COUNCIL MEMORANDUM NO. <u>90-06</u>
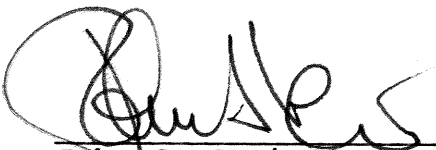
FROM: Mayor Stein

DATE: January 2, 1990

RE: Trade Area Analysis

The University of Alaska Cooperative Extension Service offers a "Trade Area Analysis" service as described in the attached materials prepared for Wrangell-Petersburg and Ouzinkie.   Such an analysis could be performed for the cities and borough to provide valuable information to help develop our local economy.   This type of study would be of special benefit to Wasilla because of our high percentage of retail activity. Results of the study would be made available to all members of the business community.

The Mat-Su Borough assembled a proposal, with our encouragement, to share the cost of a study.   The $4,500 local share, to match the Extension Services expenses, would be split three ways between Palmer, Wasilla and the Borough.

I recommend that the Council approve the expenditure of $1,500 from Council Contingency to fund our share of this project.

John C. Stein, Mayor

Approved 1/22/90

THIS SURVEY IS CONFIDENTIAL

CONSUMER SURVEY - OUZINKIE, ALASKA

JP-18

Survey No. __1-21__

Surveyor's Initials __SD-3__

Date __1|18|89 — 4|7|89__ / _____ / 1989

Type: (Interview) (Mail) (Telephone)
(circle how survey conducted)
1   1   19

Greetings:

The City of Ouzinkie is conducting a survey of our community in cooperation with the Southwest Alaska Municipal Conference and the University of Alaska Cooperative Extension Service and Marine Advisory Program. We are working to improve the economy of our community. An important step in this effort is finding out about local residents' attitudes and feelings about local/regional businesses and products/services they sell and about local community economic development issues. Would you help us by answering the following questions about yourself and the products and services which your family purchase? All information in this survey will be confidential. Thank you for your cooperation.

Please return completed survey to: Southwest AK Municipal Conference
                                     ATTN: John Levy
                                     1007 West 3rd Avenue, #201
                                     Anchorage, Alaska 99501
                                     Telephone: 274-7555

I. Household and Residence Questions

    1. How many people (M,F) are members of your household in each of the following age groups?

    ___6___ Under 5   ___7___ 5 to 13   ___6___ 14 to 18   ___3___ 19 to 24
     M   F   M   F   M   F   M   F

    ___11___ 25 to 34 ___12___ 35 to 49 ___3___ 50 to 64   ___Ø___ 65 and over
     M   F   M   F   M   F   M   F

    2. Length of Residence (Head of Household)

        a. Length of time a resident of Ouzinkie? __1 to 57   Mean 25.24__ years.

        b. Length of time a resident of Alaska? __4 to 57   Mean 30.14__ years.

    3. Please check your place of residence and the season you stay there: (Head of Household)

	Winter Oct-Mar	Summer Apr-Sep
Ouzinkie	21	21
Another Location List _____		

III. Questions About Community Economic Development for Ouzinkie:

1. Should the city encourage development of the following:
    Additional grid space? _20_ Yes _ø_ No _1_ Undecided
    Fresh water at the dock? _19_ Yes _1_ No _1_ Undecided
    Laundry & shower at the dock? _12_ Yes _8_ No _1_ Undecided
    Dock hoists? _14_ Yes _6_ No _1_ Undecided
    Large boat moorage? _18_ Yes _2_ No _1_ Undecided

2. What can the City of Ouzinkie do to encourage future community economic development?
    (Please list any suggestions.)

                    See Attached Sheet

IV. Family Employment, Income and Budget Questions

1. Please identify the 3 major sources of income for your household in 1988 (please use
    the following code to let us know what percent of total household income comes from
    this source: 1 = 1-25% 2 = 26-50% 3 = 51-75% 4 = 76-100%):

11	Commercial Fishing	4	Native Corporation Dividends
9	Construction Wages	ø	AFDC
14	Other Wages: _____	ø	Disability Benefits
2	Self Employed: _____	6	Trapping
4	Permanent Fund Dividends	8	Other _____
ø	Rent and Interest		Other _____
2	Unemployment Benefits		Other _____

2. Do you _3_ rent or _17_ own your own home (in Ouzinkie)? What is your estimated
    monthly payment? $ _83-600 Mean $230.53_

3. What is your estimated annual _20_ fuel bill or _1_ firewood bill?
    $ _80-1600 Mean $894.29_

4. What is your estimated annual electric bill? $ _86-1800 Mean $729.81_

5. What is your estimated monthly garbage collection bill? $ _5.00_

6. What is your estimated monthly water & sewer bill? $ _5-15 Mean $14.25_

7. What is your monthly propane for cooking fuel bill? $ _4-50 Mean $16.62_

8. What percent of your household's food needs are derived from subsistence activities:
    _1_ 0% _11_ 1-25% _7_ 26-50% _2_ 51-75% _____ 76-100%

9. Check the category which represents the range of your total household income, before
    taxes, in 1988 (January – December):

    _1_ $0 to $15,000
    _12_ $15,001 to $35,000
    _5_ $35,001 to $65,000
    _2_ $65,001 to $100,000
    _____ $100,000+

11. BUYING PREFERENCES OF SPECIFIC PRODUCTS AND SERVICES

For the products/services listed below, please (1) circle the location where you make your purchases, (2) mark the code which represents the percent of your total purchases you spend at each location, and (3) check the most important reason for making the purchase at that location.

CODE: 1 = 1-25%   2 = 26-50%   3 = 51-75%   4 = 75-100%

Product/Service	(1) Shopping Location (For each product/service, circle the appropriate location) — Shopping Locations Where Purchases are Made	(2) Percent of Total Yearly Purchases In This Category Made at Each Location	Store Layout and appearance	Price	Convenience/Service Selection	Product/Service Loyalty	Quality of Product/Service	Store Personnel Attitudes	Other	Comments
EXAMPLE Groceries	Ouzinkie / (Kodiak) / (Anchorage) / Seattle / Other Location / Mail Order Location	2 / 1		X	X					Bulk notes at Price Savers
Groceries	Ouzinkie / Kodiak / Anchorage / Seattle / Other Location / Mail Order Location	21 / 18 / 6 / 3 / 2		18 / 11 / 6 / 2 / 1	18 / 12 / 1				2	
Groceries	Ouzinkie / Kodiak / Anchorage / Seattle / Other Location / Mail Order Location	13 / 1 / 4	11	2 / 4					
Building Materials	Ouzinkie / Kodiak / Anchorage / Seattle / Other Location								
Sporting Goods & Hunting Supplies	Ouzinkie / Kodiak / Anchorage / Seattle / Other Location / Mail Order Location	16 / 1 / 2		12 / 1 / 2					
Commercial Fishing Boats	Ouzinkie / Kodiak / Anchorage / Seattle / Other Location / Mail Order Location	1		1			1		
Skiffs	Ouzinkie / Kodiak / Anchorage / Seattle / Other Location	2 / 1 / 2 / 1		2 / 1 / 1				1	
Commercial Fishing Gear	Ouzinkie / Kodiak / Anchorage / Seattle / Other Location	5 / 1 / 1		4				1	

Category	Location				
Clothes	Ouzinkie	13	2	9	1
	Kodiak	8	4	6	
	Anchorage			1	
	Seattle				
	Other Location			6	
	Mail Order Location	15			
Home Appliances & Furniture	Ouzinkie	14	3	9	1
	Kodiak	7	5	1	1
	Anchorage	3	2	4	
	Seattle			1	
	Other Location	2	1		
	Mail Order Location	6	5	6	
Automobiles	Ouzinkie	12	1		
	Kodiak	3	5	3	
	Anchorage	2	1	2	
	Seattle				
	Other Location	2	3	1	
Medicine & Drugs	Ouzinkie	12	2	12	5
	Kodiak	13	1	5	
	Anchorage	2	1		
	Seattle				
	Other Location	7	1	1	
Medical Services	Ouzinkie	13	1	12	3
	Kodiak	15	2	7	4
	Anchorage	7	1	1	
	Seattle				
	Other Location				
Professional Services (Accounting, Insurance, Legal)	Ouzinkie	15	1	10	1
	Kodiak				1
	Anchorage				
	Seattle				
	Other Location	11	6	3	5
Christmas Shopping	Ouzinkie	15	3	10	2
	Kodiak	8	1	1	5
	Anchorage	1	1		
	Seattle				
	Other Location				
Snowmachines & 3 and 4 Wheelers	Ouzinkie	8	1	7	
	Kodiak			1	
	Anchorage				
	Seattle				
	Other Location	3	2	2	
Check Cashing Services	Ouzinkie	12	2	10	
	Kodiak	17	3	8	4
	Anchorage	2	1	1	2
	Seattle				
	Other Location			1	1

WRITE IN SUGGESTIONS - OUZINKIE CONSUMER SURVEY

III.(2)   What can the City of Ouzinkie do to encourage
          future community economic development? (Please
          list any suggestions.)

Build/operate cannery
Cannery work
Cannery
Install cannery
Cannery
Cannery

Fish processor
Processing plant

Year round fisheries

Construction of boat harbor and breakwater

Put in break water and maintain equipment and property
  already in use

Start businesses: clothing, check cashing, furniture store
Mini mall
Grocery store
Clothing store

Gas station
Put in gas station
Gas station
Gas

Restaurant
Restaurant
Restaurant

Put a sawmill into business
Build and operate sawmill

Sell real estate

Herbal processing factory

Recreation center
Build recreation center
Get their own public gym
Recreation facility

Pre-school (planning of)
Day care

1

III.(2) What can the City of Ouzinkie do to encourage
         future community economic development? (Please
         list any suggestions.)

Purchase rock crusher

Better roads

Heavy equipment opportunities

Build a bridge to Kodiak and road

Tourism

Shouldn't encourage development
I don't feel economic development is beneficial to
         traditional lifestyles or values.

THIS SURVEY IS CONFIDENTIAL

SPECIAL SURVEY OF OUZINKIE

BUSINESSES, AGENCIES AND ORGANIZATIONS

Survey No. __1-4__ .

Date __1/18/89 — 4/7/89__ / _____ / 1989

Surveyor's Initials SD-3 JP-1 ④

Type: Interview, Mail, (Telephone)
(circle how survey conducted)

Greetings:

The City of Ouzinkie is conducting a survey of our community in cooperation
with the Southwest Alaska Municipal Conference and the University of Alaska
Cooperative Extension Service and Marine Advisory Program. We are working to
improve the economy of our community. Would you help us by answering the
following questions about your business, agency or organization and the
products and services which you purchase? All information in this survey will
be confidential. Thank you for your cooperation.

Please return completed survey to: Southwest AK Municipal Conference
ATTN: John Levy
1007 West 3rd Avenue, #201
Anchorage, Alaska 99501
Telephone: 274-7555

I.   Business, Agency and Organization Questions

1.   What type of (business, agency or organization--please circle) are you
involved with in Ouzinkie?

See attached sheet

2.   How long has your business, agency or organization been operating in
Ouzinkie? 3mo-17yr Mean=9.0 years

3.   What percent of your kind of business do you receive in Ouzinkie? 10-100 Mean= 61.67 %

4.   Number of employees?
2-5 Mean=3 Full-time   2-4 Mean=3 Part-time   0-4 Mean=1.3 Seasonal   14 Enrolled Students

5.   What is your annual gross dollar volume? $ N/A, $300,000,?, N/A

6.   What additional businesses do you think would help you, and Ouzinkie as a
whole?
See attached sheet

7.   What can the City of Ouzinkie do to encourage future community economic
development? (Please list any suggestions.)

See attached sheet

For the products/s⋯ ⋯ es listed below, please (1) circle the location where you make yo⋯ ⋯ chance, (2) mark the code which represents the percen⋯ of your total purchases you spend at each location, and (3) check the most important reaso⋯ for making the purchase at that location.

CODE: 1 - 1-25%   2 - 26-50%   3 - 51-75%   4 - 75-100%

Product/ Service	Shopping Locations Where Purchases are Made (1) Shopping Location (For each product/service, circle the appropriate location)	(2) Percent of Total Yearly Purchases In This Category Made at Each Location	Store Layout and appearance	Price	Convenience/ Service	Product/ Service Selection	Store Loyalty	Quality of Product/ Service	Store Personnel Attitudes	Other	Comments
Groceries SAMPLE	(Ouzinkie) Kodiak (Anchorage) Seattle Other Location Mail Order Location	2 1		X	X						Bulk rates at Price Savers
Groceries	Ouzinkie Kodiak Anchorage Seattle Other Location Mail Order Location	3 2 1		I 3	I						
Building Materials	Ouzinkie Kodiak Anchorage Seattle Other Location	2		I						I	
Sporting Goods & Hunting Supplies	Ouzinkie Kodiak Anchorage Seattle Other Location Mail Order Location										
Commercial Fishing Boats	Ouzinkie Kodiak Anchorage Seattle Other Location Mail Order Location										
Skiffs	Ouzinkie Kodiak Anchorage Seattle Other Location										
Commercial Fishing Gear	Ouzinkie Kodiak Anchorage Seattle Other Location Mail Order Location										
Clothes	Ouzinkie Kodiak Anchorage Seattle Other Location Mail Order Location										
Home Appliances & Furniture	Ouzinkie Kodiak Anchorage Seattle Other Location Mail Order Location	I									
Automobiles	Ouzinkie Kodiak Anchorage Seattle Other Location										
Medicine & Drugs	Ouzinkie Kodiak Anchorage Seattle Other Location Mail Order Location	I			I						
Medical Services	Ouzinkie Kodiak Anchorage Seattle Other Location	I			I						
Professional Services (Accounting, Insurance, Legal)	Ouzinkie Kodiak Anchorage Seattle Other Location	3 2 1			I			I		I I	
Christmas Shopping	Ouzinkie Kodiak Anchorage Seattle Other Location	I			I						
Snowmachines & 3 and 4 Wheelers	Ouzinkie Kodiak Anchorage Seattle Other Location										
Check Cashing Services	Ouzinkie Kodiak Anchorage Seattle Other Location	3 2			I	I					

I. BUSINESS, AGENCY AND ORGANIZATION QUESTIONS

1. What type of (business, agency or organization--please
    circle) are you involved with in Ouzinkie?

    Business
    Groceries
    Retail gift/food store
     Education (K-12 school)

6. What additional businesses do you think would help you,
    and Ouzinkie as a whole?

    Fisheries plant, sawmill
    A retail outlet for gasoline
    Shipping businesses for lower cost
    Daycare

7. What can the Village of Ouzinkie do to encourage future
    community economic development? (Please list any
    suggestions.)

    Provide real estate
    I don't think future economic development is beneficial
      to the traditional lifestyle of residents.
    Get organized - be active, be open to new ideas.
      Encourage community members to become involved in new
      businesses.
    The school and community should work closely together to
      encourage, promote, and teach skills for life.

TRADE AREA ANALYSIS FOR THE
WRANGELL-PETERSBURG TRADE AREA

Alaska's communities, both large and small, are looking for ways to develop their local economies. The declining price of oil, its impact on the state of Alaska's capital and operating budget and, in turn, its secondary effect on jobs and income at the community level has spurned an increasing concern with community economic development.

Improve Local Linkages

Many, if not all of Alaska's smaller communities, experience significant lost sales or "leakages" outside of their community in various retail sales areas. Because of this, a potential and very promising local economic development strategy would be to "improve local linkages". This strategy of improving local linkages according to David Darling (1):

> "This strategy suggests that a community seek
> better ways to link local sellers with local
> buyers. The more a dollar circulates in the
> local economy before it leaks out, the more
> local income that dollar will generate (for that
> community)."

Trade Area Analysis

Trade area analysis was the approach Thomas Harris (2) used to analyze the commercial sectors of various census areas in the western states (including Alaska). While there exist several approaches to estimate commercial sector activity in rural areas, Harris' paper focused on trade area analysis as developed by Stone and McConnon at Iowa State University and Hustedde, Pulver, and Schaffer at the University of Wisconsin (4,5).

More specifically, Harris developed a trade-area analysis model for each state in the western region. A separate appendix for each region within

each state contains the data used for the trade-area analysis, as well as graphs of population, per capita income and the resulting trade-area capture statistics and pull factors.

Trade Area Capture

Trade area capture is determined by dividing the study area's actual retail or service sales by the state per capita expenditures. This in turn is adjusted by the relative per capita income between the community, in this case the Wrangell-Petersburg trade area (census division) and the state. The trade area capture equation is stated as:

$$(1) \quad \text{Trade Area Capture} = \frac{\text{Actual Retail Sales of Merchandise Type i in Community j}}{\begin{array}{c}\text{State Per Capita} \\ \text{Expenditures} \\ \text{for Merchandise} \\ \text{Type i}\end{array} \times \frac{\text{Community j Per Capita Income}}{\text{State Per Capita Income}}}$$

The underlying assumption of trade area capture is that local tastes and preferences, regardless of income differences, are similar across the state as a whole.

Trade area capture estimates usually are derived for more than one time period and more than a single region or community. By comparing a community's trade area capture estimates through time with changes in the community's population and income, the community's ability to capture commercial sector trade at a similar rate as the community's population or income grows or declines is seen. Also, by comparing changes in trade area capture for communities of similar demographic and economic structure, that community's relative commercial sector activity can be estimated.

Example Calculation of Trade Area Capture

For this example, trade area capture values for the Wrangell-Petersburg trade area in 1980 were derived by Harris using Sales and Marketing Management Magazine retail sales data. Referring to Table 3, total retail sales in the Wrangell-Petersburg trade area totaled $12,409,000 in 1980 (in real dollars). Alaska's real per capita income expenditures for total retail sales in 1980 were $3,135.91 (Table 1). Real per capita income for the Wrangell-Petersburg trade area in 1980 was $6,064 (Table 2) and Alaska's real per capita income was $7,020 (Table 1). Using these values and referring back to equation 1, the trade area capture (TAC) figure for the Wrangell-Petersburg trade area is derived as:

$$(2) \quad TAC = \frac{\$12,409,000}{\dfrac{\$3,135.91 \times \$6,064}{\$7,020}}$$

$$TAC = 4,614$$

The trade area capture value derived for the Wrangell-Petersburg trade area indicates that there were retail sales in 1980 equal to 4,614 people if they had purchased retail products at an average rate similar to all state residents while adjusting for relative income levels. The estimate is not the actual number of people who made retail purchases in the Wrangell-Petersburg trade area, but rather an equivalent number.

How to Interpret Trade Area Capture Estimates

If the trade area capture figure is larger than the community's population then it implies that 1) the community is attracting consumers from outside its boundaries or 2) people who reside in the community are spending more for these retail items than the state-wide average. If the trade area capture figure is less than the community's population, then the community is 1) not capturing the retail/service purchases of its own residents or 2) community residents are spending relatively less than the state-wide average. For all of these occurrences, further trade analysis is required such as a consumer survey.

Therefore, the TAC of 4,614 indicates that the Wrangell-Petersburg trade area, whose estimated population for 1980 was 6,300, is probably not capturing the retail/service purchase of its own residents. (NOTE: In Alaska's bush communities with lower income levels and high subsistence activities, a lower TAC statistic would be attributed to community residents spending less locally as well as a reflection of the importance of local subsistence activities.)

Trade area capture estimates are an aggregate figure made up of both local and non-local shoppers. To estimate the amount of sales that were to outside shoppers, a pull factor is derived.

Pull Factor

Pull factor is a ratio which explicitly derives the portion of consumers that are from outside the community's boundaries. The pull factor, for retail goods and services, is the trade area capture figure divided by the regional or community population, or:

$$(3) \quad \text{Pull Factor for Community } j = \frac{\text{Trade Area Capture Estimate of Community } j}{\text{Community } j \text{ Population}}$$

The division by community population removes the influence of population change within the community and focuses attention on the community's ability to draw customers.

Just as with trade area capture estimates, pull factor estimates are more useful when more than one time period and multiple communities are used. By comparing a community's pull factor over time in relation to the changes in community population and income, decision makers will become aware of the community's market capturing efficiency. Additionally, comparison of a community's pull factor and trend in pull factor with communities of similar demographic and economic structure is useful in determining the relative commercial sector activity of a specific community.

Example Calculation of Pull Factor

From the previous section, the trade area capture figure for all retail sales for the Wrangell-Petersburg trade area in 1980 was 4,614 and its estimated 1980 population was 6,300. Given these values and equation 3, the pull factor value for the Wrangell-Petersburg trade area is:

$$(4) \quad \text{Pull Factor} = \frac{4,614}{6,300} = 0.73$$

For 1980, the pull factor value indicates that the Wrangell-Petersburg trade area is not capturing the retail purchases of its own residents. In fact, the Wrangell-Petersburg trade area in 1980 was losing retail trade to outside communities.

How to Interpret Pull Factor Estimates

If a community's pull factor is greater than one, this is interpreted to mean that the community's trade area capture is larger than the community's population. This also implies that the community is attracting consumers from outside its boundaries. Alternatively, if a community's pull factor is less than one, this means that the community's trade area capture is less than its population. This also means that the community's commercial sector is not capturing all the retail/service purchases of its own residents. In other words, the community is experiencing "sales leakages".

Results for the Wrangell-Petersburg Trade Area

Table 2 presents the aggregate figure for the Wrangell-Petersburg trade area's figures for trade area capture and its resultant pull factor. Table 3 presents the retail sales activities for the Wrangell-Petersburg trade area used to calculate the trade area capture statistics.

Referring to Table 2, the pull factor remained in the 1.35 (1976) to 1.25 (1978) range until 1979, and steadily declined to .65 in 1984. This suggests that as far as area wide retail sales were concerned, that the Wrangell–Petersburg trade area was doing very well and better than most other communities in capturing the retail sales of its own residents, but in a very short number of years following, the ability of the local retail sector to do this was seriously eroded to the point in 1984 where its pull factor was estimated to be .65. In short, in the late seventies, the Wrangell–Petersburg retail sector was in fact attracting customers from outside of its boundaries, and by 1984, not only were sales to outside purchasers lost, but Wrangell–Petersburg residents were increasing their purchases from outside (of the Wrangell–Petersburg trade area) retailers.

TABLE 1 Per Capita State Retail Sales and
Per Capita State Income
(Real Dollars)

Year	Total State Retail Sales ($)	Food ($)	Eat&Drink ($)	Gen.Merch ($)	FFA ($)	Auto ($)	Drug ($)	State Per Cap Income ($)
1976	3115.71	964.33	431.31	540.08	109.15	475.63	168.52	8104
1977	3154.22	1031.41	467.10	577.54	113.60	537.52	179.83	7831
1978	3137.24	1093.32	457.34	614.70	121.37	547.89	176.33	7284
1979	3071.68	1217.00	775.65	584.70	155.50	597.86	236.58	6941
1980	3135.91	1437.86	957.79	664.04	155.98	531.92	262.86	7072
1981	3123.37	1562.12	1085.34	721.42	158.62	550.75	271.56	7029
1982	3140.59	1824.42	1021.08	811.19	142.11	517.68	304.45	8157
1983	2900.06	1518.40	1051.41	747.89	161.18	599.57	305.07	8071
1984	3567.11	1573.41	1007.62	849.44	365.22	1278.56	289.85	7854

* Source: Trade Area Analysis for the Western States 1976-1984.

TABLE 2 Aggregate Trade Area Capture And Pull Factors
for the Wrangell-Petersburg Trade Area

Year	Population	Per Capita Income (Nominal)	Per Capita Income (Real)	Trade Area Capture	Pull Factor
1976	5800	6652	5026	7850.66	1.35
1977	5600	7215	5151	7311.51	1.31
1978	5100	7882	5239	6366.25	1.25
1979	5300	8749	5353	5255.87	0.99
1980	6300	10821	6064	4614.81	0.73
1981	6500	11528	5893	4886.23	0.75
1982	6800	16252	7836	4794.10	0.71
1983	7300	18152	8429	4843.91	0.66
1984	7100	15812	7076	4633.24	0.65

* Source: Trade Area Analysis for the Western States 1976-1984.

TABLE 3 Retail Sales Activities for the
Wrangell-Petersburg Trade Area

(1000's of Real Dollars)

Year	Total Retail Sales ($)	Food ($)	Eating & Drinking Places ($)	General Merchandise ($)	Furniture/ Appliances ($)	Auto- Motive ($)	Drug ($)	Other ($)
1976	15170	6507	1780	1362	57	298	424	4742
1977	15170	6489	1788	1486	55	325	433	4594
1978	14365	6081	1530	1399	52	293	372	4639
1979	12451	6073	1706	665	24	48	184	3751
1980	12409	6156	1827	647	21	36	174	3548
1981	12795	6258	1967	659	20	35	168	3689
1982	14464	7280	1943	718	19	39	201	4265
1983	14671	6856	2094	825	21	43	227	4604
1984	14890	7324	1516	294	60	714	462	4520

* Source: Sales and Marketing Management Magazine, various issues.

Looking more specifically at the components of this phenomenon could be
undertaken by examining Table 4, the trade area capture data for various
retail trade categories and Table 5, the resultant pull factors.

TABLE 4 Trade Area Capture for the
Wrangell-Petersburg Trade Area

Year	Food	Eat & Drink	Gen. Merch	FFA	Auto	Drug
1976	14399.74	8804.03	5379.89	1122.71	1335.69	5367.78
1977	13395.66	8149.82	5477.88	1030.47	1286.88	5123.10
1978	11631.94	6995.18	4758.85	893.51	1116.56	4415.48
1979	10574.65	4660.70	2408.34	333.55	169.17	1644.27
1980	8908.95	3969.44	2026.71	276.65	140.32	1375.39
1981	9345.98	4228.88	2131.18	293.28	147.27	1440.65
1982	8614.53	4108.49	1909.50	285.68	160.87	1422.38
1983	9310.44	4107.30	2275.11	267.33	148.52	1534.83
1984	11544.54	3730.97	858.49	404.21	1385.52	3952.00

* Source: Trade Area Analysis for the Western States 1976-1984.

TABLE 5 Pull Factors for the Wrangell-
Petersburg Trade Area

Year	Food	Eat & Drink	Gen. Merch	FFA	Auto	Drug
1976	2.48	1.52	0.93	0.19	0.23	0.93
1977	2.39	1.46	0.98	0.18	0.23	0.91
1978	2.28	1.37	0.93	0.18	0.22	0.87
1979	2.00	0.88	0.45	0.06	0.03	0.31
1980	1.41	0.63	0.32	0.04	0.02	0.22
1981	1.44	0.65	0.33	0.05	0.02	0.22
1982	1.27	0.60	0.28	0.04	0.02	0.21
1983	1.28	0.56	0.31	0.04	0.02	0.21
1984	1.63	0.53	0.12	0.06	0.20	0.56

* Source: Trade Area Analysis for the Western States 1976-1984.

The greatest retail trade loss over this period resulted in the food, eating and drink, and general merchandise categories. Retailers in the Wrangell-Petersburg trade area still provide food items for purchasers outside their area, but in a lesser amount.

The pull ratio of the retail categories: furniture, furnishings and appliances (FFA) and automobiles have characteristically remained low during this period, probably more a reflection of the limited market and high inventory carrying costs associated with these retail items. Note also, the relative magnitude of their total gross sales is substantially lower than the other Wrangell-Petersburg retail categories.

Of interest is the drug category. In recent years the pull factor indicates that sales of this retail item were essentially made to outside retailers or significant "sales leakage" occurred, however, in 1984 the pull factor increased substantially from .21 in 1983 to .56 in 1984 indicating local sales activity increased, more than doubling itself.

What Now?

Interpreting the results of Harris' work for the Wrangell-Petersburg trade area appear to indicate that presently large numbers of purchases are being made outside (of the Wrangell-Petersburg trade area); where a few short years ago the situation was exactly reversed. In pursuing a community economic development strategy of "improving local sales linkages" or "minimizing sales leakages", the following are some specific areas that may prove productive (1,3):

1. Recapture lost sales - Local merchants could improve their ability to capture their local market by better identifying the spending patterns of city households. Possibly a simple survey to ask where residents

bought goods and services and why they bought where they did. Then they could target specific ways to serve their clientele.

2. Identify new sales area - A survey or study of spending patterns of major purchasers such as the hospital, the school district, and the local and state government offices could identify new sales opportunities for local businesses.

In closing, the purpose of the preceding was to suggest only one area that decision-makers of the Wrangell-Petersburg trade area could pursue in their efforts to promote community economic development. The first step in pursuing this further is to decide what existing or new organization should take the lead and to develop broad community support for this effort.

References

(1) Darling, David L., Strategies for Economic Development, Cooperative Extension Service, Kansas State University. June, 1985.

(2) Harris, Thomas R., Trade Area Analysis for the Western States 1976-1984, Cooperative Extension Service, University of Nevada Reno, 1986.

(3) Harris, Thomas R., Commercial Sector Development in Rural Communities: Trade Area Analysis Western Rural Development Center, (WREP 90), September 1985.

(4) Hustedde, R., G. Pulver, and R. Shaffer. Community Economic Analysis: A How To Manual. Department of Agricultural Economics, University of Wisconsin, Madison, 1983.

(5) Stone, K.E. and J.C. McConnon, Jr. "Analyzing Retail Sales Potential for Counties and Towns." Submitted as a Selected Paper for the 1983 AAEA meetings, Department of Agricultural Economics, Iowa State University, Aes, 1983.