

Approved: 2-3-99  
Date

MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES.

The meeting was called to order by Chairperson Senator David Corbin at 8:00 a.m. on February 2, 1999 in Room 254-E of the Capitol.

All members were present.

Committee staff present:

Raney Gilliland, Legislative Research Department  
Mary Ann Torrence, Revisor of Statutes Office  
Lila McClafin, Committee Secretary

Conferees appearing before the committee:

Ken Peterson, American Petroleum Institute

Others attending:

Not available.

Chairperson Corbin called attention to handouts that members of the committee had requested concerning deer management in the state, and the number of automobile accidents that occur involving deer. They are as follows: (1) information regarding deer permit pricing provided by Wildlife and Parks (Attachment 1); (2) information estimating the deer population of Kansas from Wildlife and Parks; (Attachment 2); (3) information regarding Kansas Deer Accidents from 1980-1997 furnished by KDOT (Attachment 3); (4) information provided by KDOT on Kansas total annual vehicle miles of travel from 1947-1996 and information listing KDOT records of deer related vehicle accidents per county for the last twelve years (Attachment 4).

The minutes of the January 27 meeting were presented. A motion was made by Senator Vratil and seconded by Senator Biggs to approved the minutes. The motion carried.

Ken Peterson, American Petroleum Institute, presented a draft of a resolution that would encourage the EPA to develop a proposal to reduce gasoline sulfur levels with the flexibility of a regional approach that maximizes air quality benefits where they are needed most (Attachment 5). Mr. Peterson was questioned as to whether the federal government had ever acted on a resolution. A motion was made by Senator Huelskamp to introduce the resolution. Senator Pugh seconded the motion. The motion carried.

Chairperson Corbin said Greenwood County Commission had contacted him regarding the location of a proposed site for a landfill in that county. The proposed site for the landfill is within one mile of a small lake which serves the City of Severy. However the proposed site is downgradient from the lake site with proper drainages between so pollution of the municipal water source would not be an issue. A motion was made by Senator Goodwin with a second by Senator Vratil to introduce the bill. The motion carried.

**SB 70 - concerning big game permits.** Chairperson Corbin opened the discussion on **SB 70**. He said the hearing on the bill was on January 26 and the information requested has been provided and distributed. Senator Pugh made a motion for the passage of SB 70 with a second from Senator Morris. A member of the committee questioned whether the bill would do much to reduce the deer population, and address the problem with auto accidents involving deer. Clint Riley responding to a question said he was not sure if any bills were being considered to handle the deer management problem and the harvesting of more antler less deer. The motion carried.

The meeting adjourned at 8:25 a.m.

The next meeting is scheduled for February 3, 1999



STATE OF KANSAS  
DEPARTMENT OF WILDLIFE & PARKS

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MEMORANDUM

To: Senator David Corbin, Chair, Senate Committee on Energy and Natural Resources  
From: Clint Riley, Department of Wildlife and Parks *CR*  
Date: January 26, 1999  
Re: Deer permit pricing

During the public hearing on Senate Bill No. 70, the Senate Committee requested certain information regarding deer permit pricing. Permit fees are established through department regulation within ranges established by legislative statute. Current fees for deer permits are as follows:

General resident:	\$30.00
Landowner/tenant (resident):	\$15.00 (i.e. 50% of the above price)
Hunt-on-your-own-land (resident):	\$10.00
Game tag (antlerless, over-the-counter):	\$10.00
Nonresident buck or any-deer	\$200.00
Nonresident antlerless	\$50.00
Nonresident hunt-on-your-own-land	\$50.00 (currently landowners only)
Nonresident application fee:	\$5.00

In addition, a fifty-cent service charge is added to each of these prices, as established by statute.

"Landowner/tenant" permits are the same as general deer permits, but are sold at half-price if the permittee qualifies as a landowner/tenant. Consequently, the landowner/tenant must first obtain the permit in the normal manner (e.g. through a random draw, for most firearm permits) before receiving a price benefit due to landowner/tenant status. In contrast, "hunt-on-your-own-land" permits are any-deer, any-season permits guaranteed to any qualified landowner or tenant.

During the hearing, a question was asked regarding how the bill might affect landowner/tenant permits, and what the price for a nonresident would be. After contacting the department's permitting section and checking the relevant statute, it should be noted that the bill would have no effect on landowner/tenant permits, as described above. According to law, only resident landowner/tenants receive the 50% price break on general permits. Consequently, while SB 70 would allow nonresident tenants to obtain a hunt-on-your-own-land permit, nonresident landowner/tenants who obtain a general nonresident permit through the random drawing would continue to pay the fees listed above.

Senate Energy & Natural Resources

Attachment: /

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## ESTIMATING THE DEER POPULATION OF KANSAS.

A census to enumerate a population of wildlife is generally unattainable. Conditions where a census would work include where there are few individuals, in a confined space, while the visibility of those individuals is high and there is little movement or mixing of individuals while a count is being conducted. An example of those conditions might include a breed colony of seals on a beach, but it does not apply to deer in Kansas.

There are various ways of estimating the population of wildlife. Most of these techniques require assumptions, and their accuracy varies depending on how well those assumptions mirror actual conditions. We have used two means of estimating the deer population. One estimate is based on landowner opinions, and the other is based on a historic estimate of the deer population which is then projected forward with a constant rate of growth based on the trend in the vehicle accident index.

Periodically since 1964 the KDWP has surveyed landowners to determine their opinions about deer densities and also estimates of how many deer the landowners believe live on their land. In 1997 the survey included three questions dealing with the size and density of the deer herd. One question asked the landowners how many acres they managed. Another question asked how many deer had been killed on their land, and a third asked them how many deer lived on their land. Answers to these questions allowed us to estimate how many deer the landowners believe occur in the state.

The number of deer harvested each year is known based on a survey independent of landowner opinion, the mandatory report cards submitted by hunters. This value can be compared with estimates of the harvest based on what landowners thought occurred on their land. Landowners estimated that nearly 110,000 deer were taken in the state in 1996, while the results of mandatory report cards indicated that about 52,000 deer were taken. We developed a correction ratio for each deer management unit, and applied that to the landowner's estimate of deer living on their land. We further modified that estimated deer density by subtracting two times the standard error of the statewide sample of deer densities. It is believed that landowners generally overestimate deer density because the deer living on their land also uses land off their farm or ranch. The procedure we used resulted in a statewide estimate of 341,000 deer in 1996. This agrees with a projected deer population based on a herd estimate of 27,000 deer in Kansas in 1964 and a 17-year constant growth rate of the population index of 7 - 8.5%. Both methods predict a population in the neighborhood of 350,000 animals.

Deer management in Kansas does not rely upon estimates of the population. As Don Hayne, in his chapter on population dynamics and analysis in the book, *White-tailed Deer Ecology and Management* wrote:

"Estimates of whitetail population size interest the public and appeals to the media. Often, however, the importance of knowing the population size is overestimated as a tool for deer management. It is more important to know the relative abundance of deer --- whether the population is increasing or decreasing, and whether it is above, below or nearly in balance with the carrying capacity of the environment."

The Kansas Department of Wildlife and Parks uses a population index based on the trend in deer related vehicle accidents per billion miles of travel to determine trends in the deer population. To evaluate the balance level for carrying capacity, we survey the opinions of people, particularly input gathered from random surveys of landowners and measures of success and satisfaction of deer hunters.

Analysis of the population index and surveys of landowners in recent years has shifted the deer management emphasis toward higher harvest levels and added emphasis on harvesting antlerless deer to reduce the future growth of the deer herd.

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ESTIMATED DEER POPULATION IN KANSAS IN 1996 BASED ON LANDOWNER ESTIMATES OF DEER ON THEIR PROPERTY.

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DEER MANAGEMENT UNIT (DMU)	DATA FROM REPORT CARDS FOR REGULAR FIREARMS HARVEST	SQUARE MILES PER DMU	ADJUSTED HARVEST DISTRIBUTION WITH ALL PERMIT TYPES	TOTAL ESTIMATED DEER HARVEST PER SQ. MILE	LANDOWNER ESTIMATE OF DEER HARVEST PER SQ. MILE	HARVEST DENSITY CORRECTION RATIO	LANDOWNER ESTIMATE OF DEER PER SQ. MILE	ADJUSTED DEER DENSITY BASED ON HARVEST CORRECTION RATIO	ESTIMATED DEER PER DMU
1	1915	5929	2494	0.421	0.984	0.427	9.716	4.153	16,321
2	1407	5962	1832	0.307	0.610	0.504	6.340	3.194	10,695
3	1751	4345	2280	0.525	1.085	0.484	9.291	4.494	13,441
4	1067	2596	1389	0.535	1.184	0.452	14.842	6.709	13,782
5	798	3381	1039	0.307	0.711	0.432	10.135	4.380	10,078
6	934	2653	1216	0.458	0.869	0.527	6.209	3.275	4,975
7	2069	4767	2694	0.565	0.812	0.696	11.843	8.242	32,619
8	2674	4120	3482	0.845	1.417	0.596	12.759	7.609	25,583
9	3101	3552	4038	1.137	2.285	0.497	21.058	10.476	32,239
10	4723	4290	6150	1.434	3.936	0.364	26.513	9.657	35,421
11	6526	6572	8498	1.293	2.746	0.471	26.431	12.446	72,592
12	2930	2595	3815	1.470	3.523	0.417	26.597	11.099	25,170
13	949	931	1236	1.327	1.405	0.944	11.577	10.933	8,878
14	4393	6853	5720	0.835	1.643	0.508	17.422	8.851	51,061
15	2132	5841	2776	0.475	0.922	0.515	15.185	7.828	37,544
16	1046	2596	1362	0.525	0.801	0.655	10.908	7.146	14,914
17	1003	9202	1306	0.142	0.575	0.247	6.611	1.632	2,133
18	431	5747	561	0.098	0.075	1.302	3.131	4.077	15,384
4A	18		23						
8A	102		133						
10A	21		27						
Total	39,990	81,933	52,072			Mean 0.558	Mean 13.698	Mean 7.011	Total 422,831
TOTAL HARVEST BASED ON LL PERMIT TYPES	52,072		POPULATION MINUS HARVEST ESTIMATED DEER POPU IN KS						370,759

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**KANSAS DEER ACCIDENTS: 1980-1997**

	<b>YEAR</b>	<b>ACCIDENTS</b>	<b>FATAL</b>	<b>INJURY</b>	<b>P.D.O.</b>	<b>KILLED</b>	<b>INJURED</b>
B A R S	<b>1980</b>	1395	0	58	1337	0	66
	<b>1981</b>	1757	0	58	1699	0	69
	<b>1982</b>	1963	0	59	1904	0	71
	<b>1983</b>	2375	0	85	2290	0	112
	<b>1984</b>	2949	0	90	2859	0	110
	<b>1985</b>	2675	0	114	2561	0	129
	<b>1986</b>	3173	1	116	3056	1	142
	<b>1987</b>	3601	0	107	3494	0	135
	<b>1988</b>	3910	1	132	3777	1	153
	<b>1989</b>	4020	0	149	3871	0	166
K A R S	<b>1990</b>	4209	0	132	4077	0	161
	<b>1991</b>	4366	1	137	4229	1	168
	<b>1992</b>	4739	1	130	4608	1	158
	<b>1993</b>	5582	0	145	5438	0	171
	<b>1994</b>	6571	1	188	6384	1	222
	<b>1995</b>	6746	2	203	6542	2	239
	<b>1996</b>	8415	2	281	8133	5	339
	<b>1997</b>	9116	5	279	8832	5	350

BARS- Basic Accident Records System

KARS- Kansas Accident Records System

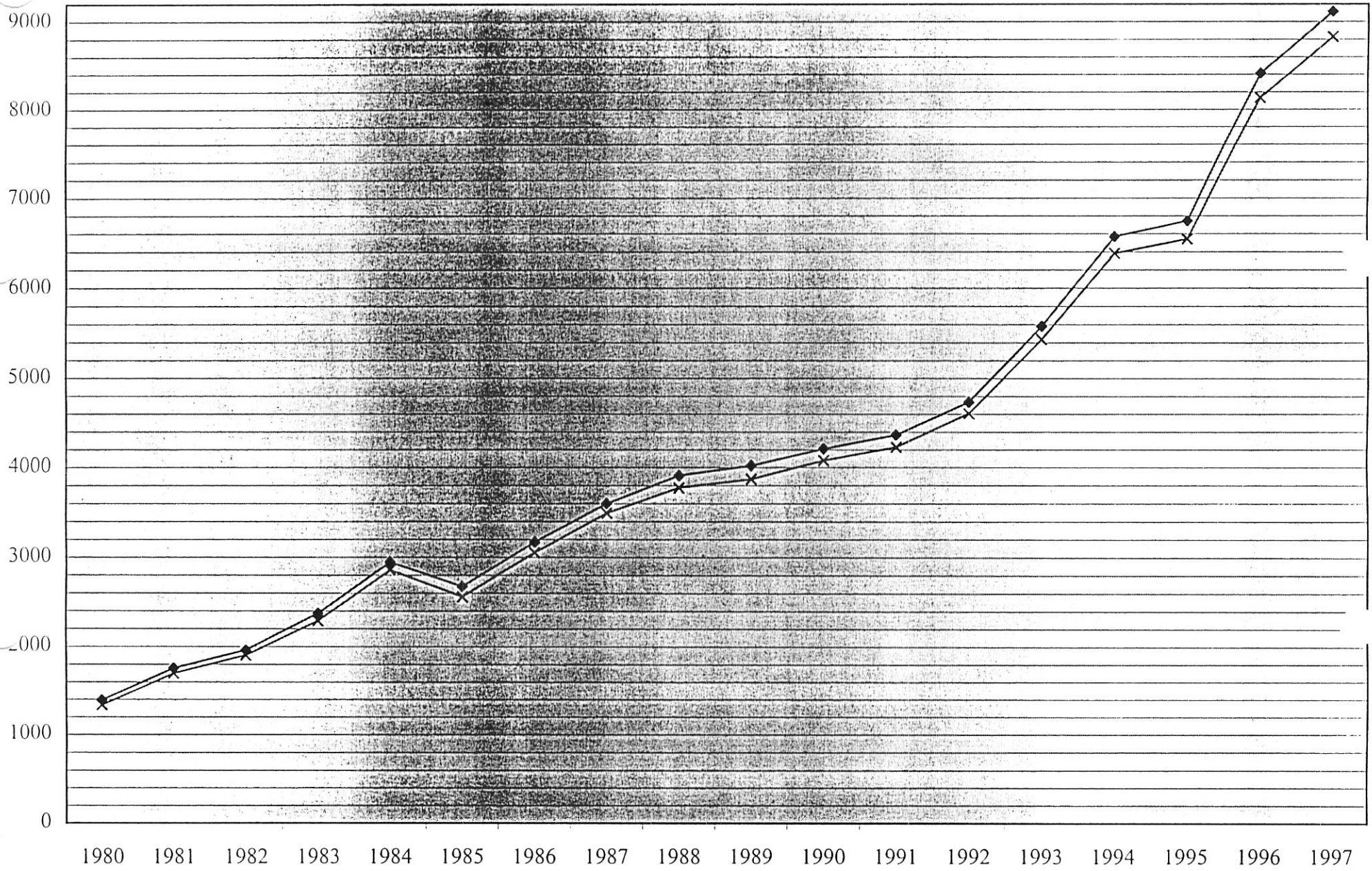
**NOTE:** Deer accident data previously released for the years 1990-1996 originating from the BAR file did not report accidents where the month and day of the accident were null.

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# DEER ACCIDENTS 1980-1997



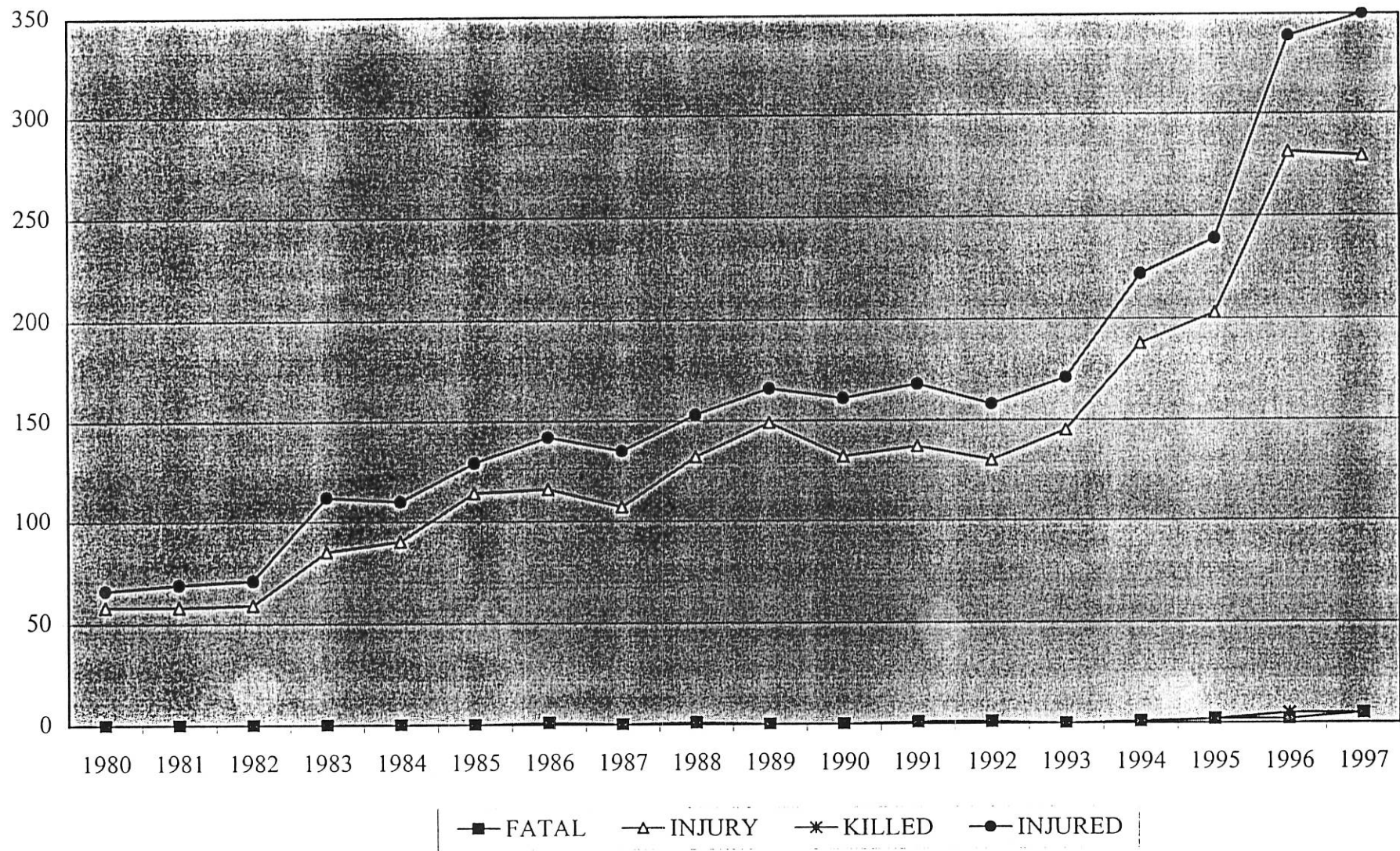
◆ ACCIDENTS

× P.D.O.

3-2

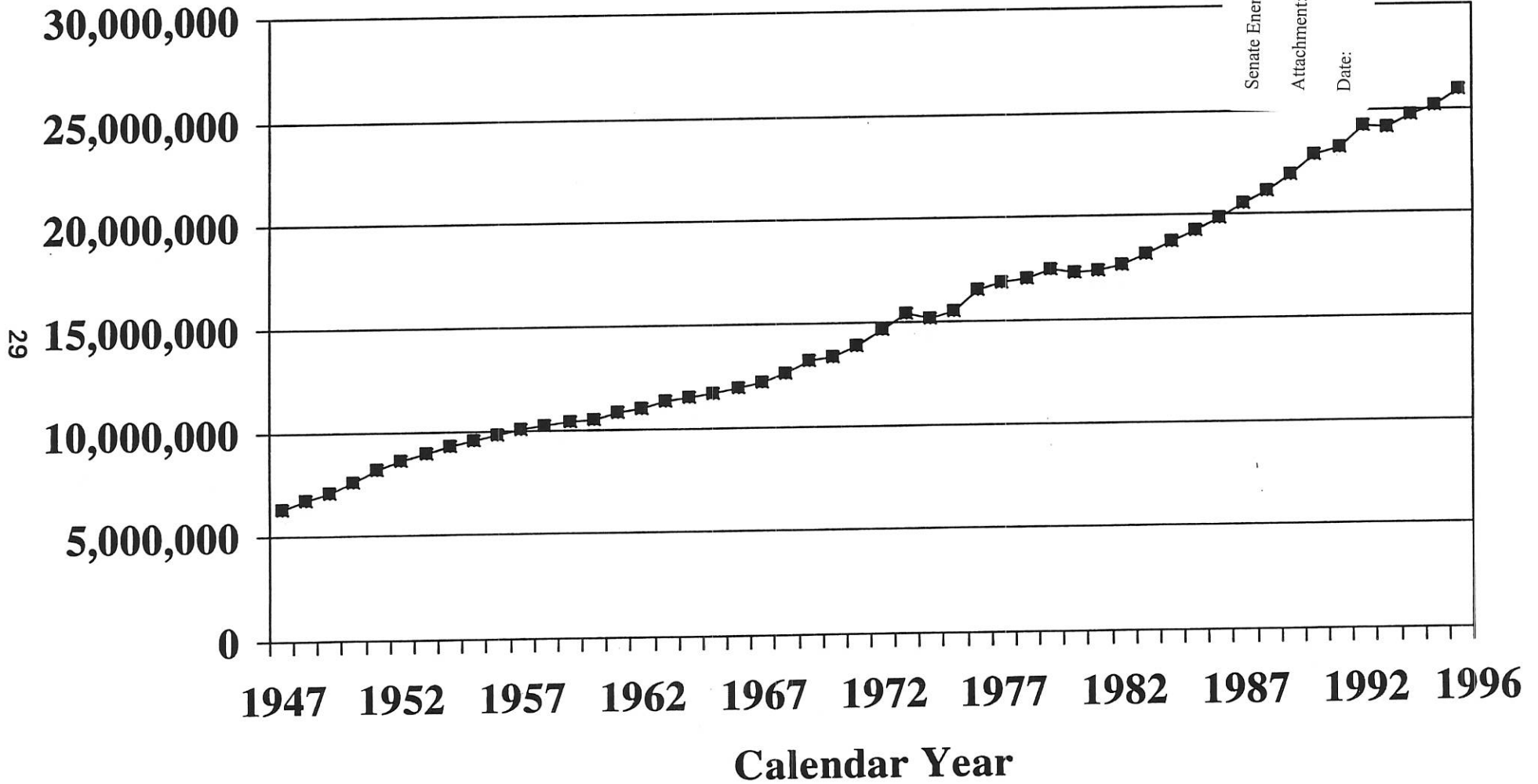
3-2

### INJURY/FATAL DEER ACCIDENTS 1980-1997



# KANSAS TOTAL ANNUAL VEHICLE MILES OF TRAVEL 1947-1996

Total AVMT in Thousands



Senate Energy & Natural Resources

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SOURCE: Kansas Department of Transportation, "Mileage and Travel Tables, 1996," page 2.

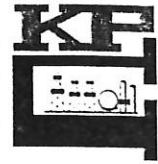


KDOT RECORDS OF DEER RELATED VEHICLE ACCIDENTS PER COUNTY.

COUNTY	1986 TOTAL	1987 TOTAL	1988 TOTAL	1989 TOTAL	1990 TOTAL	1991 TOTAL	1992 TOTAL	1993 TOTAL	1994 TOTAL	1995 TOTAL	1996 TOTAL	1997 TOTAL
AL	16	37	40	39	44	45	54	58	65	78	86	90
AN	25	21	26	27	29	42	35	45	69	60	84	86
AT	24	29	33	15	42	38	56	67	63	93	112	102
BA	23	32	37	46	27	38	36	34	57	54	71	76
BB	20	34	16	19	27	29	13	27	42	32	53	61
BR	19	22	30	47	36	42	62	77	81	75	139	108
BT	39	47	51	48	50	55	75	80	83	90	105	137
BU	133	145	167	153	134	149	179	171	247	193	231	264
CA	10	4	7	13	11	9	5	11	12	17	26	14
CD	34	33	42	52	39	47	52	72	83	70	92	92
CF	45	61	61	54	65	71	86	82	77	95	147	130
CK	31	47	53	64	57	59	84	77	126	107	115	165
CL	77	87	102	99	137	107	98	140	169	167	196	203
CM	4	4	.	1	3	3	2	4	7	11	24	24
CN	3	3	1	1	.	5	1	4	3	3	2	11
CQ	12	25	17	19	19	25	21	22	13	16	22	28
CR	18	52	36	23	85	79	81	89	83	100	108	133
CS	24	33	22	30	30	36	31	35	46	50	40	53
CY	21	17	25	36	36	22	48	63	80	106	117	124
DC	7	16	17	8	17	5	5	19	19	19	27	26
DG	89	107	119	115	131	143	148	154	178	214	246	203
DK	43	30	37	36	50	46	59	91	99	135	127	145
DP	13	22	30	23	29	37	26	47	46	56	63	88
ED	7	14	5	3	10	8	10	7	9	5	12	24
EK	9	11	10	12	19	16	10	23	20	18	27	29
EL	44	38	40	40	43	33	45	61	88	82	91	91
EW	38	31	32	37	35	53	37	57	75	74	63	100
FI	12	21	21	14	15	23	16	24	29	28	41	46
FO	22	31	20	20	25	18	31	26	36	38	44	83
FR	49	59	88	74	72	56	76	102	120	107	150	131
GE	42	68	73	71	53	73	58	69	82	56	106	88
GH	18	10	11	17	15	11	19	23	26	33	48	49
GL	2	.	4	4	1	2	1	1	3	2	3	5
GO	14	5	14	8	8	13	17	12	26	22	15	25
GT	5	4	6	8	7	8	5	16	9	8	13	12
GW	16	24	24	44	30	29	32	55	45	51	49	65
GY	13	21	18	16	3	3	3	3	6	19	19	14
HG	11	8	8	3	13	16	9	10	23	24	30	30
HM	9	13	2	5	7	20	15	16	6	.	17	23
HP	11	12	13	22	32	36	29	41	60	52	81	78
HS	2	5	2	2	1	5	3	3	2	2	3	9
HV	51	51	56	65	50	50	70	62	59	73	97	110
JA	29	36	43	22	31	46	48	51	67	78	95	105
JF	93	97	72	87	84	91	99	113	117	156	180	171
JO	108	127	171	174	181	197	206	270	269	288	310	341
JW	18	11	19	24	24	22	23	22	24	20	25	30
KE	14	11	8	13	20	10	11	16	10	15	25	24
KM	31	42	39	56	62	49	68	45	61	64	91	105
KW	6	9	9	5	11	13	12	22	15	26	44	43
LB	25	45	68	52	54	64	68	72	96	97	110	94
LC	6	2	6	13	12	5	11	22	24	24	18	46
LE	4	4	2	5	7	5	4	11	17	8	13	18
LG	4	3	6	8	6	10	7	4	4	4	13	13
LN	26	27	25	46	65	63	72	68	76	112	106	108
LV	106	110	111	109	137	108	129	149	187	216	251	224
LY	63	92	110	86	107	106	95	114	137	119	167	146

KDOT RECORDS OF DEER RELATED VEHICLE ACCIDENTS PER COUNTY.

COUNTY	1986 TOTAL	1987 TOTAL	1988 TOTAL	1989 TOTAL	1990 TOTAL	1991 TOTAL	1992 TOTAL	1993 TOTAL	1994 TOTAL	1995 TOTAL	1996 TOTAL	1997 TOTAL
MC	5	12	8	12	16	9	.	5	6	1	8	44
ME	10	11	13	16	6	12	14	15	22	11	22	26
MG	13	13	65	95	59	100	77	101	133	150	151	150
MI	63	63	89	87	110	112	127	140	132	131	199	211
MN	48	36	48	44	44	47	45	66	65	65	100	126
MP	43	51	62	49	41	51	46	49	55	99	86	161
MR	24	32	27	29	23	31	40	33	46	42	42	51
MS	35	48	32	28	22	25	11	15	15	12	11	27
MT	2	2	.	2	3	2	4	7	2	4	6	6
NM	16	27	19	22	33	35	40	68	57	69	97	106
NO	36	49	60	75	73	88	90	93	107	116	150	149
NS	6	9	15	9	12	12	21	11	37	31	27	31
NT	27	23	24	29	46	32	32	40	53	50	43	77
OB	7	11	9	12	14	11	12	5	1	2	3	27
OS	63	82	81	63	80	85	83	80	115	98	140	127
OT	27	25	24	21	25	27	36	51	52	57	61	92
PL	33	27	32	33	29	27	31	47	80	46	81	85
PN	26	27	32	22	25	12	24	49	67	43	60	68
PR	26	20	26	45	26	32	34	47	64	37	74	59
PT	46	56	45	69	90	89	97	123	159	135	167	155
RA	9	11	14	15	12	7	12	15	13	13	21	20
RC	31	29	46	20	32	31	55	65	55	48	88	96
RH	21	24	21	31	19	38	31	39	46	49	54	53
RL	68	75	60	64	71	92	105	131	128	141	186	201
RN	95	93	108	84	110	123	102	130	149	158	214	238
RO	37	37	36	26	39	36	26	44	40	58	54	77
RP	26	31	32	31	37	40	33	38	61	77	102	91
RS	25	31	29	35	46	40	43	45	67	74	74	76
SA	35	29	19	35	33	27	21	38	43	42	70	71
SC	4	7	11	12	12	3	9	11	12	13	9	19
SD	16	5	14	10	12	16	14	9	15	15	28	31
SF	25	30	46	34	37	31	29	36	47	36	74	80
SG	132	146	151	141	111	106	156	149	158	166	245	277
SH	6	10	13	6	6	10	12	18	20	20	24	26
SM	5	3	13	25	26	4	9	22	36	47	35	44
SN	119	139	143	166	151	157	197	224	264	267	342	328
ST	1	.	2	2	2	5	2	3	4	4	1	2
SU	57	45	63	65	60	54	59	52	56	70	101	135
SV	.	3	2	2	5	4	6	12	6	6	7	9
SW	5	5	12	2	8	3	5	14	17	10	11	24
TH	17	16	17	20	6	18	17	19	43	32	25	35
TR	11	21	20	13	14	19	20	23	30	22	30	33
WA	.	.	.	1	.	.	.	.	.	.	.	.
WB	29	39	39	42	47	47	70	57	68	74	92	88
WH	.	3	5	2	6	3	3	7	15	9	8	10
WL	28	28	44	43	37	47	32	47	69	70	61	61
WO	12	17	22	25	29	16	14	26	34	32	31	45
WS	19	33	33	35	41	36	68	68	93	94	121	139
WY	67	80	72	104	85	108	130	126	149	140	169	143
STWD	3,094	3,566	3,883	3,996	4,209	4,354	4,739	5,582	6,571	6,746	8,415	9,116



**DRAFT**

**RESOLUTION ON REDUCING SULFUR LEVELS IN GASOLINE**

**WHEREAS**, the U.S. Environmental Protection Agency (EPA) believes that sulfur reductions are necessary to maximize emissions reductions from cars and trucks,

**WHEREAS**, EPA plans to propose very stringent gasoline sulfur regulations along with more stringent vehicle tailpipe emission standards ("Tier 2"),

**WHEREAS**, some states have far greater air pollution problems than others and require a greater reduction in sulfur. Other states, especially those in the western part of the nation, have minimal air pollution problems and require less of a reduction,

**WHEREAS**, California gasoline was developed to address unique air quality problems in California. The air quality problems in other states are not as severe as those in California and do not necessitate the same solutions,

**WHEREAS**, reducing sulfur in gasoline means higher manufacturing costs that may be passed on to consumers which can limit their personal mobility and freedom,

**WHEREAS**, new investments in clean air are needed, however, consumers should not have to pay more for gasoline than necessary to achieve the goal of clean air,

**WHEREAS**, fuels and vehicles work together as a system. The right combination of fuel and vehicle controls will result in cleaner air and a cost-effective solution,

**WHEREAS**, the American Petroleum Institute (API) and the National Petrochemical Refiners Association (NPRO) have jointly proposed a program for reducing gasoline sulfur levels that would have the effect of reducing NOx emissions by more than 75,000 tons annually and would cut gasoline sulfur levels at least in half. Now, therefore,

*Be it resolved by the Senate of the State of Kansas, the House of Representatives concurring therein:* That the Legislature strongly encourages the EPA to develop a proposal to reduce gasoline sulfur levels with the flexibility of a regional approach that maximizes air quality benefits where they are needed most.

*Be it further resolved:* that EPA's proposal should be cost-effective so as to limit the burden on consumers:

*Be it further resolved:* That EPA's approach to reducing vehicle emissions should recognize that fuels and vehicles work in tandem and that neither fuels nor vehicles can be addressed in isolation; EPA must strike a balance in regulating both.

*Be it further resolved:* That the Secretary of State be directed to send enrolled copies of this resolution to the Administrator of the EPA and to each member of the Kansas Congressional Delegation

Senate Energy & Natural Resources

Attachment: 5

Date: 2-2-99 5-1