dakota State University
ND Agricultural
Experiment Station

rooms for university, community and industry educational meetings. The livestock unit includes research facilities that can accommodate around 750 head. It includes feed and forage storage, a modern feed mill, pole barns, equipment storage, extensive pens and feedlots, and a residence.

Agency Mission Statement

The CREC conducts research that will lead to the enhancement of agriculture and improve the quality of life across the central region of North Dakota. Specifically, the Center conducts research on both dryland and irrigated crop production factors, improved crop cultivars, alternative crop development, beef feedlot nutrition, cow/calf nutrition, integrated crop and livestock systems, cropping systems/crop rotations, environmental impacts of ag practices, and Foundation seedstocks production. The objective is to discover the balance between profitability and conservation of the natural resource base. The results of these studies are disseminated to the entire state through an ongoing Extension educational program.

Agency Performance Measures

Per NDCC Section 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in legislative council office.

Agency Future Critical Issues

The CREC is in need of a capital expansion of the existing headquarters facility to accommodate expanding efforts in both the research and educational program areas. These programs have grown in recent years in response to broad constituency demands. As this growth has occurred, we now find it increasingly difficult to provide adequate office, classroom, and work space for the expanded program efforts.

Additional state funding for the core program at the Center needs to be secured to allow us the basic capabilities to adequately support and conduct our baseline research and Extension programs. Funding patterns through past years have not kept pace with inflationary costs, capital improvement needs and a significantly aging equipment inventory. Further enhancement to the core program will result in the necessary strengthening of our basic operational and support infrastructure for the primary crops and livestock research programs. A lack of infusion of state funds to the core program will soon result in the elimination of a major research program and inability to compete for grants.

The CREC has a significant lack of technical support for the department scientists who lead very diverse research programs. The majority of the departments existing technical support staff is financed with grant based funding. This is precarious at best and has resulted in inadequate technical support for critical scientists.

The department has need for a series of physical plant improvements beyond the headquarters facility. These improvements include renovations and construction projects that will improve the capabilities of the agronomy, livestock and seedstocks programs. The department must rely on the available resources and willing landowners to secure a significant portion of the land base necessary to meet program obligations.

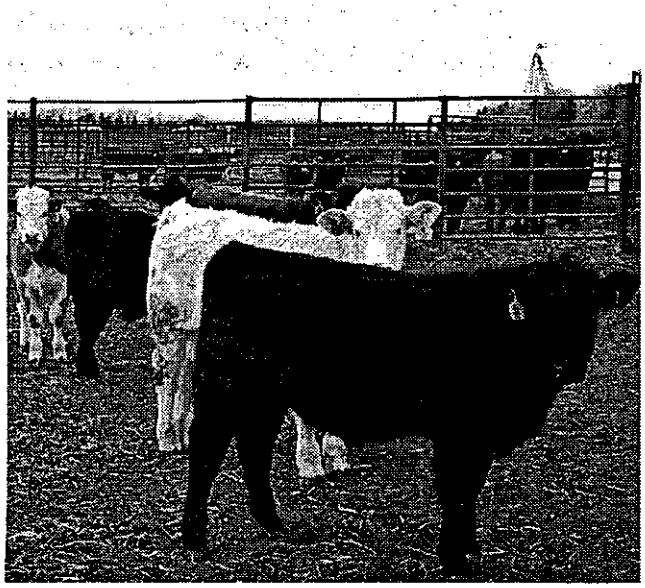
■ Carrington Research Extension Center

Carrington Research Contributes to Release of Sclerotinia-resistant Sunflowers

The U.S. Department of Agriculture-Agricultural Research Service Sunflower Unit recently released three Sclerotinia-resistant germplasm lines. In testing at misted nursery trials in three successive seasons, the three lines showed an average head rot incidence of 16 percent, 33 percent and 8 percent, compared with 58 percent for four commercial cultivars used for comparison. Misting nurseries originated at the Carrington Research Extension Center (CREC) in 2001. Several years and multiple generations of crossing into existing hybrids will be needed before private seed companies will be able to release finished hybrids with the resistant trait.

Variable Moisture Impacts Crop Maturity

Limited amounts of supplemental water from irrigation sufficiently delayed crop development during a season with below-average temperatures. In CREC performance tests, only 25 percent of the soybean varieties reached physiological maturity in the irrigated test, compared with 100 percent in the dryland test. Average harvest moisture for corn hybrids grown in the dryland trial was 24.6 percent, while the average corn hybrid under irrigation had 37 percent seed moisture. Supplemental water will tend to cause a minor delay in crop development; however, the magnitude of delays in 2004 had not been observed previously.



These cattle are part of the feedlot trials at the Carrington

Feedlot Performance Differs Among Herd Source

Cattle producers who participated in the Dakota Feeder Calf program at Carrington continue to learn more about the carcass value of their calves. Feeding performance was very competitive, with average per-head net profit, excluding interest, being $89.01 for 2003-04. Wide variations were observed among consignment groups of cattle. Average daily gain ranged from 2.78 to 3.89 pounds, the marbling score ranged from 296 (Standard) to 603 (High Choice) and profit per head ranged from $3.42 to $279.69.

Natural Beef Feeding Programs

Trials are exploring the differences in finishing cattle with conventional management vs. a more nonconventional approach, where yeast and enzyme products replace ionophores and antibiotics. Feeding calves using these natural products can result in equal animal performance and carcass quality, compared with conventional feedlot diets. Good feedbunk management and natural feed additives supported similar performance on the same grain levels. Increasing forage and decreasing grain in the natural diets lengthened the time on feed but produced equal carcass quality at a slightly elevated cost of grain.

Feedlot cattle and the environment benefit from bedding

CREC feedlot trials have shown that the simple act of bedding cattle with straw during the winter has multiple positive effects that include improved animal performance, higher carcass quality and greater total value. Twenty-three percent of carcasses from non-bedded steers graded USDA Choice vs. 45 percent for modest and 63 percent for generously bedded steers. Net return per head increased by $62 for modest bedded steers and $82 for generously bedded steers. Most importantly for the environment, however, are the reduced ammonia emissions and potential nitrogen runoff. Carbon from straw sequesters nitrogen in manure during composting to make a stable, more valuable fertilizer for crops.

NDSU Agriculture
North Dakota Agricultural Experiment Station and NDSU Extension Service

Carrington Research Extension Center

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

General Fund:	
2003-05 Original General Fund Appropriation	$ 1,404,470
Base Adjustments:	
Reallocation of revolving equipment pool	88,333
Transfer from Main Research Center to Extension Service and Branch Research Centers	161,372
2003-05 Adjusted General Fund Appropriation	1,654,175
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	65,003
Health insurance increases	21,176
Operating inflation	11,545
Initiatives	
Total Increases (Decreases)	97,724
2005-07 Executive Recommendation- General Fund	**$ 1,751,899**

Other Funds:	
2003-05 Original Other Fund Appropriation	$ 1,922,146
Increases (decreases) included in budget request:	
2003-05 Capital projects	
2005-07 Capital projects	
Other increases in estimated income	528,102
2005-07 Budget Request	2,450,248
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	37,199
Health insurance and EAP increases	11,858
Initiatives	
Increase (decrease) capital projects-State Bonding	
Increase (decrease) capital projects-Other Funds	
Total Increases (Decreases)	49,057
2005-07 Executive Recommendation-Other Funds	**$ 2,499,305**

Branch Research Centers
2005-07 Budget Changes Narrative

EQUIP REVOLVING FUND -

This represents the reallocation of the equipment revolving fund between the various branch research centers. During the 2003-05 biennium, Central Grasslands ($88,334), Langdon ($88,333) and North Central ($88,333) received allocations from the equipment revolving fund. During the 2005-07 biennium, the allocations will be made to (Dickinson $88,333), Carrington ($88,333) and Williston ($88,334).

Dickinson plans to use the funds to purchase a medium to high horse power field tractor for use in no till and forage research.

Williston plans to use the funds to purchase a 120 HP tractor and a disc or hoe drill.

Carrington plans to replace an irrigation center pivot and feedlot equipment.

AGENCY OVERVIEW

NDSU Extension Service

Agency Statutory Authority

North Dakota Century Code 4-08.

Agency Description

The North Dakota State University (NDSU) Extension Service is part of a nationwide, university-based educational system that provides research-based educational programs to citizens in all 53 counties and four reservations in North Dakota. Programs focus on selected needs and issues affecting the state's agriculture, youth, families, communities and natural resources. With staff located at state, area and local offices, the NDSU Extension Service combines funding from federal, state and county levels to specifically address local concerns.

Agency Mission Statement

The purpose of the NDSU Extension Service is "to create learning partnerships that help youth and adults enhance their lives and communities." This purpose is accomplished through the dissemination of information and the implementation of educational programs geared to the changing needs of North Dakotans. Major program areas include agriculture, youth, families, communities and natural resources.

Agency Performance Measures

Per NDCC 4-05.1-19 SBARE needs to present a status report to the budget section of the legislative council. On April 13, 2004, SBARE made a presentation to legislative council and handed out a report on the status of the Agricultural Experiment Station and the North Dakota State University Extension Service. A copy of the information is on file in the legislative council office.

NDSU
Extension Service

www.ndsu.edu/legislators

NDSU Extension Service

Impacts of Reinvesting in Critical Areas

With the $1.245 million that the 2003 Legislature provided, NDSU Agriculture was able to reinvest in several critical areas. The NDSU Extension Service received $255,000 of that. This funding made it possible to focus additional effort on the following key issues important to North Dakota:

Rural North Dakota Communities

The biennial budget of 2003-05 provided $145,000 for the expansion and enhancement of community economic development and leadership in North Dakota.

Accomplishments include:

- The creation of the NDSU Center for Community Vitality
- The development and implementation of a Rural Leadership North Dakota program
- E-Business for Small Business training for more than 100 small business owners
- Intensive leadership development training in six North Dakota communities
- Created software to help business owners understand the cost of losing a customer
- Two additional agri-tourism workshops with more than 550 attendees
- Technical assistance from the Institute for Business and Industry Development staff for 79 new projects, with an estimated economic impact of more than $10 million
- Assisted 11 rural communities in strategic planning
- Involved 439 young people in 30 hours of entrepreneurship hands-on training in 22 classrooms in the 2002-03 school year (evaluations completed in May for 2004-05 year)
- Co-chaired the creation of a state rural and nature-based tourism association
- Convened the creation of a grants roundtable in Minot that resulted in obtaining more than $2 million in grants
- Hosted an international conference for business retention and expansion
- Three research studies for community and nature-based tourism business development were conducted by the NDSU Department of Agribusiness and Applied Economics

Dollars leveraged and fees generated through this program area in Extension are estimated at $1,050,000.

Impacts of Reinvesting in Critical Areas

■ Biofuels

Biodiesel Promotion

Biodiesel has been found to be an excellent replacement for diesel fuel, and its use in North Dakota has increased significantly. Some estimates indicate a 50 to 60 percent increase in 2004 while other estimates indicate a doubling in usage.

The NDSU Extension Service presented a demonstration on the manufacture of biodiesel and its use in a 4-cylinder Cummings engine at NDSU Research Extension Centers across the state in 2003.

An Extension publication titled "Biodiesel Fuel" (AE-1240) was published and distributed through county Extension offices. It explains how vegetable oil is transformed into biodiesel; its potential as an alternative fuel; engine studies using biodiesel; costs, mixing and storage; and how biodiesel could provide reductions in several air pollutants.

An American Society of Agricultural Engineers technical paper (No. MBSK01-109) was published and presented at an ASAE meeting in Saskatoon, Saskatchewan.

A PowerPoint presentation was produced that discussed the production and use of biodiesel in diesel engines. This presentation was shown at several producer meetings throughout the state.

This summer, field tests will be conducted at the North Central Research Extension Center in Minot using canola oil as biodiesel fuel. The Experiment Station continues to identify, develop and evaluate new methods and technologies that convert plant and plant products into biobased fuels.

■ Cereal Production Constraints

Pest survey on key crops

The NDSU Extension Service monitored key insect pests and diseases of wheat, barley, sunflowers, soybeans and canola at strategic periods using GPS and GIS tools to create distribution maps of outbreaks. All counties were surveyed by this process. Coordination was provided by the NDSU Research Extension Centers and Extension area offices. The survey data provided updated and timely information on key pest threats and management strategies. The survey data collected assisted in the assessment and validation of existing disease forecasting and insect prediction models.

The 2004 survey monitored 2,391 fields during the growing season. Daily to weekly updates on disease and insect occurrences were provided to producers through county Extension agriculture alerts, the Agdakota listserve, the NDSU Integrated Pest Management Web site and the NDSU Crop and Pest Report. The NDSU IPM Web site was accessed approximately 20,000 times in 2004, and the NDSU Crop and Pest Report Web site was accessed approximately 200,000 times. Producers used the information to assess pest risk during critical growth stages.

NDSU Research Extension Centers and Extension area offices coordinate monitoring for insect pests and diseases in several crops, including sunflowers.

Impacts of Reinvesting in Critical Areas

BeefLine

Feedlot MBA

There is increased interest in feeding cattle to slaughter weights in the northern Plains, which represents a significant opportunity for job creation and new wealth in the state. In North Dakota, ample supplies of cattle, feed grains, forages and co-products are available for use in feedlots. In response to the needs and requests of participants in past feedlot schools, NDSU developed a program called Feedlot MBA: Making Bottomline Adjustments. Based on the number of feedlot cattle fed per participant each year, 134,300 head of feedlot cattle were reached by the Feedlot MBA program. If Feedlot MBA participants receive an additional $10 per head or save an extra $10 per head in the next year, participants' income potentially will increase by $1.34 million.

Beef 101

Beef cattle marketing systems are moving from traditional, commodity-based systems to valued-based systems through grids, alliances and branded-beef programs. These changes offer a new opportunity to capture value at all production levels. Understanding the value determinants under these systems is important for cow-calf producers, backgrounders and feeders. To help producers better understand and use the value-based marketing systems, "Beef 101: From Calves to Carcasses" was developed. After going through the short-course, many participants indicated they would make changes in their operations that would add value to their calf crops and improve the carcass quality of beef that North Dakota ranchers produce.

North Dakota State Soil Conservation Committee

To meet the technical assistance needs of soil conservation districts, the State Soil Conservation Committee restored funding for the Soil Conservation District Assistance Program. The funding provided by the legislative assembly assists soil conservation districts in helping landowners reduce soil erosion, improve water quality and enhance tree plantings, grazing lands and wildlife habitat. The Farm Security and Rural Investment Act of 2002 increased the conservation workload for all soil conservation districts. Soil conservation districts are working hard to get landowners signed up, plans and designs developed and then approved. The planning, installation and checkout of conservation practices by participating soil conservation districts has had a significant impact on North Dakota's natural resources.

NDSU developed programs to help producers improve the marketability of their cattle.

2005-07 Executive Recommendation

Northern Crops Institute, NDSU Extension Service, North Dakota Agricultural Research Stations and Agronomy Seed Farm

- The executive recommendation includes a general fund increase of $3,707,258 (or 7.37%) over the 2003-05 adjusted appropriation. This increase will fund the following:
  - $2,649,521 for 4% and 3% salary increases for 2005-06 and 2006-07, respectively.
  - $658,367 for 7% annual increase in employee health insurance.
  - $273,004 for 2.2% annual operating inflation.
  - $326,366 for the following initiatives: Main Research Center – $301,897 for 2 FTE for beef initiative (one-time funding for 2005-07 only); NCI – $24,469 for linking crops to livestock development.
  - **$200,000 decrease** to general fund base operations, which will be replaced with other "ERP" funds for one biennium only.
- The executive recommendation includes $59,799 other fund authority for an ethanol and malting barley initiative at the Dickinson Research Extension Center, to be funded with Dickinson oil revenues.
- The executive recommendation includes funding authority for the following capital projects:
  - $4.5 million Research Greenhouse Complex for the Main Research Station, including $2 million state bonding, $2 million federal funds and $500,000 other funds. ***(This was half of what was requested for each of the funding sources. The request was for a $9 million project.)***
  - $1,320,000 North Central Agronomy Lab and Greenhouse, including $440,000 state bonding and $880,000 other funds.
  - The Central Grasslands headquarters office addition ($250,000 state bonding and $60,000 other funds) was not included in the executive recommendation.

NDSU Extension Service

2005-07 Needs-Based Budget

SBARE ranked all of the projects for Main Station, Branch Station and Extension together since a lot of the projects are joint efforts. Please refer to the ranked projects by reviewing the narrative in all of the agencies.

 # 1 ranked: Costs to Continue (2.2% Operating Inflation) $114,990 Total General Fund Increase

The work of the NDSU Extension Service involves delivering educational programs to citizens of North Dakota. This programming requires staff, travel, electronic equipment, office equipment and supplies, and other program costs. If unfunded, this cost could result in staffing reductions, and restrict our ability to utilize video conferencing and develop printed material for clientele use.

 # 5 ranked: Investing in Infrastructure Needs for the 21st Century $150,000 Total General Fund Increase

An enhancement of operating funds would provide greater flexibility for Extension scientists to remain productive and competitive, and allow for improved opportunities to leverage these dollars with additional grants and contracts. Increased operating funds will reduce the impact of inflation and other rising costs and would assist in the delivery of quality Extension programs across the state.

 # 7 ranked: Community Rural Vitality and Economic Development. - Education Program Design

$96,000 Total General Fund Increase

(0.8 FTE, $80,000 salary and fringe; $16,000 operating)

A specialist in Agriculture Communication would work with NDSUES and NDAES faculty and staff to identify target audiences, determine desired outcomes, select the most appropriate teaching tools (CDs, videoconferencing, Web lessons, public programs, printed materials, media releases, etc.), coordinate development of the educational programs, market the programs to targeted North Dakotans and conduct follow-up evaluation(s).

 # 11 ranked: Community Rural Vitality and Economic Development - Enhancing North Dakota Communities

$345,000 Total General Fund Increase

(2.0 FTE, $305,000 salary and fringe; $40,000 operating)

Healthy communities are critical to the future of North Dakota and the agriculture industry. This program effort would connect NDSU expertise and resources to communities; provide education; develop collaborations; and build partnerships with communities to help address critical issues. Funds would be used to fill two Extension positions and create a formal intern program that would place NDSU students in rural North Dakota communities for work and rural living experiences. It also adds project funds to the Center for Community Vitality to work with faculty in other colleges to address issue-based needs. Community economic development research, which would support Extension outreach efforts, would be conducted by the Department of Agribusiness and Applied Economics.

 # 12 ranked: Community Rural Vitality and Economic Development - Rural Leadership North Dakota

$140,000 Total General Fund Increase

(0.75 FTE, salary and fringe)

This leadership program emphasizes the development of leadership and technology skills while sharing important and divergent information about critical issues facing North Dakotans. This funding request is to continue an existing program/ Extension specialist initiated with temporary NDSU Central Administration funds.

 # 13 ranked: Cropping Systems and Sustainability - Soil Biology **$50,000 Total General Fund Increase**

(0.25 FTE, $40,000 salary and fringe; $10,000 operating)

A scientist working in the area of microbiology, bioremediation, and soil/water contamination from agricultural, industrial and residential sources would provide expertise to a wide range of collaborators, including range scientists, agronomists, microbiologists and agricultural engineers. Lack of a scientist trained in this critical area limits our ability to use a "systems" approach to some of the state's important production and environmental problems.

 # 16 ranked: Urban Agriculture - Expanded Agriculture and Urban Horticulture

$182,200 Total General Fund Increase

(1.0 FTE, $140,000 salary and fringe; $32,200 operating; $10,000 equipment)

Horticulture is currently a $471 million per year industry in North Dakota. An Extension specialist located at the North Central Research Extension Center, partnering with faculty located at NDSU and other Extension sites, would better serve agricultural and urban horticultural needs in western North Dakota.

 # 17 ranked: Community Rural Vitality and Economic Develeopment - 4-H Tech Teams

$75,000 Total General Fund Increase

(0.5 FTE, $75,000 salary and fringe)

This program would focus on providing youth audiences with experiential learning using computers and related technologies. Youth would use these skills for increased involvement in community decision-making, character education, positive relationships with adults and job preparation skills.

 # 18 ranked: Community Rural Vitality and Economic Development - Geospatial Program

$75,000 Total General Fund Increase

(0.5 FTE, 75,000 salary and fringe)

New sources of data, accompanied by new methods for data processing and analysis, provide the basis for new applications. A geospatial Extension specialist, funded by a combination of state and grant funds, would ensure that farmers and rural communities would continue to receive the benefits of this technology.

 # 19 ranked: Cropping Systems and Sustainability - Range Extension/Research for the Coteau

$168,750 Total General Fund Increase

(0.75 FTE, $120,000 salary and fringe; $48,750 operating)

The five million acres of the Coteau region of North Dakota is home to 42 percent of the state's cattle and 38 percent of the farms, and represents 44 percent of the state's rangeland. A focused Research/Extension position to provide information to clientele on rangeland issues, coordinated with activities of Main Station scientists, would enhance the overall outreach effort of this large, diverse region of the state.

 # 20 ranked: Livestock Systems Development - Non-Ruminant Nutrition, Swine Emphasis

$120,000 Total General Fund Increase

(0.6 FTE, $96,000 salary and fringe benefits; $24,000 operating)

The swine industry in North Dakota is in a state of transition. The industry is poised to make major strides in production by utilizing new technologies and marketing arrangements. A Research scientist with Extension responsibilities to investigate specific problems associated with swine production in North Dakota and disseminate information concerning swine production is requested.

#21 ranked: Livestock Systems Development - Livestock Development **$182,000 Total General Fund Increase**

(1.0 FTE, 130,000 salary and fringe benefits; $40,000 operating; $12,000 equipment)

Twenty-two percent of North Dakota's agricultural economy is generated through livestock enterprises. An Extension specialist would work with communities, interest groups, livestock groups and agribusinesses around the state on business planning, market development and industry expansion.

 # 23 ranked: Cropping Systems and Sustainability - Maintaining Strong Integrated Pest Management Effort

$80,000 Total General Fund Increase

($80,000 Part-time salary)

Summer crop scouts help is needed to monitor crop insect pests and diseases in wheat, sunflower, soybean and canola. Global Positioning System (GPS) and Geographic Information System (GIS) tools are used to create spatially-precise distribution maps and outbreaks. All counties would be surveyed.

 # 25 ranked: Community Rural Vitality and Economic Development - Extending to Hard-to-Reach Audiences

$200,000 Total General Fund Increase

(no new FTE, $160,000 salary and fringe benefits; $40,000 operating)

Communities of place are defined as where people live, work and play, whereas communities of interest emanate from shared interests of their members. Advances in communication technology are freeing communities of interest from geographic constraints. This proposal is aimed at county-based Extension agent and technician staffing models that focus on communities of interest along with enhancing the center of learning concept.

The following are unranked by SBARE:

ND State Soil Conservation Committee

In order to effectively meet the technical assistance needs in Soil Conservation Districts, the North Dakota State Soil Conservation Committee requests increased funding in the Soil Conservation District Assistance Program (SCDAP). Environmental demands have increased interest in conservation planning by North Dakota producers. This requires enrolling producers in the right program; planning and designing the conservation practice; and submitting the plan to USDA for approval. Soil Conservation Districts depend on the SCDAP to accomplish this task. These funds would also be utilized as match for section 319 of the Clean Water Act Non-Point Source Pollution (NPS) program.

Crop Quality and Consumer Needs - Adding Value to North Dakota Agriculture

Economic analyses will focus on developing NDSU expertise in understanding global impacts of biotechnology development, evaluating new markets for bio-based products, and evaluating processor and consumer willingness to pay for traditional and novel food and industrial products.

Food Systems and Its Impact on Food Security - The High Cost of Obesity

Health issues related to obesity are a concern. Two pilot centers for nutrition and health would be established in rural communities, one located in south central North Dakota and the other in southwestern North Dakota. The centers would be equipped with physical fitness machines, and programming would be provided by Extension agents and specialists.

Bio-Based Industrial Products - Bioproduction

Great potential exists in utilizing plant products for non-traditional uses, including energy and industrial purposes. These new uses would provide opportunities for producers in the state to diversify their markets.

Community Rural Vitality and Economic Development - ND Children in Poverty

Of the 160,849 North Dakota children under 18 years of age, 11,648 (15.5 percent) live below the poverty level. Child poverty in rural North Dakota farm counties is 50 percent greater than in metropolitan areas of the state. Three Extension parenting resources coordinator positions and operating expenses for four centers are needed to provide educational programming to 28 North Dakota counties.

Budget Reconciliation

NDSU Agriculture

North Dakota Agricultural Experiment Station and NDSU Extension Service

General Fund — Extension Service

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

2003-05 Original General Fund Appropriation	$ 13,859,446
Base Adjustments:	
Transfer from Main Research Center to Extension Service and Branch Research Centers	255,000
Appropriation	14,114,446
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	837,570
Health insurance and EAP increases	174,056
Operating inflation	114,990
Initiatives[1]	
GF Operating Reduction (Offsetting Incr to Other Funds)	
Total Increases (Decreases)	1,126,616
2005-07 Executive Recommendation - General Fund	**$ 15,241,062**
Increase (Decrease) From 2003-05 Adjusted Appropriation	**$ 1,126,616**
Percent Increase (Decrease)	**7.98%**

[1]Initiatives (general fund) include the following: Main Research Center - $301,897 for 2 FTE for beef initiative (one-time funding for 2005-07 only); NCI - $24,469 for linking crops to livestock development.

Other Funds — Extension Service

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

2003-05 Original Other Fund Appropriation	$ 20,486,830
Increases (decreases) included in budget request:	
2003-05 Capital projects	
2005-07 Capital projects	
One-time funding for Centers for Excellence	
Other increases in estimated income	1,581,419
2005-07 Budget Request	22,068,249
Executive Recommendation Increases (Decreases):	
Compensation package (4%-FY06 & 3%-FY07)	584,896
Health insurance and EAP increases	336,083
Initiatives	
ERP One-time Operating Funding (Offset to GF Reduction)	
Increase (decrease) capital projects-State Bonding	
Increase (decrease) capital projects-Other Funds	
Total Increases (Decreases)	920,979
2005-07 Executive Recommendation - Other Funds	**$ 22,989,228**

NDSU Extension Service

2005-07 Budget Changes Narrative

OTHER REV -

NDSU Extension Service requests an increase in special funds authorization. NDSU Extension Service county offices provide N.D. citizens front door access to NDSU. Extension programs use unbiased, research information to help citizens address issues and pursue opportunities. This unique structure and function has created an environment where many other organizations want to partner with Extension to deliver programs that require an educational focus. A recent example is the Horizons program sponsored by the Northwest Area Foundation. The Foundation asked the NDSU Extension Service to develop and deliver this program in Beach, Regent, Mott, Ashley and Ellendale, and they provided a $700,000 grant to deliver this program over an 18-month period. Because of needs and opportunities like this, Extension is requesting an increase in special funds authorization.

NDSU Extension Service
2003-05 Impacts

The NDSU Extension Service gives North Dakotans the research-based information they need to succeed in today's complex world and be better prepared to face the future.

Extension focuses its efforts in eight key areas:

- *Community, Economic Development and Leadership*
- *Competitiveness and Profitability of Animal Systems*
- *Cropping Systems in the 21st Century*
- *Farm and Family Economics*
- *4-H Youth Development*
- *Human Development and Family Science*
- *Natural Resources and Environmental Management*
- *Nutrition, Food Safety and Health*

■ Community, Economic Development and Leadership

Community Development

Provided training in grant development for more than 200 community leaders and Extension faculty in four North Dakota locations. This resulted in numerous grant applications, including almost $1 million in successful Extension applications and the establishment of a grants roundtable in Minot, where more than $2 million was successfully obtained.

Economic Development

The Extension Institute for Business and Industry Development (IBID) provided technical assistance for 79 new business projects resulting in 22 new jobs in North Dakota. Four hundred thirty-nine third- through seventh-graders were involved in 30 hours of entrepreneurship.

Leadership

Rural Leadership North Dakota participants designed and implemented 24 community projects in the state. The Horizons Leadership Program, funded by the Northwest Area Foundation, was implemented in two community clusters. Expected results include better cell phone service for rural residents and housing for moderate income families and elderly in rural communities.

Rural Leadership North Dakota participants tour the Dickinson Recreation Center construction site.

Competitiveness and Profitability of Animal Systems

Cattle Feeding in North Dakota: Expanding Feeding and Management Skills

Feedout Project

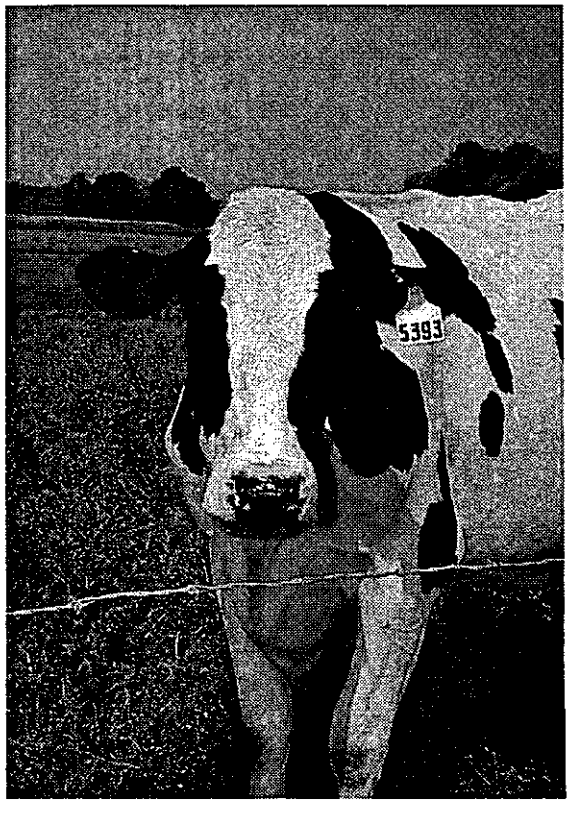
Cattle feeding management schools have trained more than 150 farmers/cattlemen on professional cattle feeding methods. Cattle feeding opportunities are demonstrated through cattle feedout projects. In the 2003-04 feedout project, 52 cattlemen consigned and commingled 174 head of North Dakota-born calves for finishing in North Dakota to determine feedyard and carcass performance. Average profit per head, excluding interest, was $112.27. On-farm evaluation of feeding operations have helped cattlemen expand the size of their feedlots and increase nutrient utlization while preventing livestock waste runoff. Since North Dakota has comparatively low-priced feeds, excellent cattle genetics and ready access to management information, feedlot expansion in North Dakota is occurring with many 1,000-head or larger feedlots being constructed using EPA 319 and USDA EQUIP matching funds.

Dairy Management, Milk Quality and Technology Transfer for Profit

The advisory team helped a dairy farm wrestle with two years of financial difficulties. Together, they developed a financial plan of restructuring loans for the entire farm that secured operating loans for the previous year. Management changes included developing a purchase order system to control expenses, an advisory group to direct and monitor ration/veterinarian issues, a revised structure for more efficient use of labor and reduced costs, and restructuring the calf-rearing operation to include more appropriate management protocols. After one year, the farm's operator was able to pay all of the farm's yearly expenses and pay down 20 percent of the loss it had incurred the previous two years.

Cows and Crops: Expanding North Dakota's Cow Herd

The state's cow-calf industry, encompassing 11,000 operations and 937,000 beef cows, contributes substantially to the state's economy, accounting for about 10 percent of annual agricultural revenue. Cattle numbers and values are cyclic with weather and market conditions, and peaked in the state in 1975 at 1.24 million beef cows. Efforts are under way to maintain and expand this industry while structural change is evident, as the state has had an annual 3 percent loss of operations during the past five years. "Cows and crop" programs, targeted at early- and mid-career operators interested in expanding their operation, provide integrating opportunities for cow-calf production with changing farming and processing industries, such as using crop residues, salvaging damaged crops, haying and grazing CRP, feeding byproducts, rotational forage planting, and labor and equipment sharing. In several regions of the state, modest herd growth is occurring with beginning and expanding operators. And in the past year, interaction between crop and cattle producers has resulted in considerable use of frost-damaged crops.



NDSU helped dairy farmers cope with two years of financial difficulties.

Cropping Systems in the 21st Century

Crop diversity

Flexibility in the choice of crops grown in the state has increased in recent years. Soybean acres approached 3.7 million in 2004, flax acreage increased to more than 400,000 acres and corn increased to 1.8 million acres. Field pea and lentil (pulse crops) doubled to 410,000 acres. Supported and encouraged by Extension programs, these crops have helped producers cope better with drastic swings in environmental conditions and provided greater chances for increased profitability.

Help with crop diversity

Acres of large kabuli chickpeas went from 20,000 acres to near zero in 2002 because of problems controlling ascochyta blight. Results from 2001-04 fungicide trials at the North Central Research Extension Center at Minot helped producers control the disease, which will help chickpea become profitable once again. In 2004, large kabuli chickpea acreage increased to nearly 4,000 acres with good success in managing ascochyta blight. The number of acres perhaps will double in 2005.

Challenges of growing corn in northeastern North Dakota

Corn acreage has increased dramatically in northeastern North Dakota the past three years. Corn trials were established two years ago, and growth models were developed using accumulated growing degree days to hybrid relative maturity values. From these models, Extension was able to predict in August that most corn would not produce harvestable grain in northeastern North Dakota. This information was shared with livestock specialists, county agents and crop insurance officials in the area and alternative uses, other than for grain, were explored. Terminal elevator managers in the area were visited. As a result, they adjusted grain car orders for the reduced amount of grain they would handle.

Approximately 90 percent of the 200,000 acres planted to corn in northeastern North Dakota was not harvested as grain. Insurance claims were settled in a timely manner to allow producers to manage the crop residue, which will reduce the potential for prevented plant acres next spring. The early warning helped producers reduce expensive propane purchases that were not needed because the crop was not harvested. Growers contacted livestock producers and planned for silage, grazing or earlage. One dairy put up an extra 3,000 tons of corn as earlage.

Harvest challenges met

A cool 2004 growing season and early frosts resulted in unusual harvest challenges in most crops. Individual consultations by telephone and e-mail assisted 250 people to dry and store about $19 million worth of grain. Drying information was disseminated through news releases in national and local media, on the Web, through county agents and grower meetings. Assistance was provided to North Dakota and Minnesota congressional representatives and the North Dakota agriculture commissioner during meetings with the Risk Management Agency and insurance personnel to resolve insurance coverage concerns with low-quality corn.

Research and Extension programs supporting soybean production

In recent years, soybean production acres have dramatically increased in North Dakota, to 3.7 million acres. The Carrington Research Extension Center has been a leader in supporting this growth in production through research and educational programs. Soybean research trials include variety performance (conventional and Roundup Ready cultivars), plant establishment (planting rates, dates, row spacing and seed quality), plant nutrition (seed inoculation and nitrogen management), tillage systems, crop rotation and land rolling. Educational sessions were conducted statewide to provide farmers and crop advisers with soybean production recommendations.

Geospatial programs

From 2002-04, 48 NDSU county Extension agents, 13 area and state specialists and 34 other individuals have developed geospatial skills as a result of their participation in the NDSU geospatial education program. A program evaluation in April 2004 revealed that more than 30 percent of the participants use geospatial skills at least once a month in educational programming. County Extension agents can respond to the increasing demand at the local level. Extension agents have assisted producers in measuring their field boundaries for use in emergency haying or grazing of CRP land, assisted county weed boards to incorporate GPS and GIS technology to map and control noxious weeds, assisted county weed boards with remote sensing technology to identify and map invasive species and are cooperating with North Dakota Farm Management instructors to conduct precision agricultural comparative research projects with 10 farmers.

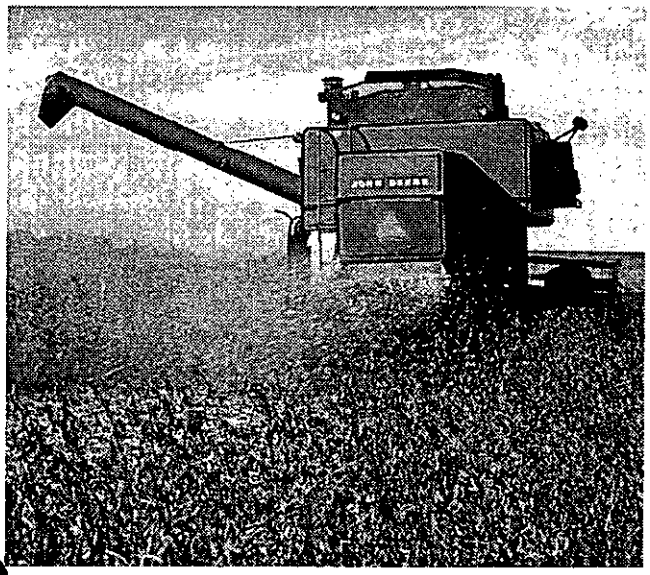
■ Cropping Systems in the 21st Century (continued)

Precision agriculture

Fertilizer price increases make efficient use of fertilizer products more important than ever. Zone soil testing, pioneered at NDSU, has increased profitability for sugar beet growers and others outside of the valley. Zone sampling is used in numerous locations across the state, with direct benefit to growers estimated at $2 million. Yield mapping also is becoming more common. The mapping helps producers understand the differences between fields and assists them in creating an information legacy for those who will farm those fields in the future. Extension testing and teaching of these technologies has been important in increasing the adoption rate.

Intensive wheat management

Many wheat growers strive to increase yields every year. Extension programs in intensive wheat management have educated growers on how to achieve higher yields using methods proven in our challenging environment. Emphasis on scouting and controlling inputs reduces up-front crop production costs while alerting growers to periodic disease and insect infestations. Record wheat yields have been reported the past two growing seasons. If NDSU Extension takes credit for just 2-plus bushels per acre of the average increase, this amounts to a net increase for producers of 32.5 million bushels the past two years, producing a net value of $130 million.



Soybean aphids have become a problem in some North Dakota fields. NDSU alerts growers about infestations and saves them money by letting them know where they don't need to apply insecticide.

Growers alert to insect pests

Soybean aphids have been established in North Dakota since 2001. The infestation levels and management needs to avoid economic losses have varied each season. The integrated pest management crop and pest survey has provided valuable information on the developing aphid populations, alerting growers and the agriculture industry to the economic threshold concerns through mapping of field level infestations. Field studies on the economic threshold for soybean aphid control have proven valuable for identifying fields requiring protection, as in 2003, and preventing unnecessary treatment, as in 2004, thus, saving soybean producers thousands of dollars.

Fighting wheat scab

NDSU Extension Service plant pathologists provided data and documentation to support the section 18 exemption for Folicur fungicide to manage Fusarium head blight of wheat. With recommendations from Extension plant pathologists, producers applied this product, which resulted in an approximately 20 percent yield benefit. This yield benefit translated into an approximately $20 million gain in income to state wheat producers in 2004.

Perennial weed control on Canada thistle

NDSU Extension Service has provided education and data to support the use of glyphosate on Roundup Ready crops such as soybeans, canola and corn. Through the use of this technology, the number of acres of severely infested Canada thistle has been greatly reduced. The use of genetically modified crops and the promotion of these crops in the rotation to clean up hard-to-control weeds have greatly added to the producers' profitability.

Farm and Family Economics

- NDSU economists and county Extension agents assisted the North Dakota Farm Service Agency in determining the extent of weather-related crop damage in 2004. This information was used to document the need for crop loss disaster assistance. A federal agricultural disaster bill is expected to bring more than $200 million to North Dakota.
- Software was developed by Extension economists to help producers evaluate their base and yield options under the 2002 farm bill. The software was used in every county Extension office to assist thousands of producers with the one-time opportunity to adjust crop acreage bases and payment yields used to determine decoupled farm program payments until at least 2007.
- Twenty-two full-day "Computer Accounting for Farm, Home and Business" workshops were held. At least 2,200 people have completed this workshop during the last 10 years. More than 90 percent of attendees stated that they plan to make changes in their record-keeping and/or accounting system.
- An Ag Lenders Conference (four locations), Crop Insurance Conference and Tax Management for Agricultural Producers Program (10 locations) are three, major statewide annual conferences/programs that have been very successful. For example, more than 95 percent of surveyed participants indicated that the tax program has helped them comply with tax regulations and improve their management of tax liabilities. Each conference/program draws more than 200 annually.

Legally Secure Your Financial Future

A new national curriculum, "Legally Secure Your Financial Future: Communicate, Organize, Prepare," has been developed by a team of state specialists and Extension agents. The program, which has been the recipient of numerous national awards and recognition, will be available nationwide Feb. 1, 2005. The format consists of one to three educational sessions utilizing Extension educators, a local attorney and a health-care provider to cover topics such as recordkeeping, family communications, advanced directives for health care, wills, trusts and estate planning.

North Dakota SAVES

Extension agents from Ward, Mountrail and McHenry counties, along with other area professionals, kicked off the "North Central North Dakota Saves" campaign at the North Dakota State Fair this past summer. With funding from "America Saves," this group promoted increased savings and reduced debt among participants through educational programming. This coalition and its efforts were featured in a video clip as part of the "Financial Security in Later Life: Best Practices" national satellite videoconference Dec. 11, 2003.

Who Gets Grandma's Yellow Pie Plate?

This program encourages families and individuals to begin discussions and make decisions about passing on personal possessions. During the past year, the program was presented to several groups in north-central North Dakota including adult education classes, senior citizens, FCE clubs, church groups and community organizations. The program information was further shared in newspaper articles. In evaluations, most individuals (about 85 percent) indicated that they intend to start planning for the transfer of their nontitled property.

High School Financial Planning Program

The National Endowment for Financial Education initiated the High School Financial Planning Program (HSFPP) in 1984 as a public service to increase the financial literacy of America's youth. The six-unit program provides teens with a greater understanding and ability to manage their personal finances in the areas of goal setting, budgeting, savings, and credit and risk management. The program uses unique games, simulations, case studies and interactive exercises to provide hands-on experience for students to test and apply the financial principles and concepts being taught.

Since the NDSU Extension Service became involved in 1992, more than 8,000 North Dakota high school students and other young people in nearly 200 classrooms have increased their knowledge of money management skills.

A recent landmark national study of the effectiveness of the HSFPP shows that, as a result of participating in the program, 86 percent of high school students know more about managing their money.

4-H Youth Development

4-H Youth Development education creates supportive learning environments for youth and adults to reach their fullest potential as capable, competent and caring citizens.

Youth become caring and contributing members of society through experiences in community service.

- Sixteen North Dakota counties reported more than 70 percent of their clubs are actively engaged in community service projects.
- Youth participation in community service is an excellent predictor of future volunteerism. A 1999 study by the National Center for Education Statistics showed that 71 percent of adults who volunteered in their childhood continued to volunteer as adults. This compared with 37 percent of adults who volunteer, but did not have volunteer experiences as children.
- About 170 4-H'ers across North Dakota participated in the 4-H Hero Pack project to show support for families of military personnel.

Youth develop life skills that positively affect their success in the work force.

- Youth involved in conference judging interviews, judging contests, local club meetings and communication arts events develop and practice skills, such as public speaking, organization, research and interviewing, in communicating one-to-one and with larger groups.
- Several former 4-H members have attributed their accomplishments, in part, to 4-H involvement. Caitlyn Brown, the current Miss Teen North Dakota, states that her 4-H public speaking experiences gave her the poise and confidence to accomplish this goal.

4-H youth learn knowledge and skills through specialized clubs and groups that focus on topics of interest.

- Specialized clubs offer an alternative for a club experience to many youth making choices with their time. There is a growing trend for clubs in technology and outdoor skills. For example, an archery club has been formed in Ransom County.
- Technology clubs are forming. Stutsman County has one Internet-based club that conducts all of its meetings through online discussions. Currently, there are 12 county 4-H technology teams.
- A partnership with the University of North Dakota Aerospace Center and the North Dakota 4-H Foundation provides an aerospace experience to approximately 100 youth annually. A 4-H aerospace club has been established in Grand Forks County.
- More than 1,350 North Dakota high school students have received valuable lessons in science, math, technology, art and the environment while learning about the Red River watershed through the River Watch program.

2004 North Dakota 4-H Youth Survey examined perceptions about benefits of 4-H

- 90 percent of 4-H members feel they have a voice in their club meetings and experiences.
- 83 percent state that they are able to make meaningful contributions to their community.
- 90 percent have developed positive relationships with adults.

4-H members use a flight simulator at the University of North Dakota Aerospace Center.

Human Development and Family Science

The Human Development and Family Science program area focuses on helping individuals develop the skills to nurture and support family members throughout their lives, and strengthening the capacity of families to establish caring communities where economic security is maintained.

CYFAR New Community Project (2 sites)

Standing Rock: Since February 2004, 124 participants (adults, adolescents and children) have been involved in programming on the Standing Rock Reservation. Parent education and programs focusing on positive youth development are provided. Parents and caregivers indicated that, as a result of this program, they increased the time they spend with their children, became more patient with their children and became more aware of their children's needs.

Home on the Range: Approximately 131 children and adolescents have been involved in a youth program at Home on the Range, an in-home youth facility in western North Dakota. Youth indicated that, as a result of programming, they learned how to work with others, gained new information, learned leadership skills, learned that dropping out of school has no benefits, how to say no to drugs and get closer to family.

Father Times newsletter project

Families (430) with youngsters at the Eagles Kindergarten Center in Fargo received issues of the Father Times parenting newsletter. The newsletter is targeted at fathers and father figures. A survey was conducted to determine impacts of the newsletter. The findings showed that:

- Eight of 10 fathers and father figures indicated they had an increased understanding of their children's needs for growth and development.
- Eight of 10 fathers and father figures stated they were more attentive to the needs of their children.
- Seven of 10 fathers and father figures reported changing their behavior to use more positive guidance or discipline.
- Seven of 10 fathers and father figures indicated they had read more to or with their child.

Military Outreach

- During the 2003 Spring Extension Conference, Extension child development and family science specialists provided in-service training to Extension agents on support and resources for military families. The training included an overview of the available resources, which include Extension publications, online at www.ext.nodak.edu/extpubs/yf/famsci/fs477.pdf, and Web sites supporting military families including www.mfrc-dodqol.org/ and www.mfrc-dodqol.org/healthyparenting/index.cfm.
- The Extension child/adolescent development specialist provided community presentations in Devil's Lake for school personnel, mental health professionals and military families on issues concerning military families and deployment after a unit from this area was mobilized.
- Interviews with media outlets focusing on topics of deployment and helping children cope with armed conflict have been provided.
- About 170 4-H'ers across North Dakota participated in the 4-H Hero Pack project in fall 2004 to show support for families of military personnel. The 4-H'ers created 200 packs for children with a parent who has been deployed. The packs contain items such as a disposable camera and stationery that will help the children stay in touch with the deployed parents.
- County agents in Stutsman County and Barnes County work with the Family Assistant Centers to provide training to families in financial management and child development.

Members of Mountrail County 4-H clubs assemble hero packs destined for children with a parent who has been deployed on military service.

Natural Resources and Environmental Management

Ranchers Guide to Range and Natural Resource Management

Managing North Dakota's range and pastureland can be a complex job for ranchers and resource land managers, especially in times of drought, weed invasion and herd management. NDSU and the Natural Resource Conservation Service (NRCS) work in collaboration to develop a simple, but useful tool called "Ranchers Guide to Grassland Management."

The guide has several sections, including native and introduced plants, pasture development, grazing management, riparian grazing management, noxious weeds, poisonous plants, drought management and monitoring. It also has a recordkeeping section and mini notebook to help ranchers better manage their grazing dates and herd, and provides tips and references to more detailed publications when needed.

Agroforesty Systems at Work

Agroforestry systems control wind erosion, increase crop yields, improve livestock weight gain and reduce home energy costs. In addition, these systems increase water-use efficiency, protect wildlife, improve water quality, reduce the accumulation of drifting snow on roads and can provide long-term profits for landowners. Agroforestry can provide income through wood and alternative products. Yet, many of the benefits provided by agroforestry systems are not fully utilized and often are underappreciated. More than two-thirds of the windbreaks in North Dakota need renovation to sustain the environmental, economic and social benefits they provide.

A team of Extension specialists and scientists from NDSU, the North Dakota Forest Service and local environmental groups have conducted educational workshops and materials to improve windbreak management techniques to preserve and sustain this resource.

Irrigation Water Management, Technical Information and Assistance

Effective irrigation water management requires accurate daily crop water use estimates. Since 1995, NDSU Extension Service has had a Web site that displays the water use for the 10 major irrigated crops in North Dakota. Water use is calculated using data from the North Dakota Agricultural Weather Network's 67 automated weather stations. Daily water use is available in color-coded maps or numerical tables. Features have been added every year to help irrigators or crop consultants make better irrigation decisions.

The NDSU Extension Service first published a bulletin on irrigation scheduling in 1977. In 2000, NDSU Extension and the Minnesota Extension Service developed an irrigation scheduling program for computers. In 2003, NDSU Extension developed a checkbook program version to run on a Personal Digital Assistant (PDA) using the Palm operating system.

Improving Irrigation Pump Intakes from Surface Water Sources

Many irrigators along the Heart, Missouri and Yellowstone rivers have difficulty pumping water. Frequent intake screen plugging and accumulated riverbed sediment in piping systems combine to reduce the required volume of water for their irrigation systems. Through a cooperative agreement with the Bureau of Reclamation's Dakotas Area Office, NDSU students and Extension faculty researched, built and installed three types of intake devices at demonstration sites along the Heart River. Irrigators using these prototypes have observed a reduction in accumulated sediment in gated piping, a flow rate increase, a decreased need to clean screens and an improved overall system performance.

Two local irrigation equipment suppliers are fabricating the devices, and approximately 10 units are in use.

Livestock Waste Management Education and Assistance Program

In the past year, this program has provided education to producers, Natural Resource Conservation Service employees, 319 watershed coordinators, county Extension agents, commodity association members and policy-makers through 17 workshops, 22 on-farm producer consultations, and the development and distribution of seven new Extension publications. A reflection of these educational efforts can be quantified by the fact that 56 North Dakota producers have requested financial assistance to bring their livestock feeding operation into environmental compliance. These 56 facilities account for more than 60,000 head of cattle.

Nutrition, Food Safety and Health

Helping teens serve food safely

"Teens Serving Food Safely" is a statewide project to teach young food handlers the rules of serving food safely. More than 1,000 North Dakota teens enrolled in family and consumer sciences classes and 4-H-related programs. Based on pre/post testing, 2004 average test scores increased from 56 percent to 88 percent correct. On a follow-up survey, 83 percent said they washed their hands more often, 52 percent shared their knowledge with others and 40 percent applied what they learned when preparing food for the public.

Helping food entrepreneurs

Food-related businesses are a growing sector in North Dakota. To help food entrepreneurs, the NDSU Extension Service has developed materials, including a resource binder and a Web site, www.ag.ndsu.nodak.edu/food.htm. Educational opportunities include food safety certification workshops. Online educational modules will be released in 2005. In addition, more than 400 Nutrition Facts labels have been developed for North Dakota food products.

North Dakota 5 Plus 5 Communities program

Communities throughout North Dakota have been recognized as "5 Plus 5 Communities" by the North Dakota Department of Health. These programs include Extension agents, public health nutritionists and other partners. They support the "Healthy North Dakota" initiative by promoting healthy eating and regular physical activity. For example, in the "Walk Northwest North Dakota" program, 37 percent of the participants walked five or more miles daily, 64 percent increased their daily activity and 91 percent planned to continue walking regularly after the program ended.

Stepping up physical activity and nutrition practices

Regular physical activity and balanced nutrition are important for good health. The NDSU Extension Service collaborated with the Sioux and Grant County Extension Service offices to provide nutrition education to students in grades one to four at Standing Rock Elementary School. As a result, 93 percent of participants reported they are eating more fruit and vegetables, 94 percent report they are drinking more milk, and 88 percent said they are physically active every day.

Got Milk?

Strong bones begin in childhood. The kids' 3-A-Day of Dairy project, an in-school education intervention program for pre-teens and their parents, focused on the health benefits of calcium-rich foods. The NDSU Extension Service, Cass County Extension Service and Fargo Cass Public Health collaborated on a 3-A-Day of Dairy project in five, fourth-grade Fargo classrooms. The project consisted of eight monthly classrooms lessons, "dairy days" in the cafeteria and take-home newsletters. Ninety-eight percent of the students indicated they would drink more milk, 74 percent said that they eat more cheese and 67 percent said they would drink less soda pop.

Flaxseed: Agriculture to Health

The "Agriculture to Health" theme provides the basis for an adult awareness program, which promotes the research-based health benefits of regional foods produced in North Dakota and the northern Plains. Flaxseed was featured for the first lesson of the series. Biomedical research indicates that flaxseed, when consumed on a regular basis, potentially may reduce heart disease risk, diabetes risk and blood glucose, the inflammatory response and menopausal symptoms, and promote healthy laxation. In addition, flaxseed can be consumed by those with celiac disease who must avoid wheat products. Educational materials that promoted the health qualities of flaxseed were developed under the leadership of the NDSU Extension Service nutrition and health specialist in collaboration with the NDSU Department of Plant Sciences and the USDA-Agricultural Research Service's Grand Forks Human Nutrition Research Center. NDSU Extension agents delivered lessons to adult audiences across the state during 2003-04. A pre/post-evaluation obtained from 245 participants (men and women from 18 counties) indicated increased awareness, knowledge and intent to add flaxseed to the diet.

Folic Acid Education

U.S. Public Health Service officials recommend that women who could become pregnant should have 400 micrograms of B vitamin folic acid daily. It could prevent up to 70 percent of some birth defects, plus reduce the risk of heart disease, some types of cancer and Alzheimer's Disease, health officials say. A statewide task force including Extension, public health, health professionals and others has promoted the folic acid message. In a 2002 statewide random survey, 63.7 percent of females ages 25 to 34 knew the link between folic acid and birth defects, compared with 47.4 percent of the same age group the previous year. Of females 25 to 34, 59.3 percent reported taking a multivitamin compared with 46.5 percent of the same age group surveyed the previous year.

Budget Reconciliation

NDSU Agriculture
North Dakota Agricultural Experiment Station and NDSU Extension Service

General Fund —

Extension Service, Main and Branch Research Centers, Northern Crops Institute and Agronomy Seed Farm

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

	(1) Extension Service	(2) Main Research Center	(3) Branch Research Centers	(4) NCI	(5) Agronomy Seed Farm	(6) Total
2003-05 Original General Fund Appropriation	$ 13,859,446	$ 28,210,740	$ 7,467,679	$ 746,002	$ -	$ 50,283,867
Base Adjustments:						
Transfer from Main Research Center to Extension Service and Branch Research Centers	255,000	(492,408)	237,408		-	
2003-05 Adjusted General Fund Appropriation	14,114,446	27,718,332	7,705,087	746,002	-	50,283,867
Executive Recommendation Increases (Decreases):						
Compensation package (4%-FY06 & 3%-FY07)	837,570	1,467,507	313,578	30,866		2,649,521
Health insurance and EAP increases	174,056	366,472	111,063	6,776		658,367
Operating inflation	114,990	107,754	45,529	4,731		273,004
Initiatives[1]		301,897		24,469		326,366
GF Operating Reduction (Offsetting Incr to Other Funds)		(200,000)				(200,000)
Total Increases (Decreases)	1,126,616	2,043,630	470,170	66,842	-	3,707,258
2005-07 Executive Recommendation - General Fund	**$ 15,241,062**	**$ 29,761,962**	**$ 8,175,257**	**$ 812,844**	**$ -**	**$ 53,991,125**
Increase (Decrease) From 2003-05 Adjusted Appropriation	**$ 1,126,616**	**$ 2,043,630**	**$ 470,170**	**$ 66,842**	**$ -**	**$ 3,707,258**
Percent Increase (Decrease)	**7.98%**	**7.37%**	**6.10%**	**8.96%**	**0.00%**	**7.37%**

[1] Initiatives (general fund) include the following: Main Research Center - $301,897 for 2 FTE for beef initiative (one-time funding for 2005-07 only); NCI - $24,469 for linking crops to livestock development.

Budget Reconciliation

NDSU Agriculture

North Dakota Agricultural Experiment Station and NDSU Extension Service

Other Funds —

Extension Service, Main and Branch Research Centers, Northern Crops Institute and Agronomy Seed Farm

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

	(1) Extension Service	(2) Main Research Center	(3) Branch Research Centers	(4) NCI	(5) Agronomy Seed Farm	(6) Total
2003-05 Original Other Fund Appropriation	$ 20,486,830	$ 32,306,474	$ 8,967,403	$ 777,345	$ 1,166,604	$ 63,704,656
Increases (Decreases) included in budget request:						
2003-05 Capital projects		(1,120,000)	(1,400,000)			(2,520,000)
2005-07 Capital projects		9,000,000	1,060,000			10,060,000
One-time funding for Centers for Excellence		(800,000)				(800,000)
Other increases in estimated income	1,581,419	5,212,364	3,309,194	144,453	9,868	10,257,298
2005-07 Budget Request	22,068,249	44,598,838	11,936,597	921,798	1,176,472	80,701,954
Executive Recommendation Increases (Decreases):						
Compensation Package (4%-FY06 & 3%-FY07)	584,896	760,384	105,213	22,167	18,131	1,490,791
Health insurance and EAP increases	336,083	250,996	30,925	6,776	5,082	629,862
Initiatives[1]			59,799			59,799
ERP One-time Operating Funding (Offset to GF Reduction)		200,000				200,000
Increase (decrease) capital projects-State Bonding[2]		(2,000,000)	190,000			(1,810,000)
Increase (decrease) capital projects-Other Funds[3]		(2,500,000)	70,000			(2,430,000)
Total Increases (Decreases)	920,979	(3,288,620)	455,937	28,943	23,213	(1,859,548)
2005-07 Executive Recommendation - Other Funds	**$ 22,989,228**	**$ 41,310,218**	**$ 12,392,534**	**$ 950,741**	**$ 1,199,685**	**$ 78,842,406**

[1] Initiatives (other funds-Dickinson oil revenues) include $59,799 for an ethanol and malting barley initiative at the Dickinson Research Extension Center.

[2] State bonding - Decreased $2 million for Research Greenhouse Complex; increased $440,000 for North Central Agronomy Lab and Greenhouse; and eliminated $250,000 Central Grasslands Headquarters Office Addition.

[3] Other funds - Decreased $2 million federal funding and $500,000 other funding for Research Greenhouse Complex; increased $130,000 other funds for North Central Agronomy Lab and Greenhouse; and eliminated $60,000 Central Grasslands Headquarters Office Addition.

NDSU Agriculture
North Dakota Agricultural Experiment Station and NDSU Extension Service

Branch Research Centers

Reconciliation of 2003-05 Original Appropriation to Executive Recommendation (SB 2021)

	(1) Dickinson	(2) Central Grasslands	(3) Hettinger	(4) Langdon	(5) North Central	(6) Williston	(7) Carrington	(8) Total
General Fund:								
2003-05 Original General Fund Appropriation	$ 1,601,257	$ 911,996	$ 868,573	$ 911,413	$ 856,960	$ 913,010	$ 1,404,470	$ 7,467,679
Base Adjustments:								
Reallocation of revolving equipment pool	88,333	(88,334)		(88,333)	(88,333)	88,334	88,333	-
Transfer from Main Research Center to Extension Service and Branch Research Centers	963	19,382	10,965	18,381	25,381	964	161,372	237,408
2003-05 Adjusted General Fund Appropriation	1,690,553	843,044	879,538	841,461	794,008	1,002,308	1,654,175	7,705,087
Executive Recommendation Increases (Decreases):								
Compensation package (4%-FY06 & 3%-FY07)	71,160	35,137	32,329	35,484	35,276	39,189	65,003	313,578
Health insurance increases	24,703	11,646	11,581	10,462	17,943	13,552	21,176	111,063
Operating inflation	5,320	5,347	8,830	5,188	3,115	6,184	11,545	45,529
Initiatives								-
Total Increases (Decreases)	101,183	52,130	52,740	51,134	56,334	58,925	97,724	470,170
2005-07 Executive Recommendation- General Fund	**$ 1,791,736**	**$ 895,174**	**$ 932,278**	**$ 892,595**	**$ 850,342**	**$ 1,061,233**	**$ 1,751,899**	**$ 8,175,257**
Other Funds:								
2003-05 Original Other Fund Appropriation	$ 3,679,877	$ 755,391	$ 652,902	$ 371,472	$ 855,550	$ 730,065	$ 1,922,146	$ 8,967,403
Increases (Decreases) included in budget request:								
2003-05 Capital projects	(1,400,000)							(1,400,000)
2005-07 Capital projects		310,000			750,000			1,060,000
Other increases in estimated income	1,400,000	326,936	200,000	54,156	500,000	300,000	528,102	3,309,194
2005-07 Budget Request	3,679,877	1,392,327	852,902	425,628	2,105,550	1,030,065	2,450,248	11,936,597
Executive Recommendation Increases (Decreases):								
Compensation package (4%-FY06 & 3%-FY07)	16,482	3,282	9,976	11,387	26,887		37,199	105,213
Health insurance and EAP increases	6,863	1,906	3,665	3,092	3,541		11,858	30,925
Initiatives[1]	59,799							59,799
Increase (decrease) capital projects-State Bonding[2]		(250,000)			440,000			190,000
Increase (decrease) capital projects-Other Funds[3]		(60,000)			130,000			70,000
Total Increases (Decreases)	83,144	(304,812)	13,641	14,479	600,428	-	49,057	455,937
2005-07 Executive Recommendation-Other Funds	**$ 3,763,021**	**$ 1,087,515**	**$ 866,543**	**$ 440,107**	**$ 2,705,978**	**$ 1,030,065**	**$ 2,499,305**	**$ 12,392,534**

[1] Ethanol and malting barley initiative, funded from oil revenues.

[2] State bonding - Increased $440,000 for North Central Agronomy Lab and Greenhouse and eliminated $250,000 Central Grasslands Headquarters Office Addition.

[3] Other funds - Increased $130,000 other funds for North Central Agronomy Lab and Greenhouse; and eliminated $60,000 Central Grasslands Headquarters Office Addition.

NDSU Agriculture

Summary of Senate Appropriation Amendments to S.B. 2020

- Reduces funding for compensation increases from funded 4/3% as proposed in the Governor's Budget to 3/4% as recommended by the Legislature ($237,349 General fund and $131,623 other funds).
- Adds $228,201 in general fund for western malting barley project at various research centers.
- Adds $100,000 in general fund for soil conservation districts in Extension budget.
- Adds $159,605 ($120,000 general fund and $39,605 in other funds) for crop quality promotion specialist in Northen Crops Institute (NCI).
- Removes $24,469 in general fund for "linking crops to livestock research" in NCI.
- Continues $800,000 in Ag PACE funding, first approved in 2003, for Beef Systems Center of Excellence. Adds $400,000 in state general fund for 2.0 new positions and related operating costs for beef center. The new positions may not be filled until SBARE enters into a business partnership agreement for the Beef Systems Center of Excellence.
- Suggests the Legislative Council consider a study of the branch research centers, including visiting each center to observe infrastructure needs and research conducted; how research at the centers may compliment the Beef Systems Center of Excellence; and receive comments from area growers and producers.
- Adds a section indicating the special funds spending authority of $1.4 million included in subdivision 5 of section 1 of chapter 20 of the 2003 Session Laws for the Dickinson Research Extension Center building project may come from any available source and declares this section an emergency measure.
- In total, S.B. 2020 has been increased by $586,383 in state general funds.

North Dakota University System
(Extension Service, Main & Branch Research Stations, Northern Crops Institute, and Agronomy Seed Farm)
Summary of Changes from 2003-05 Legislative Appropriation to Executive Recommendation and Engrossed SB2020

	General Fund					
	Extension Service	Main Research Station	Branch Centers	NCI	Agronomy Seed Farm	Total General Fund
2003-05 Original General Fund Appropriation	**$ 13,859,446**	**$ 28,210,740**	**$ 7,467,679**	**$ 746,002**	**$ -**	**$ 50,283,867**
Base Adjustments (Transfer of 03-05 "critical area" funds)	255,000	(492,408)	237,408			-
2003-05 Adjusted General Fund Appropriation	**14,114,446**	**27,718,332**	**7,705,087**	**746,002**	**-**	**50,283,867**
Executive Recommendation Adjustments:						
Compensation package (4% & 3%)	837,570	1,467,507	313,578	30,866		2,649,521
Health insurance and EAP increases	174,056	366,472	111,063	6,776		658,367
Operating inflation	114,990	107,754	45,529	4,731		273,004
Initiatives 1/		301,897		24,469		326,366
GF Operating Reduction (Offsetting Incr to Other Funds)		(200,000)				(200,000)
Subtotal-Adjustments per Executive Recommendation	**1,126,616**	**2,043,630**	**470,170**	**66,842**	**-**	**3,707,258**
General Fund per Executive Recommendation	**15,241,062**	**29,761,962**	**8,175,257**	**812,844**	**-**	**53,991,125**
Senate Adjustments:						
Adds funds for Soil Conservation Districts	100,000					100,000
Adds funds for western malting barley 2/		39,251	188,950			228,201
Adds funds for beef systems centers of excellence 3/		400,000				400,000
Adds 1 FTE crop quality promotion specialist				120,000		120,000
Removes funding for linking crops to livestock research 4/				(24,469)		(24,469)
Reduces compensation package 5/	(74,028)	(131,842)	(28,701)	(2,778)	-	(237,349)
Subtotal-Senate Adjustments	**25,972**	**307,409**	**160,249**	**92,753**	**-**	**586,383**
General Fund per Engrossed SB2020	**$ 15,267,034**	**$ 30,069,371**	**$ 8,335,506**	**$ 905,597**	**$ -**	**$ 54,577,508**

Footnotes regarding general fund adjustments:

1/ Initiatives (general fund) include the following: Main Research Center - $301,897 for 2 FTE for beef initiative (one time funding for 2005-07 only); NCI - $24,469 for linking crops to livestock development.

2/ Adds funds for western malting barley project at various research centers (Main Research Center $39,251; Dickinson $62,845; Hettinger $8,000; and Williston $118,105)

3/ Adds $400,000 in state general fund for 2.0 new positions and related operating costs for beef center. The new positions may not be filled until SBARE enters into a

4/ Removes funding for linking crops to livestock research that was included in the executive recommendation.

5/ Reduces funding for compensation increases from 4/3%, as proposed in the executive recommendation, to 3/ 4% as recommended by the Legislature

North Dakota University System
(Extension Service, Main & Branch Research Stations, Northern Crops Institute, and Agronomy Seed Farm)
Summary of Changes from 2003-05 Legislative Appropriation to Executive Recommendation and Engrossed SB2020

	Other Funds					
	Extension Service	Main Research Station	Branch Centers	NCI	Agronomy Seed Farm	Total Other Funds
2003-05 Original Other Fund Appropriation	**$ 20,486,830**	**$ 32,306,474**	**$ 8,967,403**	**$ 777,345**	**$ 1,166,604**	**$ 63,704,656**
Executive Recommendation Adjustments:						
2003-05 Capital projects		(1,120,000)	(1,400,000)			(2,520,000)
2003-05 One-time PACE funding for beef systems centers of excellence		(800,000)				(800,000)
Increases in estimated income	1,581,419	5,212,364	3,309,194	144,453	9,868	10,257,298
Compensation package (4%-FY06 & 3%-FY07)	584,896	760,384	105,213	22,167	18,131	1,490,791
Health insurance and EAP increases	336,083	250,996	30,925	6,776	5,082	629,862
Initiatives 1/		-	59,799			59,799
ERP One-time Operating Funding (Offset to GF Reduction)		200,000	-			200,000
Subtotal-Adjustments per Executive Recommendation	**2,502,398**	**4,503,744**	**2,105,131**	**173,396**	**33,081**	**9,317,750**
Other Funds per Executive Recommendation	**22,989,228**	**36,810,218**	**11,072,534**	**950,741**	**1,199,685**	**73,022,406**
Senate Amendments:						
Continues PACE funding for beef systems centers of excellence 2/		800,000				800,000
Adds crop quality promotion specialist				39,605		39,605
Reduces compensation package 3/	(50,617)	(68,419)	(8,962)	(1,996)	(1,629)	(131,623)
Subtotal-Senate Adjustments	**(50,617)**	**(68,419)**	**(8,962)**	**(1,996)**	**(1,629)**	**707,982**
Other Funds per Engrossed SB2020	**$ 22,938,611**	**$ 36,741,799**	**$ 11,063,572**	**$ 948,745**	**$ 1,198,056**	**$ 73,730,388**

Footnotes regarding other funds adjustments:

1/ Initiatives (other funds-Dickinson oil revenues) include $59,799 for an ethanol and malting barley initiative at the Dickinson Research Center.

2/ Continues $800,000 in Ag PACE funding, first approved in 2003, for Beef System Centers of Excellence.

3/ Reduces funding for compensation increases from 4/3%, as proposed in the executive recommendation, to 3/ 4% as recommended by the Legislature

OTHER CHANGES TO EXECUTIVE RECOMMENDATION:

* Suggests the Legislative Council consider a study of the branch research centers, including visiting each center to observe infrastructure needs and research conducted; how research at the centers may compliment the beef systems center of excellence; and receive comments from area growers and producers

* Adds a section, indicating the special funds spending authority of $1.4 million, included in subdivision 5 of section 1 of chapter 20 of the 2003 Session Laws for the Dickinson

North Dakota [redacted]sity System
Detail for Branch Research Centers
Summary of Changes from 2003-05 Legislative Appropriation to Executive Recommendation and Engrossed SB2020

General Fund

	Dickinson	Central Grasslands	Hettinger	Langdon	North Central	Williston	Carrington	Total
2003-05 Original General Fund Appropriation	$ 1,601,257	$ 911,996	$ 868,573	$ 911,413	$ 856,960	$ 913,010	$ 1,404,470	$ 7,467,679
Base Adjustments:								
Transfer from Main Research Center	963	19,382	10,965	18,381	25,381	964	161,372	237,408
Reallocation of revolving equipment pool	88,333	(88,334)	-	(88,333)	(88,333)	88,334	88,333	-
2003-05 Adjusted General Fund Appropriation	**1,690,553**	**843,044**	**879,538**	**841,461**	**794,008**	**1,002,308**	**1,654,175**	**7,705,087**
Executive Recommendation Adjustments:								
Compensation package (4% & 3%)	71,160	35,137	32,329	35,484	35,276	39,189	65,003	313,578
Health insurance and EAP increases	24,703	11,646	11,581	10,462	17,943	13,552	21,176	111,063
Operating inflation	5,320	5,347	8,830	5,188	3,115	6,184	11,545	45,529
Subtotal-Adjustments per Executive Recommendation	**101,183**	**52,130**	**52,740**	**51,134**	**56,334**	**58,925**	**97,724**	**470,170**
General Fund per Executive Recommendation	**1,791,736**	**895,174**	**932,278**	**892,595**	**850,342**	**1,061,233**	**1,751,899**	**8,175,257**
Senate Adjustments:								
Adds funds for western malting barley	62,845		8,000			118,105		188,950
Reduces compensation package	(6,475)	(3,175)	(2,949)	(3,246)	(3,300)	(3,528)	(6,028)	(28,701)
Subtotal-Senate Adjustments	**56,370**	**(3,175)**	**5,051**	**(3,246)**	**(3,300)**	**114,577**	**(6,028)**	**160,249**
General Fund per Engrossed SB2020	$ 1,848,106	$ 891,999	$ 937,329	$ 889,349	$ 847,042	$ 1,175,810	$ 1,745,871	$ 8,335,506

Other Funds

	Dickinson	Central Grasslands	Hettinger	Langdon	North Central	Williston	Carrington	Total
2003-05 Original Other Fund Appropriation	$ 3,679,877	$ 755,391	$ 652,902	$ 371,472	$ 855,550	$ 730,065	$ 1,922,146	$ 8,967,403
Executive Recommendation Adjustments:								
2003-05 Capital projects	(1,400,000)							(1,400,000)
Increases in estimated income	1,400,000	326,936	200,000	54,156	500,000	300,000	528,102	3,309,194
Compensation package (4%-FY06 & 3%-FY07)	16,482	3,282	9,976	11,387	26,887		37,199	105,213
Health insurance and EAP increases	6,863	1,906	3,665	3,092	3,541		11,858	30,925
Malting barley initiative from oil revenues	59,799							59,799
Subtotal-Adjustments per Executive Recommendation	**83,144**	**332,124**	**213,641**	**68,635**	**530,428**	**300,000**	**577,159**	**2,105,131**
Other Funds per Executive Recommendation	**3,763,021**	**1,087,515**	**866,543**	**440,107**	**1,385,978**	**1,030,065**	**2,499,305**	**11,072,534**
Senate Amendments:								
Reduces compensation package	(1,404)	(280)	(850)	(970)	(2,290)		(3,168)	(8,962)
Subtotal-Senate Adjustments	**(1,404)**	**(280)**	**(850)**	**(970)**	**(2,290)**	**-**	**(3,168)**	**(8,962)**
Other Funds per Engrossed SB2020	$ 3,761,617	$ 1,087,235	$ 865,693	$ 439,137	$ 1,383,688	$ 1,030,065	$ 2,496,137	$ 11,063,572

North Dakota University System

(Extension Service, Main & Branch Research Stations, NCI, and Agronomy Seed Farm)

Detail of Senate Amendments to S.B. 2020

	Original SB2020	Reduces Compensation Pkg from 4&3 to 3&4	Adds Funds for Soil Conservation Districts	Adds Funds for Western Malting Barley	Adds Positions & Funding for Beef Ctr of Excellence	Continues PACE Funding for Beef Ctr of Excellence	Adds Crop Quality Promotion Specialist	Removes Funding for Linking Crops to Livestock Research	Total Amendments	Amended SB2020 - Senate Version
				Senate Amendments						
Extension Service										
General fund	15,241,062	(74,028)	100,000						25,972	15,267,034
Special funds	22,989,228	(50,617)							(50,617)	22,938,611
Total funds	38,230,290	(124,645)	100,000	-					(24,645)	38,205,645
Main Research Station										
General fund	29,761,962	(131,842)		39,251	400,000				307,409	30,069,371
Special funds	36,810,218	(68,419)				800,000			731,581	37,541,799
Total funds	66,572,180	(200,261)		39,251	400,000	800,000			1,038,990	67,611,170
Branch Research Centers										
Dickinson:										
General fund	1,791,736	(6,475)		62,845					56,370	1,848,106
Special funds	3,763,021	(1,404)							(1,404)	3,761,617
Total funds	5,554,757	(7,879)		62,845					54,966	5,609,723
Central Grasslands:										
General fund	895,174	(3,175)							(3,175)	891,999
Special funds	1,087,515	(280)							(280)	1,087,235
Total funds	1,982,689	(3,455)		-					(3,455)	1,979,234
Hettinger:										
General fund	932,278	(2,949)		8,000					5,051	937,329
Special funds	866,543	(850)							(850)	865,693
Total funds	1,798,821	(3,799)		8,000					4,201	1,803,022
Langdon:										
General fund	892,595	(3,246)							(3,246)	889,349
Special funds	440,107	(970)							(970)	439,137
Total funds	1,332,702	(4,216)		-					(4,216)	1,328,486
North Central:										
General fund	850,342	(3,300)							(3,300)	847,042
Special funds	1,385,978	(2,290)							(2,290)	1,383,688
Total funds	2,236,320	(5,590)		-					(5,590)	2,230,730
Williston:										
General fund	1,061,233	(3,528)		118,105					114,577	1,175,810
Special funds	1,030,065	-							-	1,030,065
Total funds	2,091,298	(3,528)		118,105					114,577	2,205,875
Carrington:										
General fund	1,751,899	(6,027)							(6,027)	1,745,872
Special funds	2,499,305	(3,169)							(3,169)	2,496,136
Total funds	4,251,204	(9,196)		-					(9,196)	4,242,008
Total Research Centers:										
General fund	8,175,257	(28,701)		188,950					160,249	8,335,506
Special funds	11,072,534	(8,962)		-					(8,962)	11,063,572
Total funds	19,247,791	(37,663)		188,950					151,287	19,399,078
Northern Crops Institute										
General fund	812,844	(2,778)					120,000	(24,469)	92,753	905,597
Special funds	950,741	(1,996)					39,605		37,609	988,350
Total funds	1,763,585	(4,774)		-			159,605	(24,469)	130,362	1,893,947
Agronomy Seed Farm										
General fund									-	-
Special funds	1,199,685	(1,629)							(1,629)	1,198,056
Total funds	1,199,685	(1,629)		-					(1,629)	1,198,056
TOTAL SB2020										
General fund	53,991,125	(237,349)	100,000	228,201	400,000	-	120,000	(24,469)	586,383	54,577,508
Special funds	73,022,406	(131,623)	-	-	-	800,000	39,605	-	707,982	73,730,388
Total funds	127,013,531	(368,972)	100,000	228,201	400,000	800,000	159,605	(24,469)	1,294,365	128,307,896

North Dakota Agricultural Experiment Station

2005-07 Major Capital Projects

This general and special fund capital improvement project was ranked No. 1 by SBARE.

RESEARCH GREENHOUSE COMPLEX — $ 9,000,000

Main Station Research Farms *2005-2007 Biennium – Priority #1*

Project Rationale: This project is for the new construction plus implementation of the renovation of selected existing greenhouses to meet the critical need for state-of-the-art greenhouse space by North Dakota Agricultural Experiment Station (NDAES) researchers and the needs of UDSA researchers. This project has a high priority because of the current condition of existing greenhouses and the requirements for expanding research needs to benefit crop production both nationally and globally. The NDAES needs secure greenhouse space to conduct the research on transgenic crops in order to meet consumer demands and to respond to the threat of bioterrorism.

Project Description: This request is for 16 containment units, each consisting of 800 square feet, with independent environmental controls to work on the 40 crops currently grown in the state, on potential new crops and on the insects/diseases/weed/soil problems that affect those crops. Eighteen units, each containing 200 square feet, are needed for specialized insect rearing and disease inoculation, and one 600 square foot unit is required for use as a greenhouse spray chamber room.

Each greenhouse room within a range shall have de-ionized and regular water systems, fertilizer injection system, heating, lighting, ventilation and environmental controls. Independent room access is required for security and to minimize contamination of rooms by workers and transported plant material.

Headhouses for the greenhouse ranges shall be designed to support the greenhouses (soil bins, autoclaves/sterilizers, plant and soil disposal, etc.) and to provide additional facilities important for crop research. The headhouse shall incorporate at least six laboratories (three transgenic, three non-transgenic); three controlled environment seed storage rooms (with a total of 8,000 square feet); two large threshing/storage rooms (one transgenic and one non-transgenic, each 100' x 200'); a propagating material room; a freezer room; two seed cleaning/sorting/packing rooms (each consisting of 2,000 square feet); three drying rooms with 15 dryer units; and two large growth chamber areas sufficient for 24 chambers each. The facility shall include a multi-purpose classroom/demonstration area, restroom, and changing/locker rooms. The facility shall be planned for future expansion to conform to the needs of NDAES and USDA research.

The location of this facility shall be in proximity to other on-campus laboratory research facilities because of the need to transport plant material between buildings in the winter, for access by student labor and for the convenience of graduate students and faculty.

Funding Request: State Bonding Funds ($4.0 million); Other Funds ($5.0 million)

Branch Research Centers

2005-07 Major Capital Projects

AGRONOMY LABORATORY and GREENHOUSE $1,690,000

North Central Research Extension Center *2005-2007 Biennium – Priority #1*

Project Rationale: A new agronomy research laboratory and greenhouse is needed in order to provide new and more efficient research opportunities and capabilities for the North Central Research Extension Center. This research is currently being conducted on four floors of an old seedhouse constructed in 1949, resulting in the following problems:

- Inadequate laboratory space for the 20 full-time and seasonal employees sharing the 24' x 14' area.
- Inoperable elevator, with a cost of more than $30,000 to repair it. (More than 15,000 filled harvest bags must be carried to the second or third floor for cleaning, analysis and storage.)
- Delayed harvests due to insufficient dryer space for the quantity of research projects conducted, jeopardizing valuable research.
- Difficult breathing and working conditions during the seed cleaning process because of inadequate dust ventilation system.
- Difficult working conditions in the seed cleaning area during times of temperature extremes because area is not heated or cooled; has also resulted in computer malfunctions and lost data.
- Computers are not connected to the main office network.

The lab will provide a safer and cleaner working environment, as well as a climate-controlled area for germplasm archives. The greenhouse, spray chamber and growth chamber will fill a critical void in NCREC's research capabilities, completing its field research with the ability to conduct studies under controlled conditions. The facility will provide an area to conduct preliminary crop evaluation, weed, disease, and insect studies prior to the growing season and the opportunity to study the influence of soil pH, fertility, relative humidity, temperature, etc. on crop and pest management. This, along with enhanced educational activities that a greenhouse can provide, makes it a necessary component of the project. Greenhouse research options (locally or at the NDSU Main Station in Fargo) are restricted due to limited greenhouse space, as well as logistical and time constraints.

Project Description: This project will consist of construction of a heated laboratory, office and storage space for crop and weed research, all located on one floor. The laboratory will be used for setting up seed and processing data from crop, weed, insect and disease studies and will create a more efficient flow of materials from seed preparation through harvesting, seed cleaning and sample analysis. Facilities for receiving, drying, cleaning and storing freshly harvested material will also be included, as will a dust control system and a greenhouse for winter research.

Funding Request:		
	Other Funds	$ 1,250,000
	State Bonding	440,000
		$ 1,690,000

For Senate Bill 2020
WILLISTON RESEARCH EXTENSION CENTER (WREC)
Budget No. 646 as part of the combined budget No. 628

Prepared for:
House Appropriations Sub-Committee on 3/1/05
by
Jerald W. Bergman, WREC Director

Mr. Chairman and Members of the House Appropriations Sub-Committee:

I support the SBARE needs based budget as prioritized but would like to stress the need of the REC's to obtain funding for extraordinary repairs for the general upkeep, repair, and maintenance of our REC facilities and grounds. Extraordinary repair and maintenance needs at WREC include new shingles for our seedhouse, resurfacing of our existing driveways, and machinery storage in Nesson Valley.

Also, I support the continued funding of the Western Malt Barley project initiated in 2002 on a one-time funding. This project will result in new malt barley varieties with acceptable protein levels and kernel plumpness for western North Dakota dryland production and new barleys for irrigation having improved straw strength and higher yielding ability. The Western Malt Barley project will help assure the current 20 million bushel western malt barley industry becomes firmly established and stays in North Dakota. The Western Malt Barley Project is a statewide cooperative effort involving the NDSU barley breeders, NDSU cereal chemists, soil scientists, plant pathologists and research staff located at the Dickinson, Hettinger, North Central (Minot) and Williston Research Extension Centers.

The NDSU MonDak Irrigation Research and Development Project in Nesson Valley has obtained all the water permits and completed the construction and installation of the irrigation infrastructure totaling $725,000 from grants and donations from the region. The project includes (4) 40-acre linear overhead irrigation systems and lake water and ground water source pumping systems. Research scientists from WREC, the MSU Eastern Agricultural Research Center, and the USDA-ARS Northern Plains Agricultural Research Laboratory at Sidney, MT will work together to develop improved irrigation technologies and develop and commercialize new irrigated high-value and value-added crops in our Region. This project will expand irrigated agriculture and attract agricultural processors to our region to create new wealth and private sector employment through irrigation development and new and expanding agricultural processing in western North Dakota.

I thank you for your long time funding support for the Agricultural Experiment Station, Extension Services, and the REC's and thank you for your consideration of these requests.

Testimony on SB-2020 to the House Appropriations Sub-Committee
March 1, 2005
by
Paul E. Nyren, Director, NDSU Central Grasslands Research Extension Center

I would like to take this opportunity to thank the members of this committee for your continued support of our program. I am here to support the NDSU Agricultural Budget as approved by the State Board of Agricultural Research and Education. The CGREC represents the central region of the state known as the Coteau. The 18 counties that make up the coteau are home to 38% of the state's farms which have 44% of the state's rangeland and raise 42% of the state's beef cattle.

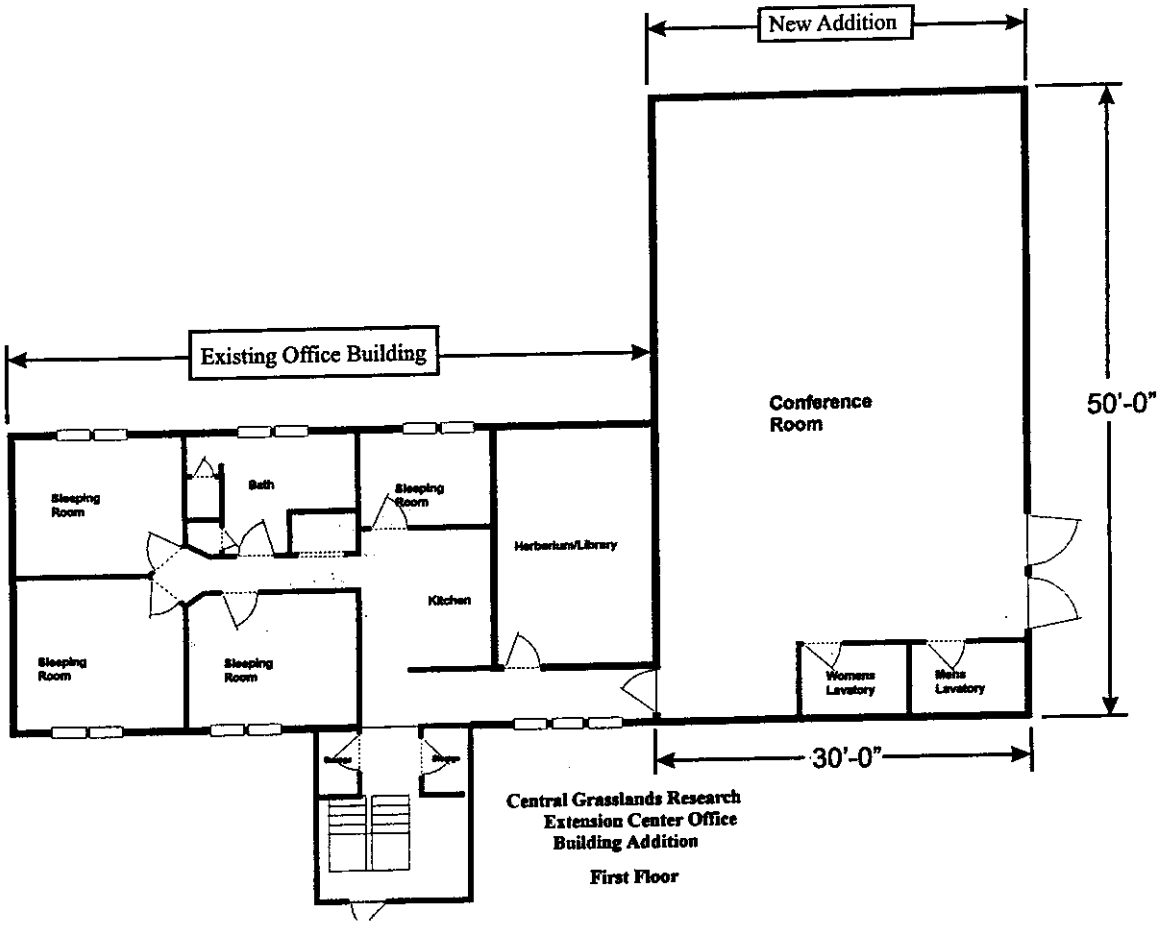
The last biennium has been an exciting time for the CGREC. The staff at the Center and those from the Main Station that conduct cooperative trials strive to develop answers to questions that will improve the quality of life for all citizens of North Dakota. As an example, recent studies by Dr. Jimmie Richardson and students from the Soils Department at NDSU have shown that proper grazing management can improve water infiltration and rooting depth on grasslands. **These findings have important implications on how rangeland can maintain productivity during a drought**. In the past biennium the Center has developed a cooperative biomass project with the USDA-ARS in Lincoln, Nebraska to look at **switchgrass biomass for ethanol**. Recently, grant funding as been obtained to begin working on an expanded biomass for ethanol project that will include six of the other REC's across the state. The CGREC has recently completed an agreement with the Chinese Academy of Science, Institute of Botany, in Beijing, China to exchange research information and scholars in the field of grassland ecology. **In 2004 the Center received a USDA grant to develop a range extension position at the Center**. This grant, coupled with funding from the Natural Resources Trust, will fund a extension specialist at the center to work with producers to set up rangeland monitoring sites and to work one-on-one with producers on range management issues.

The NDSU Research Extension Centers have long been centers for economic development within their respective regions of the state. While most of that economic development has been, and will continue to be, in the area of production agriculture all centers are now working to bring other forms of economic development to their areas. These vary from agricultural processing to alternative forms of energy, to tourism development. In order for this expansion to occour there needs to be sufficient infrastructure in place to accommodate these changes.

This biennium the addition to the CGREC office building was selected as the number two capital building project by the State Board of Agriculture Research and Education. The proposed office addition is based on the need for conference facilities, offices and lab space. Currently, meetings with an attendance larger than 12 must be held in the Center's shop or at a location away from the Center. The new addition will be 3000 square feet and provide 5 new offices and a laboratory and larger conference facilities.

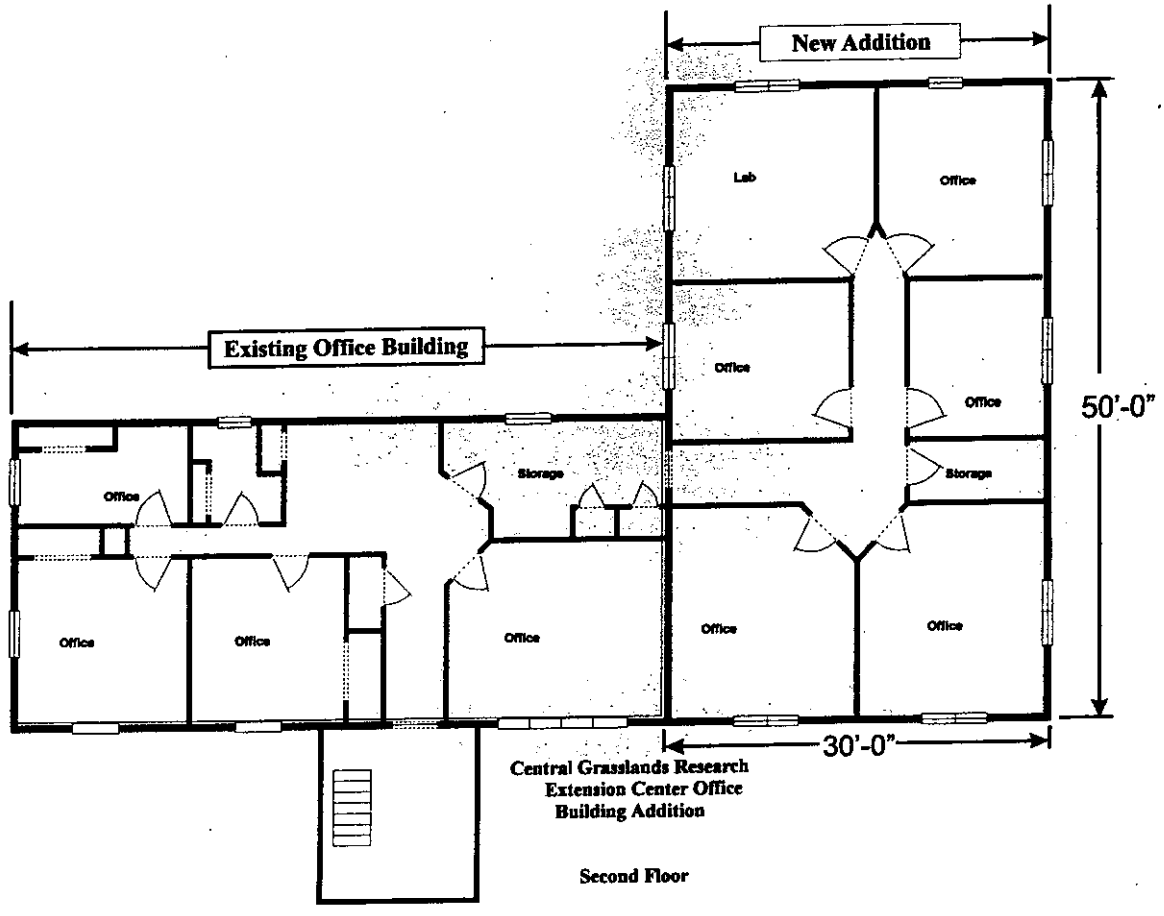
At present, the office building has five offices on the main floor as well as a receptionist desk and bathroom. One office is shared by two of the staff and one of our staff maintains an office in another building at the Center. The ground floor of the office contains three sleeping rooms, a herbarium/sample prep room, a kitchen, bath, and a conference room that accommodates 12 people comfortably.

With the advent of video conferencing and the expanded outreach program at the center, there is a need for larger conference room space. The experience of other research centers that have expanded conference facilities indicate that the number of meetings and usage of the facility increased dramatically when the new facility was in place. **The addition is projected to cost $350,000. The Senate has placed this project in the Bonding Bill.**



Central Grasslands Research Extension Center Office Building Addition

First Floor



Central Grasslands Research Extension Center Office Building Addition

Second Floor