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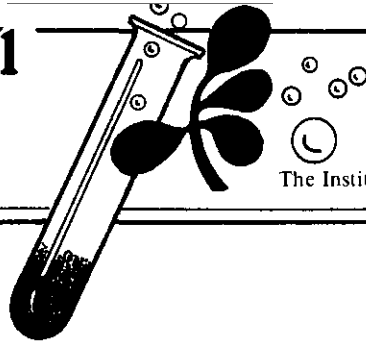
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June 1993

Volume 27, Number 6

COMMENTS FROM THE DEAN

Dear Colleagues:

Budget reductions and resource reallocations are a major topic of conversation on East Campus. IANR has completed action on the 1.5 percent budget reduction imposed on UNL during a special session of the Unicameral last fall. These reductions will negatively affect the programs in several units and reduce the breadth and depth of some of our research thrusts. At the time this column is written, it appears that the University of Nebraska will avoid additional budget reductions for the FY 1993-95 biennium. Many people have worked hard to inform the members of the Legislature about the effects of additional budget reductions.

IANR has also pledged to reallocate 5 percent of our budget during FY 1993 and each of the next two years. About half of the reallocation will occur through redirection of resources within units. The remaining reallocation will occur through eliminating some lower priority programs and establishing several high priority thrusts. Most of the reallocation resources for new programs will come from eliminating open faculty positions and removing associated support for these positions from units. The resulting resources will be focused on new programs that advance the IANR Strategic and Action Plans and that have been identified as very high priority. As a position becomes open, faculty and administrators will determine the relative priority of the existing program thrust to that of a new thrust. Thus, high priority existing programs will be maintained and new thrusts will be established.

The recently completed budget reduction/reallocation process has developed a pool of resources that will be allocated to units for new programs. A number of these high priority programs will have research components, e.g., meat & poultry by-products, animal waste management, value-added textile science, youth and adolescence behavior, carbohydrate chemistry, animal molecular genetics, and soil microbial ecology. We feel that these programs are important to Nebraska and are in concert with the Strategic Plan. The pace of societal change is accelerating and IANR programs must continue to change if we are to remain relevant and retain our clientele support.

*Darrell W. Nelson
Dean and Director*

ARD ADVISORY COUNCIL UPDATE

The ARD Advisory Council's purpose is to provide advice to the ARD Deans on current issues and to present the faculty's concerns to them. The ARD Advisory Council is divided into nine districts; each district has an elected representative. Three representatives are elected each year. The Council meets about six times annually.

Important issues discussed during the past year included: The ARD mission statement, the ARD goals and objectives statement, the project review process, the Research Council travel grant program, the ESCOP research initiatives, the EPA audit, and Facilities Management.

A major activity of the Council is to review and rank proposals and applications for the following recurring programs:

- ✓ Junior Faculty for Excellence in Research Awards
- ✓ Widaman Trust Distinguished Graduate Assistant Awards
- ✓ UNL Foundation Grants
- ✓ Interdisciplinary Research Grant
- ✓ International Travel Grant
- ✓ Innovative and High Risk Research Award

Faculty can keep up with the Council's activities by reviewing the minutes of meetings, available from your District representative.

One special project during this past year was the workshop on Program Management for Scientists. This one-day program, co-sponsored by the ARD, was designed to help researchers manage grant budgets, people, and time.

1992-93 Council members whose terms will continue are: Dean Eisenhauer, Julie Albrecht, David Mortensen, Ken Hubbard, David Baltensperger, and Chris Calkins. Members whose terms expire in June 1993 include John Rupnow, James Partridge, and Edward Peters. Please contact us if you have something that you want us to discuss with the Deans.



FY 1994 CSRS BUDGET

Given below is a listing of the CSRS appropriation for FY 1993, the President's budget for FY 1994, and the NASULGC recommendation for FY 1994. The President's budget is normally released in mid January but this action was delayed until April this year. We were pleased to see that the President's budget provided a 2.76% increase in Hatch funds, a \$32.7 million increase in the NRI, and increased funding for some Special Grant programs such as Integrated Pest Management, Clearance of Pesticides for Minor Uses, and Global Change. The President's budget would eliminate funding for the Animal Health Formula Program, Critical Ag Materials, Weather Information Systems, and Tropical and Subtropical Agriculture.

USDA COOPERATIVE STATES RESEARCH SERVICE

FY 1994 BUDGET SITUATION

	FY 93 Appropriation	FY 94 Pres. Budget	FY 94 NASULGC recomm
----- \$, thousands -----			
BASE PROGRAMS			
Hatch Act	168,785	173,451	177,224
McIntire-Stennis	18,533	29,045	19,460
Animal Health	5,551	0	5,828
NATIONAL RESEARCH INITIATIVE			
Plant Systems	40,000	45,145	50,000
Animal Systems	25,000	30,000	34,000
Nutrition & Food	6,500	13,000	20,000
Natural Resources	18,000	26,000	36,000
Engineer. & Value-Added	4,000	9,000	15,000
Markets, Trade & Policy	4,000	7,000	7,000
Total	97,500	130,195	162,000
NATIONAL SPECIAL GRANTS			
Animal Health	0	0	3,000
Integrated Pest Mgmt.	4,457	7,000	3,000
Animal Welfare	0	0	7,000
Pesticide Clearance	3,500	10,000	10,000
Pest. Impact Assessment	2,969	2,968	3,000
Minor Use Animal Drugs	464	650	520
Biol. Impact Assessment	300	300	300
Rural Develop. Center	500	500	550
Trop. & Subtrop. Ag.	3,320	0	3,500
Water Quality	8,950	9,000	10,080
Global Change	2,000	3,000	2,200
Solid Waste Management	0	0	3,000
Strengthen Rural Wkforce	0	0	3,000
Energy Biomass/Biofuels	0	1,000	0
Total	26,775	34,418	54,150
REGIONAL/STATE SPECIAL GRANTS	46,636	0	16,253
OTHER RESEARCH PROGRAMS			
Rangeland	475	489	2,000
Aquaculture Centers	4,000	4,111	4,220
Supp. & Alter. Crops	1,168	3,000	2,000
Critical Materials	400	0	0
Sustainable Ag.	6,725	6,911	10,000
Weather Inform Systems	400	0	0
INTERNATIONAL RESEARCH	0	0	2,000

ROUTING RESEARCH PROPOSALS

During the past several months, there has been a lot of confusion about appropriate procedures for approval and routing of research grant proposals. All proposals must be approved by the unit administrator and ARD. Do not send proposals directly to Sponsored Programs.

We have also found that faculty are confused about the appropriate indirect cost (IDC) rates to be used on grant proposals. The IDC rate for proposals prepared by ARD-affiliated faculty is different than that for proposals prepared by faculty in City Campus units. The ARD IDC rate starting July 1, 1993 is 43 percent and will increase to 44 percent on July 1, 1994. Please do not call Sponsored Programs about the IDC rate because their specialists sometimes quote incorrect rates for ARD-related proposals and, consequently, the budgets must be recalculated before submission. Please contact Diane Mohrhoff in the ARD office if you have any questions about preparing the budget.

There is also difficulty concerning designation of the "Authorized Organizational Representative" on grant proposals. Darrell W. Nelson is the "Authorized Organizational Representative" for all USDA agency proposals (CSRS, ARS, ERS, SCS, APHIS) and Nebraska commodity boards. Sharon Davis, Director of Sponsored Programs, is the "Authorized Organizational Representative" for all other grant proposals including those submitted to industry.

IMPORTANCE OF PROJECT REVIEWS

I am certain that many of you felt the same as I did about the Project Review process before working as an Administrative Intern in ARD. They seemed unneeded and another hoop you needed to jump through to get on with your research work.

My perspective has changed during the past year. The Project Review process is a valuable learning experience. It gives new faculty members the opportunity to interact with senior faculty to gain input into their research efforts. It is an aid in networking with other faculty both here and at other universities. Sometimes the discussions result in reducing the scale and scope of the project in order to focus more effort on one area the team feels needs to be investigated immediately. For newer faculty it helps to uncover and discuss additional funding sources they may not have previously considered. The process also lets others in your subject matter area know what your research focus will be so future projects under development will better dovetail with others in the department. Finally, these reviews open a dialogue with statisticians on new ways to design projects to save time, effort and dollars.

Senior researchers also gain from these reviews since every five years it makes them focus on their future research areas. It also gives them the opportunity to start over in a new direction. We all need a fresh start once in awhile.

From an ARD perspective it gives administrators a way to interact with the newer faculty members and see what others in the research area think about the breadth, scope and

focus of the proposed research. ARD then can determine how peers view the quality of the research effort and discuss the project's importance to Nebraska and the surrounding states. It enables ARD to keep abreast of the changing techniques and the important research carried out within IANR. Help can also be offered in identifying potential funding sources. Lastly and perhaps most importantly the review process gives ARD the opportunity to be certain the proposed research fits the overall role and mission of IANR.

Currently there are approximately 330 projects in IANR that receive funding. Keeping track of these projects and knowing how they are developing is no small task.

—Jeff Keown

INDIRECT COST RATES IN THE NORTH CENTRAL REGION

Listed below is a compilation of the indirect cost (IDC) rates assessed by land grant universities in the North Central Region. Interestingly, UNL's rate is slightly below the average of all North Central land grant universities. Also listed is the proportion of IDC that are directly returned to the "college" (ARD for UNL) and to departments generating the IDC. We are below average in the proportion of IDC returned to the "college" but significantly above average in proportion provided to the department. The overall proportion of IDC returned directly to ARD plus units for support of research is 31% whereas the average for the North Central Region is 29.8%. Please keep in mind that faculty also receive other benefits from university-wide IDC such as laboratory renovation; hazardous wastes, radiological safety, and computing services; and Research Council programs.

University	Federal IDC Rate	% to College	% to Unit
Illinois	53.6	5	25
Iowa State	44	0	0
Purdue	50	0	0
Kansas State	45	5	40
Michigan State	45	10	10
Minnesota	40	54	0
Missouri	34	2	45
Nebraska	42.5	10	21
North Dakota State	42	45	22.5
Ohio State	47.7	7	0
South Dakota State	40	40	0
Wisconsin	44	16	0
Average	44	16.2	13.6

PROTECTING INTELLECTUAL PROPERTY

Periodically, scholarly activity by faculty results in technology or products that can be characterized as intellectual property. Intellectual property includes such things as inventions, books, papers, software, video discs, dramatic works, poems, sculptures, motion pictures, etc. Many of these discoveries and developments may have the potential for commercial development, but unless the correct protection

procedures are followed, they may never be commercialized or may be lost to others.

Intellectual property may be protected by a variety of means. The following table illustrates examples of intellectual property and their means of protection.

Property	Means of Protection
Trade secrets	Non-disclosure or confidentiality agreements
Inventions	Patents
Software	Copyrights or patents
Books, paper, video disks	Copyrights
Logos, names	Trademarks

The University of Nebraska Board of Regents Bylaws govern the handling of intellectual property. A summary of the Board of Regents requirements are as follows:

Trade secrets, Inventions: "Patentable discoveries by staff members that result from the performance of duties owed to the University, or from the use of University properties or facilities, except where such use is minimal, shall be offered to the Board in writing prior to making a patent applications."

Copyrights: Copyrights belong to the creator of the material to be copyrighted *unless* the material was created as a result of a specific requirement of employment or from an assigned University duty, was commissioned in writing by the University, or resulted from a grant or agreement with a sponsor which requires the University to hold or transfer the copyright.

Royalties: Net receipts from royalties received from the licensing of a patent or trade secret (or many University-owned copyrights) are divided equally among the inventor(s), the inventor's department or equivalent administrative unit and the Office of Technology Transfer. (Net receipts means total royalties minus the costs of patenting and licensing.)

Within the UNL campus, patent protection on behalf of UNL faculty and staff is handled through the patent administration office in the Office of the Vice Chancellor for Research. More extensive information and guidelines on patents and other intellectual property are available from that office as well as from the ARD office. Additional information on this topic will be communicated in future issues of ARD News. The current IANR Patent Policy is outdated and is undergoing revision. At this time, faculty and staff should continue to operate under the policy as stated in the UNL Guidelines. It is important to remember that Offers of Invention and disclosure statements need to be routed through appropriate departmental administration, IANR divisions and IANR Vice Chancellor prior to being processed by the UNL patent administration.

If there are any questions regarding these processes, please contact the UNL patent administration office at 2-3829 or the ARD office.



**GRANTS AND CONTRACTS
RECEIVED
APRIL & MAY, 1993**

Agricultural Economics	
Miscellaneous grants under \$5,000 each	4,500
Agricultural Meteorology	
Walter-Shea, E. A. & Blad, B. - NASA	11,453
Agronomy	
Baenziger, P. S. - Anna Elliott via UN Foundation	25,000
Johnson, B., Wilhelm, W., Francis, D., & Maranville, J. - Crop Production Trust Fund via UN Foundation	15,000
Miscellaneous grants under \$5,000 each	86,541
Animal Science	
Grotjan, H. E. - National Science Foundation	78,700
Morrison, M. - Nebraska Banker's Ass'n - via UN Foundation	10,000
Scheideler, S. E., Wallner-Pendleton, E. A. & Schneider, N. R. - North Dakota Oilseed Council	15,000
Scheideler, S. E. - American Ostrich Association	20,000
Miscellaneous grants under \$5,000 each	21,299
Biochemistry	
Golbeck, J. - National Science Foundation	8,000
Ragsdale, S. - U.S. Department of Energy	94,000
Wagner, F. - Partners in Science Research Corporation	14,000
Biological Systems Engineering	
Miscellaneous grants under \$5,000 each	17,438
Center for Sustainable Agriculture	
Francis, C. A. - USDA/CSRS	66,091
Entomology	
Stanley-Samuelson, D. W. - National Institute of Health	91,384
Miscellaneous grants under \$5,000 each	4,185
Family & Consumer Science	
Prochaska-Cue, K., Combs, E. R., & Davis, E. P. - USDA/CSRS	75,533
Food Processing Center	
Taylor, S. & Neumeister, D. - USDA	47,208
Miscellaneous grants under \$5,000 each	2,385
Food Science & Technology	
Miscellaneous grants under \$5,000 each	4,121
Forestry, Fisheries & Wildlife	
Miscellaneous grants under \$5,000 each	3,200
Horticulture	
Riordan, T. P. - U.S. Golf Association	331,538
Miscellaneous grants under \$5,000 each	23,556
Industrial Ag Products Center	
Hanna, M. A. - USDA	103,858
Northeast Research & Extension Center	
Miscellaneous grants under \$5,000 each	18,600
Nutritional Science & Dietetics	
Lewis, N. M. - Lincoln-Lancaster County Health Department	16,860
Panhandle Research & Extension Center	
Baltensperger, D. - UN Foundation	17,200
Kerr, E. - Western Sugar Company	9,069
Lyon, D. & Arkebauer, T. - UN Foundation	10,000

Wilson, R. - Western Sugar Company	29,700
Miscellaneous grants under \$5,000 each	55,300
Plant Pathology	
Van Eetten, J. L. - National Institute Health	7,650
Miscellaneous grants under \$5,000 each	2,100
South Central Research & Extension Center	
Miscellaneous grants under \$5,000 each	27,645
Veterinary & Biomedical Sciences	
Miscellaneous grants under \$5,000 each	8,593
West Central Research & Extension Center	
Miscellaneous grants under \$5,000 each	20,680
Grand Total	1,397,387

FEDERAL REGISTER GRANT NOTICES

CSRS is distributing electronically those solicitations by federal agencies requesting proposals for research and training grants, cooperative agreements, and contracts that relate to agriculture, natural resources and human and community resources. All of these notices appear in the Federal Register but are screened by CSRS personnel for relevance to the CSRS mission. Although ARD receives copies of the electronic messages and forwards these to appropriate units, units or faculty members may want to receive the notices directly. You may place your name on the mailing list for the Almanac System.

To subscribe to this summary service send an email to:

almanac@esusda.gov
(subject may be blank)

In the body of the message, type

subscribe stationltr

SECOND NATIONAL IPM SYMPOSIUM

The Second National IPM Symposium/Workshop will be held in Las Vegas on April 19-22, 1994. The sponsors for the activity are the ESCOP Pest Management Strategies Subcommittee and the ECOP IPM Task Force. A call for poster presentations has been issued. The symposium will focus on the following: IPM related to livestock, forage crops, forest trees, fruit & nut trees, urban pests, corn, soybeans, small grains, stored products, vegetables, potatoes, cotton, and peanut; biological control; host resistance; impacts of IPM; innovative delivery; pesticide resistance; application technology; classroom teaching; NAPIAP; and integration of technologies.

Some additional information is available in the ARD office. Detailed information about the symposium may be obtained from Dr. Ronald J. Kuhr, Department of Entomology, Box 7613, North Carolina State University, Raleigh, NC 27695. A second announcement of the symposium with hotel and registration information and a more complete program will appear later this year.

PROPOSALS SUBMITTED FOR FEDERAL GRANTS

The following is a listing of proposals submitted after April 1, 1993 by faculty for federal grant programs. While not all grants will be funded, we applaud the faculty member's effort in submitting proposals to the various agencies.

Stephen W. Ragsdale - National Science Foundation - Mechanistic Studies of Acetoclastic Methanogenesis - \$1,339,353

Robert J. Spreitzer - National Institute of Health - Genetic Modification of Chloroplast Rubisco - \$844,760

Sam M. Cordes, Jeffrey S. Royer and John C. Allen - USDA (Rupri) - Policy Impacts on Rural Communities - \$157,537

Glenn J. Hoffman and Blaine L. Blad - National Science Foundation - Renovation of First Floor of Chase Hall - \$312,000

James S. Schepers and Derrel Martin - US Environmental Protection Agency - Variable Rate Fertilizer Applications to Protect the Environment - \$499,046

Dennis McCallister - USDA/ARS - Nitrogen in Cultivated Ecosystems - \$36,000

P. Stephen Baenziger - National Science Foundation - Renovation and Replacement of Greenhouses - \$668,500

Shawn Kaeppler - U.S. Department of Energy - Inheritance of Epigenetic Modifications in Maize - \$374,621

Steve Comfort, Patrick J. Shea and Gerald Horst - U.S. Army Cold Regions Research and Engineering Laboratory - Temporal Aspects of Munitions Sorption and Transport in Contaminated Soils - \$24,990

Timothy J. Arkebauer & Elizabeth A. Walter-Shea - NOAA - Radiation and Gas Exchange of Canopy Elements in a Boreal Forest - \$300,000

Raymond Chollet - National Science Foundation - Posttranslational Regulation of PEP-Carboxylase Activity in Higher Plants - \$527,441

Robert J. Spreitzer - National Science Foundation - Genetic Modification of Chloroplast Rubisco-REU Supplement - \$8,000

John E. Foster - USDA/ARS - Identification and Development of Chinchbug Resistant Sorghum - \$20,000

Judy A. Driskell - National Institute of Health - Aerobic Capacity & Antioxidant Vitamin Supplementation - \$197,838

James L. Van Etten - National Science Foundation - Interkingdom Transfer of Restriction/Modification Genes? - \$570,936

Dennis E. Jelinski, Charles A. Francis and Kyle D. Hoagland - U.S. EPA - Impact of Agricultural Landscape Heterogeneity and Pattern on the Environment - \$749,757

Blair D. Siegfried, Kyle D. Hoagland and Scott Nissen - U.S. EPA - Mechanisms of Atrazine Selective Toxicity in Freshwater Algae - \$142,900

Elizabeth A. Walter-Shea - NASA-Goddard - Konza Prairie Background BDR Characterization - \$11,453

Scott J. Nissen, Robert A. Masters, Donald J. Lee and Martha L. Rowe - USDA/CSRS - Influence of Genetic Variation in North American Leafy Spurge on *Apthona nigricutis* Establishment - \$77,540

Bruce E. Anderson, Lowell E. Moser and Terry J. Klopfenstein - USDA/CSRS - Bruce E. Anderson, Lowell E. Moser and Terry J. Klopfenstein - Interactive Responses of Range Grasses During Sward Development and Grazing - \$79,163

Darrell G. Watts and Roy F. Spalding - USDA/CSRS - Management of Irrigated Corn and Soybeans to Minimize Ground Water Contamination - \$360,000

Gerald Horst, William Powers, Patrick Shea and Steven Comfort - US EPA - Irrigation Schedule Modifications for Modeling Chemical Transport Through Plant-Soil Systems - \$349,652

NEW OR REVISED PROJECTS

The following station projects were approved recently by the USDA Cooperative State Research Service:

NEB-10-106 (Agricultural Economics) Private Strategies, Public Policies and Food System Performance
Investigator(s): A. M. Azzam and J. F. Royer
Status: Revised Hatch project that contributes to regional project NE-165

NEB-12-072 (Agronomy) Introduction of Collection, Evaluation, Enhancement, Maintenance, and Utilization of Plant Germplasm
Investigator(s): D. J. Andrews, K. P. Vogel and D. B. Baltensperger
Status: Revised Hatch project that contributes to regional project NC-7

NEB-12-229 (Agronomy) Calibration of Residual Soil Nitrate for Predicting Supplemental N for Sorghum
Investigator(s): D. H. Sander, K. D. Frank and E. J. Penas
Status: New USDA Competitive Grant

NEB-21-040 (Plant Pathology) DNA Replication and Gene Expression of Chlorella Viruses
Investigator: J. L. Van Etten
Status: Revised Hatch project effective March 1, 1993

NEB-21-053 (Plant Pathology) PCR Based Approaches for Identification and Epidemiology of Parasite Nematodes
Investigator: T. O. Powers
Status: New Hatch project effective March 1, 1993

NEB-27-003 (Ag Meteorology) Exchange of Carbon Dioxide and Other Atmospheric Trace Gases in Vegetated Ecosystems

Investigator: S. B. Verma

Status: Revised Hatch project effective April 1, 1993

NEB-27-012 (Ag Meteorology) A Long-Term Monitoring Program in Support of Research on the Effects of Atmos. Chemical Deposition

Investigator: S. B. Verma

Status: New Hatch project that contributes to Regional Project NRSP-003

NEB-43-055 (West Central Research & Extension Center) Weed Control Management in Reduced Tillage Systems

Investigator: G. A. Wicks

Status: New Hatch project effective April 1, 1993

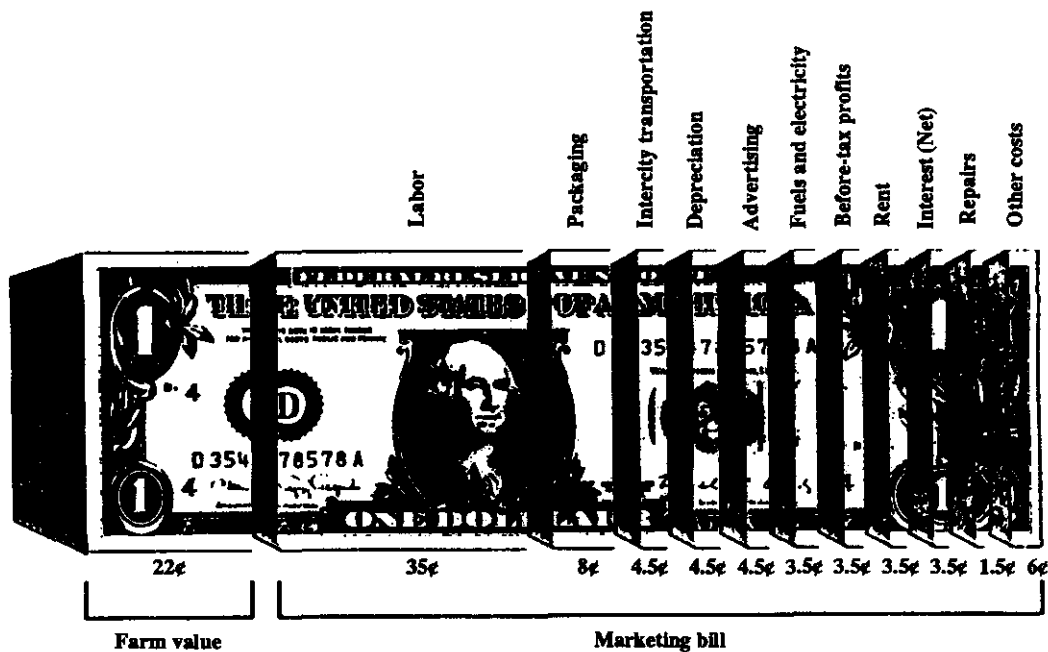
NEB-92-019 (Family & Consumer Science) Housing Affordability in Rural Areas

Investigator(s): K. Prochaska-Cue, E. R. Combs, E. P. Davis & A. C. Ziebarth

Status: New USDA Special Grant

WHAT A DOLLAR SPENT FOR FOOD PAID FOR IN 1992

About one-third went for food marketing labor costs.



Includes food eaten at home and away from home. Other costs include property taxes and insurance, accounting and professional services, promotion, bad debts, and many miscellaneous items.

SOURCE: Food Costs ... From Farm to Retail in 1992, ERS, USDA, April 1993.