TRANSPORTATION AND COLORADO'S AGRIBUSINESS INDUSTRY

September 2007

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Colorado Agriculture Depends On Sound Transportation Infrastructure

Executive Summary

An efficient and cost effective transportation system that supports agriculture is critical to Colorado's agribusiness industry, in planting, obtaining supplies, harvesting and marketing products from farms and ranches in Colorado to consumer plates around the world. Current intrastate regulations require state transport of raw and finished commodities in truck loads that are significantly less than in neighboring states often placing Colorado's farmers, ranchers and food processors at a transportation disadvantage to neighboring competitors. Colorado's agribusiness industry does not advocate any changes that would increase the wear and damage to our highways due to increased weight per axle or any changes that would decrease the safety of our state and interstate highways. The maintenance and repair of existing bridges is another critical requirement to support agriculture in Colorado. With 34 of the 104 restricted bridges on the State Highways under the Colorado Department of Transportation's (CDOT's) jurisdiction located in agribusiness critical counties, the maintenance of the roads and repair to bridges is important to Colorado agriculture. Colorado's agribusiness industry feeds Colorado and the U.S. as well as exporting over one billion dollars of Colorado agricultural products. Maintaining rail service to Colorado is critical to the transportation of our raw commodities to this global market. Colorado citizens have identified agriculture as vital to the Colorado life style*, supporting agriculture's need for water and land for agricultural production. Maintaining this trust and support is critical to Colorado's agribusiness industry.

Developing and maintaining a strong agricultural industry within Colorado is a critical element of Colorado's commitment to economic development. Colorado's agribusiness industry generates sixteen billion dollars in sales and employs over 107,000 Coloradoans, which is more than 7 percent of the state's GDP and over 4 percent of all jobs in Colorado. In more than one-third of Colorado's counties at least one in ten jobs are in the agribusiness sector, and in some counties agriculture creates almost 60 percent of total jobs. From the natural resources view, 76 percent of all land in Colorado is under agricultural production utilizing 86 percent of the state's water. Efficient transportation supports the Colorado agricultural industry and helps reduce Colorado citizens' frustrations with the state's current transportation infrastructure. With 906,000 truck movements and 32,400 rail cars moves attributed to agriculture, each citizen in Colorado is impacted by this vital network of highways and railroads that move people and Colorado products to market.

Colorado's agricultural industry represents the primary industry for economic development in the rural counties. Transportation is a critical component in the economic wellbeing of this industry. The current regulations have placed Colorado's farmers, ranchers and agribusiness at a disadvantage to neighboring states. Colorado's state legislature and regulators need to address the current regulations and laws that are harming Colorado's agriculture industry. Furthermore, funding to maintain and improve Colorado's primary and secondary roads in all counties must be a priority for funding commitments from the state. Colorado's rural economies will be negatively impacted if the transportation infrastructure and regulations are not addressed to allow Colorado's agribusiness industry to compete with neighboring states.

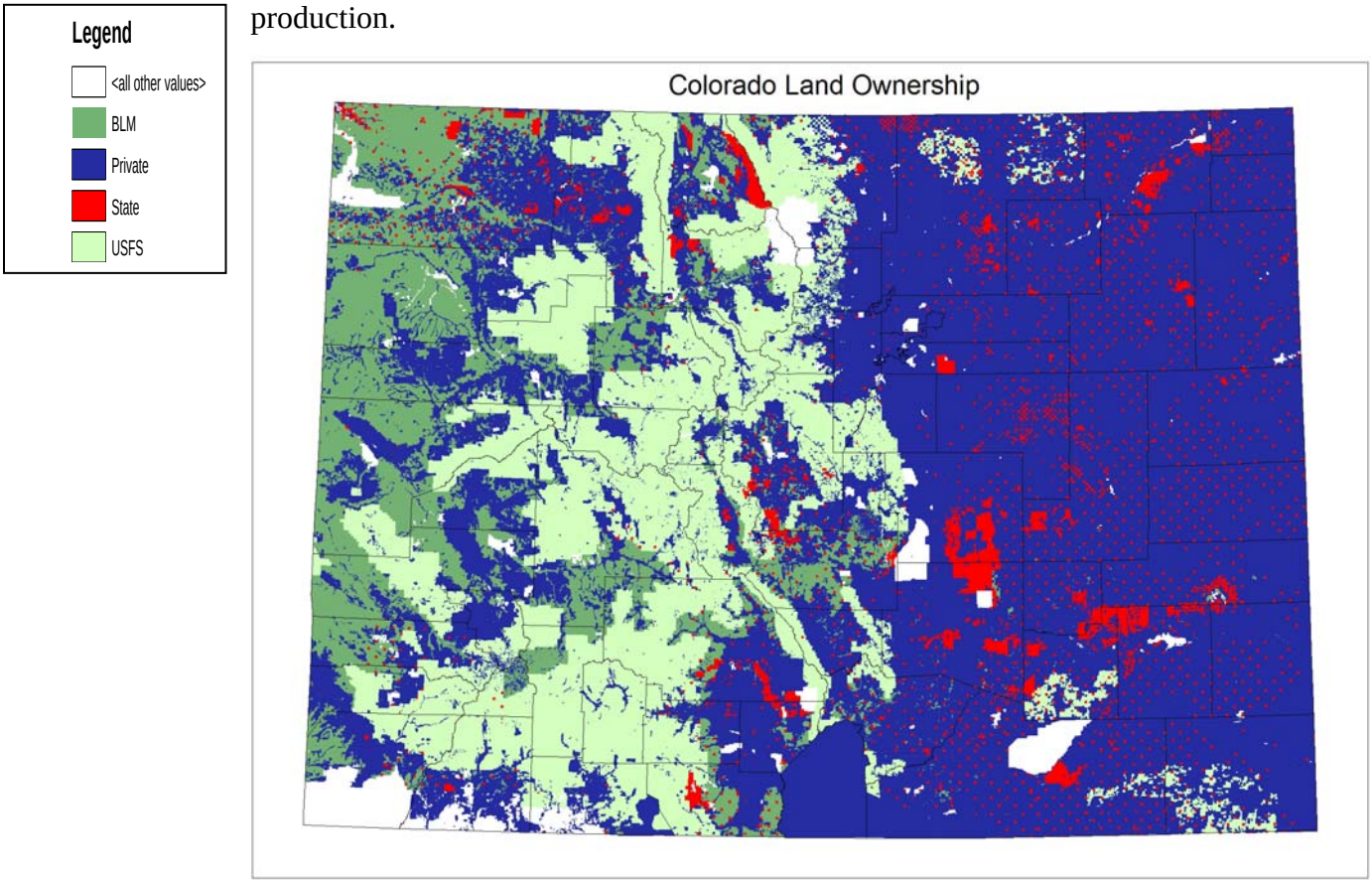
*Survey Appendix E

Colorado's Agribusiness Contribution to the State

To fully understand the importance of transportation to agriculture, it's important to understand how agriculture impacts and contributes to Colorado's land use, economy, water and transportation infrastructure.

Agricultural land use in Colorado

Seventy six percent of Colorado's total land mass is utilized in agricultural production. Forty seven percent of the land in Colorado is privately owned farms and ranches and an additional twenty nine percent of the land is government owned and leased for farming and ranching. There are thirty one million acres of private land controlled by 31,369 farmers and ranchers in Colorado. These producers also lease 19.7 million acres of federal (BLM and USFS) and state lands for agricultural production.



Colorado's privately owned farms and ranches have 19.6 million acres in pasture and grazing and 11.5 million acres in crop production. Of these crop acres, 8.9 million are in dry land crops and 2.6 million acres are irrigated.

Agribusiness contributions to Colorado's economy

Agriculture continues to be an important economic driver in rural and urban Colorado. Farming and ranching in the state generates sixteen billion dollars in economic activity annually and supports over 107,000 jobs, representing 4.1 percent of all jobs in Colorado. The value of agriculture to the state also extends beyond direct economic returns to include wildlife habitat, view-scapes, aquifer recharge areas, and other community amenities.

Agribusiness encompasses three distinct economic sectors:

- *Farm Production* ($5.4B) includes the traditional farm production of commodities such as wheat, corn, and livestock as well as greenhouses, orchards and horse farms.
- *Agricultural Inputs* ($1.5B) comprise businesses that support production agriculture, such as seed, fertilizer, and fuel and include financing and agricultural services.
- *Processing and Marketing* ($9B*)* includes the first order processing and marketing necessary to bring the final goods to the consumer, such as the food processing, trucking, and warehousing industries.

Thirty percent of Colorado counties continue to rely on agribusiness for over 20 percent of their total jobs. Kiowa County is the state's most agricultural dependent county with 60 percent of jobs tied to agriculture. In Weld County the agribusiness sector generates over 13,490 jobs and sales over $3.1 billion. Agribusiness impacts reach into the Front Range as well, creating almost 46,000 jobs.

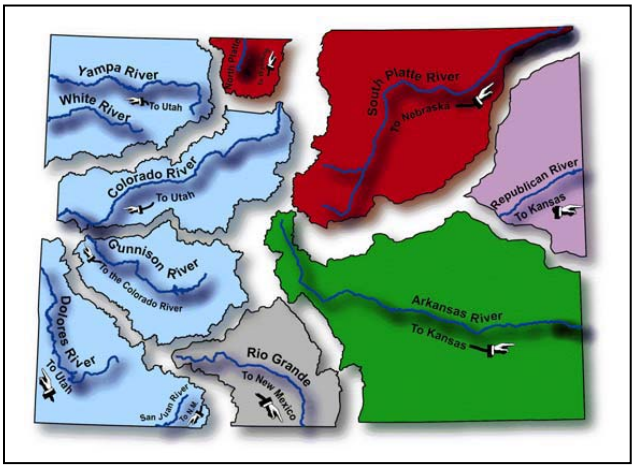
Top 10 Counties with agriculture jobs	
Denver	13,778
Weld	7,919
Jefferson	5,675
Adams	5,431
Arapahoe	4,933
Morgan	3,485
Boulder	3,181
Larmier	2,572
El Paso	2,060
Rio Grande	1,455

In Colorado, 60 percent of the total agribusiness industry jobs are from processing, marketing and supplying the inputs to agriculture. The processing and marketing sector is a $6.2 billion industry to Colorado's Front Range and a $2.8 billion industry sector in rural counties.

See Appendix A for table of county by county, and region by region, jobs and sales

Agriculture and water

Agriculture is the primary owner of water in Colorado, controlling 86 percent of all water rights. This water is critical to Colorado's agricultural industry for both crop and livestock production. Loss of water for agriculture would have a devastating impact on both the farmer and the community as evidenced by the current situation regarding well curtailments along the South Platte River.



Colorado's total water system includes over 173,000 different water rights, 30,600 diversions and storage records and over 250,000 wells. Production of alfalfa hay accounts for 31 percent of agricultural water use in Colorado, followed by corn (22 percent), pastureland (17 percent), other hay (11 percent), and all other crops (19 percent).

Transportation Critical To Creating And Maintaining Profitable Agriculture Industry

Market prices for Colorado farmers and ranchers have long been stated as 'the farmer receiving the current global market price, minus the cost of transportation to market". As such, transportation infrastructure is critical to the short and long term viability of Colorado's agricultural industry. Some commodity producers, such as wheat growers, sell up to 80 percent of the Colorado crop into world markets. Colorado's feedlots and the new ethanol plants consume all of the state grown corn and then import 20,000 additional rail cars of corn. Over 42,000 semi truck loads leave the San Luis Valley each year to take Colorado potatoes to consumers throughout the U.S. as well as to Mexico. Regional and national brands of consumer products all must ship their products to their consumers in other states and around the world.

While Colorado's crop harvest is focused from May through November, the subsequent movement of these products from first storage site to market continues year round. The livestock industry operates year round as well, making transportation critical to Colorado's agricultural industry twelve months a year. Almost 906,000 truck movements and 32,400 rail cars are required to harvest and market Colorado's entire agricultural production.

For field crop harvest and movement of crops to market, farmers require 685,000 truck movements to move products from field to storage to market and 32,400 rail cars to move their crops to the next markets. Rail car movement of crops not only moves one ton of commodities over 400 miles per gallon of diesel fuel, but reduces truck movements on the highway. The loss of rail service in rural Colorado will reduce the farm income as well and add 65,000 to 130,000 additional trucks to Colorado's highways.

Colorado's four billion dollar livestock industry (farm income) will utilize over 105,600 truck movements for livestock production in Colorado and an additional 44,000 truck shipments in marketing of these products after processing.

Colorado's agricultural industry must be competitive with neighboring states to develop and maintain a strong processing industry. When a neighboring farmer has access to the same feed, but with lower transportation costs, the Colorado farmer is at a disadvantage. When a food processor is considering the creation of a new processing plant, or the expansion of a plant, especially if they currently operate in neighboring states, the cost of transportation can be a factor considered in the decision making process.

When Colorado sugar beet growers joined with fellow farmers in Wyoming, Nebraska and Montana to purchase sugar beet processing plants, they decided to treat all growers equally. Current intra state regulations in these four states illustrate Colorado's transportation disadvantage. Industry decisions are made now that do not send additional raw products into Colorado for processing because of transportation regulations.

The Colorado green industry represents a $276 million industry sector, including greenhouse, nursery and floriculture and other green sector products. Transportation needs for this sector are not quantified in this report. Nor does this review include any analysis of the transportation resulting from our food processing industry (except for beef marketing truck shipments). Coors and Budweiser breweries, Celestial Seasoning, White Wave Tofu and almost 900 food processors in Colorado are dependent on an efficient transportation infrastructure for their operation but are beyond the scope of this report.

CDA's Transportation Related Functions

The Colorado Department of Agriculture has direct oversight and impact on several key elements within the transportation of agricultural products in the state. This includes the CDA Brand Board, Plants Industry, Inspection and Consumer Services, and the Markets Divisions. A review of each division's functions relating to transportation is available in Appendix C

Colorado's Overall Agribusinesses Dependence on the Transportation Infrastructure

On average 2,500 trucks and 90 rail cars every day are moving Colorado's livestock and crops from field to storage and on to market. Imagine a line of trucks, bumper to bumper from Boulder to Denver, critical to Colorado's agribusiness and with the potential to complicate Colorado's transportation infrastructure. Timely transportation from field to first storage is critical to successfully harvest crops and moving those products to market year round for Colorado's agribusiness industry, in the Front Range, and in Colorado's rural communities. Colorado's agribusiness industry does not advocate any changes that would increase the wear and damage to our highways due to increased weight per axle or any changes that would decrease the safety of our state and interstate highways.

TOTAL AGRICULTURAL TRANSPORTATION LOAD

905,927 Trucks
32,444 Rail cars

In cooperation with Colorado's agricultural commodity groups, CDA has compiled a review of transportation impacts by key commodities. The full table by individual crops is attached for detailed review. This reviews each commodity as well as the load factors utilized to generate these projected transportation impacts. (Appendix B). Furthermore, summaries of identified issues from various commodity groups are included. (Appendix D).

Livestock Industry

Colorado's livestock industry represents over seventy four percent of Colorado's farm and ranch income. This sector is also the market for the additional ten percent of farm income from the animal feed grown in the state to support this sector. About $3.3 billion of the $4.1 billion livestock sector is attributable to the beef cattle sector. Colorado's other livestock sectors include: $345 million in dairy products, $222 million of hogs, $119 million of sheep, and $39 million of poultry.

Livestock transportation load

166,725 trucks in production
54,236 trucks to market

Colorado is a national leader in the livestock industry. Cattle, sheep and lamb, and hog production, in addition to the dairy industry all depend on access to the transportation system year round to maintain this industry.

Colorado's cattle industry requires over 105,000 truck movements for cattle each year, and an additional 44,000 truck movements to move the finished product to market. The industry requires 140 trucks per day to move milk from the farms to the processing plants. When the December storms of 2006 closed the roads, Colorado dairy farmers had to dump their milk on the farm.

National Rank	Commodity
3	Market sheep/lambs
4	Cattle on feed
4	Fed cattle marketings
4	Wool production
4	All sheep & lambs
10	All Cattle & calves
8	Breeding sheep & Lambs
9	Lamb crop
12	Pig crop

Beef cattle move from ranches to pasture, from pasture to grazing land, from grazing to feedlots and then to the slaughter plants. Federal regulations dictate limits to how long an animal can be confined in a truck so again; delays in transportation have significant impact on the livestock industry. Secondary roads are the only way to reach most pastures and fields.

Grain Industry

Colorado's grain and feed crop industry represented $777 million in sales for Colorado farmers in 2006. Colorado's food crops (predominately wheat) find their markets outside the U.S., with over eighty percent of all wheat harvested in Colorado moving to exports, first by rail and then by ship to markets around the world. The price a wheat farmer receives for their harvest is calculated at the world market price (at the export ports) minus the transportation and handling charges to get the grain to the port. Delays, shipping premiums and shrinkage due to outside or stressed handling facilities in Colorado reduce the farmer's income from that crop. Colorado's corn farmers have a market for all they can grow at livestock feedlots and increasingly, at ethanol plants. Most of Colorado's corn moves once, from field to market, resulting in the larger movement to market than field to storage. In addition to the corn grown in Colorado, feedlots and ethanol plants depend on efficient rail service to bring in an additional 20,000 rail cars of corn each year.

Field transportation load

142,938 trucks from the field
393,317 trucks to market
31,979 rail cars to market

Colorado's hay industry utilizes about half of the product on site, where the cattle are fed the hay grown on farm, with the remainder shipped to the feedlots and dairy farms. The hay industry requires over 4,400 truck movements annually.

Produce Industry

Colorado's $296 million dollar fruit and vegetable industry must depend on transportation, first to quickly move the harvested crop to storage, then on to the consumer. Over 42,000 semi-loads of potatoes leave the San Luis Valley each year, which means 42,000 empty trucks move into the valley to be loaded before movement to markets as far away as Florida, including over 1,100 truck loads annually to Mexico.

Produce transportation load

91,900 trucks from the field
56,800 trucks to market
460 rail cars to market

Similarly, Colorado's onion industry will utilize 15,000 farm truck movements to bring the crop in from the field and then 4,500 semi-trucks to move the onions to markets throughout the U.S. and Mexico.

In total, Colorado's produce industry will require over 91,900 farm truck movements in the harvest of crops and over 56,800 semi-trucks and 460 railcars to move product to market, some to the Front Range and much throughout the United States.

Public Attitudes of Agriculture in Colorado

The Colorado Department of Agriculture, in cooperation with Colorado State University has tracked Colorado citizen attitudes towards agriculture since 1996. Key findings include:

- Three-fourths (74 percent) of those surveyed felt that agriculture was very important to the quality of life in Colorado.
- One of three respondents (34 percent) ranked agriculture as the most important economic sector in Colorado, followed by tourism and recreation (27 percent), high tech industries (11 percent), and mining/petroleum (13 percent).
- A majority of respondents (83 percent) believe it is very important to maintain land and water in agricultural production.
- Two-thirds of respondents (67 percent) indicated that, if available, they would definitely buy more Colorado grown and produced products while one-fourth (25 percent) indicated they would probably do so.

Appendix E: Executive summary of report and links to full reports

Key Transportation Issues Facing Colorado Agriculture

Colorado's agricultural industry faces multiple challenges in shipping their products to market. The deteriorating road conditions of state and county roads and bridges in rural Colorado will create additional logistical challenges in moving products from the field and to the markets. The Colorado Department of Transportation reports that Colorado Class 1 rail line miles have declined by thirty three percent from 2001 to 2004. Maintaining rail service to rural agricultural regions is critical to the long term viability of grain crop production in Colorado.

Colorado also needs to be competitive with neighboring states. While neighboring states allow permitted hauling of "divisible loads" (bulk commodities), Colorado's current ban on permitting for these loads means Colorado farmers are at a competitive disadvantage with our neighboring states and farmers. When current milk processors (cheese) consider new plant sites or expansion of production when they have multiple state options. Colorado's 10-20 percent less efficient truck capacity regulations could impact a decision to locate in Colorado. These regulations reduce farm and ranch net income and food processor profitability. Neighboring states allow permitted movements of "divisible loads" up to 124,000 while in Colorado, only "non-divisible loads" are allowed to receive route specific over weight permits. A "non-divisible load" would be a large machine, or a product that could not be moved within the 80,000 interstate load limits, versus the "divisible load" such as wheat which could be loaded to less than a truck capacity to meet the 80,000 weight limit. By altering Colorado's load regulations to conform to those of neighboring states, Colorado can improve the competitiveness of our industry as well as potentially reduce highway congestion by 120,000 truck movements in transporting Colorado's annual harvest.

Load limits of neighboring states

Nebraska	
Trailer Length	71.5 feet
Total number of axles	7
Legal Gross Weight	109,250 Lbs
Net Weight	34 Tons
Wyoming	
Trailer Length	81 feet
Total number of axles	7
Legal Gross Weight	115,000 Lbs
Net Weight	37 Tons
Montana	
Trailer Length	81 feet
Total number of axles	9
Legal Gross Weight	124,000 Lbs
Net Weight	38.5 Tons
Colorado	
Trailer Length	42 feet
Total number of axles	5
Legal Gross Weight	85,000 Lbs
Net Weight	25 Tons

Grain and produce growers, livestock producers and dairyman all face additional transportation challenges in conducting business in Colorado versus neighboring states.

Appendix C provides sector specific transportation issues

The San Luis Valley needs over 40,000 refrigerated trucks to move their fresh potatoes to market and reports a lack of available vehicles and drivers. Colorado's regulations require an additional 8,000 trucks to handle the same level of shipping as our competing states. Idaho ships the same quantity with 20 percent fewer trucks due to higher load limits.

Colorado's dairymen report that the reduced load limits they must use result in an additional 2,482 truck loads each year versus Idaho or Utah. Fuel savings alone would save the dairy cooperative over $250,000 a year. Colorado's sugar beet grower's cooperative reports that they will make an additional 9,000 trips with their trucks to bring the beets to the processing plant in Fort Morgan than for similar quantities in their Nebraska and Montana plants.
During the 2007 wheat harvest the lack of rail cars and trucks have resulted in grain storage in open piles at the local elevators. Elevators are reporting a 5% discount in payment for the ground stored grain and the basis (difference from key market price and local market) has widened this year because of increased cost and risk to the grain elevators as the lack of transportation increases their risk. Meanwhile neighboring states will ship 10-20 percent more grain per truck with their highway standards versus Colorado regulations.

Current regulations impact our farmer owned trucks as well as their contracted commercial trucking services. All sectors would benefit from regulatory changes.

When Colorado crops are harvested and loaded in trucks for shipment to first storage, low weight limits and a lack of a reasonable grace factor in weight makes the state's farmers subject to fines and additional costs. When wheat is harvested, the same quantity in the same truck (by volume) can vary by up to 5,000 pounds. To stay within current regulations a farmer will under load all shipments (and increase truck movements) to stay within regulations. To comply with regulations they could also be required to drive to a port of entry for weighing even if it means they are driving out of their way from field to storage.

Compounding these issues are multiple agencies with regulatory authority, sometimes at a state and federal level. Today a producer will hear "We can't do anything because of the (state or federal) regulations impact our rule making."

The December storms of 2006 also illustrated the need for new emergency authority and communications so that the agricultural industry is not penalized in future storms due to state (and federal) regulations. Excavators entering Colorado from neighboring states did not get waivers in time to avoid the $400 per excavator fees at the Ports of Entry. Dairymen reported milk dumped because the truck drivers exceeded their legal driving time before reaching the plants and had to stop driving without delivering the milk to the plant. Additionally, the farms themselves were dumping milk at the farm when the trucks could not get to the barns to receive the milk.

State and federal efforts should also be focused on the railroads providing service to Colorado's agricultural industry. Over 32,000 railcar movements are needed to insure timely and cost efficient transportation of grains to and from Colorado. Lack of service, as well as the continuing threats of rail line abandonment, means Colorado grain growers are at risk of losing the most effective way to ship their products to market. The 2007 wheat harvest has brought to focus how the lack of railcar availability is reducing farmer's net sales receipts from their harvest.

Maintaining Colorado's highways, secondary roads and bridges is critical to Colorado's agribusiness industries. The Colorado Department of Transportation has identified 104 bridges in Colorado which have restrictions on truck travel weights. Thirty four (33%) of these bridges are located in counties where from 10% to 60% of all jobs are in the agribusiness sector. Restricted

bridges increase transportation costs and limit route options throughout the year for bringing harvest to storage and for shipment on to market.

A list of all restricted bridges is available at:
http://www.dot.state.co.us/App_DTD_DataAccess/Downloads/StatewideMaps/BridgeWeightLimit.pdf

Summary

An efficient and cost effective transportation system that supports agriculture is critical to Colorado's agribusiness industry, in planting, obtaining supplies, harvesting and marketing products from farms and ranches in Colorado to consumer plates around the world. Colorado's agricultural industry represents the primary industry for economic development in the rural counties. Current intrastate regulations require state transport of raw and finished commodities in truck loads that are significantly less than in neighboring states often placing Colorado's farmers, ranchers and food processors at a transportation disadvantage to neighboring competitors. Colorado's agribusiness industry does not advocate any changes that would increase the wear and damage to our highways due to increased weight per axle or any changes that would decrease the safety of our state and interstate highways. The maintenance and repair of existing bridges is another critical requirement to support agriculture in Colorado. With 34 of the 104 restricted bridges on the State Highways under the Colorado Department of Transportation's (CDOT's) jurisdiction located in agribusiness critical counties, the maintenance of the roads and repair to bridges is important to Colorado agriculture. Colorado's agribusiness industry feeds Colorado and the U.S. as well as exporting over one billion dollars of Colorado agricultural products. Maintaining rail service to Colorado is critical to the transportation of our raw commodities to the global market. Colorado citizens have identified agriculture as vital to the Colorado life style, supporting agriculture's need for water and land for agricultural production. Maintaining this trust and support is critical to Colorado's agribusiness industry. Colorado's rural economies will be negatively impacted if the transportation infrastructure and regulations are not addressed to allow Colorado's agribusiness industry to compete with neighboring states.

Appendix A Colorado Agribusiness impact on counties

	Employment				Sales in Millions $		
County	Ag. Production	Inputs & Process/ Marketing	Total jobs in county	Agribusiness % of total Cty. Emp.	Ag. Production	Inputs & Process/ Marketing	total agribusiness sales in county
Colorado	43,074	64,005	107,079	4.1%	5,114	10,582	15,696
FRONT RANGE	7,648	38,240	45,888		322	5,860	6,182
Adams	1,578	5,431	7,009	4.1%	80	693	772
Arapahoe	381	4,933	5,314	1.5%	26	259	284
Boulder	1,044	3,181	4,225	2.0%	41	677	718
Denver	19	13,778	13,797	2.8%	2	2,318	2,320
Jefferson	698	5,675	6,373	2.6%	19	1,094	1,113
Larimer	1,975	2,572	4,547	3.1%	114	485	600
El Paso	1,096	2,060	3,156	1.1%	26	284	310
Douglas	857	610	1,467	1.9%	14	49	63
SLV	2,751	2,314	5,065		314	190	505
Alamosa	728	252	980	10.5%	82	24	106
Conejos	635	95	730	24.9%	26	5	30
Costilla	252	110	362	33.9%	21	4	26
Saguache	496	402	898	40.9%	73	12	85
Rio Grande	640	1,455	2,095	33.8%	113	145	259
Arkansas Valley/SE	4,750	3,123	7,873		505	556	1,062
Pueblo	981	1,381	2,362	3.7%	27	246	273
Crowley	320	19	339	22.5%	54	0	55
Bent	417	84	501	27.2%	55	4	59
Otero	747	931	1,678	18.8%	108	194	303
Prowers	821	386	1,207	16.5%	165	74	239
Baca	848	128	976	41.2%	80	23	103
Las Animas	616	194	810	11.2%	15	15	30
SouthWestern Color	2,495	1,057	3,552		48	185	233
Archuleta	242	31	273	6.1%	4	1	4
Dolores	216	30	246	26.4%	5	8	13
La Plata	879	584	1,463	5.4%	14	102	116
San Juan	0	0	0	0.0%	0	17	17
San Miguel	117	26	143	2.5%	2	2	4
Hinsdale	17	6	23	6.3%	0	0	0
Mineral	14	0	14	2.5%	0	0	0
Montezuma	924	348	1,272	10.7%	20	50	71
Ouray	86	32	118	6.4%	4	5	8
High Plains	6,465	1,986	8,451		994	394	1,388
Chaffee	275	77	352	4.4%	5	14	19
Cheyenne	457	56	513	39.4%	23	16	38
Clear Creek	0	12	12	0.3%	0	3	3
Kiowa	537	57	594	59.8%	58	15	73
Kit Carson	1,072	564	1,636	34.3%	182	135	317
Washington	993	286	1,279	50.4%	80	70	151
Yuma	1,557	526	2,083	38.7%	579	112	692
Lincoln	595	198	793	25.3%	37	9	46
Elbert	979	210	1,189	21.5%	29	20	49

	Employment				Sales in Millions $		
County	Ag. Production	Inputs & Process/ Marketing	Total jobs in county	Agribusiness % of total Cty. Emp.	Ag. Production	Inputs & Process/ Marketing	total agribusiness sales in county
Platte River Basin	9,468	12,404	21,872		2,592	2,790	5,382
Weld	5,571	7,919	13,490	15.1%	1,525	1,597	3,123
Morgan	1,402	3,485	4,887	34.0%	482	928	1,409
Logan	1,359	698	2,057	17.1%	389	185	574
Phillips	703	234	937	37.3%	127	62	189
Sedgwick	433	68	501	37.0%	69	18	86
Colorado River Basi	5,712	3,418	9,130		227	492	719
Delta	1,386	682	2,068	18.5%	48	91	139
Montrose	1,372	1,051	2,423	13.9%	100	215	315
Mesa	1,968	1,272	3,240	5.1%	53	149	202
Garfield	678	354	1,032	4.1%	19	32	50
Gunnison	308	59	367	3.9%	7	5	13
Mountains	3,740	1,467	5,207		107	115	222
Custer	172	29	201	12.9%	4	1	5
Eagle	196	266	462	1.4%	5	23	28
Fremont	644	223	867	5.4%	14	18	31
Gilpin	0	0	0	0.0%	0	0	0
Grand	209	68	277	3.2%	6	2	8
Huerfano	336	21	357	11.0%	8	5	12
Jackson	207	92	299	34.9%	13	3	16
Moffat	557	197	754	12.0%	16	19	35
Park	216	30	246	8.3%	3	5	8
Pitkin	108	84	192	1.0%	2	11	12
Rio Blanco	352	203	555	13.1%	15	2	18
Routt	601	136	737	4.1%	20	14	34
Summit	47	95	142	0.7%	2	11	13
Teller	95	12	107	1.3%	1	1	2
Lake	0	11	11	0.5%	0	1	1

Statistics are from an unpublished 2005 CSU/CDA report on the Economic Impact of Agriculture on Colorado Agriculture.

APPENDIX B ANALYSIS OF COLORADO AGRICULTURE'S TRANSPORTATION REQUIREMENTS TO HARVEST AND MARKET CROPS/LIVESTOCK

Tim Larsen, Markets Division 9-Jul-07

								First movement from field			ON farm to elevato		Storage to Market Movement			
Commodity	Total truck movements at harvest	Total truck movements to market	Total railcar movements to market	unit, 2006 CASS records	rank	production	weight per bushel/ head per truck	Harvest in tons/# of animals	Truck capacity (tons) (head)	ttl truck movements	Truck capacity (tons)	ttl truck movements	Truck capacity	Ttl Truck movements	Rail car capacity	Total railcard movements
FIELD CROPS:	**234,848**	**450,119**	**32,444**													
ttl truck	**684,967**															
Barley	5,796	2,635		1,000 bu.	6	4,830	48	115,920	20	5,796			25	2,635		
Beans, dry edible	2,111	1,295	365	1,000 cwt.	7	1,140		57,000	27	2,111			22	1,295	78	365
Corn, grain	`	125,216		1,000 bu.	15	134,160	56	3,756,480	26.2	143,377			30	125,216		
imported corn (eth & Feeding)			19,798					1,960,000							99	19,798
Corn, silage		81,180		1,000 tons	18	1,845		1,845,000					15	81,180		
Hay, all **				1,000 tons	12	4,389										
Hay, alfalfa (assume 1/2 off farm movement)		74,100		1,000 tons	10	2,964		2,964,000					20	74,100		
Hay, other		35,625		1,000 tons	17	1,425		1,425,000					20	35,625		
Oats	595	595		1,000 bu.	24	700	34	11,900	20	595			20	595		
Potatoes, all				1,000 cwt.	5	24,166										
Potatoes, fall	56,715	44,011	436	1,000 cwt.	5	22,686		1,134,300	20	56,715			25	44,011	78	436
Potatoes, summer	4,111	2,871	28	1,000 cwt.	7	1,480		74,000	18	4,111			25	2,871	78	28
Proso Millet	7,229	7,229		1,000 bu.	1	5,355	54	144,585	20	7,229			20	7,229		
Sorghum, grain	4,648	4,648		1,000 bu.	9	3,380	55	92,950	20	4,648			20	4,648		
Sorghum, silage	15,300	15,300		1,000 tons	7	306		306,000	20	15,300			20	15,300		
Sugarbeets	63,133	41,174		1,000 tons	8	947		947,000	15	63,133			23	41,174		
Sunflower, all				1,000 lbs.	5	108,600										
Sunflower, oil varieties	2,063	917	375	1,000 lbs.	5	82,500		41,250	20	2,063			23	917	55	375
Sunflower, non-oil varieties	653	290	119	1,000 lbs.	4	26,100		13,050	20	653			23	290	55	119
Wheat, all 1/				1,000 bu.	15	41,515										
Wheat, other spring	1,611	121	440	1,000 bu.	8	1,615	60	48,450	40	1,211	40	400	40	121	99	440
Wheat, winter	39,800	2,993	10,882	1,000 bu.	12	39,900	60	1,197,000	40	29,925	40	9,875	40	2,993	99	10,882
VEGETABLES: 2/																
Cabbage	5,554	1,666		1,000 cwt.	7	1,333		66,650	12	5,554			40	1,666		
Cantaloup	1,133	340		1,000 cwt.	6	272		13,600	12	1,133			40	340		
Corn, sweet	5,625	1,688		1,000 cwt.	6	1,350		67,500	12	5,625			40	1,688		
Lettuce, head	1,867	560		1,000 cwt.	3	448		22,400	12	1,867			40	560		
Onions (storage only)	14,921	4,476		1,000 cwt.	6	3,581		179,050	12	14,921			40	4,476		
FRUITS:																
Apples	625	375		Mil lbs.	25	15		7,500	12	625			20	375		
Peaches	1,167	700		Tons	8	14,000		14,000	12	1,167			20	700		
Pears	192	115		Tons	7	2,300		2,300	12	192			20	115		
								TOTAL		367,950		10,275		450,119		32,444

								First movement from field			Movements to Market			
Livestock - 2006 CASS statistics	Total truck movements at harvest	Total truck movements to market		unit	U.S. rank	Production	weight per bushel/ head per truck	Harvest in tons	Truck capacity (tons) or head	ttl truck movements			Truck capacity	Ttl Truck movements
ALL LIVESTOCK	166,725	54,236	220,960											
BEEF TOTAL	105,635	44,436	150,071											
All cattle & calves				1,000 head	10	2,700								
All cows 4/				1,000 head	18	840								
Beef cows 4/				1,000 head	15	725								
Calf crop, 2006	21,351			1,000 head	18	790	37			21,351				
Cattle on feed	20,000			1,000 head	4	1,120	56			20,000				
Backgrounding	10,533					790	75			10,533				
Fed cattle marketings 5/	53,750			1,000 head	4	1,935	36			53,750				
CO slaughter* (truck mvmts from slaughter to market)		44,436		1,000 head		2,116		2,221,800,000					25	44,436
SHEEP/LAMB TOTAL	**3,166**	**5,621**	8,787											
All sheep & lambs				1,000 head	4	400								
Breeding sheep & lambs	1,267	1,267		1,000 head	8	190	150	190,000	150	1,267				1,267
Market sheep & lambs	1,400	2,100		1,000 head	3	210		210,000	150	1,400				2,100
Wool production, 2006	52			1,000 lbs.	4	2,600		1,300	25	52				
Lamb crop, 2006	447			1,000 head	9	190	425	190,000	425	447				1,229
Lamb slaughter				1,000 head										
Market sheep & lambs				in # and lbs#		1053600		112,735,200						
shipment of product and byproduct		2,255						56,368	25				25	2,255
All goats				1,000 head	16	44								
All chickens				1,000 head	24	4,596								
All layers				1,000 head	25	3,735								
Egg production, 2006		4,178		Million	23	1,083	(dozen)	90,250,000	21600	4,178				
All hogs & pigs				1,000 head	15	830								
Breeding hogs & pigs				1,000 head	11	155								
Market hogs & pigs	3,750			1,000 head	15	675		675,000	180	3,750				
Pig crop, 2006	3,234			1,000 head	11	2,911		2,911,000	900	3,234				
Milk cows 4/				1,000 head	17	115								
Milk production, 2006	50,940			Mil lbs.	16	2,547		1,273,500	25	50,940				
TOTAL										170,903				51,287

Appendix C

CDA's Transportation Related Functions

The Colorado Department of Agriculture has direct oversight and impact on several key elements within the transportation of agricultural products in the state.

CDA Brand Board is assigned five principal regulatory responsibilities: to record and administer livestock brands; to inspect livestock and verify ownership before sale, transportation beyond 75 miles or more out of state for slaughter; to inspect and license packing plants, livestock sale rings, and inspect all consignments before sale to verify ownership; to license and inspect alternative livestock (elk and fallow deer) facilities; and to prevent and return strayed or stolen livestock and to investigate reports of lost or stolen livestock.

CDA Plants Industry supports Colorado's farmers by issuing over 3,500 phytosanitary certificates based on their inspection and oversight to certify shipments, both to international markets and other states, comply with plant health regulations.

CDA Inspection and Consumer Services Division is responsible for the large capacity device inspection program, which with a fleet of six heavy-duty trucks, outfitted with precisely calibrated weights, cranes and carts, test and inspects over 4,000 large capacity (2,000+ lb) commercial and law enforcement scales. Scales are inspected at grain elevators, ports of entry, manufacturers' shipping docks, truck stops, meat packing plants, moving and storage companies, mines, power plants, railroads, sand and gravel companies, highway construction sites, and other locations. In addition the division is responsible for approximately 1,500 Certified Public Weighers which operate public scales throughout Colorado. Public Weighers are licensed by the Section to ensure that persons weighing for the public are technically qualified. Before a license is issued, applicants must pass a test that demonstrates their knowledge of scale operations and recordkeeping requirements.

CDA Markets Division coordinates with the Colorado Public Utilities Commission on agricultural transportation topics and provides grade certification for shipping produce shipped as complying with USDA grade standards. The Markets Division annually submits a request to the Colorado PUC to designate the harvest schedule for each primary crop based on anticipated individual county harvests. This temporary registration period provides a 90-day period when a farmer may apply for and operate a trucking service for hire in each county. Each year farmers are faced with limited access to commercial trucks to bring their harvest to storage or market. Over the years, some farmers have made the financial commitment to purchase their trucks for harvest. Then, they look at the opportunity to hire themselves and equipment to their neighbors to haul their crops from the field. The Fruit & Vegetable Inspection Services of the Markets Division inspects and certifies all potatoes shipped comply with USDA grade standards as well as providing optional USDA grade standard inspections for other produce.

Appendix D

Agricultural Transportation Issues, *Presented to CDOT on August 15, 2006 by the Colorado Ag Council*

During the summer of 2006, members of the Ag Council met with the Department of Transportation to discuss potential regulatory or statutory changes to address concerns brought forth by the agricultural industry relating to agricultural transportation. Due to the change in administration, both sides agreed to table the issue until this summer. Below is a list of issues presented by the Ag industry in August, 2006. Following that are some statements the Department of Transportation made recently. Both sides will sit down over the next couple of months and discuss these issues.

1. The Colorado Department of Transportation should consider implementing weight and length rules based on the federal bridge formula (for length, axel and combo vehicle formulas) that would allow loads grossing up to110,000 lbs via additional length and axel combinations. This allowance should be considered for use on all interstate and intrastate roads with the exclusion of crossing designated bridges that would not allow such loads.
2. Agricultural producers operating LVC's (Long Vehicle Combinations) must have the ability to drive from farm to farm without returning to the interstate on county approved state and county roads.
3. Allow agricultural producers to drive trailers with a length up to 94' long on state and county approved roads.
4. Allow agricultural producers to be able to travel to their destination without going through the port of entry station if the destination is within a reasonable distance (i.e. five miles) during the identified harvest periods.
5. Implement an agricultural exemption from the requirement that a commercial vehicle must seek out a weigh station to verify weight status if the station is within a 5-mile radius of the transportation route.
6. Provide exemption from load and weight limit regulations for farm trucks traveling less than 50 miles from farm headquarters.
7. A "grace factor" should be implemented for farm vehicles that are loading/hauling agricultural products (livestock and crops) to and from the field.
8. The Colorado Department of Agriculture should work with the agricultural industry to establish appropriate sign requirements for agricultural markets including fruit and vegetable stands, wineries and other direct marketing outlets along state highways.
9. Colorado needs to negotiate reciprocity agreements with neighboring states to honor Colorado's farm trucking exemptions and regulations.

Issues from Colorado Potato Administrative Committee

The potato industry in the San Luis Valley ships 35-40,000 loads of potatoes every season. Approximately 93 percent of these shipments are by truck most years. Due to the location and lack of back haul opportunities into the San Luis Valley truck shortages can be a severe issue for the area. Increasing weight limits through the use of longer trailers with additional axles is an obvious benefit to the industry. If Colorado were to adopt the Canadian standard of 97,000 lbs. on 3 axle trailers vs. 80,000 lbs. on the current 2 axle trailers 35,000 truck loads could be reduced to approximately 27,500 loads. This does not account for the additional benefit of the reduction of a portion of the farm loads at harvest also being of greater weight.

Another important factor is the looming shortage of truck drivers facing the nation in the near future. When faced with limited driver availability trucking companies will obviously choose to service the most profitable hauls first, and to some extent this already affects Colorado today.

One issue facing the potato industry is the lack of quality refrigerated trailers that are being put in service today. More investment is needed and the quicker ROI thru the improved efficiency of increased weight limits could assist this process. Potatoes are a perishable commodity so refrigerated equipment is a necessity.

Other issues of concern are possible exemptions on hours of service limits during harvest operations, and the lack of a decent rail shipping alternative. The opportunities of intermodel shipment of potatoes are immense but only if there is a willing rail partner willing to compete with trucking freight rates.

Sugarbeet Industry Issues

The Western Sugar Cooperative is a grower owned processor of sugar beets to sugar. With company headquarters in Denver, Colorado, Western Sugar currently operates sugar-processing plants at Scottsbluff, Nebraska; Lovell and Torrington, Wyoming; Billings, Montana; and Fort Morgan, Colorado. Storage facilities are located at Greeley, Rocky Ford, Sterling and Longmont, Colorado; and at Gering, Wyoming; and Mitchell and Bayard Nebraska.

The Western Sugar Cooperative
Rehaul load limits by member states

Nebraska	
Trailer Length	71.5 feet
Total number of axles	7
Legal Gross Weight	109,250 Lbs
Net Weight	34 Tons
Wyoming	
Trailer Length	81 feet
Total number of axles	7
Legal Gross Weight	115,000 Lbs
Net Weight	37 Tons
Montana	
Trailer Length	81 feet
Total number of axles	9
Legal Gross Weight	124,000 Lbs
Net Weight	38.5 Tons
Colorado	
Trailer Length	42 feet
Total number of axles	5
Legal Gross Weight	85,000 Lbs
Net Weight	25 Tons

A key element of their operation is to rehaul the harvested sugar beets to the processing plants as needed for 90 to 120 days after harvest. A review of the intrastate regulations for this movement (estimated in Colorado at 28,500 truck movements for the 2007 harvest) reveals that there will be 9,000 more than for similar harvests in our neighboring states. The Ft. Morgan plant could operate longer, or process sugarbeets from other states if not for the higher transportation cost in Colorado versus the other member states in the cooperative.

Current Colorado intrastate regulations require 32 percent more truck movements in Colorado (9,000) to haul the same quantity of sugarbeets to the processing plants in neighboring states.

Dairy Industry Issues

Dairy Farmers of America (DFA) is a cooperative, owned and operated by the dairy farmers. They are one of the most vertically-integrated and future-focused co-ops and food companies in the industry with over 4,000 employees.

	Colorado limits		Idaho	Utah
	Interstate	Non-interstate		
Gross vehicle weight Lbs.	80,000	85,000	105,000	129,000
Number of Axles	5	5	8	10
Lbs. per axle	16,000	17,000	13,125	12,900
Number of wheels	18	18	24	36
Lbs per wheel	4,444	4,722	4,375	3,583
Number of brakes	10	10	16	20
Lbs per brake	8,000	8,500	5,653	6,450

Currently, Colorado's intrastate regulations prohibit DFA trucking operations in Colorado with the same efficiency that they have utilized in Utah and Idaho for the past 20 years. It can be argued that the larger trucks operating in the neighboring states are in fact safer than authorized in Colorado based on the average weight per axle, weight per wheel and weight per brake. In addition, the lower weight per axle reduces the impact on state and federal highways.

In 2006 DFA hauled 9,478 trips in Colorado (average of 26 per day) with 296,103 miles traveled. If Colorado would allow the 53' Quad-Axle Tank Trailer, similar to those allowed in our neighboring states, there would be 2,482 fewer trips (77,780 miles) to move the same quantity of raw milk. With increasing cheese processing in Colorado, the location of expansions could be influenced by the net delivered cost of raw milk, placing Colorado processing plants at a disadvantage to neighboring states.

Additional Topics

1. Creating timely implementation of Governor's Emergency Orders which allow for waving of fees and operational regulations for agricultural transportation;
    a. $400 per excavator that came to Colorado to assist in digging out from the blizzard at Ports of Entry because the waver was not implemented and communicated in a timely manner.
    b. DFA trucks stuck snow, slowed in transportation that had to dump loads of milk because the truck driver reached the maximum hours of operation limit and could not continue to operate the truck to offload.

2. Definition of feedlot trucks as husbandry equipment allowing for exemption from commercial vehicle registration and fuel tax exemptions.

3. Captive shippers on rail without access to rail cars.

4. Piggy back rail service (intermodal)

Appendix E: Executive summary of Public Attitudes about Agriculture and links to full reports

Public Attitudes About Agriculture In Colorado June 2006

Executive Summary

In the spring of 2006, a study was conducted by the Colorado Department of Agriculture and the Human Dimensions in Natural Resources Unit of the Warner College of Natural Resources at Colorado State University. Replicating similar studies done in 1996 and 2001, the purpose of the 2006 study was to understand how Coloradans currently perceive agriculture and whether those perceptions have changed over the past 10 years. This document summarizes the 1996, 2001, and 2006 results and is drawn from the full 2006 final report of research.

- One-fourth of respondents (26%) were at least moderately familiar with the activities and programs of the Colorado Department of Agriculture. More than one-third (36%) were not at all familiar with the agency.
- Three-fourths (74%) of those surveyed felt that agriculture was very important to the quality of life in Colorado.
- More than eight of ten respondents (86%) felt that agriculture provides food at a reasonable price.
- Two-thirds of respondents (67%) indicated that, if available, they would definitely buy more Colorado grown and produced products while one-fourth (25%) indicated they would probably do so.
- One of three respondents (34%) ranked agriculture as the most important economic sector in Colorado, followed by tourism and recreation (27%), high tech industries (22%), and mining/petroleum (13%).
- A majority of respondents (83%) felt it was very important to maintain land and water in agricultural production.
- Three-fourths of respondents (73%) agreed that purchasing developing rights to prevent the loss of agricultural lands was acceptable. Coloradans favor using either financial incentives (47%) or regulations (34%) to encourage landowners to maintain agricultural land and water in production. Most respondents (84%) agreed that open space programs should be partially used to minimize farm and ranch losses.
- More than half of the respondents (57%) agreed that agriculture in Colorado is protective of the environment.
- Six of ten respondents (62%) agreed that it is at least sometimes necessary to use chemicals to produce enough food for people; lower than in 2001 (72%) and 1996 (80%).
- More than one-half of the respondents (56%) felt that food produced in Colorado is almost always safe while three of ten (31%) believed it is usually safe. Less than four of ten (38%) believed genetically engineered food is safe. Only 3 percent of respondents had no opinion on this issue.
- Seven of ten respondents (72%) believed that farm and ranch animals are treated humanely.
- About three-fourths of respondents (78%) agreed that ranchers with permits to graze on public lands treat the land appropriately.
- Two of three respondents (65%) agreed that agricultural practices to conserve water and soil are effective.
- Nearly nine of ten respondents (87%) agreed that public funds should be used to help farmers and ranchers improve wildlife habitat and conserve soil and water resources.

- About three-fourths of respondents (73%) felt that agriculture should be a top priority for water use in a dry year. In stream flow levels was the top priority for less than one of five respondents (18%).
- Nearly nine of ten respondents (88%) agreed that the United States should increase its production of corn-based ethanol and crop-based bio-diesel as alternatives to petroleum-based fuels.
- Farmers and ranchers (33%) and farm/ranch organizations (28%) were rated most trustworthy as sources of information about agriculture. Government agencies (35%) and news reports (36%) were least trustworthy.

To read the full summary report
http://www.ag.state.co.us/mkt/AgInsights/Executive%20Summary%202006.pdf
To read the full report
http://www.ag.state.co.us/mkt/AgInsights/Attitudes%20Toward%20Colorado%20Agriculture%202006%20Final%20Report.pdf