





IAFWA-ASA Data Mining Project

Initial Nebraska Findings

June 27, 2006

This analysis, funded by a Sport Fish Restoration multi-state conservation grant awarded jointly to the IAFWA and American Sportfishing Association, is designed to help Nebraska improve efforts to increase fishing licenses sales and revenues. This report represents the first step, which is an initial review of Nebraska's fishing license data by Southwick Associates, Inc., the grant's subcontractor. The results are intended to help Nebraska understand basic license sales trends, and help the agency generate questions for additional investigation. The second step will be a second round of data analysis based on questions and issues of interest to Nebraska. We encourage Nebraska to consider its current or potential future marketing efforts when reviewing this document. The second round of analysis will seek insights supporting those efforts. Southwick Associates, Inc. will be available by phone or email to answer any questions (904-277-9765, rob@southwickassociates.com).

The analysis below is based on a sample of 37,000 residents and non-resident license purchasers randomly selected from all customers who bought a license in the past four years.

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SECTION 1: Basic License Sales Information

Tables 1 through 4 present initial information regarding Nebraska's 2005 license sales. This is a basic look at Nebraska's license sales, which mirrors the examinations traditionally available prior to the advent of electronic license systems.

Table 1. 2005 Licenses Sales, By Type of Licenses Sold

License	Percent
Resident Fish	63.9%
Resident Hunt & Fish	22.8%
Non-Resident 3-Day Fish	8.6%
Non-Resident Fish	3.2%
Resident 3-Day Fish	1.5%
TOTAL	100.0%

Table 2. 2005 Resident and Non-Resident License Distribution

	Percent
Non-Resident	11.8%
Resident	88.2%
Total	100.0%

Table 3. Licenses Sold by Gender, 2005

		Non-
	Resident	Resident
Female	22.6%	16.6%
Male	77.4%	83.4%

Table 4. Age of License Buyers at Time of Purchase, 2005

Age	All Buyers	Resident	Non-Resident
16 and Under	1.4%	1.5%	0.9%
17 to 109	5.6%	5.9%	3.6%
20 to 29	20.2%	20.6%	17.6%
30 to 39	20.5%	20.5%	20.7%
40 to 49	23.7%	23.8%	22.8%
50 to 59	17.4%	17.3%	18.1%
60 to 69	9.7%	9.6%	11.1%
70 and older	1.4%	0.9%	5.3%
Total	100.0%	100.0%	100.0%

Tables 1-4 above give us a general one-year picture of license sales in Nebraska, but nothing very detailed, nothing new, and nothing that permits a focused marketing effort. Next, we will go into more detail by looking at multi-year trends.







SECTION 2: Licenses Sold, 2002-2005

By looking at multiple years of data, we can identify license sales trends.

Table 5. License Sales Trends, 2002-2005 (Y axis = the percentage within the weighted sample of license buyers for the years 2002-2005; N=37,000)

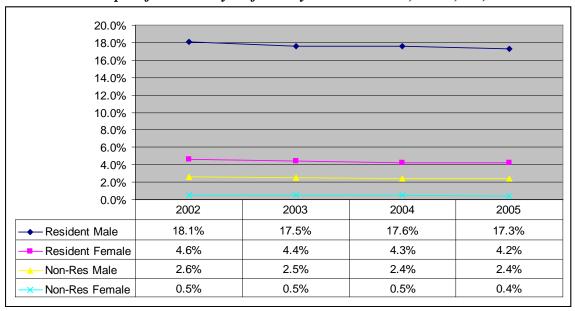


Table 5 suggests that the licenses are declining. The long term gradual decline is mirrored in many other states, and may reflect a shift away from fishing and towards others forms of recreation. This is speculative reasoning, and is only provided as an observation based on reviews of other state license sales trends.

Even though overall sales show slight declines, there may be customer segments experiencing increases while others have above-average declines. Which segments are these?







SECTION 3: Lifestyle Analyses

People's preferences are likely to vary based on income, age, urban/rural lifestyle, where they are in life (single, family, empty-nest, retired, etc.) and more. This type of information is not available from the data solely provided by Nebraska's electronic license database. To gain a better understanding of who is more likely to buy or not buy a license, we use TAPESTRY® lifestyle data:

ESRI of Arlington, VA provides the TAPESTRY® data service. TAPESTRY® is built from Census Bureau data and other sources. From the ESRI website: "The Community Tapestry segmentation system provides an accurate, detailed description of America's neighborhoods. U.S. residential areas are divided into 65 segments based on demographic variables such as age, income, home value, occupation, household type, education, and other consumer behavior characteristics." Using the ESRI service, we appended a sample of 37,000 Nebraska license purchasers with TAPESTRY® data. The resulting information explains the lifestyle typical to people who live on the same block or local neighborhood as the license purchaser. The appended data allow us to learn more about the lifestyles of people who purchase fishing licenses and gain a better understanding of the type of person who buys or does not buy fishing licenses. The results will allow Nebraska to better understand the license buying market and to become more focused and cost-effective in its marketing and recruitment programs.

TAPESTRY® divides the public into 12 major groupings called "LifeModes," each of which has sub-groupings referred herein as "Tapestry segments" or just "segments." In all, there are 65 segments available. We give abbreviated descriptions of each LifeMode and segment when first presented, but encourage the reader to review the attached .pdf for more complete descriptions.

Who is Likely to Buy a Fishing License?

Let's take an initial look at the top license-purchasing LifeMode categories in 2005. These are ranked based on the number of licenses purchased by each in 2005. Table 6 ranks the LifeMode groups from the largest group of buyers to the least, and includes residents and non-residents:

Table 6. Sales by LifeMode Categories, 2005, Ranked from Largest Purchasers to Least, Residents and Non-residents

LifeMode Groups	% of State Pop.	% of 2005 Buyers	Cumulative %	Description
Factories and Farms	20.9%	26.9%	26.9%	Small towns often in America's breadbasket states, lower income, married, employed in ag & manufac.
Senior Styles	15.9%	14.8%	41.7%	Retirees, average income, depend soc sec & pensions
Traditional Living	13.5%	12.9%	54.7%	Hard working, modest income families, older towns losing kids to newer cities and growth areas
Upscale Avenues	8.4%	10.7%	65.4%	Above average income







LifeMode Groups	% of State Pop.	% of 2005 Buyers	Cumulative %	Description
High Society	8.7%	9.4%	74.8%	Fastest growing group, highest income, married
Family Portrait	7.0%	6.8%	81.6%	Generally younger families, homeowners
High Hopes	7.3%	5.8%	87.4%	Young, college educated, single or married w/out kids
American Quilt	3.7%	4.5%	91.9%	Small towns/rural, modest income, blue-collar or rural nearing retirement, modest or mobile homes
Global Roots	3.6%	2.6%	94.6%	Ethnically diverse, recent immigrants, want to improve
Solo Acts	6.1%	2.7%	97.3%	Young, educated, city life
Scholars & Patriots	2.2%	1.4%	98.7%	Youthful, lower income, in college or military
Metropolis	2.8%	1.3%	100.0%	City families, row houses & public transportation

The leading LifeMode categories are the rural areas with small towns, modest incomes and older citizens. With one-fifth of the state population, they purchase over one-fourth of licenses sold, which demonstrates a higher propensity to buy licenses compared to the average state resident. Additionally the top two wealthiest LifeMode groups (Upscale Avenues and High Society show a greater likelihood of buying licenses compared the average state resident (column #3 compared to column #2). These wealthier groups combined represent fewer people and licenses than Factories and Farms. Lower income, more urbanized people ("Metropolis," "Solo Acts," etc.) are less likely to buy a license in market share and compared to the average resident.

The LifeMode categories presented in Table 6 provide an initial look at Nebraska's anglers, and there are greater details still available. Let's take a look at the top license-purchasers by TAPESTRY® segments from 2002 to 2005. These are ranked for both resident and non-resident based on the number of licenses purchased by each segment for all four years. Table 7 is long and detailed, and summary discussions follow.

Table 7. 2002-2005 License Sales by Segment, Resident & Non-Resident (ranked by market share ('% of 2002-2005 License Sales'))

Rank	Tapestry Segment	LifeMode Groups	% of 2001-2005 License Sales	Cumulative %	% of State Pop.	Description
1	Prairie Living	Factories and Farms	20.51%	20.51%	15.96%	Midwest small farms mostly, avg age = 40, married, half have kids, typical income, pets, country music, hunts and fish
2	Heartland Communities	Senior Styles	8.53%	29.05%	7.00%	Above avg age, married, modest income, small Midwest towns, hunt/fish/bowl, country music, do-it-yourselfers
3	Rustbelt Traditions	Traditional Living	7.65%	36.70%	8.50%	Older Great lakes industrial cities, avg age = 36, mix of married or single, slightly below avg income, don't move much, forego fads
4	Green Acres	Upscale Avenues	5.06%	41.77%	3.26%	Married w/ kids, blue collar baby boomers with college ed., Above average income, suburban fringe, do-







FISH AND	WILDLIFE ECONOMIC	S AND STATISTIC	s -	AGENCIES		
Rank	Tapestry Segment	LifeMode Groups	% of 2001-2005 License Sales	Cumulative %	% of State Pop.	Description
						it-yourselfers, outdoors
5	Midlife Junction	Traditional Living	4.55%	46.32%	3.88%	Exiting child-rearing, mix married & single, slightly below avg income, 33% live in apts, suburban, conservative, budget-conscious
6	Great Expectations	High Hopes	4.24%	50.56%	5.37%	Young singles & married couples, lower income & growing, many rent, music taste varies: MTV to country, like outdoor sports
7	Salt of the Earth	Factories and Farms	3.48%	54.04%	2.50%	Two-thirds are married with kids, blue collar, avg income, Midwestern, often rural, own single family homes, conservative
8	Milk and Cookies	Family Portrait	3.28%	57.32%	3.34%	Young families but affluent for their age, two incomes, prefer single-family homes, focused on families & future, leisure time = kid time
9	Up and Coming Families	Family Portrait	3.25%	60.57%	3.27%	Fast growing segment, avg age = 32, married with kids, affluent, own home on suburban fringe, little time, fast food.
10	Cozy and Comfortable	Upscale Avenues	3.11%	63.68%	3.05%	Older suburban areas, middle aged, married, older kids, use computers, above avg income, not really do-it- yourselfers
11	Sophisticated Squires	High Society	3.06%	66.74%	2.47%	Country living on urban fringe, above avg income, 35-54, SUVs, married w/kids, golf
12	Boomburbs	High Society	2.60%	69.33%	2.45%	Younger families with busy upscale lifestyle, two incomes, college ed., homeowners, into computers & tech, CNN, Discovery channel
13	Rustbelt Retirees	Senior Styles	2.53%	71.87%	2.70%	Married/no kids, avg income, Great Lakes & Northeast, own homes, not inclined to move, loyal to community & country, gets involved
14	Exurbanites	High Society	2.19%	74.05%	2.15%	Affluent, likes open space on urban edge, married/empty nesters, golf, kayakers, active in volunteer groups and donate to causes
15	Home Town	Factories and Farms	2.14%	76.19%	1.72%	Young, tend to remain in hometown, low avg income, some married, 1/3 without diploma, suburban but prefer country lifestyle
16	Aspiring Young Families	High Hopes	1.80%	77.99%	1.88%	Young start-up families, married or divorced, typical age=30, 22% with degrees, ½ rent, live in growing metro areas, avg income
17	Prosperous Empty Nesters	Senior Styles	1.67%	79.65%	2.50%	1/2 over 55, kids moved out, above avg income, still working, suburban, physically active, investors
18	Young and Restless	Solo Acts	1.61%	81.27%	4.07%	Avg age=29, most are single, educated but income < avg. Renters, women more likely to work, metro areas, tech savvy.
19	Midland Crowd	American Quilt	1.54%	82.81%	1.13%	Avg age=36, married, ½ with kids, typical income, new housing in rural







FISH AND	WILDLIFE ECONOMIC	S AND STATISTIC	s .			
Rank	Tapestry Segment	LifeMode Groups	% of 2001-2005 License Sales	Cumulative %	% of State Pop.	Description
						areas, blue collar, conservative, likes Fords & fishing
20	In Style	Upscale Avenues	1.47%	84.27%	1.60%	Suburb living/prefers city lifestyles, married/no kids, age=38, higher income, tech savvy, rock music, health oriented
21	Crossroads	American Quilt	1.43%	85.71%	1.35%	Married couples/single parents, 32 years, below avg income, smaller towns, mobile homes common, above avg unemployment
22	Industrious Urban Fringe	Global Roots	1.19%	86.90%	1.00%	Family is key. Largely hispanic, many foreign born, live on city's edge, avg. income, commonly owns home. Thrifty.
23	College Towns	Scholars & Patriots	1.17%	88.07%	1.77%	Avg age=24.3, almost ½ enrolled in college & others on staff, part-time jobs, low income, renters or some in dormitories.
24	Simple Living	Senior Styles	1.01%	89.08%	1.58%	Older, ½ single, kids rare, low income, ¼ didn't finish high school, community is important
25	Suburban Splendor	High Society	0.96%	90.04%	1.12%	Maturing families, very affluent, dual incomes, avg age=40, younger neighborhoods (but not new), like to invest
26	Rooted Rural	American Quilt	0.88%	90.92%	0.68%	Slightly older, rural, empty-nesters, lower income, less likely to have college experience, trucks, do-it- yourselfers
27	Southern Satellites	Factories and Farms	0.88%	91.80%	0.75%	Primarily found in rural South, 37 yrs, most married, some with kids, below avg income, 1/3 without diploma, fishing, NASCAR
28	Old and Newcomers	Solo Acts	0.85%	92.65%	1.63%	In transition-starting careers or retiring, renters, more single person and shared households, few families, lower income
29	Main Street, USA	Traditional Living	0.83%	93.48%	0.91%	Suburbs of smaller metro areas in older homes, avg age= 36, ½ married, slightly above avg income, service/manufacturing
30	Rural Resort Dwellers	American Quilt	0.82%	94.30%	0.52%	Rural non-farm, married/kids moved out, typically older, avg income, boats/fish/hunt
31	Inner City Tenants	Global Roots	0.82%	95.12%	1.81%	Ethnically diverse, urban, 27 years=avg, single, lower than average income, college is a goal, rents, not outdoorsy.
32	Metropolitans	Metropolis	0.63%	95.75%	1.03%	City living, older neighborhoods, single or childless couples, educated, slightly above average income, mobile, homeowners
33	Metro City Edge	Metropolis	0.59%	96.34%	1.23%	Many single parent families (1/3 married households), older children at home, below avg education & income, high unemployment
34	Retirement Communities	Senior Styles	0.58%	96.92%	1.35%	Retired, ½ single, below avg income, ½ own single-family homes/others in







FISH AND	WILDLIFE ECONOMIC	S AND STATISTIC	S			
Rank	Tapestry Segment	LifeMode Groups	% of 2001-2005 License Sales	Cumulative %	% of State Pop.	Description
						multi-unit places, live in metro areas, health conscious
35	City Dimensions	Global Roots	0.54%	97.46%	0.80%	Young, 2/3's single, many single parents, low income, urban, lack education, renters, frequent moves, dense neighborhoods
36	Enterprising Professionals	Upscale Avenues	0.45%	97.91%	0.51%	Young, highly educated, single or recently married. Above average income, rent, mobile, tech savvy, likes to travel
37	Connoisseurs	High Society	0.33%	98.24%	0.47%	Very high incomes, slightly older, slightly older & many still with kids, live in dense city centers, liberal, travel, like to spend
38	Military Proximity	Scholars & Patriots	0.30%	98.54%	0.38%	Young, married, embracing parenthood, second youngest Tapestry segment, 3/4's active duty or work on bases. Above avg education.
39	Social Security Set	Senior Styles	0.29%	98.83%	0.55%	Mostly elderly, most live alone, ethnically diverse, very low income, apartment renters in high-rise urban locations, few recreation \$
40	Modest Income Homes	Metropolis	0.13%	98.97%	0.56%	Mostly young singles & single parents, many grandparents raising kids, low income, low valued homes, 1/2 rent
41	Metro Renters	Solo Acts	0.13%	99.10%	0.40%	Urban, young, educated & single, slightly above avg income & rising, internet savvy, have disposable income, ethnically diverse
42	Senior Sun Seekers	Senior Styles	0.10%	99.19%	0.09%	Older, growing segment, many are winter snow-birds & go south, education levels are below avg, over half receive social security.
43	Family Foundations	Traditional Living	0.09%	99.28%	0.17%	Mostly African-American, slightly older families, active in community, average income, urban.
44	Pleasant-ville	Upscale Avenues	0.09%	99.37%	0.00%	Slightly older, families with kids, above average income, urban/suburban, long commutes common, moves infrequently
45	Urban Chic	Upscale Avenues	0.08%	99.45%	0.00%	Professional, urban couples, less than ½ with kids, 41 yrs, above avg income, uptown living (highrises) common, prefer city life
46	NeWest Residents	Global Roots	0.08%	99.53%	0.00%	Over 1/2 foreign born, largely hispanic, urban, renters in mid-to-high rise apts. Low education rates but modest (not low) income.
47	City Commons	Family Portrait	0.07%	99.60%	0.36%	Young, single or single parents in urban areas. Mostly African American. Blue collar, service-oriented employment. Low income, low rent.
48	Southwestern Families	Family Portrait	0.07%	99.67%	0.06%	Young hispanic families, not recent immigrants, low income, high unemployment, prefer low-cost homes (2/3's own home)







Rank	Tapestry Segment	LifeMode Groups	% of 2001-2005 License Sales	Cumulative %	% of State Pop.	Description
49	Silver and Gold	Senior Styles	0.05%	99.72%	0.05%	These are the wealthiest & older seniors, commonly live on the outer edge of suburbs, like to travel, active, seek sunshine
50	Wealthy Seaboard Suburbs	High Society	0.05%	99.77%	0.00%	Coastal metro areas, age=40's, white, few kids, high income & high wealth, professionals, travels, seldom moves
51	Top Rung	High Society	0.04%	99.81%	0.00%	Mature, married, well educated and wealthy. Live in coastal urban areas, travel frequently. Home values near \$1 million.
52	Urban Villages	Family Portrait	0.04%	99.85%	0.00%	Multicultural areas, young families, in dense urban centers, 40% with no diploma, often hispanic, older single-family homes
53	Dorms to Diplomas	Scholars & Patriots	0.03%	99.87%	0.01%	College students, youngest Tapestry segment. 3/4's hold part-time jobs. 1/2 live in dorms.
54	Rural Bypasses	Factories and Farms	0.02%	99.90%	0.00%	Rural, low income & education, trucks, fishing, NASCAR, mostly white & 1/3 African-American.
55	Las Casas	Global Roots	0.02%	99.92%	0.00%	Newest Western immigrants, young, 62% married (above avg), \$35K income, mostly skilled workers, large household size.
56	Laptops and Lattes	Solo Acts	0.02%	99.94%	0.00%	Avg age = 38, mostly single, live in urban centers, affluent, cosmopolitan, educated, rents, traveled and tech savvy.
57	International Marketplace	Global Roots	0.01%	99.95%	0.00%	Young families, many immigrants, ethnically diverse, common to NY and LA, lower income than urban villages.
58	Trendsetters	Solo Acts	0.01%	99.96%	0.00%	Young, single, culturally diverse, above average income, educated. Most rent. Live the urban life style.
59	City Lights	Metropolis	0.01%	99.97%	0.00%	Live in dense urban areas, 38 yrs, generally above avg income, families/singles and culture types, most in apts, not outdoorsy
60	The Elders	Senior Styles	0.01%	99.98%	0.04%	Oldest Tapestry segment (73 years = avg), 96% white, growing in numbers, senior communities, golf, travel, above avg wealth
61	City Strivers	Metropolis	0.01%	99.99%	0.00%	Live in dense urban areas, 38 yrs, generally above avg income, families/singles and culture types, most in apts, not outdoorsy
62	Pacific Heights	Upscale Avenues	0.01%	100.00%	0.00%	Upscale urban neighborhoods on Pacific coast, 34 are families, 38 yrs, one income earner, high annual income.
63	Urban Melting Pot	Global Roots	0.00%	100.00%	0.00%	Mostly immigrants, ethnically diverse, urban, income below avg (\$37K), public transportation, fashion conscious,







The above table gives us a better picture of Nebraska's license buyers. The highlighted segments in the top 10 show a significantly greater-than-average tendency to buy licenses. These highlighted segments are not urban and tend towards rural, with families. What we don't see are younger, educated, urban-types. This does not mean these people will not fish in the future, but at this stage in their lives, fishing is not a common activity. Older urban people and generally lower income residents don't appear as likely to buy licenses. The Prairie Living segment, representing nearly 16% of the state population, is the top source for license sales accounting for over 20% of all licenses sold.

Where Do We Find Residents More or Less Likely to Buy Licenses?

Table 8 below lists all segments recorded as having bought a license in Nebraska between 2002 and 2005, for residents only. The rank is therefore different than Table 7 since Table 8 specifically reflects residents. This rank will be reflected in subsequent tables for residents.

The third column presents the larger LifeMode group each belongs to, and the fourth presents the urban-rural areas in which the segments are generally located. The fifth column presents the change in sales for each license from 2002 through 2005, based on the number of licenses sold. Column 6 represents the market share of buyers from 2002 through 2005. Column 6 is important as it allows the agency to decide if the trends represented by a specific segment are worth the agency's time to focus on strategies to maintain or boost sales to this segment. The percentage change in market share is in column seven. For example, the total share of licenses bought by the Prairie Living segment dropped by 4.05 percent from 2002 to 2005. The rank presented in the first column is based on the total market share reported in column six, and is used in later tables.

Table 8. Resident License Buyers by Segment, as a Percentage of All Licenses Sold Annually

1) Rank	2) Tapestry Segment	3) LifeMode Groups	4) Urban Group	5) Net Change in Real Licenses Sold from 2002 - 2005	6) Percentage Market Share from 2002-2005	7) Percentage Change in Market Share from 2002-2005
1	Prairie Living	Factories and Farms	Rural II	-8.97%	22.24%	-4.05%
2	Heartland Communities	Senior Styles	Small Towns	-4.06%	8.97%	1.13%
3	Rustbelt Traditions	Traditional Living	Urban Outskirts I	-6.18%	8.18%	-1.10%
4	Green Acres	Upscale Avenues	Rural I	7.59%	4.97%	13.41%
5	Midlife Junction	Traditional Living	Suburban Periphery II	-5.76%	4.66%	-0.66%
6	Great Expectations	High Hopes	Urban Outskirts I	-14.18%	4.58%	-9.54%
7	Salt of the Earth	Factories and Farms	Rural I	4.77%	3.60%	10.44%
8	Milk and Cookies	Family Portrait	Metro Cities I	-2.50%	3.31%	2.77%
9	Cozy and Comfortable	Upscale Avenues	Suburban Periphery II	-7.21%	3.19%	-2.19%
10	Up and Coming Families	Family Portrait	Suburban Periphery I	0.82%	2.82%	6.27%
11	Sophisticated Squires	High Society	Suburban Periphery I	0.85%	2.78%	6.30%







1) Rank	2) Tapestry Segment	3) LifeMode Groups	4) Urban Group	5) Net Change in Real Licenses Sold from 2002 - 2005	6) Percentage Market Share from 2002-2005	7) Percentage Change in Market Share from 2002-2005
12	Rustbelt Retirees	Senior Styles	Suburban Periphery II	-5.52%	2.58%	-0.41%
13	Boomburbs	High Society	Urban Outskirts I	25.78%	2.29%	32.58%
14	Home Town	Factories and Farms	Suburban Periphery II	-11.50%	2.22%	-6.72%
15	Exurbanites	High Society	Suburban Periphery I	2.68%	2.01%	8.23%
16	Prosperous Empty Nesters	Senior Styles	Suburban Periphery I	-14.34%	1.70%	-9.71%
17	Aspiring Young Families	High Hopes	Metro Cities II	-6.54%	1.62%	-1.49%
18	Young and Restless	Solo Acts	Metro Cities II	4.39%	1.61%	10.04%
19	Midland Crowd	American Quilt	Rural I	-4.55%	1.32%	0.62%
20	In Style	Upscale Avenues	Suburban Periphery I	3.01%	1.28%	8.58%
21	Crossroads	American Quilt	Small Towns	-10.67%	1.28%	-5.84%
22	College Towns	Scholars & Patriots	Urban Outskirts II	0.00%	1.22%	5.41%
23	Industrious Urban Fringe	Global Roots	Urban Outskirts I	-3.33%	1.13%	1.89%
24	Simple Living	Senior Styles	Urban Outskirts II	-2.19%	1.07%	3.10%
25	Southern Satellites	Factories and Farms	Rural II	-3.20%	0.92%	2.03%
26	Rooted Rural	American Quilt	Rural II	-17.95%	0.81%	-13.51%
27	Inner City Tenants	Global Roots	Metro Cities II	-12.04%	0.78%	-7.28%
28	Old and Newcomers	Solo Acts	Metro Cities II	-12.04%	0.77%	-7.28%
29	Rural Resort Dwellers	American Quilt	Rural I	-33.88%	0.76%	-30.31%
30	Suburban Splendor	High Society	Suburban Periphery I	12.63%	0.76%	18.72%
31	Metro City Edge	Metropolis	Urban Outskirts II	-6.98%	0.64%	-1.95%
32	Retirement Communities	Senior Styles	Metro Cities II	-24.73%	0.60%	-20.66%
33	Main Street, USA	Traditional Living	Urban Outskirts I	6.94%	0.59%	12.73%
34	City Dimensions	Global Roots	Metro Cities II	-17.98%	0.59%	-13.54%
35	Metropolitans	Metropolis	Metro Cities I	1.39%	0.55%	6.87%
36	Social Security Set	Senior Styles	Principal Urban Centers II	-30.19%	0.32%	-26.41%
37	Military Proximity	Scholars & Patriots	Suburban Periphery II	-16.33%	0.32%	-11.80%
38	Enterprising Professionals	Upscale Avenues	Metro Cities I	3.23%	0.25%	8.81%
39	Connoisseurs	High Society	Metro Cities I	-23.08%	0.22%	-18.92%
40	Modest Income Homes	Metropolis	Urban Outskirts II	14.29%	0.14%	20.47%
41	Family Foundations	Traditional Living	Metro Cities II	-42.86%	0.09%	-39.77%
42	Metro Renters	Solo Acts	Principal Urban Centers I	71.43%	0.08%	80.70%
43	City Commons	Family Portrait	Principal Urban Centers II	57.14%	0.08%	65.64%
44	Southwestern Families	Family Portrait	Urban Outskirts II	50.00%	0.04%	58.11%
45	Silver and Gold	Senior Styles	Suburban Periphery I	-66.67%	0.03%	-64.86%
46	Senior Sun Seekers	Senior Styles	Small Towns	-25.00%	0.02%	-20.94%
47	Dorms to Diplomas	Scholars & Patriots	Metro Cities II	0.00%	0.01%	5.41%
48	Top Rung	High Society	Metro Cities I	-100.00%	0.00%	-100.00%

^{*} Each urbanization group is divided into two categories, I and II. "T' categories are typically more affluent, with higher incomes, than "II" categories.

The top six segments represent over half of all resident licenses sold. These top six segments need special consideration since they are the larger part of the State's annual







license revenue stream. Five of the top six segments lost buyers since 2002. The top segment, Prairie Living, lost nearly 9% of its buyers since 2002. Great Expectations, #6, showed an alarming 14 percent drop. Qualitative work that compares these two segments to the Green Acres segment – the only top six segment showing growth – may provide insights into the type of person more likely to enter fishing rather than drop out. An additional analysis that compares the trend in the overall state population from 2002 to 2005 would be useful, but ESRI is unable to provide Tapestry data prior to 2005.

Although the majority of the segments show a decline, other segments show growth such as "Green Acres" and "Salt of the Earth". One segment, "Boomburbs", shows a significant increase of over 25 percent and is ranked thirteen. This may show a trend in the population of the state and may require further investigation. Otherwise, comparing the preferences and motivations of these segments to the shrinking segments may provide beneficial insights.

In Table 8 above, we added TAPESTRY[®] Urban Groups. These describe the level of urbanization where the segments, or neighborhoods, are found. In Table 9, we consolidated the resident data to get a better idea of the rural versus urban differences.

Table 9. License Sales Market Share by Urbanization Group, Residents only

			1/
Urbanization Group	Market Share (2002 - 2005)	% Change in Market Share from 2002 to 2005	% Change in Number of Licenses Sold
Rural	34.62%	-0.31%	-5.99%
Suburban Periphery	24.35%	0.22%	-4.27%
Urban Outskirts	19.87%	0.27%	-3.85%
Metro Cities	10.41%	-0.16%	-6.56%
Small Towns	10.27%	0.02%	-4.95%
Principal Urban Centers	0.48%	-0.03%	-10.45%

Table 9 shows the importance of rural areas and suburban/urban outskirts as the top buyers of Nebraska's fishing licenses. The last column shows that the actual, or real, number of licenses sold to rural residents is falling. The Suburban Periphery and Urban Outskirts are the next two larger sources of license sales and they are also losing license buyers. These categories are losing license buyers at a slightly lower rate than the other categories, which translates into an increased share of the license market, but don't be fooled, their sales are also decreasing. Overall, sales of licenses to all urbanization groups are shrinking at a similar rate, and the faster rate of decline in the top category, rural, is the most alarming.

Please note the data in this report is based on the purchaser's home residence, not where he or she purchased their license. If a trend exists in Nebraska for urban residents to buy their licenses close to their fishing site, that trend cannot be identified in this report.







Let us now take a look at the Tapestry segments with the fastest growing market shares and largest increase in licenses sold. These groups have increased their share of annual license sales from 2002 to 2005. Table 10 presents the top 15 segments sorted by those with the greater growth listed first. The number listed in column #1 is the segment's ranking as the provider of most license sales, as first presented in Table 7.

Table 10. Top 15 Segments Ranked by Fastest Growth in Market Share, 2002-2005

1) Rank	2) Tapestry Segment	3) LifeMode Groups	4) Urban Group	5) Net Change in Real Licenses Sold from 2002 - 2005	6) Percentage Market Share from 2002-2005	7) Percentage Change in Market Share from 2002-2005
42	Metro Renters	Solo Acts	Principal Urban Centers I	71.43%	0.08%	80.70%
43	City Commons	Family Portrait	Principal Urban Centers II	57.14%	0.08%	65.64%
44	Southwestern Families	Family Portrait	Urban Outskirts II	50.00%	0.04%	58.11%
13	Boomburbs	High Society	Urban Outskirts I	25.78%	2.29%	32.58%
40	Modest Income Homes	Metropolis	Urban Outskirts II	14.29%	0.14%	20.47%
30	Suburban Splendor	High Society	Suburban Periphery I	12.63%	0.76%	18.72%
4	Green Acres	Upscale Avenues	Rural I	7.59%	4.97%	13.41%
33	Main Street, USA	Traditional Living	Urban Outskirts I	6.94%	0.59%	12.73%
7	Salt of the Earth	Factories and Farms	Rural I	4.77%	3.60%	10.44%
18	Young and Restless	Solo Acts	Metro Cities II	4.39%	1.61%	10.04%
38	Enterprising Professionals	Upscale Avenues	Metro Cities I	3.23%	0.25%	8.81%
20	In Style	Upscale Avenues	Suburban Periphery I	3.01%	1.28%	8.58%
15	Exurbanites	High Society	Suburban Periphery I	2.68%	2.01%	8.23%
35	Metropolitans	Metropolis	Metro Cities I	1.39%	0.55%	6.87%
11	Sophisticated Squires	High Society	Suburban Periphery I	0.85%	2.78%	6.30%

The highlighted segments "Boomburbs", "Green Acres" and "Salt of the Earth" stand out. Of the growing segments, these have larger market shares and growth rates and provide the greatest stabilizing force for license sales. Outside of the Green Acres and Salt of the Earth segments, the fastest growing segments are from urban and suburban areas. This presents an interesting picture: the areas providing the fewest number of license sales and showing a lower rate of sales per person *might* be experiencing the greatest rate of growth. Please note that these segments have such a small share of the market that a change of just a few licenses from 2002 to 2005 had a major impact on there growth rates and ranking. At this time, till more information comes available, we suggest these groups be overlooked as their overall impact is negligible. It is possible their growth rates are reflective of overall state population trends from 2002 to 2005.

At this point, it is worth knowing which segments are shrinking quicker. Table 11 presents the segments suffering the worst declines.







Table 11. Top 20 Segments Ranked By Shrinking Market Share

	Tuble 11. 10p 20 Segments Rainted By Still thinking Maintel Share					
1) Rank	2) Tapestry Segment	3) LifeMode Groups	4) Urban Group	5) Net Change in Real Licenses Sold from 2002 - 2005	6) Percentage Market Share from 2002-2005	7) Percentage Change in Market Share from 2002-2005
48	Top Rung	High Society	Metro Cities I	-1	0.00%	-100.00%
45	Silver and Gold	Senior Styles	Suburban Periphery I	-0.66667	0.03%	-64.86%
41	Family Foundations	Traditional Living	Metro Cities II	-0.42857	0.09%	-39.77%
29	Rural Resort Dwellers	American Quilt	Rural I	-0.33884	0.76%	-30.31%
36	Social Security Set	Senior Styles	Principal Urban Centers II	-0.30189	0.32%	-26.41%
46	Senior Sun Seekers	Senior Styles	Small Towns	-0.25	0.02%	-20.94%
32	Retirement Communities	Senior Styles	Metro Cities II	-0.24731	0.60%	-20.66%
39	Connoisseurs	High Society	Metro Cities I	-0.23077	0.22%	-18.92%
34	City Dimensions	Global Roots	Metro Cities II	-0.17978	0.59%	-13.54%
26	Rooted Rural	American Quilt	Rural II	-0.17949	0.81%	-13.51%
37	Military Proximity	Scholars & Patriots	Suburban Periphery II	-0.16327	0.32%	-11.80%
16	Prosperous Empty Nesters	Senior Styles	Suburban Periphery I	-0.14344	1.70%	-9.71%
6	Great Expectations	High Hopes	Urban Outskirts I	-0.14178	4.58%	-9.54%
27	Inner City Tenants	Global Roots	Metro Cities II	-0.12037	0.78%	-7.28%
28	Old and Newcomers	Solo Acts	Metro Cities II	-0.12037	0.77%	-7.28%
14	Home Town	Factories and Farms	Suburban Periphery II	-0.11502	2.22%	-6.72%
21	Crossroads	American Quilt	Small Towns	-0.10674	1.28%	-5.84%
1	Prairie Living	Factories and Farms	Rural II	-0.08973	22.24%	-4.05%
9	Cozy and Comfortable	Upscale Avenues	Suburban Periphery II	-0.07209	3.19%	-2.19%
31	Metro City Edge	Metropolis	Urban Outskirts II	-0.06977	0.64%	-1.95%

The top ten or eleven segments showing the worst losses all have such small shares of the license market that a change of just a few licenses has a large impact on their ranking. To gain a better picture of the segments contributing the greatest loss of licenses, Table 11 was expanded to include the top 20 licenses. Looking at the segment with approximately 1 percent of the market or more, we see the worst declines are spread across the different urbanization groups. No one area jumps out.

The rural segments are "middle of the road" in terms of changes in market share. The results in Table 11 show that not all of the affluent categories can be considered strong, as hinted to in Table 6. In general, Table 11 gives a picture that the downward trend is generally statewide, in all types of neighborhoods.

The decreases in the highlighted segments are of particular concern. These segments represent over one-third of Nebraska's license buyers. Too many people in these segments are deciding to not buy licenses any longer, and more investigation would be needed to know why. One option could be a survey of license buyers in these







segments who purchased a license in 2002 but not in later years. These individuals can be identified in Nebraska's electronic license data base.

Purchasing Frequencies: Gender Differences

During the review of the four-year sales trends, a question was raised if the frequency of fishing license purchases over four years differed between men and women. This analysis was run for resident license holders only and the results are presented below:

# of Years Bought a License Over Last Four		
Years	Male	Female
1	76.1%	23.9%
2	78.9%	21.1%
3	83.7%	16.3%
4	88.2%	11.8%

Men are much more likely to buy a license in multiple years than women, indicating men are more likely to fish regularly. Multiple reasons could be offered as to why, but the main purpose of this paper is to explore *what* is happening versus *why*. Any promotions encouraging anglers to purchase licenses more frequently, or any new initiatives such as a multi-year license, would likely be more effective if targeted towards males.







SECTION 4: The "Churn" Issue

Let's look at the "churn" issue. The "churn" issue refers to the rate of anglers entering and dropping out of the customer base. Considering all Nebraska residents who purchased a license at least once over the past four years, Table 12 reports the percentage who bought a license in just one, two, three or all four years.

Table 12. License Purchasing Frequency

	<u> </u>
License Purchasing	Percentage of Customers,
Frequency	2002 to 2005
1 of 4 years:	64.9%
2 of 4 years:	16.7%
3 of 4 years:	10.6%
4 of 4 years:	7.7%

Nebraska's anglers seem to be less loyal than the national findings. It could be argued that 82 percent of license customers are not loyal customers and bought only one or two years of the four years studied. These people are finding other ways to spend their free time. Time constraints or competing recreations may be diverting their attention. Encouraging existing anglers to fish more often, helping them derive greater pleasure from fishing, or adding convenience and simplicity to the license buying and renewal process could result in increased license revenues. The next steps are to find out which type of angler is more or less likely to purchase a license frequently or infrequently.

Tables 13 and 14 present purchasing frequencies for specific segments of resident customers.¹

Table 13. Top 15 Segments Likely to Buy Frequently, Residents Only

Rank	Tapestry Segment	Bought 1 or 2 years only, out of 4 years	Bought 3 or 4 years, out of 4 years
38	Enterprising Professionals	75.00%	25.00%
41	Family Foundations	75.00%	25.00%
46	Senior Sun Seekers	75.00%	25.00%
15	Exurbanites	75.59%	24.41%
7	Salt of the Earth	75.96%	24.04%
4	Green Acres	75.99%	24.01%
16	Prosperous Empty Nesters	76.74%	23.26%
9	Cozy and Comfortable	76.98%	23.02%
12	Rustbelt Retirees	77.56%	22.44%
14	Home Town	77.63%	22.37%
1	Prairie Living	77.64%	22.36%
45	Silver and Gold	77.78%	22.22%

-

¹ Non-residents are less likely to buy a Nebraska license annually. Their inclusion in this specific analysis could mislead the analysis.







Rank Tapestry Segment		Bought 1 or 2 years only, out of 4 years	Bought 3 or 4 years, out of 4 years
29	Rural Resort Dwellers	78.02%	21.98%
5	Midlife Junction	78.37%	21.63%
20	In Style	78.70%	21.30%

We see five of the top 10 segments, in terms of total licenses purchased (refer to Table 7), listed here. It may be worth investigating why some segments buy more frequently than others, using qualitative methods.

Please note that many of the segments in Table 13 have a very small share of the license market. Be careful drawing inferences about these segments as a change of just one or two licenses in these segments can significantly affect their rankings. This is true for most segments ranked in the thirties and higher.

Table 14. Top Segments Likely to Buy Licenses Only 1 or 2 of the Past 4
Years, Residents Only

Rank	Tapestry Segment	Bought 1 or 2 years only, out of 4 years	Bought 3 or 4 years, out of 4 years
47	Dorms to Diplomas	100.00%	0.00%
48	Top Rung	100.00%	0.00%
42	Metro Renters	93.75%	6.25%
37	Military Proximity	92.37%	7.63%
40	Modest Income Homes	88.89%	11.11%
39	Connoisseurs	88.75%	11.25%
27	Inner City Tenants	88.42%	11.58%
18	Young and Restless	86.67%	13.33%
30	Suburban Splendor	85.71%	14.29%
24	Simple Living	85.01%	14.99%
35	Metropolitans	84.57%	15.43%
23	Industrious Urban Fringe	83.16%	16.84%
25	Southern Satellites	82.84%	17.16%
22	College Towns	82.05%	17.95%
44	Southwestern Families	81.82%	18.18%

Except for a few segments in Table 14 (basically #25 and higher), most segments are infrequent purchasers of licenses and possess only a small share of the overall license market. This correlation is not surprising as fishing is not a common activity for these segments.

Comparing tables 13 & 14, rural and suburban residents in general are Nebraska's more loyal license buyers, even though a majority of these people only bought a license once or twice in the last four years. Considering that most licenses are sold to rural and







suburban anglers, drop-out anglers from these segments will have a much more severe impact on license revenues than drop-outs from metro and urban areas. Efforts to encourage rural and suburban anglers to renew their licenses each year may have more success in boosting revenues versus trying the same with anglers from more-urbanized or ethnic areas. Overall, the frequency rate for purchasing Nebraska licenses does not vary significantly across most segments. Differences are slight, suggesting the reasons why people are not likely to buy every year may be similar across Nebraska's communities and neighborhoods.

Propensity to Buy a License

Focusing marketing efforts on segments with a greater "propensity" to purchase a license may yield greater returns. "Propensity" is the likelihood of someone from a specific segment or group buying a license compared to the likelihood of the average person buying a license. Tables 15a-c use a ratio to determine each segment's propensity. This "Sales to Population" ratio is the segment's market share divided by the 'percentage of the state population' held by that segment. All segments with a "Sales/Pop Ratio" greater than one are more likely to buy a license compared to the average Nebraska resident. This ratio is a prime method of identifying who is more likely to buy a license and therefore who is more likely to fish. Efforts to recruit new anglers or to encourage greater purchasing frequencies would likely have greater success if they targeted the segments with ratios greater than one.

Table 15a. Segments with a Greater Propensity to Buy Licenses, Residents Only

1 avi	Tuble 13a. Segments with a Greater Propensity to Buy Licenses, Residents Ong					
Rank	Tapestry Segment	LifeMode Group	% of 2005 License Sales	% of State Population	Sales/Pop Ratio	
4	Green Acres	Upscale Avenues	5.20%	3.27%	1.59	
7	Salt of the Earth	Factories and Farms	3.77%	2.50%	1.51	
1	Prairie Living	Factories and Farms	21.96%	15.96%	1.38	
2	Heartland Communities	Senior Styles	9.23%	7.00%	1.32	
14	Home Town	Factories and Farms	2.16%	1.72%	1.26	
25	Southern Satellites	Factories and Farms	0.95%	0.75%	1.26	
29	Rural Resort Dwellers	American Quilt	0.63%	0.52%	1.21	
5	Midlife Junction	Traditional Living	4.60%	3.88%	1.19	
19	Midland Crowd	American Quilt	1.31%	1.13%	1.16	
11	Sophisticated Squires	High Society	2.80%	2.47%	1.13	
23	Industrious Urban Fringe	Global Roots	1.13%	1.00%	1.13	
26	Rooted Rural	American Quilt	0.75%	0.68%	1.10	
13	Boomburbs	High Society	2.52%	2.45%	1.03	
9	Cozy and Comfortable	Upscale Avenues	3.12%	3.05%	1.02	
8	Milk and Cookies	Family Portrait	3.35%	3.34%	1.00	
15	Exurbanites	High Society	2.09%	2.15%	0.97	
3	Rustbelt Traditions	Traditional Living	8.19%	8.50%	0.96	
12	Rustbelt Retirees	Senior Styles	2.54%	2.70%	0.94	
21	Crossroads	American Quilt	1.24%	1.35%	0.92	
10	Up and Coming Families	Family Portrait	2.88%	3.27%	0.88	
37	Military Proximity	Scholars & Patriots	0.32%	0.38%	0.85	
20	In Style	Upscale Avenues	1.34%	1.60%	0.84	







Rank	Tapestry Segment	LifeMode Group	% of 2005 License Sales	% of State Population	Sales/Pop Ratio
17	Aspiring Young Families	High Hopes	1.56%	1.88%	0.83
6	Great Expectations	High Hopes	4.45%	5.37%	0.83
44	Southwestern Families	Family Portrait	0.05%	0.06%	0.79
30	Suburban Splendor	High Society	0.84%	1.12%	0.75
34	City Dimensions	Global Roots	0.57%	0.80%	0.71
24	Simple Living	Senior Styles	1.05%	1.58%	0.66
33	Main Street, USA	Traditional Living	0.60%	0.91%	0.66
16	Prosperous Empty Nesters	Senior Styles	1.63%	2.50%	0.65
22	College Towns	Scholars & Patriots	1.16%	1.77%	0.65
47	Dorms to Diplomas	Scholars & Patriots	0.01%	0.01%	0.56
35	Metropolitans	Metropolis	0.57%	1.03%	0.55
36	Social Security Set	Senior Styles	0.29%	0.55%	0.53
31	Metro City Edge	Metropolis	0.63%	1.23%	0.51
38	Enterprising Professionals	Upscale Avenues	0.25%	0.51%	0.49
28	Old and Newcomers	Solo Acts	0.74%	1.63%	0.46
18	Young and Restless	Solo Acts	1.67%	4.07%	0.41
27	Inner City Tenants	Global Roots	0.74%	1.81%	0.41
32	Retirement Communities	Senior Styles	0.55%	1.35%	0.40
41	Family Foundations	Traditional Living	0.06%	0.17%	0.36
39	Connoisseurs	High Society	0.16%	0.47%	0.33
45	Silver and Gold	Senior Styles	0.02%	0.05%	0.30
46	Senior Sun Seekers	Senior Styles	0.02%	0.09%	0.25
43	City Commons	Family Portrait	0.09%	0.36%	0.24
42	Metro Renters	Solo Acts	0.09%	0.40%	0.24
40	Modest Income Homes	Metropolis	0.13%	0.56%	0.22
48	Top Rung	High Society	0.00%	0.00%	-

Table 15a ranks all segments based on their "Sales to Population" ratio, or propensity to buy a license. The segments are ranked by those segments with the highest ratio to the lowest. Of all 48 segments, 15 segments have a ratio greater than one. These segments provide 64 percent of Nebraska's annual license sales, but only 50% of the state population. Next, we take a more detailed look at the segments with a propensity greater than one.

First, we examine the urbanization levels for all segments possessing a propensity ("sales to population" ratio) greater than one. Statistics on these segments are as follows:

Table 15b. Urbanization Groups with a Propensity >1

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	% of 2005	% of State Population						
	Buyers with	Represented by						
	Propensity > 1	each Urbanization						
		Group						
Rural	34.6%	24.8%						
Suburban Periphery	12.7%	24.9%						
Small Towns	9.2%	8.4%						
Urban Outskirts	3.6%	23.5%						
Metro Cities	3.4%	18.4%						







63.5% 100.0%

Overall, rural areas provide the greatest number of segments with a high propensity to buy licenses. This means rural areas are a greater source of customer segments that buy licenses at an above-average rate compared to the state population as a whole. Nearly one-half of all *segments* with a propensity >1 are from rural areas (Table 15). One-third of all resident license *buyers* come from rural segments possessing a ratio greater than one. Suburban areas are second largest source of segments with a high propensity of buying licenses, but not as significant as rural areas. Urban/metro areas are a very small source of segments buying licenses at an above-average rate. Marketing efforts directed in masse to urban and metro areas will have a low 'hit' rate, meaning that a much higher percentage of recipients would not be interested compared to rural and suburban residents. Marketing efforts in urban and metro areas will be more effective if they directly target segments showing a high propensity to buy licenses.

Next, we examine the segments more likely to buy a fishing license based on Lifemode designations. Lifemode designations help us gain a general understanding of the lifestyles led by license customers. Table 15c looks at the segments that have a propensity ratio greater than one.

Table 15c. Lifemode Groups with a Propensity >1

	% of All License Buyers in this Group with a Propensity >1	% of all Buyers to State Population		
Factories and Farms	28.8%	20.9%		
Senior Styles	9.2%	15.8%		
Upscale Avenues	8.3%	8.4%		
High Society	5.3%	8.7%		
Traditional Living	4.6%	13.5%		
Family Portrait	3.4%	7.0%		
American Quilt	2.7%	3.7%		
Global Roots	1.1%	3.6%		
High Hopes	0.0%	7.3%		
Metropolis	0.0%	2.8%		
Scholars & Patriots	0.0%	2.2%		
Solo Acts	0.0%	6.1%		
	63.5%	100.0%		

Table 15c shows Factories & Farms communities as the most significant source of customers, followed by seniors and the two affluent groups (High Society and Upscale Avenues) are significant sources of customers. This matches well with the results in Table 15a that shows rural areas (Factories & Farms generally) as well as more-affluent suburban areas are the major sources of license buyers in Nebraska.

Whether promoting license sales in rural or more urban environments, efforts will be more successful if they focus on segments showing a higher-than-average propensity of buying licenses. It may not be prudent to market to all rural residents. For example,







while rural areas have a high propensity to buy licenses, future marketing efforts might provide higher rates of return if they avoided residents from American Quilt segments who are also rural as American Quilt members have a low rate of buying licenses. It would be best to examine each segment's propensity rates (Table 15a) prior to deciding to include them or not in their efforts.







SECTION 5: "Upgraders" and "Downgraders"

Current customers moving to higher- or lower-priced license options also drive revenue trends. Table 16 looks at residents who actually bought a license in 2002 and/or one in 2005. License sales in the intervening years were excluded. The table reports the percentage who a) downgraded to a lower priced license (for example, dropping from an annual to a 3-day license), b) dropped out (bought in 2002 but not in 2005), c) are new customers (bought in 2005 but not in 2002 (this does not mean they bought their first-ever license in 2005)), d) are steady customers and bought the same license in each year, or e) upgraded to a higher-priced license.

Table 16. Upgrading/Downgrading Trends

1 40 to 10 to 18 4 4 4 1 5 1 4 4 1 5 1 4 4 1 5 1 4 4 1 5 1 5					
	Percentage of				
Resident Purchasing	Customers Who Bought				
Behavior, 2002 vs 2005	a License in 2002				
	and/or 2005				
Downgraded	1.39%				
Dropped Out	40.76%				
New	37.45%				
Steady	18.67%				
Upgraded	1.74%				

Over 42 percent of the customers who bought a license in either 2002, 2005 or both downgraded or dropped. Over 37 percent were "new" in 2005 meaning they did not buy a license in 2002 (though they may have bought in earlier or intervening years). About 20 percent maintained their license type or upgraded. About 3% more anglers dropped out as became new buyers. Efforts to boost license revenues could include reducing the percentage of customers down-grading their purchases and by encouraging others to upgrade their purchase (i.e. "Super-size that?"). Recognizing the limited license choices in Nebraska, the latter option may be enhanced by offering additional licenses such as multi-year licenses, new licenses providing additional privileges, etc.

Using the TAPESTRY® data, we can gain a better understanding of who is more likely to upgrade or downgrade. Table 17 ranks the top 20 segments based on their percentage of license buyers who upgraded their license purchases. The percentages of license buyers who downgraded their purchases are also presented. Table 17 is also based on purchases made in 2002 and also in 2005 exclusive of licenses purchased in other years.







Table 17. Top 20 Segments Upgrading Their License Purchases, Residents

Rank	Segment	LifeMode Groups	Urban Groups	% Upgraded	% Downgraded	% Market Share, '02-'05	% Upgraded X Market Share Ratio
1	Prairie Living	Factories and Farms	Rural II	0.18%	0.15%	20.51%	0.037%
2	Heartland Communities	Senior Styles	Small Towns	0.05%	0.06%	8.53%	0.004%
3	Rustbelt Traditions	Traditional Living	Urban Outskirts I	0.03%	0.03%	7.65%	0.003%
4	Green Acres	Upscale Avenues	Rural I	0.04%	0.04%	5.06%	0.002%
5	Midlife Junction	Traditional Living	Suburban Periphery II	0.04%	0.02%	4.55%	0.002%
7	Salt of the Earth	Factories and Farms	Rural I	0.03%	0.02%	3.48%	0.001%
6	Great Expectations	High Hopes	Urban Outskirts I	0.02%	0.02%	4.24%	0.001%
9	Up and Coming Families	Family Portrait	Suburban Periphery I	0.03%	0.02%	3.25%	0.001%
8	Milk and Cookies	Family Portrait	Metro Cities I	0.02%	0.02%	3.28%	0.001%
13	Rustbelt Retirees	Senior Styles	Suburban Periphery II	0.03%	0.01%	2.53%	0.001%
11	Sophisticated Squires	High Society	Suburban Periphery I	0.02%	0.02%	3.06%	0.001%
10	Cozy and Comfortable	Upscale Avenues	Suburban Periphery II	0.02%	0.02%	3.11%	0.001%
15	Home Town	Factories and Farms	Suburban Periphery II	0.02%	0.01%	2.14%	0.001%
12	Boomburbs	High Society	Urban Outskirts I	0.02%	0.02%	2.60%	0.000%
17	Prosperous Empty Nesters	Senior Styles	Suburban Periphery I	0.02%	0.01%	1.67%	0.000%
14	Exurbanites	High Society	Suburban Periphery I	0.01%	0.02%	2.19%	0.000%
16	Aspiring Young Families	High Hopes	Metro Cities II	0.01%	0.01%	1.80%	0.000%
19	Midland Crowd	American Quilt	Rural I	0.01%	0.01%	1.54%	0.000%
20	In Style	Upscale Avenues	Suburban Periphery I	0.01%	0.01%	1.47%	0.000%
30	Rural Resort Dwellers	American Quilt	Rural I	0.01%	0.01%	0.82%	0.000%

In Table 17, more people in the highlighted segments are upgrading their purchases compared to downgrading. Please note there is an unknown rate of error in these estimates based on the analysis only including sales from the years 2002 and 2005.

Using the State's electronic license database, efforts to boost revenues can be made by directly contacting people from key segments who are up for renewal and encourage them to renew. To those who last bought a 3-day license, the benefits of upgrading their license can be explained. Overall, such efforts would likely generate larger margins compared to recruiting new anglers.







Conclusion

In 2005, 88 percent of Nebraska's fishing licenses were purchased by residents. Approximately 81 percent of the purchasers were male, indicating females were more likely to favor other forms of recreation. Resident license buyers were more likely to be in the 40-49 year old age bracket.

Over the past four years, Nebraska's total number of licenses sold has decreased. Licenses are more likely to be purchased by people in rural areas, followed by suburban areas. The percentage of licenses sold to suburban resident has increased slightly. This does not mean suburban areas are buying more licenses. Instead, the State is not losing suburban license buyers as fast as rural customers. This may also be an indication of a general population shift towards suburban communities and urban outskirts. In general, the majority of segments of Nebraska's population are showing license sales decreases.

People with a significantly greater-than-average tendency to buy licenses are commonly families from rural areas, followed by suburban areas. We do not see younger, educated, urban-types buying licenses often. This does not mean these people will not fish in the future, but at this stage in their lives, fishing is not a common activity. Older urban people and generally lower income residents do not appear as likely to buy licenses. The closer one comes to urban or city life, the likelihood of buying a license decreases. Immigrant neighborhoods are less likely to purchase licenses.

The lifestyle data used in this project, obtained from ESRI, divides the public into 65 segments based on types of neighborhoods (urban to rural, income, ethnicity and more). Of the 65 segments, in Nebraska nearly 22 percent of fishing licenses are bought by the "Prairie Living" segment. People within this segment are defined by ESRI as living on Midwestern small farms, having an average age of approximately 40, married, half with kids in the household, average income, have pets, enjoy country music, and like to hunt and fish. This analysis backs up the part about enjoying fishing as this segment buys nearly 2.5 times more license than the second

Prairie Living and the next top five segments (six segments overall) represent over half of all resident licenses sold. These top six segments need special consideration since they are the larger part of the State's annual license revenue stream. A side analysis showed the number of licenses bought by these six segments fell 7 percent since 2002. The top segment, Prairie Living, lost nearly 9% of its buyers since 2002. Great Expectations, ranked #6, showed an alarming 14 percent drop. The rapid drop in licenses purchased by the State's most important customer segments is a real threat to future revenues. Any future qualitative work that compares these two segments to the Green Acres segment – the only top six segment showing growth – may provide insights into the type of person more likely to enter fishing and provide clues about how to slow losses.







Although the majority of the segments show a decline, other segments show growth such as "Green Acres" and "Salt of the Earth". One segment, "Boomburbs", shows a significant increase of over 25 percent and is ranked as the thirteenth largest segment for resident license buyers. This trend might reflect overall state population changes. Comparing the preferences and motivations of these segments to the shrinking segments may provide beneficial insights.

Other rural segments show declines, too. Table 9 showed the importance of rural areas and suburban/urban outskirts as the top buyers of Nebraska's fishing licenses. The last column shows that the actual, or real, number of licenses sold to rural residents is falling. The suburban periphery and urban outskirts are the next two larger sources of license sales and they are also losing license buyers. These latter two categories are losing license buyers at a slightly lower rate than the other categories, which translates into an increased share of the license market, but do not be fooled. Their sales are also decreasing.

Nebraska's anglers seem to be less loyal than discovered in other states. It could be argued that 82 percent of license customers are not loyal customers as only bought a license in one or two years of the four years studied. Less than eight percent of all license buyers between 2002 and 2005 bought a license each year. Most anglers are finding other ways to spend their free time. Encouraging existing anglers to fish more often or adding convenience and simplicity to the license buying/renewal process could result in increased license revenues. Rural and suburban residents in general are more loyal license buyers. Efforts to encourage rural and suburban anglers to renew their licenses each year may have more success in boosting revenues versus trying the same with anglers from more-urbanized or ethnic areas.

Over 42 percent of the customers who bought a license in either 2002, 2005 or both downgraded or dropped. Over 37 percent were "new" in 2005 meaning they did not buy a license in 2002 (though they may have bought in earlier or intervening years). About 20 percent maintained their license type or upgraded. Slightly more anglers dropped out as became new buyers. Efforts to boost license revenues could include reducing the percentage of customers down-grading their purchases and by encouraging others to upgrade their purchase (i.e. "Super-size that?"). Recognizing the limited license choices in Nebraska, the latter option may be enhanced by offering additional licenses such as multi-year licenses, new licenses providing additional privileges, etc.

Table 17 shows the top four segments are downgrading their purchases at a faster rate than upgrading. The worst rate of change is in the top segment, Prairie Living. These four segments represent 44 percent of the State's annual fishing license sales, and is downgrading licenses 2.5 times faster than the next fastest downgrading segment. While not loosing these anglers altogether, the State is receiving less revenue from them. Efforts to boost license revenues can include reducing the percentage of customers down-grading their purchases and by encouraging others to upgrade their purchase (i.e. "Super-size that?"). Recognizing the limited







license choices in Nebraska, the latter may enhanced by offering additional licenses such as multi-year licenses, new licenses providing additional privileges, etc.

Efforts to increase license revenues could take one of several directions. Such efforts could include:

- A. Recruit new anglers,
- B. Retain existing anglers,
- C. Encourage anglers to buy licenses more frequently, or
- D. Encourage anglers to upgrade their license purchases.

Recognizing that essentially all segments are showing losses in terms of actual licenses sold, boosting license revenues by recruiting new anglers will be tough and may not show a significant return on investment. We are not advocating against angler recruitment programs as fisheries conservation in the long run will depend on the number of active and interested anglers. But, from a perspective of boosting short-term agency revenues, angler recruitment efforts may not be the answer.

Recognizing the low percentage of anglers who upgrade and the high percentage that downgrade or do not purchase a subsequent license, efforts to encourage existing license holders to renew their licenses should show a significant return-on-investment. Using the State's electronic license database, efforts to boost revenues can be made by directly contacting people from key segments who are up for renewal and encourage them to renew. To those who previously purchased a 3-day license, the benefits of upgrading to an annual license can be explained. Overall, such efforts would likely generate larger margins compared to cost of recruiting new anglers.

With 80 percent of the State's license customers having bought a license only once or twice in the last four years, increasing the frequency of license purchases may prove more successful in boosting revenues. Again, the State's electronic licensing database may be a solution. Promotional mailings (snail mail or email) could target individuals with licenses that are about to expire or have just expired encouraging them to renew. Providing simple online methods to renew would help maximize revenues. Control groups can be established by tracking purchasing behaviors of similar anglers who do not receive the mailer.

A review of the State's license product may show if the privileges offered by each are priced fairly enough to encourage 3-day license holders to upgrade to annual licenses. Recognizing that only one in five anglers buys a license every year, multi-year licenses may help capture additional revenue.

Closing Notes:

The purpose of this initial analysis is to identify the trends affecting license sales and revenues and help identify strategies that can boost license revenues. We will assist







in developing additional analyses and provide interpretations per Nebraska's requests and directions. Additional analyses could include:

- 1. Breakouts based on the type of license purchased,
- 2. Greater investigations of lapsed anglers (frequency of license purchases), and
- 3. Analyze the upgrade/downgrade trends for all four years of the study to include the first year of purchase compared to the last year of purchase.

Please note that this report is an initial, general overview of Nebraska's license sales trends. We can run additional analysis requested by Nebraska, assuming the necessary data are available. There are many more questions that could be asked, and discussions that should take place to ensure the data are adequately and properly interpreted.

Next step: Until the end of 2006, we will wait for Nebraska's questions and requests for additional analysis, and will be available to answer questions about the contents of this report.