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## Survey Overview

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Decision Resources, Ltd., is pleased to present the results of this study to the Flint Hills Resources Community Advisory Council. This section provides a brief introduction to the specifications of the survey and a guide to the organization of the written analysis.

While the most statistically sound procedures have been used to collect and analyze the information presented herein, it must always be kept in mind that surveys are not predictions. They are designed to measure public opinion within identifiable limits of accuracy at *specific points in time*. This survey is in no way a prediction of opinions, perceptions, or actions at any future point in time. After all, in public policy analysis, the major task is to impact these revealed opinions in a constructive fashion.

The Principal Investigator for this study was Dr. William D. Morris; the Project Director overseeing all phases of the research and analysis was Ms. Diane Traxler.

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## Research Design

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This study contains the results of a telephone survey of 625 randomly selected residents in the Flint Hills Resources Community Advisory Council participating cities. Survey responses were gathered by professional interviewers across the community between February 11<sup>th</sup> and March 4<sup>th</sup>, 2008.

The average interview took 25 minutes.

All respondents interviewed in this study were part of a randomly generated sample of the area. In general, random samples such as this yield results projectable to their respective universe within  $\pm 4.0$  percent in 95 out of 100 cases. In each of the three regions, the results are projectable to within  $\pm 6.3$  percent in 95 out of 100 cases.

Interviews were conducted by **Decision Resources, Ltd.**, trained personnel from telephone banks in St. Paul, Minnesota. Approximately twenty percent of all interviews were independently validated for procedure and content by a Decision Resources, Ltd., supervisor. Completed interviews were edited and coded at the company's headquarters in Minneapolis, Minnesota. Statistical analysis and cross-tabulations were produced by the company's CfMC Mentor Analysis System and SPSS 15.0 FOR WINDOWS.

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## Organization of the Study

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The results of this study are presented in the following order:

The *Analysis* consists of a written report of the major findings. The results contained herein were also presented verbally to the client.

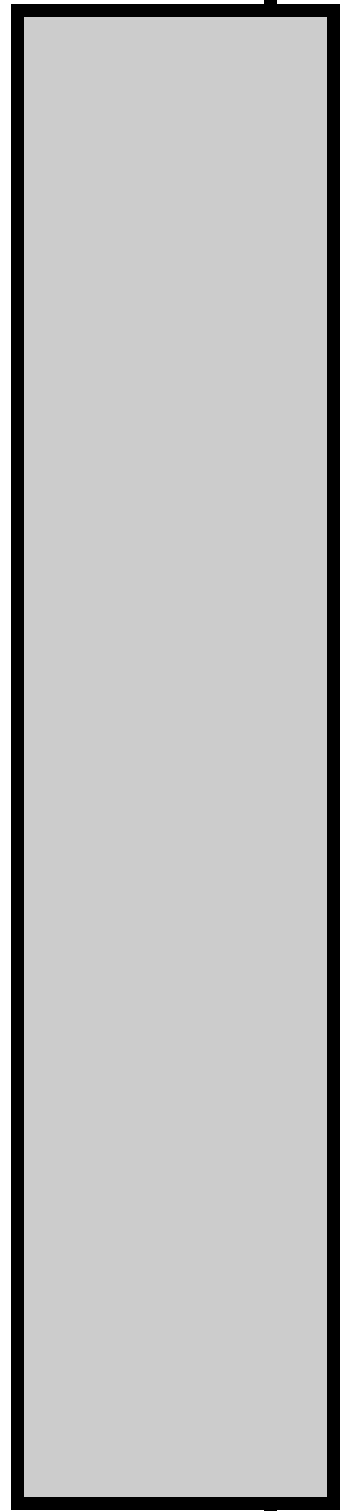
The *Questionnaire* reproduces the survey instrument as it was used in the interviewing process. This section also includes a response frequency distribution for each question.

Any further questions the reader may have about this study which are not answered in this report should be directed to either Dr. Morris or Ms. Traxler.

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# **Chapter One: Residential Demographics**

# Residential Demographics

Residents of the Flint Hills Resources' Community Advisory Council constituency were asked a series of questions about their demographic backgrounds. These questions were asked for two reasons: first, to validate this sample against updated 2000 U.S. Census findings; and, second, to track any differences between subgroups and the rest of the population. There were no statistically significant differences between the demographics of this survey and the census data. And, throughout the course of this study, subgroup differences will be discussed.

## Residential Longevity

Residents were queried:

*How long have you lived in this area?*

The typical adult resident within five miles of plant site lived there for 18.6 years:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
LESS THAN TWO YEARS .....	3%	1%	2%
TWO TO FIVE YEARS .....	14%	11%	12%
SIX TO TEN YEARS .....	14%	20%	20%
11 TO 20 YEARS .....	24%	31%	29%
21 TO 30 YEARS .....	16%	18%	18%
OVER THIRTY YEARS .....	29%	19%	19%
REFUSED .....	0%	0%	0%

Within the core cities of Rosemount and Inver Grove Heights, but over five miles from the plant, the typical adult resident has lived there for 16.8 years. In the outlying cities of Apple Valley, Hastings, and Egan, the typical adult has resided there for 16.2 years.

A second question was then asked:

*And, how long have you lived at your current residence?*

The typical adult resident within five miles of Flint Hills Resources lived in his/her current house for 14.2 years:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
LESS THAN TWO YEARS .....	5%	3%	4%
TWO TO FIVE YEARS .....	15%	13%	15%
SIX TO TEN YEARS .....	21%	22%	26%

11 TO 20 YEARS	26%	30%	26%
21 TO 30 YEARS	13%	16%	18%
OVER THIRTY YEARS	20%	15%	11%
REFUSED	0%	0%	0%

Within the core communities outside of the five miles radius from the plant, this median longevity is 14.5 years. The median household longevity in the outlying cities is 12.6 years.

## Age of Respondent

Residents were queried:

*Which of the following categories contains your age?*

The typical adult resident within five miles of the site is 51.2 years old:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
18-34	13%	10%	13%
35-44	26%	33%	28%
45-54	18%	26%	24%
55-64	24%	15%	24%
65 AND OVER	20%	15%	10%
REFUSED	0%	0%	0%

In the core cities outside of the five-mile radius, the typical adult resident is 47.2 years old. Within the outlying cities, the median adult age is 48.3 years old.

## Households with Children

Residents were asked:

*Do you have school-age children or pre-schoolers living with you at home?*

As distance from the plant site increases, the percentage of households containing school-age children or pre-schoolers increases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
YES	37%	41%	49%
NO	62%	57%	51%
REFUSED	1%	3%	0%

## Employment

Residents were next queried:

*Are you employed by: a government agency or political subdivision, such as state or local government or a school district; a business or corporation; self-employed; work on a farm; currently not working OR retired?*

Over 40% of each group works for a business or corporation:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
GOVERNMENT AGENCY/ POLITICAL SUBDIVISION ..	12%	16%	14%
BUSINESS/CORPORATION .....	40%	48%	45%
SELF-EMPLOYED .....	12%	11%	10%
WORKING ON FARM .....	0%	0%	0%
NOT WORKING .....	8%	7%	13%
RETIRED .....	29%	18%	18%
DON'T KNOW/REFUSED .....	0%	0%	0%

About 15% of each constituency is employed by a government agency or political subdivision, while about 11% are self-employed. Retirees are far more numerous within five miles of the plant site.

## Formal Education

Respondents were asked:

*What is the last grade of formal education you completed?*

Within the core communities, the typical adult resident has some college experience, albeit short of college graduation:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
HS GRADUATE OR LESS .....	22%	20%	18%
VO-TECH/TECH COLLEGE .....	10%	13%	11%
SOME COLLEGE .....	23%	23%	16%
COLLEGE GRADUATE .....	38%	34%	33%
POST-GRADUATE .....	6%	9%	20%
REFUSED .....	1%	0%	0%

Among outlying communities residents, the typical adult is a college graduate.

## Household Income

Residents were asked:

*Keeping in mind your responses are completely confidential...*

*Which of the following categories contains your total household income for last year -- under \$25,000, \$25,000-\$50,000, \$50,000-\$75,000, \$75,000-\$100,000, or over \$100,000?*

As distance from the Flint Hills Resources Pine Bend Refinery increases, total household income for last year also increases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNDER \$25,000 .....	5%	6%	2%
\$25,000-\$50,000 .....	24%	19%	11%
\$50,000-\$75,000 .....	20%	26%	21%
\$75,000-\$100,000 .....	16%	19%	21%
OVER \$100,000 .....	22%	17%	32%
DON'T KNOW/REFUSED .....	14%	13%	12%

Almost one third of the households in the outlying cities post incomes over \$100,000.00.

## Gender

The gender of each respondent was noted:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
MALE .....	55%	48%	46%
FEMALE .....	45%	52%	54%

As the distance from the plant site increases, so does the proportion of women in the sample.

## City of Residence

The city of residence of each respondent was also noted:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
ROSEMOUNT/EAST .....	23%	0%	0%
ROSEMOUNT/WEST .....	0%	40%	0%
IGH/NORTH .....	0%	60%	0%
IGH/SOUTH .....	54%	0%	0%
RURAL .....	23%	0%	0%
HASTINGS .....	0%	0%	33%
APPLE VALLEY .....	0%	0%	33%
EAGAN .....	0%	0%	33%

Two communities are split between two zones: Rosemount and Inver Grove Heights.

## Summary and Conclusions

*Each “Summary and Conclusions” section will take a macroscopic approach. The preceding discussion sections adopted a microscopic approach based, initially, upon the results in each of the three regions. These discussions will focus on the entire sample, merging the data from each region into one general overview.*

The typical resident lived in this area for 16.7 years. Fourteen percent resided there for less than five years, while 21% lived there for at least 30 years. Similarly, the typical resident has lived in their current home for 13.5 years. Eighteen percent were in their current homes for no more than five years, and 21% were in the same home for at least 30 years. Forty-three percent of the households contain pre-schoolers or school-aged children. Women outnumber men by two percent in the sample.

The typical adult resident is 48.2 years old. Twelve percent post ages under 35 years old, and 15% indicate they are at least 65 years old. The average education level is some college, although short of graduation. A large 49% are college graduates, though. Forty-five percent work for a business or corporation. Twenty-one percent are retirees. Fourteen percent are employed by a government agency or political subdivision, while 11% are self-employed, and nine percent are currently not working.

Rosemount residents are 21% of the sample, and 37% live in Inver Grove Heights. Six percent live in the rural areas of Dakota County. A composite 36% live in the cities of Hastings, Apple Valley, and Eagan.

# **Chapter Two: Community Perceptions**

# Community Perceptions

Residents were asked a short series of questions about their perceptions of their community. First, community issues were identified. Then, the quality of life and the quality of the environment were evaluated. Specific ratings followed: quality of drinking water, quality of air, economic future, and jobs availability.

## Most Important Issue

Respondents were asked:

*In your opinion, what is the most important issue facing your community today?*

Two key concerns are posted by each group: “education funding” and “high taxes:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	13%	10%	16%
AIR QUALITY .....	4%	5%	4%
EDUCATION FUNDING .....	10%	10%	14%
STREET MAINTENANCE .....	10%	7%	12%
HIGH TAXES .....	14%	17%	12%
RISING CRIME .....	5%	2%	5%
AFFORDABLE HEALTH CARE .....	0%	6%	4%
FUEL PRICES .....	4%	2%	0%
LACK OF JOBS .....	6%	6%	4%
STRUGGLING ECONOMY .....	10%	7%	8%
PRESERVING OPEN SPACE .....	0%	2%	0%
RAPID GROWTH .....	7%	12%	3%
WATER QUALITY .....	3%	2%	0%
TRAFFIC CONGESTION .....	0%	0%	9%
LACK OF PUBLIC TRANSIT .....	3%	3%	0%
LACK OF SENIOR SERVICES .....	2%	2%	0%
LACK OF YOUTH ACTIVITIES .....	2%	0%	0%
CLIMATE CHANGE .....	2%	0%	0%
GOVERNMENT SPENDING .....	0%	0%	2%
SCATTERED .....	5%	7%	7%

“Street maintenance” was an issue for respondents within five miles of the plant and outlying cities. “Rapid growth” was an issue for Rosemount and Inver Grove Heights residents outside a five-mile radius from the site.

“High taxes” is a concern among:

- residents for twenty-one to thirty years
- over fifty-four year olds
- those with some post-secondary experience

“Education funding” troubles:

- residents for ten years or less
- eighteen to forty-four year olds
- households with children
- college graduates

“Street maintenance” is posted at a higher rate by:

- eighteen to forty-four year olds

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## Quality of Life

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Respondents were queried:

*How would you rate the quality of life in your community in comparison with most other communities -- much better, somewhat better, about the same, somewhat worse, or much worse?*

In comparing their quality of life with most other communities, majorities view theirs as “better” – 65% among residents within five miles of the site, 57% among core communities residents outside of the five-mile radius, and a very large 75% among outlying cities residents:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
MUCH BETTER . . . . .	16%	10%	28%
SOMEWHAT BETTER . . . . .	49%	47%	46%
ABOUT THE SAME . . . . .	33%	41%	25%
SOMEWHAT WORSE . . . . .	1%	2%	1%
MUCH WORSE . . . . .	1%	0%	0%
DON'T KNOW/REFUSED . . . . .	0%	0%	0%

Respondents of the core communities outside of the five-mile radius are most apt to feel their quality of life is “about the same.”

“Better” is stated most frequently by:

- residents for six to twenty years
- households with children

- college graduates
- residents of Apple Valley, Eagan, and Hastings

“About the same” is posted at a higher rate by:

- residents for over thirty years
- empty nesters
- high school graduates
- under \$50,000 annual income households
- residents outside of five miles from the refinery in the core communities

## **Quality of the Environment**

Respondents were asked:

*How would you rate the quality of the environment in your area in comparison with most other communities -- much better, somewhat better, about the same, somewhat worse, or much worse?*

With the exception of respondents in core communities outside of the five-mile radius from the plant site, more respondents rate the quality of the environment in their area in comparison with most other communities as “better” rather than “about the same.”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
MUCH BETTER . . . . .	12%	6%	15%
SOMEWHAT BETTER . . . . .	37%	36%	42%
ABOUT THE SAME . . . . .	43%	51%	37%
SOMEWHAT WORSE . . . . .	7%	7%	4%
MUCH WORSE . . . . .	1%	0%	1%
DON'T KNOW/REFUSED . . . . .	1%	0%	0%

In the core communities outside of the five-mile radius, a majority see the quality of their environment as “about the same” as in most other communities.

“Better” is mentioned more frequently by:

- residents for six to ten years
- households with children
- college graduates
- residents of Apple Valley, Eagan, and Hastings

“About the same” is selected at a higher rate by:

- empty nesters

- high school graduates
- under \$50,000 annual income households
- residents outside of five miles from the refinery in the core communities

## **Quality of Drinking Water**

Respondents were instructed:

*On a scale of "one" to "nine," with "nine" being the best and "one" being the worst, how would you rate the quality of water you drink?*

Outlying cities residents post the highest mean on the rating of the quality of their drinking water:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
1	3%	1%	0%
2	1%	1%	0%
3	4%	3%	3%
4	6%	8%	4%
5	3%	15%	7%
6	10%	9%	5%
7	23%	26%	22%
8	33%	27%	36%
9	16%	9%	24%
DON'T KNOW/REFUSED	1%	1%	0%
MEAN	6.93	6.60	7.43

The lowest mean score occurs among residents of core communities outside of the five-mile radius from the plant.

“Low box scores” are posted at a higher rate by:

- self-employed residents
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

“Mid box scores” are given more frequently by:

- residents for six to ten years
- business or corporation employees
- residents outside of five miles from the refinery in the core communities

“Top box scores” is cited most often by:

- residents for eleven to twenty years

- retirees
- residents of Apple Valley, Eagan, and Hastings

Positive differences from the mean occur more frequently among:

- retirees
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable

## Quality of Air

Respondents were queried:

*Using the same scale, how would you rate the quality of the air you breathe?*

The highest mean rating on the quality of air is posted by residents of outlying cities:

		WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
1	.....	1%	0%	0%
2	.....	2%	1%	0%
3	.....	1%	1%	3%
4	.....	3%	5%	5%
5	.....	9%	14%	6%
6	.....	14%	15%	10%
7	.....	28%	35%	26%
8	.....	36%	24%	32%
9	.....	5%	7%	18%
DON'T KNOW/REFUSED		0%	0%	0%
MEAN	.....	6.82	6.74	7.19

Within the core communities, the mean ratings are relatively equal, but lower than in the outlying communities.

“Mid box scores” are stated more often by:

- empty nesters
- government employees
- self-employed residents
- under \$50,000 annual income households
- residents outside of five miles from the refinery in the core communities
- those whose impression of Flint Hills Resources has gotten better
- those aware of the CAC

“Top box scores” are mentioned most frequently by:

- households with children
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable
- those unaware of the CAC

Positive differences from the mean are encountered more often among:

- residents not currently working
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable

## Economic Future of the Community

Respondents were queried:

*How would you rate the economic future of your community from "one" to "nine," with "nine" being "bright" and "one" being "not at all bright?"*

As distance from the plant site increases, the mean rating of the economic future of their community increases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
1	1%	2%	0%
2	3%	2%	0%
3	3%	1%	1%
4	3%	5%	4%
5	16%	18%	15%
6	18%	16%	18%
7	40%	33%	32%
8	14%	18%	20%
9	3%	4%	9%
DON'T KNOW/REFUSED	0%	0%	0%
MEAN	6.28	6.30	6.72

“Mid box scores” are cited at a higher rate by:

- forty-five to fifty-four year olds
- empty nesters
- government employees

“Top box scores” are given more often by:

- households with children
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources has gotten better
- those unaware of the CAC

Positive differences from the mean are posted more often by:

- households with children
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those unaware of the CAC

## Availability of Jobs

Respondents were asked:

*Using the same scale of "one" to "nine," with "nine" being "very concerned" and "one" being "not very concerned," how concerned are you about jobs being available in the community a year from now?*

Job availability in the community is a lesser concern among residents of outlying cities and core communities within a five-mile radius of the plant:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
1	5%	3%	3%
2	7%	8%	10%
3	13%	6%	7%
4	8%	9%	13%
5	16%	18%	17%
6	18%	13%	20%
7	12%	12%	13%
8	8%	18%	4%
9	14%	14%	12%
DON'T KNOW/REFUSED	1%	0%	0%
MEAN	5.50	5.88	5.40

“Low box scores” are cited more often by:

- those whose impression of Flint Hills Resources is still favorable

“Mid box scores” are mentioned more often by:

- men

“Top box scores” are given most frequently by:

- residents for over thirty years
- empty nesters
- residents outside of five miles from the refinery in the core communities
- those whose impression of Flint Hills Resources has gotten worse

Positive differences from the mean are encountered most frequently among:

- residents for over thirty years
- empty nesters
- residents outside of five miles from the refinery in the core communities
- those whose impression of Flint Hills Resources has gotten worse

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## **Summary and Conclusions**

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According to residents, the two most often-cited important issues facing their community today are “taxes” and “education.” “Road repairs” follow, then “development and growth,” the “economy” and “lack of jobs.” “Air quality,” “traffic congestion,” and “health care” round out the list. No key major issue emerges; in fact, 23 issue concerns are offered by respondents.

Sixty-five percent think the quality of life in their community is “better” in comparison with most other communities. Thirty-three percent see it as “about the same.” Similarly, 49% rate the quality of the environment in their area is “better” in comparison with most other communities. Forty-four percent see it as “about the same,” while only six percent label it “worse.”

Respondents were asked to rate four area attributes on a one-to-nine scale, with “nine” being the best and “one” being the worse. Residents post a moderately high mean rating for the “quality of water you drink” and the “quality of the air you breathe.” A somewhat lower mean rating is awarded to the “economic future of your community.” Residents give a middling mean rating to their “concern about jobs being available in the community a year from now.”

# **Chapter Three: Perceptions of Flint Hills**

# Perceptions of Flint Hills

Area residents were asked an extensive series of questions about their perceptions of the Flint Hills Resources' Pine Bend Refinery. First, top-of-the-mind associations were elicited. Opinions about the company were discussed, as well as descriptions about the refinery. Knowledge about the refinery process and the production of products were also established. Next, the Flint Hills Resources' website was examined. Company policies and operations were reviewed. Flint Hills Resources-connected controversies were recalled. Finally, emissions from the refinery were talked about.

## First Thing Comes to Mind

Respondents were asked:

*Now, I'd like you to focus on one area company -- Flint Hills Resources' Pine Bend Refinery, which used to be called Koch (COKE) Refinery.*

*When I say the name, "Flint Hills Resources," what is the first thing that comes to your mind?*

Three responses dominate the list: "oil/gas," "pollution," and "refinery:"

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
NOTHING .....	7%	5%	8%
OIL/GAS .....	24%	20%	15%
SMELLS .....	5%	5%	5%
POLLUTION .....	16%	15%	16%
AIR POLLUTION .....	6%	9%	7%
REFINERY .....	12%	18%	13%
KOCH .....	5%	7%	3%
HEALTH ISSUES .....	3%	0%	0%
BIG PLANT .....	2%	2%	2%
A LOT OF LIGHTS .....	0%	0%	3%
IMPROVING POLLUTION			
CONTROL .....	0%	2%	0%
JOBS .....	5%	3%	4%
SMOKE .....	4%	4%	10%
KNOW EMPLOYEES .....	0%	2%	0%
LARGE COMPANY .....	5%	0%	6%
HEALTH HAZARDS .....	0%	2%	0%

HELPS COMMUNITY .....	0%	.....	2%	.....	0%
SCATTERED .....	6%	.....	4%	.....	7%

On the negative side, about 21% in each of the three groups point to “air pollution” or “general pollution.”

“Oil and gas” is posted more often by:

- retirees
- men
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Pollution” is stated more frequently by:

- those whose impression of Flint Hills Resources is still unfavorable

“Refinery” is selected at a higher rate by:

- business or corporation employees
- those whose impression of Flint Hills Resources has gotten better
- those aware of the CAC

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## Opinion of Flint Hills Resources

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Residents were asked:

*Would you say your opinion of Flint Hills Resources during the past few years has -- changed for the better, stayed the same and is favorable, stayed the same and is unfavorable, or changed for the worse?*

About 60% of each group have a “better” or “favorable” opinion of Flint Hills Resources during the past few years:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
BETTER .....	24%	..... 20%	..... 16%
SAME/FAVORABLE .....	36%	..... 39%	..... 42%
SAME/UNFAVORABLE .....	26%	..... 15%	..... 23%
WORSE .....	3%	..... 6%	..... 3%
DON'T KNOW/REFUSED .....	12%	..... 20%	..... 15%

Negative opinions vary between the areas: the most negative is closest to plant site, while they are somewhat lower in the outlying cities and lowest in the core communities outside of the five-mile radius.

“Better” is cited more often by:

- residents for over thirty years
- those aware of the CAC

“Same/favorable” is stated more frequently by:

- over fifty-four year olds
- retirees

“Same/unfavorable” is mentioned most often by:

- residents for five years or less
- eighteen to forty-four year olds
- households with children

Respondents offering an opinion were asked a follow-up query:

***Why do you feel that way?***

“Better pollution control” is the key reason for the opinions cited:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	2%	0%	3%
BAD ODOR .....	12%	6%	7%
HELPS THE COMMUNITY .....	2%	2%	4%
PROVIDES JOBS .....	6%	4%	4%
BETTER POLLUTION CONTROL ..	32%	31%	26%
LESS ODOR .....	8%	9%	6%
STILL TOO MUCH POLLUTION ...	11%	12%	17%
IMPROVING SAFETY STANDARDS	5%	13%	12%
NO PROBLEMS .....	7%	11%	6%
KEEPS EXPANDING .....	0%	2%	0%
LESS EMISSIONS .....	2%	0%	0%
TOO POLITICAL .....	2%	2%	0%
HEALTH PROBLEMS .....	0%	3%	2%
NO IMPROVEMENTS MADE .....	2%	0%	0%
WATER POLLUTION .....	2%	0%	2%
PRODUCES IMPORTANT			
PRODUCT FOR STATE .....	0%	0%	6%
SCATTERED .....	6%	5%	5%

“Still too much pollution” is a secondary concern in each group, while residents closest to plant site mention “bad odor” and those further away point to “improving safety standards.”

“Better pollution control” is key to:

- retirees
- \$75,000 to \$100,000 annual income households
- those aware of the CAC

“Still too much pollution” is a concern among:

- eighteen to forty-four year olds
- households with children
- business or corporation employees
- residents not currently working
- those unaware of the CAC

“Better safety standards” is posted at a higher rate by:

- men

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### **Word Pairs about Flint Hills Resources**

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Respondents were instructed:

*I'm going to read you pairs of words or phrases that may apply to the Flint Hills Resources' Pine Bend Refinery in Rosemount. Tell me, in your opinion, which one best describes the facility.*

A list of three pairs was then read:

*Is it modern or does it need to be modernized?*

As distance from the site increases, so do the opinions that the facility is modern:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
MODERN .....	64%	55%	51%
MODERNIZED .....	24%	24%	32%
DON'T KNOW/REFUSED .....	12%	20%	17%

“Modern” is cited most frequently by:

- retirees
- under \$50,000 annual income households
- men
- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Modernized” is mentioned more often by:

- residents for six to ten years
- households with children
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

***Does it have state-of-the-art pollution control equipment or does it have outdated pollution control equipment?***

As distance increases, the percentage of respondents who see state-of-the-art pollution control equipment as state-of-the-art decreases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
STATE OF THE ART .....	55%	51%	45%
OUTDATED .....	24%	20%	31%
DON'T KNOW/REFUSED .....	21%	29%	24%

“State of the art” is posted at a higher rate by:

- residents for over thirty years
- over fifty-four year olds
- empty nesters
- retirees
- men
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Outdated” is selected more often by:

- residents for six to ten years
- \$50,000 to \$75,000 annual income households
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse
- those unaware of the CAC

*Is it an environmental concern or is it environmentally responsible?*

As distance from the plant site increases, the percentage of residents seeing Flint Hills Resources' Pine Bend Refinery as an environmental concern increases modestly:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
CONCERN .....	45%	46%	50%
RESPONSIBLE .....	51%	48%	44%
DON'T KNOW/REFUSED .....	4%	6%	5%

“Concern” is stated more often by:

- households with children
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse
- those unsure about Flint Hills Resources
- those unaware of the CAC

“Responsible” is indicated at a higher rate by:

- over fifty-four year olds
- empty nesters
- retirees
- men
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

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**Knowledge about Refinery Process**

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Area residents were asked:

*How much do you know about the Flint Hills Resources' Pine Bend Refinery process -- a great deal, some, not too much, or nothing?*

The highest information levels are found in both the core community within a five-mile radius and outlying cities:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
GREAT DEAL .....	6%	2%	3%
SOME .....	39%	30%	41%
NOT TOO MUCH .....	45%	56%	41%
NOTHING .....	10%	11%	14%
DON'T KNOW/REFUSED .....	0%	0%	0%

A lower information level is found among residents of core cities outside of the five-mile radius from the site.

Knowledge increases among:

- residents for twenty-one to thirty years
- men
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

It decreases among:

- residents for five years or less
- business or corporation employees
- women
- residents outside of five miles from the refinery in the core communities
- those unsure about Flint Hills Resources
- those unaware of the CAC

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## Flint Hills Resources' Website

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Respondents were initially asked:

*Have you accessed the Flint Hills Resources' website on the Internet?*

Access is somewhat higher within the five-mile radius from the refinery:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
YES .....	12%	7%	7%
NO .....	88%	93%	92%
DON'T KNOW/REFUSED .....	0%	0%	1%

“No” is reported most frequently by:

- residents for over thirty years
- over fifty-four year olds
- retirees
- high school graduates
- under \$50,000 annual income households
- those unaware of the CAC

The small percentage of residents who accessed the website were asked three follow-up queries. First, the information content was considered:

***How would you rate its information content -- excellent, good, only fair, or poor?***

About 35%-40% of each group rate the website information content highly:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
EXCELLENT . . . . .	5%	6%	0%
GOOD . . . . .	37%	29%	38%
ONLY FAIR . . . . .	58%	59%	63%
POOR . . . . .	0%	6%	0%
DON'T KNOW/REFUSED . . . . .	0%	0%	0%

But, about 60% of each group are more critical in their evaluations.

Ratings are higher among:

- residents for over thirty years
- those whose impression of Flint Hills Resources has gotten better

They are lower among:

- residents for eleven to twenty years
- \$50,000 to \$75,000 annual income households
- those whose impression of Flint Hills Resources is still unfavorable

Next, the ease of navigation was assessed:

***How would you rate the ease of navigating the website -- excellent, good, only fair, or poor?***

Over 60% of two groups – website users within five miles of the refinery and residents of outlying cities – rate the ease of navigation favorably:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
EXCELLENT . . . . .	11%	0%	0%
GOOD . . . . .	58%	47%	63%

ONLY FAIR .....	32%	....	35%	....	38%
POOR .....	0%	....	18%	....	0%
DON'T KNOW/REFUSED .....	0%	....	0%	....	0%

A majority of website visitors in the core cities outside of the five-mile radius express dissatisfaction with the ease of navigation of the website.

Ratings increase among:

- business or corporation employees

They decrease among:

- government employees
- residents not currently working
- \$50,000 to \$75,000 annual income households

Finally, respondents were queried:

***What further information, if any, would you like to see added to the Flint Hills Resources' website?***

In the core communities, over 60% of the respondents are “unsure” about further information needs:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES		
UNSURE .....	63%	....	70%	....	38%
IMPROVEMENTS BEING MADE ..	16%	....	12%	....	25%
AIR QUALITY REPORTS .....	0%	....	0%	....	25%
PROCESSES AND PROCEDURES ...	0%	....	6%	....	6%
GENERAL INFORMATION .....	0%	....	6%	....	6%
ENVIRONMENTAL EFFECTS .....	11%	....	0%	....	0%
AIR QUALITY UPDATES .....	5%	....	0%	....	0%
WATER QUALITY REPORTS .....	5%	....	6%	....	0%

“Improvements being made” are requested by all three groups. “Air quality reports” are key to residents of the outlying cities.

“Air quality reports” is stated most frequently by:

- those with some post-secondary experience
- residents of Apple Valley, Eagan, and Hastings

## Products Produced at Pine Bend Refinery

Respondents were asked:

*Other than gasoline, what kinds of products are produced at the Pine Bend Refinery?*

Thirty-three percent of each group report they are “uncertain:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	33%	33%	33%
OIL .....	17%	29%	16%
PLASTIC .....	8%	7%	5%
JET FUEL .....	8%	8%	11%
HEATING FUELS .....	4%	3%	4%
DIESEL FUEL .....	5%	3%	4%
ASPHALT .....	7%	5%	9%
KEROSENE .....	0%	2%	4%
PROPANE .....	5%	0%	0%
NATURAL GAS .....	3%	0%	0%
PETROLEUM PRODUCTS .....	8%	9%	8%
TAR .....	0%	0%	3%
SCATTERED .....	2%	1%	0%

The most-often posted response is “oil.” “Plastic,” “jet fuel,” “petroleum products” and “asphalt” form a second tier of answers to the question.

“Oil” is reported most frequently by:

- forty-five to fifty-four year olds
- residents outside of five miles from the refinery in the core communities

## Statements Describing Flint Hills Resources

Respondents were instructed:

*Here are some statements that could be made about Flint Hills Resources' Pine Bend Refinery in Rosemount. Please tell me how well you believe each statement describes the company -- very well, fairly well, not very well, or not at all well.*

They were then read three statements:

***Flint Hills Resources is responsible when area citizens express concerns about the company's operations.***

Over 60% of each group rate Flint Hills Resources as either “very well” or “somewhat well” in acting responsibly responding to area citizens’ concerns:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY WELL .....	18%	24%	13%
FAIRLY WELL .....	55%	41%	48%
NOT VERY WELL .....	10%	16%	21%
NOT AT ALL WELL .....	2%	2%	2%
DON'T KNOW/REFUSED .....	16%	16%	16%

“Well” is posted at a higher rate by:

- residents for over thirty years
- over fifty-four year olds
- retirees
- \$50,000 to \$75,000 annual income households
- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Not well” is stated more often by:

- residents not currently working
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

***Flint Hills Resources is open and honest in providing information about the company's operations.***

As distance from the plant site increases, the percentage of residents giving positive ratings to the openness and honesty of the company in providing information decreases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY WELL .....	14%	18%	8%
FAIRLY WELL .....	52%	38%	43%
NOT VERY WELL .....	14%	21%	29%
NOT AT ALL WELL .....	3%	7%	4%

DON'T KNOW/REFUSED ..... 18% .... 16% .... 16%

“Well” is cited more often by:

- residents for over thirty years
- over fifty-four year olds
- empty nesters
- retirees
- \$50,000 to \$75,000 annual income households
- men
- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Not well” is mentioned more often by:

- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

***Flint Hills Resources does all it can to ensure the health and safety of people living and working around its refinery.***

Seventy-two percent of the residents within five miles of the plant site rate Flint Hills Resources highly on doing all it can to ensure the health and safety of people living and working around its refinery:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY WELL .....	14%	15%	6%
FAIRLY WELL .....	58%	47%	57%
NOT VERY WELL .....	10%	16%	16%
NOT AT ALL WELL .....	3%	5%	4%
DON'T KNOW/REFUSED .....	15%	18%	16%

“Well” is selected at a higher rate by:

- residents for over thirty years
- over fifty-four year olds
- \$50,000 to \$75,000 annual income households
- men
- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Not well” is cited most frequently by:

- eighteen to forty-four year olds
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

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## Performance Attributes of Flint Hills Resources

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Respondents were instructed:

*I would like your opinion of the performance of Flint Hills Resources on the following attributes. For each one, please rate it as excellent, good, only fair, or poor.*

Four attributes were then read:

*Effectively guarding the environmental quality of the area?*

As the distance from the refinery increases, positive ratings decrease:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
EXCELLENT .....	7%	10%	2%
GOOD .....	46%	35%	36%
ONLY FAIR .....	29%	28%	37%
POOR .....	7%	10%	10%
DON'T KNOW/REFUSED .....	12%	18%	14%

Ratings increase among:

- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

They decrease among:

- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

***Taking steps to protect the community from industrial accidents that might occur there?***

As the distance from the refinery increases, positive ratings decrease:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
EXCELLENT .....	10%	12%	6%
GOOD .....	51%	46%	46%
ONLY FAIR .....	20%	22%	30%
POOR .....	1%	3%	2%
DON'T KNOW/REFUSED .....	18%	17%	16%

Favorable ratings are given more often by:

- residents for over thirty years
- empty nesters
- retirees
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

Unfavorable ratings are posted at a higher rate by:

- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

***Providing good jobs for area residents?***

As the distance from the refinery increases, positive ratings slightly decrease:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
EXCELLENT .....	27%	34%	20%
GOOD .....	50%	38%	52%
ONLY FAIR .....	8%	13%	14%
POOR .....	0%	2%	0%
DON'T KNOW/REFUSED .....	16%	14%	12%

Ratings increase among:

- residents for over thirty years
- \$50,000 to \$75,000 annual income households
- men
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable

- those aware of the CAC

They decrease among:

- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

***Being a socially responsible corporate citizen and playing a constructive role in helping the area and its residents?***

Again, as the distance from the refinery increases, positive ratings decrease:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
EXCELLENT .....	8%	12%	8%
GOOD .....	53%	44%	43%
ONLY FAIR .....	11%	20%	20%
POOR .....	4%	3%	3%
DON'T KNOW/REFUSED .....	24%	21%	26%

Ratings are higher among:

- residents for over thirty years
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

They are lower among:

- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

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## Air Pollution Controversies

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Residents were queried:

***During the past few years, do you recall any instances of the Flint Hills Resources' Pine Bend Refinery involvement in air pollution controversies? What do you recall?***

Over 85% of each group could not recall any instances of the Refinery involvement in air pollution controversies:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	6%	5%	8%
NO .....	84%	89%	77%
POOR AIR QUALITY REPORTS .....	2%	0%	3%
CONTAMINANTS IN SMOKE .....	0%	2%	4%
FIRE AT THE PLANT .....	0%	1%	4%
PEOPLE GETTING SICK FROM			
FUMES .....	3%	0%	2%
PIPELINE LEAK .....	3%	1%	0%
SCATTERED .....	2%	2%	2%

“No” is indicated at a higher rate by:

- residents for eleven to twenty years
- eighteen to forty-four year olds
- residents outside of five miles from the refinery in the core communities
- those whose impression of Flint Hills Resources is still favorable
- those unsure about Flint Hills Resources

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## Water Pollution Controversies

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Next, respondents were asked:

*During the past few years, do you recall any instances of the Flint Hills Resources' Pine Bend Refinery involved in water pollution controversies? What do you recall?*

Over 80% could not recall any instances of the Flint Hills Resources' Pine Bend Refinery involvement in water pollution controversies:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	3%	4%	5%
NO .....	84%	87%	75%
CHEMICAL SPILL INTO RIVER .....	10%	7%	16%
GROUNDWATER			
CONTAMINATION .....	3%	2%	2%
SCATTERED .....	1%	0%	2%

The most often cited controversy involves a “chemical spill into the river.”

“No” is posted at a higher rate by:

- residents for eleven to twenty years

- under \$50,000 annual income households
- residents outside of five miles from the refinery in the core communities
- those unsure about Flint Hills Resources

“Chemical spill into river” is cited most frequently by:

- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still unfavorable
- those aware of the CAC

## Air Emissions

Residents were queried:

*What do you think the air emissions from the Flint Hills Resources' Pine Bend refinery contain?*

Over 40% express uncertainty about the nature of the air emissions from the Refinery:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	43%	42%	47%
CARBON DIOXIDE .....	16%	12%	10%
GREENHOUSE GASES .....	0%	3%	0%
GAS FUMES .....	8%	13%	7%
POLLUTANTS .....	8%	9%	9%
CARBON MONOXIDE .....	6%	7%	3%
AMMONIA .....	2%	0%	0%
SULFUR .....	15%	12%	22%
SCATTERED .....	2%	2%	2%

The most often postings are “carbon dioxide,” “gas fumes,” and “sulfur.”

“Sulfur” is stated more often by:

- residents for twenty-one to thirty years
- men
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Carbon dioxide” is cited more frequently by:

- \$75,000 to \$100,000 annual income households

“Gas fumes” is mentioned more often by:

- college graduates
- residents outside of five miles from the refinery in the core communities
- those whose impression of Flint Hills Resources has gotten better

## Greenhouse Gases

Residents were queried:

*Globally, greenhouse gases may potentially have an impact on climate change.*

*How concerned are you about the environmental impact of greenhouse gas emissions associated with the refinery processing and production operations at the Flint Hills Resources' Pine Bend Refinery -- very concerned, somewhat concerned, not too concerned or not at all concerned?*

In the core communities, about 75% are either “very concerned” or “somewhat concerned” about the Refinery’s greenhouse gas emissions:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY CONCERNED . . . . .	25%	26%	24%
SOMEWHAT CONCERNED . . . . .	49%	50%	41%
NOT TOO CONCERNED . . . . .	23%	20%	29%
NOT AT ALL CONCERNED . . . . .	3%	4%	4%
DON'T KNOW/REFUSED . . . . .	0%	1%	1%

In the outlying cities, 65% feel similarly.

Concern increases among:

- residents for six to ten years
- government employees
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse
- those aware of the CAC

It decreases among:

- residents for five years or less
- over fifty-four year olds
- retirees

- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable

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## Odor

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Residents were initially asked:

*How often is odor a problem from the Flint Hills Resources' Pine Bend Refinery -- frequently, occasionally, rarely or never?*

As the distance increases, the percentage of residents experiencing odor problems either “frequently” or “occasionally” decreases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
FREQUENTLY .....	8%	9%	8%
OCCASIONALLY .....	31%	24%	18%
RARELY .....	37%	33%	30%
NEVER .....	23%	34%	44%
DON'T KNOW/REFUSED .....	0%	0%	1%

“Often” is posted at a higher rate by:

- eighteen to forty-four year olds
- government employees
- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse
- those aware of the CAC

“Not often” is stated more often by:

- over fifty-four year olds
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable
- those unaware of the CAC

Next, those who experience odor problems from the Refinery were asked a follow-up query:

*How serious of a problem is odor -- very serious, somewhat serious, not too serious, or not at all serious?*

About 50% of each group rate the odor problems as either “very serious” or “somewhat serious:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY SERIOUS . . . . .	9%	17%	14%
SOMEWHAT SERIOUS . . . . .	41%	30%	34%
NOT TOO SERIOUS . . . . .	46%	47%	47%
NOT AT ALL SERIOUS . . . . .	4%	5%	5%
DON'T KNOW/REFUSED . . . . .	0%	0%	1%

“Serious” is posted at a higher rate by:

- residents for five years or less
- government employees
- self-employed residents
- over \$100,000 annual income households
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse
- those unsure about Flint Hills Resources

“Not serious” is indicated more often by:

- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable

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## Summary and Conclusions

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The first things that comes to mind when they hear the name, “Flint Hills Resources,” are “oil and gas,” at 19%, “refinery,” at 15%, and “pollution,” at 13%. Eight percent mention “air pollution,” and five percent each point to “smells” or “Koch Refinery.”

Fifty-nine percent report their opinion of Flint Hills Resources either “changed for the better” or “stayed the same and is favorable.” Twenty-five percent say their opinion either “stayed the same and is unfavorable” or “changed for the worse.” Sixteen percent report no opinion of the company. Positive ratings are based upon “less pollution now,” “better safety standards,” “less odor,” and “no major problems.” Negative ratings stem from the perceptions of “bad odor” and “still too much pollution.”

By a 56%-27% margin, resident think the Refinery is “modern.” A narrower 50%-25% margin tips residents toward thinking the site has “state-of-the-art pollution control equipment.” But, a tie occurs, 47%-47%, on whether the Refinery is an environmental concern or environmentally responsible.

Forty percent say they know “a lot” or “some” about the Flint Hills Resources’ Pine Bend Refinery process. But, 60% admit they know “not too much” or “nothing.”

Eight percent of the sample access the Flint Hills’ Resources website on the Internet. But, 62%

rate the content negatively and 40% rate the ease of navigation unfavorably. Website visitors urge more information about “improvements made” and “air quality updates.”

In addition to gasoline, residents believe the Refinery produces “oil,” at 21%, “jet fuel” and “petroleum products” each at nine percent, and “asphalt,” at seven percent. Six percent also think “plastic” is produced there.

Sixty-five percent think “Flint Hills Resources is responsible when area citizens express concerns about the company’s operation” describes the company “very well” or “somewhat well.” Fifty-seven percent feel “Flint Hills Resources is open and honest in providing information about the company’s operation” is an apt description. And, 65% believe “Flint Hills Resources does all it can to ensure the health and safety of people living and working around its refinery” is a good description of the company.

While 45% rate Flint Hills Resources favorably on “effectively guarding the environmental quality of the area;” forty percent rate the company unfavorably. Fifty-six percent rate the company positively on “taking steps to protect the community from industrial accidents that might occur there,” while 27% are more critical. Seventy-three percent highly rate the company as “providing good jobs for area residents;” thirteen percent disagree. And, 55% regard Flint Hills Resources as “being a socially responsible corporate citizen and playing a constructive role in helping the area and its residents;” twenty-one percent take exception to that characterization.

Across the area, 90% cannot recall any instances of the involvement of the Flint Hills Resources’ Pine Bend Refinery in any air pollution controversies during the past few years. But, a lower 86% cannot recall the Refinery’s involvement in water pollution controversies. Eleven percent recall a chemical spill into the River.

Forty-four percent are unsure about the composition of the air emissions from the Flint Hill Resources’ Pine Bend Refinery. Sixteen percent think “sulfur” is part of the emissions, while 13% say it contains “carbon dioxide.” Ten percent see “gas fumes,” and nine percent think the emissions include “pollutants and toxins.”

Seventy-one percent report they are at least “somewhat concerned” about the environmental impact of greenhouse gas emissions associated with the refinery processing and production operations at the Flint Hills Resources’ Pine Bend Refinery. Twenty-nine percent state they have no concerns about it.

Twenty-two percent indicate that odors from the Refinery are at least an “occasional” problem. Another 33% report it is a “rare” occurrence. Among those seeing odor from the Refinery as a problem, 14% see it as a “very serious problem,” while 35% think it is a “somewhat serious problem.”

# **Chapter Four: Community Advisory Council**

# Community Advisory Council

Residents of the area were asked a series of questions about the Community Advisory Council to the Flint Hills Resources' Pine Bend Refinery. First, CAC awareness was established. Among those aware of the Council, the source of their information, the impression of the Council, and awareness of CAC roles were discussed. The functions of the Community Advisory Council were prioritized. Awareness of the Emergency Response Network Telephone System was ascertained. Finally, the CAC website was examined.

## Awareness of CAC

Respondents were asked:

*As you may know, there is a Community Advisory Council (CAC) to Flint Hills Resources' Pine Bend Refinery. It is composed of twenty citizen members from the communities surrounding the refinery.*

*Prior to this survey, were you aware of this Community Advisory Council?*

Awareness varies markedly, although the pattern is awareness decreases as distance from the plant site increases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
YES .....	46%	30%	20%
NO .....	54%	70%	79%
DON'T KNOW/REFUSED .....	1%	0%	1%

Awareness is higher among:

- residents for eleven to twenty years
- men
- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources has gotten better

It is lower among:

- residents for five years or less
- women
- residents of Apple Valley, Eagan, and Hastings

- those unsure about Flint Hills Resources

## **Learn about the CAC**

Respondents aware of the CAC were asked a follow-up query:

### *How did you learn of the Community Advisory Council?*

Flyers prove more informative in areas closer to the Refinery, while local newspapers are more influential as the distance increases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	0%	0%	2%
NEWSLETTER .....	11%	4%	11%
LOCAL NEWSPAPER .....	10%	21%	44%
WORD OF MOUTH .....	20%	36%	11%
MAILINGS .....	27%	21%	22%
FLYERS .....	24%	12%	2%
MEETINGS .....	0%	0%	2%
MAJOR NEWSPAPERS .....	0%	0%	4%
TELEVISION NEWS .....	0%	0%	2%
WEBSITE .....	3%	6%	0%
SCATTERED .....	4%	1%	0%

The “grapevine” is especially effective in the core communities outside of a five-mile radius from the firm. Mailings are equally effective in all three areas.

“Word of mouth” is posted more often by:

- residents outside of five miles from the refinery in the core communities

“Mailings” is cited more frequently by:

- college graduates

“Local newspaper” is stated at a higher rate by:

- residents for twenty-one to thirty years
- \$50,000 to \$75,000 annual income households
- residents of Apple Valley, Eagan, and Hastings

“Flyers” is cited more often by:

- those with some post-secondary experience
- residents living within five miles of the refinery

- those unsure about Flint Hills Resources

## **Impression of the CAC**

Aware individuals were next asked:

*Do you have a very favorable impression of the Council, favorable impression, neither favorable nor unfavorable impression, unfavorable impression, or a very unfavorable impression of the Community Advisory Council?*

Respondents living in the outlying cities and within five miles of the plant site have more favorable impressions:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY FAVORABLE .....	4%	3%	4%
FAVORABLE .....	56%	41%	65%
NEITHER .....	31%	45%	28%
UNFAVORABLE .....	4%	3%	0%
VERY UNFAVORABLE .....	3%	3%	0%
DON'T KNOW/REFUSED .....	1%	6%	2%

“Neither favorable nor unfavorable” impressions are highest within the core cities outside of the five-mile radius.

“Favorable” is reported most frequently by:

- empty nesters
- self-employed residents
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable

“Neither” is posted at a higher rate by:

- households with children
- residents outside of five miles from the refinery in the core communities
- those whose impression of Flint Hills Resources is still unfavorable
- those unsure about Flint Hills Resources

## Aware of CAC's Role

Finally, respondents aware of the Citizen Advisory Committee were queried:

*Are you aware one of the roles of the Community Advisory Council is to answer residents' questions and register complaints about Pine Bend Refinery?*

Most aware residents report they are also aware that one of the roles is to answer residents' questions and register complaints about Pine Bend Refinery:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
YES .....	89%	78%	85%
NO .....	11%	21%	13%
DON'T KNOW/REFUSED .....	0%	1%	2%

Awareness is higher among:

- residents for eleven to twenty years
- government employees
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources is still favorable

It is lower among:

- empty nesters
- those whose impression of Flint Hills Resources has gotten worse
- those unsure about Flint Hills Resources

## Current and Future CAC Functions

Residents were instructed:

*The purpose of the Community Advisory Council is to provide two-way communications between the community and Flint Hills Resources management. It provides members with an opportunity to discuss issues and make recommendations about environmental, safety and other issues of concern to citizens living within close proximity of the Pine Bend Refinery. It also provides a mechanism for Flint Hills Resources to receive direct feedback from the community regarding refinery operations and plans.*

*I would like to read you a list of current and future Community Advisory Council functions. For each one, please tell me how you would rate that function of the Community Advisory Council -- very important, somewhat important, not too important, or not at all important?*

Six functions were then read:

*Oversees independent monitoring of the air quality in the areas around the refinery?*

Over sixty percent of the residents of the core cities view overseeing independent monitoring of the air quality in the areas around the refinery as “very important:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY IMPORTANT . . . . .	60%	65%	52%
SOMEWHAT IMPORTANT . . . . .	30%	26%	31%
NOT TOO IMPORTANT . . . . .	7%	5%	12%
NOT AT ALL IMPORTANT . . . . .	1%	2%	1%
DON'T KNOW/REFUSED . . . . .	3%	1%	3%

The percentage drops to 52% in the outlying cities.

Importance increases among:

- government employees
- residents outside of five miles from the refinery in the core communities

It decreases among:

- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable

*Improves accessibility of information about the refinery?*

Majorities believe improving the accessibility of information about the refinery is “very important:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY IMPORTANT . . . . .	58%	63%	52%
SOMEWHAT IMPORTANT . . . . .	34%	28%	39%
NOT TOO IMPORTANT . . . . .	6%	7%	8%

NOT AT ALL IMPORTANT	1%	1%	1%
DON'T KNOW/REFUSED	1%	2%	0%

The narrowest majority is posted by residents of outlying cities.

“Important” is stated more often by:

- college graduates
- women

***Works with the refinery on initiatives to improve safety in and around the refinery?***

Over 60% of each group thinks working with the refinery on initiatives to improve safety in and around the refinery is “very important:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY IMPORTANT	68%	74%	60%
SOMEWHAT IMPORTANT	27%	23%	27%
NOT TOO IMPORTANT	4%	1%	12%
NOT AT ALL IMPORTANT	0%	0%	0%
DON'T KNOW/REFUSED	1%	1%	0%

Importance proves somewhat lower in the outlying cities.

“Important” is cited more frequently by:

- \$50,000 to \$75,000 annual income households
- residents outside of five miles from the refinery in the core communities

***Works with the refinery on initiatives to reduce the greenhouse gas emissions associated with the refinery operations?***

About 60% of residents within five miles of the plant and residents in outlying cities view working with the refinery on initiatives to reduce the greenhouse gas emissions associated with the refinery operations as “very important:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY IMPORTANT	62%	70%	59%
SOMEWHAT IMPORTANT	33%	24%	27%
NOT TOO IMPORTANT	3%	2%	7%
NOT AT ALL IMPORTANT	1%	2%	6%
DON'T KNOW/REFUSED	1%	2%	1%

In core cities outside of the five-mile radius, 70% see this function as “very important.”

“Important” is mentioned at a higher rate by:

- government employees
- women
- residents outside of five miles from the refinery in the core communities
- those whose impression of Flint Hills Resources is still unfavorable
- those aware of the CAC

***Monitors progress towards air emissions targets associated with the recent refinery expansion projects?***

About 68% of residents in the core cities rate the monitoring progress towards air emissions targets associated with the recent refinery expansion projects as “very important:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY IMPORTANT . . . . .	66%	70%	59%
SOMEWHAT IMPORTANT . . . . .	31%	27%	28%
NOT TOO IMPORTANT . . . . .	3%	1%	9%
NOT AT ALL IMPORTANT . . . . .	0%	1%	2%
DON'T KNOW/REFUSED . . . . .	1%	1%	1%

Among residents of the outlying cities, 59% similarly view this function.

“Important” is stated most frequently by:

- residents for twenty-one to thirty years
- women
- residents outside of five miles from the refinery in the core communities
- those aware of the CAC

***Holds community meetings in the area on topics of interest and concern about the Flint Hills Resources' Pine Bend Refinery?***

About 64%-70% of each group regards holding community meetings in the area on topics of interest and concern about the Flint Hills Resources' Pine Bend Refinery as “very important:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY IMPORTANT . . . . .	70%	64%	68%
SOMEWHAT IMPORTANT . . . . .	27%	32%	29%
NOT TOO IMPORTANT . . . . .	2%	2%	1%
NOT AT ALL IMPORTANT . . . . .	0%	0%	1%
DON'T KNOW/REFUSED . . . . .	2%	2%	1%

“Important” is selected most frequently by:

- residents for over thirty years
- over \$100,000 annual income households
- those aware of the CAC

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## Emergency Response Network Telephone System

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Residents were queried:

*Prior to this survey, were you aware of the Emergency Response Network Telephone System which automatically calls all residents within a three mile radius of the Pine Bend Refinery, in the event of a major industrial accident?*

Almost 50% of the respondents within five miles of the refinery are aware of the Emergency Response Network Telephone System:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
YES .....	49%	25%	20%
NO .....	51%	75%	79%
DON'T KNOW/REFUSED .....	0%	0%	1%

In the other areas, 20%-25% of the respondents are aware of the System.

“Yes” is cited more frequently by:

- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources has gotten better

“No” is mentioned at a higher rate by:

- residents of Apple Valley, Eagan, and Hastings
- those unsure about Flint Hills Resources

## CAC Website

Respondents were asked:

*Have you visited the Community Advisory Council's website on the Internet?*

About five percent of each group actually visited the CAC's website:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
YES .....	5%	5%	3%
NO .....	95%	95%	97%
DON'T KNOW/REFUSED .....	0%	0%	0%

There are no statistically significant sub-group differences.

Website visitors were then asked:

*What was the purpose of your last visit to the website -- find information about the Council, contact the Council with a question, register a complaint with the Council, or something else?*

Two purposes account for most visits: "find information about the Council" or "contact the Council with a question."

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
FIND INFORMATION .....	38%	77%	50%
CONTACT WITH QUESTION .....	38%	23%	17%
REGISTER COMPLAINT .....	13%	0%	33%
PHONE NUMBERS .....	13%	0%	0%
DON'T KNOW/REFUSED .....	0%	0%	0%

Interesting, the highest level of registered complaints occurs among residents of the outlying cities.

"Find information" is stated more often by:

- college graduates

"Register complaint" is posted more frequently by:

- those with some post-secondary experience
- \$50,000 to \$75,000 annual income households

- those whose impression of Flint Hills Resources is still unfavorable

The ease of navigation was evaluated next:

***How would you rate the ease of navigating the website -- excellent, good, only fair, or poor?***

Positive ratings decreases as distance from the Refinery increases:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
EXCELLENT .....	13%	8%	17%
GOOD .....	63%	54%	33%
ONLY FAIR .....	25%	39%	50%
POOR .....	0%	0%	0%
DON'T KNOW/REFUSED .....	0%	0%	0%

Unfavorable ratings are given more frequently by:

- residents for six to ten years

Finally, website visitors were queried:

***What further information, if any, would you like to see added to the Community Advisory Council's website?***

Within five miles of the plant, website visitors urge “safety control updates.”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	13%	46%	50%
NOTHING .....	38%	54%	50%
SAFETY CONTROL UPDATES .....	38%	0%	0%
EFFECTS OF EMISSIONS .....	13%	0%	0%

Most respondents, though, make no suggestions about providing further information.

“Nothing” is reported most frequently by:

- those whose impression of Flint Hills Resources is still favorable

“Safety control updates” are desired more often by:

- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources is still unfavorable

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## Summary and Conclusions

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Thirty percent say they were aware of the Community Advisory Council prior to the survey. The four main sources of their information are “other people,” “mailings,” “local newspapers,” and “flyers from the plant.” Fifty-six percent of the respondents aware of the CAC hold a favorable impression, 36% have neither a favorable nor unfavorable impression, and five percent are unfavorably impressed. Eighty-four percent also report awareness of the Community Awareness Council’s role in answering residents’ questions and registering complaints about the Pine Bend Refinery.

In reacting to a list of current and future Community Advisory Council functions, large majorities consider each one as “very important.” Sixty-eight percent rate “works with the refinery on initiatives to improve safety in and around the refinery.” Sixty-seven percent feel the same way about “holds community meetings in the area on topics of interest and concern about the Flint Hills Resources’ Pine Bend Refinery.” Sixty-five percent think “monitors progress towards air emissions targets associated with the recent refinery expansion projects.” Sixty-four percent think the same about “works with the refinery on initiatives to reduce greenhouse gas emissions associated with refinery operations.” Fifty-nine percent rate “oversees independent monitoring of the air quality in the areas around the refinery” as “very important.” Fifty-eight percent similarly rate “improves accessibility of information about the refinery.”

Twenty-nine percent are aware of the Emergency Response Network Telephone System which automatically calls all residents within a three-mile radius of the Pine Bend Refinery, in the event of a major industrial accident.

Only four percent report visiting the Community Advisory Council’s website on the Internet. The most often stated purpose of the last website visit is to “find information about the CAC.” Sixty-three percent positively rate the ease of navigating the website; thirty-seven percent are more critical in their evaluations. The only suggestion about additional information on the website is “safety control updates.”

# **Chapter Five: Communications**

# Communications

Flint Hills Resources' Pine Bend Refinery CAC constituencies were asked a series of questions about their sources of information. First, the primary source of information about the Refinery was established. Then, the impact of potential sources of information were assessed. Finally, the extent of their information needs with respect to the Refinery was ascertained.

## Primary Source of Information

Respondents were first asked:

*Where do you get most of your information about the Flint Hills Resources' Pine Bend Refinery -- TV advertising, radio commercials, newspaper advertisements, TV news, radio news, newspaper reports, word of mouth, or other sources? What is that source?*

The most often indicated source of information is “newspaper reports:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
TV ADVERTISING . . . . .	1%	0%	0%
RADIO COMMERCIALS . . . . .	0%	0%	0%
NEWSPAPER ADVERTISEMENTS . . . . .	1%	2%	0%
TV NEWS . . . . .	15%	8%	10%
RADIO NEWS . . . . .	2%	2%	4%
NEWSPAPER REPORTS . . . . .	36%	42%	50%
WORD OF MOUTH . . . . .	23%	27%	21%
MAILINGS . . . . .	17%	10%	4%
DON'T KNOW/REFUSED . . . . .	2%	6%	4%
WEBSITE . . . . .	1%	1%	2%
NOTHING . . . . .	1%	0%	4%
SCATTERED . . . . .	0%	2%	0%

“Word of mouth” ranks second, while “TV news” and “mailings” form a third tier.

“Newspaper reports” are key to:

- residents for eleven to thirty years
- over fifty-four year olds
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable
- those whose impression of Flint Hills Resources is still unfavorable

“Word of mouth” is posted most frequently by:

- residents for six to ten years
- government employees
- men
- those whose impression of Flint Hills Resources has gotten better

“TV news” is stated more often by:

- high school graduates
- under \$50,000 annual income households
- residents living within five miles of the refinery
- those whose impression of Flint Hills Resources has gotten worse
- those unaware of the CAC

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## Potential Sources of Information

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Residents were instructed:

*I would like to read you a list of potential sources of information about the Flint Hills Resources' Pine Bend Refinery. For each one, tell me if it would be a very effective way to reach YOU, a somewhat effective way, or not an effective way to reach YOU.*

A list of ten potential sources of information was then read:

*Information from Flint Hills Resources' sponsored events?*

“Information from Flint Hills Resources’ sponsored events” has very limited effectiveness:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY	5%	2%	3%
SOMEWHAT EFFECTIVE WAY	3%	3%	5%
NOT AN EFFECTIVE WAY	88%	93%	91%
DON'T KNOW/REFUSED	4%	2%	1%

There are no statistically significant sub-group differences.

The small percent of respondents finding this type of information effectiveness were asked a follow-up query:

***Which events would you like to see information available?***

“Plant tours” rank very highly, followed by “public meetings” and “community celebrations:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	23%	23%	39%
5K WALK .....	0%	8%	0%
PLANT TOURS .....	15%	39%	6%
ALL EVENTS .....	0%	15%	17%
PUBLIC MEETINGS .....	23%	15%	6%
COMMUNITY CELEBRATIONS ...	23%	0%	28%
FUNDRAISING EVENTS .....	8%	0%	0%
SCATTERED .....	8%	0%	6%

“Plant tours” is cited more often by:

- government employees
- women
- residents outside of five miles from the refinery in the core communities

“Public meetings” is stated more frequently by:

- those whose impression of Flint Hills Resources is still unfavorable

“All events” is mentioned more often by:

- business or corporation employees
- \$75,000 to \$100,000 annual income households

***Local radio shows?***

About one-quarter of respondents in the core communities view local radio shows as “effective:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY .....	8%	8%	7%
SOMEWHAT EFFECTIVE WAY ...	16%	18%	30%
NOT AN EFFECTIVE WAY .....	75%	72%	63%
DON'T KNOW/REFUSED .....	1%	2%	0%

Thirty-seven percent of residents in the outlying cities view them as effective sources of information.

“Somewhat effective way” is stated more often by:

- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable

“Not an effective way” is posted at a higher rate by:

- those unsure about Flint Hills Resources
- those aware of the CAC

***Mailings to your home?***

“Mailings to your home” is an effective way to contact residents in all three groups:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY . . . . .	60%	41%	44%
SOMEWHAT EFFECTIVE WAY . . . . .	24%	35%	39%
NOT AN EFFECTIVE WAY . . . . .	17%	23%	18%
DON'T KNOW/REFUSED . . . . .	0%	0%	0%

“Very effective way” is stated more often by:

- residents for eleven to twenty years
- self-employed residents
- over \$100,000 annual income households
- residents living within five miles of the refinery
- those aware of the CAC

“Somewhat effective way” is mentioned more often by:

- residents for six to ten years
- under \$50,000 annual income households
- residents of Apple Valley, Eagan, and Hastings
- those unaware of the CAC

“Not an effective way” is cited more frequently by:

- those whose impression of Flint Hills Resources has gotten worse
- those unsure about Flint Hills Resources
- those unaware of the CAC

***Local newspaper stories?***

At least 73% of each group consider local newspaper stories as effective sources of information:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY . . . . .	44%	35%	38%
SOMEWHAT EFFECTIVE WAY . . .	30%	38%	43%
NOT AN EFFECTIVE WAY . . . . .	27%	28%	19%
DON'T KNOW/REFUSED . . . . .	0%	0%	0%

“Very effective way” is selected at a higher rate by:

- over \$100,000 annual income households
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Somewhat effective way” is posted more often by:

- \$50,000 to \$75,000 annual income households
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources has gotten better
- those unaware of the CAC

“Not an effective way” is chosen more often by:

- under \$50,000 annual income households
- those unsure about Flint Hills Resources

### *Local newspaper advertising?*

“Local newspaper advertising” is a moderately effective way to communicate information about the Refinery:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY . . . . .	10%	12%	5%
SOMEWHAT EFFECTIVE WAY . . .	23%	26%	39%
NOT AN EFFECTIVE WAY . . . . .	64%	61%	55%
DON'T KNOW/REFUSED . . . . .	3%	1%	0%

“Somewhat effective way” is indicated more frequently by:

- residents for twenty-one to thirty years
- residents not currently working
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources has gotten better
- those whose impression of Flint Hills Resources has gotten worse

Respondents seeing local newspaper advertising as effective were asked a follow-up question:

***Which local newspaper do you read most often?***

The “Sun Current” is the most read newspaper in each region:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
UNSURE .....	4%	2%	1%
SUN CURRENT .....	53%	67%	36%
THE REVIEW .....	19%	12%	0%
TOWN PAGES .....	2%	3%	0%
THIS WEEK .....	6%	13%	34%
STAR GAZETTE .....	14%	0%	25%
TRADEWINDS .....	0%	0%	2%
CHRONICLE .....	0%	0%	2%
SCATTERED .....	2%	3%	0%

“This Week” and the “Star Gazette” are also popular among residents of outlying cities.

“Sun Current” is key to:

- residents for six to ten years
- men
- residents outside of five miles from the refinery in the core communities

“This Week” is reported most frequently by:

- forty-five to fifty-four year olds
- over \$100,000 annual income households
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable

“Star Gazette” is posted more often by:

- high school graduates
- women
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources has gotten better

***Stories in the major daily newspapers?***

Stories in the major daily newspapers prove moderately effective:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY .....	22%	23%	17%
SOMEWHAT EFFECTIVE WAY ...	31%	41%	44%
NOT AN EFFECTIVE WAY .....	47%	35%	39%

DON'T KNOW/REFUSED ..... 0% ..... 2% ..... 0%

“Very effective way” is stated more often by:

- self-employed residents
- those with some post-secondary experience
- over \$100,000 annual income households
- those whose impression of Flint Hills Resources has gotten better

“Somewhat effective way” is indicated more often by:

- under \$50,000 annual income households
- those whose impression of Flint Hills Resources has gotten better

“Not an effective way” is selected at a higher rate by:

- residents living within five miles of the refinery
- those unsure about Flint Hills Resources

***Conversations with Refinery employees you know?***

“Conversations with Refinery employees you know” is a modestly effective way to inform residents:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY .....	14%	13%	11%
SOMEWHAT EFFECTIVE WAY ...	18%	20%	14%
NOT AN EFFECTIVE WAY .....	65%	63%	72%
DON'T KNOW/REFUSED .....	3%	4%	3%

“Very effective way” is cited more often by:

- government employees
- those whose impression of Flint Hills Resources has gotten better
- those aware of the CAC

“Somewhat effective way” is mentioned more often by:

- those whose impression of Flint Hills Resources has gotten better

“Not an effective way” is indicated at a higher rate by:

- empty nesters
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable
- those unaware of the CAC

***Websites on the Internet?***

“Websites on the Internet” are most effective in communicating with residents of outlying cities:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY . . . . .	12%	5%	10%
SOMEWHAT EFFECTIVE WAY . . . . .	18%	19%	36%
NOT AN EFFECTIVE WAY . . . . .	66%	71%	52%
DON'T KNOW/REFUSED . . . . .	4%	5%	1%

It is least effective among core cities residents outside of a five-mile radius from the plant.

“Somewhat effective way” is stated most frequently by:

- residents for twenty-one to thirty years
- \$75,000 to \$100,000 annual income households
- residents of Apple Valley, Eagan, and Hastings

“Not an effective way” is selected more often by:

- residents for eleven to twenty years
- residents for over thirty years
- over fifty-four year olds
- empty nesters
- retirees
- residents outside of five miles from the refinery in the core communities
- those unsure about Flint Hills Resources

***Cable television broadcasts of presentations to your City Council or Township Board?***

“Cable television broadcasts of presentation to your City Council or Township Board” proves to have a modest impact:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY . . . . .	8%	5%	7%
SOMEWHAT EFFECTIVE WAY . . . . .	16%	13%	16%
NOT AN EFFECTIVE WAY . . . . .	75%	79%	74%
DON'T KNOW/REFUSED . . . . .	1%	4%	3%

“Somewhat effective way” is cited most frequently by:

- residents for six to ten years

- forty-five to fifty-four year olds
- those unaware of the CAC

***Conversations with current or former Citizen Advisory Council members you know?***

“Conversations with current or former Citizen Advisory Council members you know” is only minimally effective among core cities residents:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
VERY EFFECTIVE WAY . . . . .	4%	2%	0%
SOMEWHAT EFFECTIVE WAY . . . . .	9%	11%	3%
NOT AN EFFECTIVE WAY . . . . .	84%	80%	92%
DON'T KNOW/REFUSED . . . . .	3%	8%	4%

It is not at all effective in outlying communities.

“Not an effective way” is posted at a higher rate by:

- residents not currently working
- over \$100,000 annual income households
- residents of Apple Valley, Eagan, and Hastings
- those unaware of the CAC

**Receive Enough Information**

Respondents were asked:

***Do you feel you receive enough information about the Flint Hills Resources' Pine Bend Refinery? Would you like to receive more information about the Pine Bend Refinery in Rosemount?***

Majorities of each group report they receive enough information about the Flint Hills Resources' Pine Bend Refinery:

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
YES/YES . . . . .	18%	9%	20%
YES/NO . . . . .	44%	42%	42%
NO/YES . . . . .	29%	37%	28%
NO/NO . . . . .	9%	13%	9%
DON'T KNOW/REFUSED . . . . .	0%	0%	0%

Even so, about 48% of each group would like to receive more information.

“Yes/Yes” is cited more often by:

- \$75,000 to \$100,000 annual income households
- residents of Apple Valley, Eagan, and Hastings
- those whose impression of Flint Hills Resources is still favorable
- those aware of the CAC

“Yes/No” is posted more often by:

- residents for over thirty years
- over fifty-four year olds
- retirees
- men
- those whose impression of Flint Hills Resources is still favorable

“No/Yes” is mentioned more often by:

- residents for five years or less
- eighteen to forty-four year olds
- households with children
- women
- residents outside of five miles from the refinery in the core communities
- those whose impression of Flint Hills Resources is still unfavorable
- those whose impression of Flint Hills Resources has gotten worse

“No/No” is stated most frequently by:

- those unsure about Flint Hills Resources
- those unaware of the CAC

Respondents wanting more information were asked a follow-up question:

***What type of information would you be most interested in receiving -- safety, environmental, refinery processes and procedures or something else? What would that be?***

The most requested type of information in all three groups is “environmental information:”

	WITHIN FIVE MILES	OUTSIDE FIVE MILES	OUTLYING CITIES
SAFETY .....	31%	33%	29%
ENVIRONMENTAL .....	56%	44%	56%
PROCESSES/PROCEDURES .....	8%	17%	10%
EVERYTHING .....	3%	5%	3%
DON'T KNOW/REFUSED .....	1%	1%	1%

The second most requested type of information is “safety information.”

“Safety” is key to:

- households with children
- business or corporation employees
- those aware of the CAC

“Environmental” is desired most frequently by:

- over fifty-four year olds
- residents not currently working
- those unaware of the CAC

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## Summary and Conclusions

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“Newspaper reports” are a major source of information about the Flint Hills Resources’ Pine Bend Refinery, cited by 44%. Twenty-four percent point to “the grapevine.” Ten percent rely upon “television news,” and nine percent, “mailings.”

The effectiveness of ten potential sources of information about the Refinery. The table below indicates the percentage of area residents who consider each source as “very effective:”

<i>Source of Information</i>	<i>Very Effective</i>
Mailings to your home	47%
Local newspaper stories	38%
Stories in the major daily newspapers	21%
Conversations with Refinery employees you know	13%
Local newspaper advertising	9%
Websites on the Internet	9%
Local radio shows	8%
Cable television broadcasts of presentations to your City Council or Township Board	6%
Information from Flint Hills Resources’ sponsored events	3%
Conversations with current or former Citizen Advisory Council members you know	2%

Fifty-seven percent feel they currently receive enough information about Flint Hills Resources’

Pine Bend Refinery; forty-three percent, however, think they do not receive enough information. Forty-six percent report they would like to receive more information, particularly on environmental and safety issues. Interestingly, 11% of the sample does not feel informed nor do they wish further information.

# **Chapter Six: Concluding Thoughts**

## Concluding Thoughts

The following conclusions can be drawn from this analysis:

1. Geography divides the CAC constituency into three different groups with differing information needs:
  - a. Residents living within five miles of the Pine Bend Refinery possess a high level of knowledge about both Flint Hills Resources and the Citizen Advisory Council. They currently rely upon four information sources: newspaper reports, the grapevine, television news, and mailings. They find mailings to their home, especially, and local newspaper stories as particularly effective communications channels.
  - b. Residents living in Rosemount and Inver Grove Heights outside of the five-mile radius possess a general amount of information, but have very few details about the company and the CAC. They principally rely upon newspaper reports and the grapevine for information about the Refinery. Three sources of information are deemed especially effective: mailings to their home, local newspaper stories, and major daily newspaper stories.
  - c. Residents living in the periphery cities of Hastings, Apple Valley, and Eagan have very limited knowledge about the Flint Hills Resources, the Pine Bend Refinery, and the Citizen Advisory Council. They base their current knowledge on newspaper reports. But, in the future, mailings to homes and local newspaper stories will be very effective information sources.

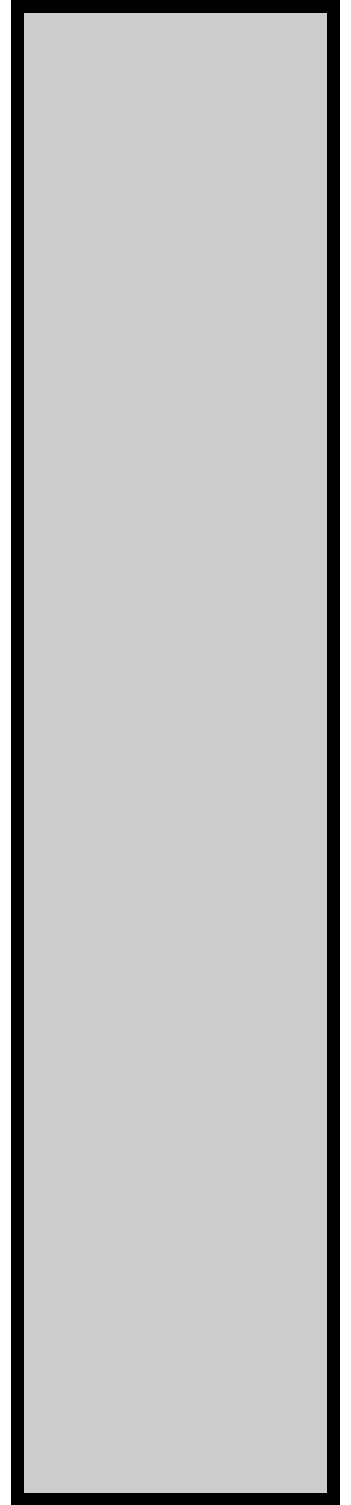
Depending on the message and the target group, then, tactics and strategy can be melded to provide the most cost-effective reach.

2. Majorities in each region consider the six functions of the Community Advisory Council as “very important.” Holding community meetings scored the highest level of importance. But, in light of previous low attendance, the CAC may need to consider the ways in which the meetings are publicized, relying on multiple low-cost communications channels, and structured, keeping the meetings short, to the point, and narrowly focused.
3. Both the Pine Bend Refinery and the CAC need to undertake efforts to increase the reach of their websites. Previous studies of similar situations suggest three means of publicizing the availability of the electronic information: city and school newsletters, inserts in local newspapers, and advertising on local government channels. A multi-pronged effort should drive a significant percentage of residents to the website, particularly if something especially noteworthy is posted.

4. Finally, and as a long term effort, the CAC should consider branding itself. For the most part, the public, and many members, view themselves as the independent monitors and complaint bureau for the Pine Bend Refinery. That view will limit both the visibility and the legitimacy of the group. The CAC could play a much more robust role if it tied itself more directly to the interests of area residents. After all is said and done, the CAC is there to contribute and protect the quality of life of area residents with regard to the environment. While its focus is upon Flint Hills Resources, the Council plays a key role in the community. As such, the CAC needs to reposition itself and provide a succinct answer to the question, “Why should I care about this group?”



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