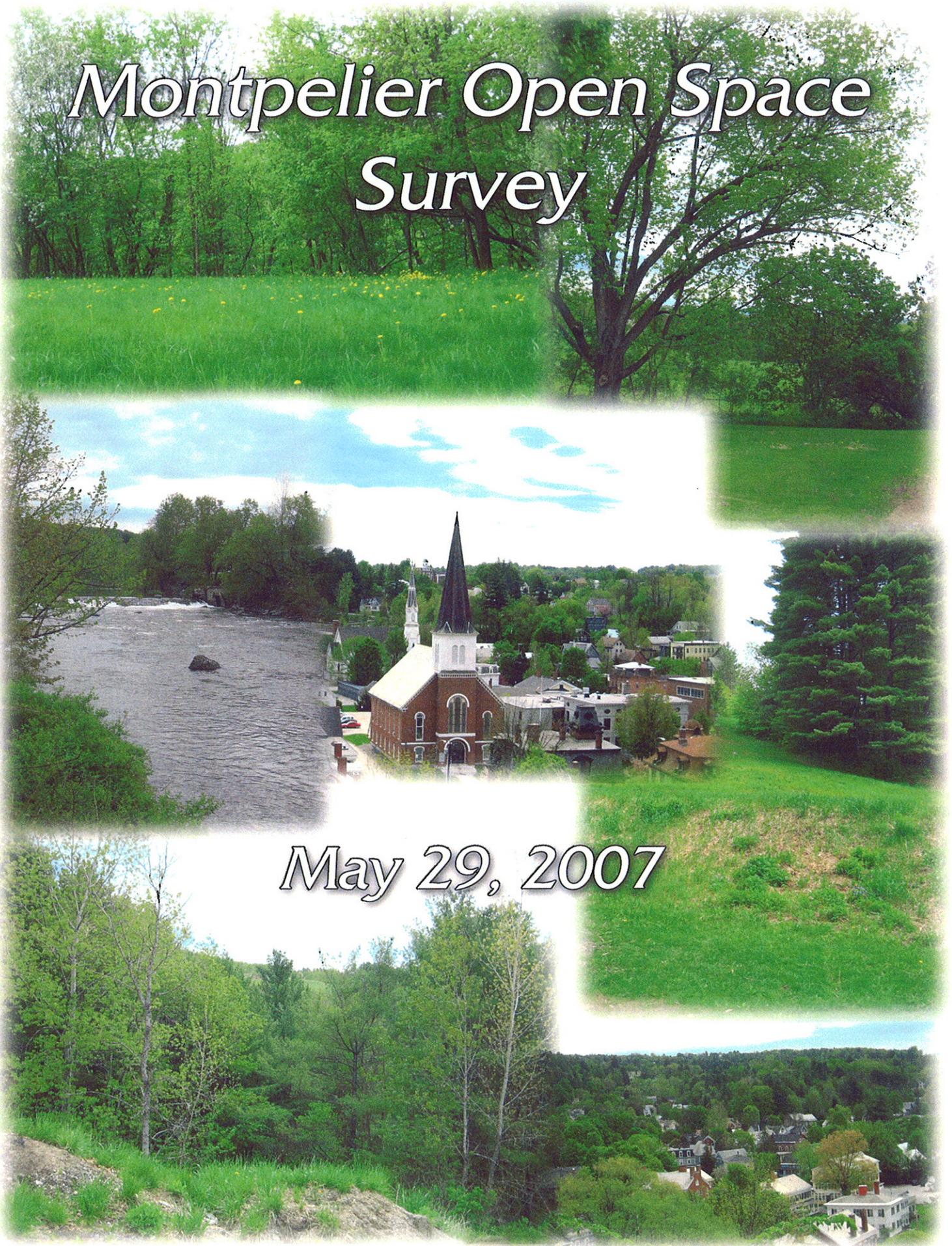


Montpelier Open Space Survey



May 29, 2007

MONTPELIER HIGH SCHOOL



5 High School Drive
Montpelier, Vermont 05602
Office: 225-8000
Guidance: 225-8050
Fax: 223-9227

May 18, 2007

Dear Commissioner,

Attached you will find the Montpelier Open Space Survey that was developed, administered and analyzed by the Montpelier High School Advanced Statistics class with the support and guidance of Montpelier city commissions and personnel.

We have enjoyed using our academic skills and knowledge during this yearlong service learning project and it is our hope that the survey results will provide valuable information for your discussions and decision making processes. Thank you for the opportunity to collaborate with you and take part as active citizens in our community.

Respectfully,

Advanced Statistics Class
Sue Beem, Teacher

Cc: William Frasier, City Manager
Peter Evans, Principal

Open Space Survey

This survey is a joint project of the Montpelier Conservation Commission and the Montpelier High School statistics class. It is our hope that survey results will be used to guide the work of city commissions. We would appreciate your honest input on the following questions.

Because the survey is created and read by a computer program, please mark with a **pencil** only **one response per question**. Fill in each circle completely. The squares on each corner of the page represent a code for the data to be ready by the computer so please take special care not to mark the squares in any way.

1. How important do you feel it is to preserve/create open space in Montpelier for:

Response Definition: 1=Not Important 2=Somewhat Important 3=Important 4=Very Important 5=Essential

- | | 1 | 2 | 3 | 4 | 5 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| A. open space for conservation of water and air | <input type="radio"/> |
| B. open space for wildlife conservation | <input type="radio"/> |
| C. the natural beauty of the area | <input type="radio"/> |
| D. open space to attract tourists..... | <input type="radio"/> |
| E. a balance between developed and undeveloped land | <input type="radio"/> |
| F. neighborhood parks | <input type="radio"/> |
| G. playgrounds | <input type="radio"/> |
| H. community gardens | <input type="radio"/> |
| I. recreation fields: baseball/soccer, etc. | <input type="radio"/> |
| J. hiking/skiing trails | <input type="radio"/> |
| K. farmlands and agriculture | <input type="radio"/> |
| L. other (please comment within the square boundary provided): | <input type="radio"/> |

2. From the list above, which three (3) do you feel are the *highest* open space priorities for Montpelier?

- | | A | B | C | D | E | F | G | H | I | J | K | L |
|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1st | <input type="radio"/> |
| 2nd | <input type="radio"/> |
| 3rd | <input type="radio"/> |

3. To preserve open space, how likely would you be to:

Response Definition: 1=Not likely 2=Somewhat likely 3=Likely 4=Very likely 5=Definitely

- | | 1 | 2 | 3 | 4 | 5 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| vote for city to purchase land..... | <input type="radio"/> |
| support a tax increase | <input type="radio"/> |
| donate money to buy land | <input type="radio"/> |
| donate an easement to provide trail access..... | <input type="radio"/> |
| donate an easement, on some portion of your property, to protect it as open space | <input type="radio"/> |
| help fund-raise or work in some other volunteer capacity | <input type="radio"/> |
| donate land to the city | <input type="radio"/> |
| sell land to the city at below market value | <input type="radio"/> |

Open Space Survey

4. Should the city protect some open space through regulation by

Response Definition: Y=Yes N=No

- | | Y | N |
|---|-----------------------|-----------------------|
| rezoning undeveloped land by requiring the clustering of new houses near roads and services, protecting blocks of open space (same number of houses allowed but "clustered")? | <input type="radio"/> | <input type="radio"/> |
| rezoning portions of undeveloped land to preserve it as part of new housing developments (just applies to larger developments)? | <input type="radio"/> | <input type="radio"/> |
| rezoning undeveloped land to conserve it as open space (reduction of landowner's current development rights)? | <input type="radio"/> | <input type="radio"/> |
| open space should not be protected through zoning regulations? | <input type="radio"/> | <input type="radio"/> |

5. How would you balance open space protection and land development in Montpelier?

Response Definition: 1=Develop all lands possible 2=Develop about 3/4 of land but preserve some open space 3=Balance the two equally 4=Develop about 1/4 of land but preserve most open space 5=Preserve all remaining open space

- | 1 | 2 | 3 | 4 | 5 |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

6. How important are the the following issues in Montpelier?

Response Definition: 1=Least important 2=Somewhat important 3=important 4=Very important 5=Most important

- | | 1 | 2 | 3 | 4 | 5 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| More and higher paying jobs..... | <input type="radio"/> |
| Improved parking and traffic management..... | <input type="radio"/> |
| More housing..... | <input type="radio"/> |
| More commercial development..... | <input type="radio"/> |
| Open space..... | <input type="radio"/> |

7. Do you own or rent the apartment or house in which you are currently living?

Response Definition: O=Own R=Rent

- | O | R |
|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

8. If you own your home, what size is your lot?

Response Definition: 1=1 acre or less 2=more than 1 acre but not more than 5 acres 3=more than 5 acres

- | 1 | 2 | 3 |
|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

9. In walking distance, how close do you live to publicly accessible open space?

Response Definition: 1=less than 5 minutes 2=between 5 and 10 minutes 3=more than 10 minutes

- | 1 | 2 | 3 |
|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

10. Which of the following best describes your total annual household income?

Response Definition: 1=Less than \$24,999 2=\$25,000 to \$34,999 3=\$35,000 to \$44,999 4=\$45,000 to \$54,999 5=\$55,000 to \$79,999 6=\$80,000 to \$99,999 7=\$100,000 or more 8=Prefer not to say

- | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Please feel free to enclose comments or concerns regarding open space in Montpelier on a separate sheet of paper.



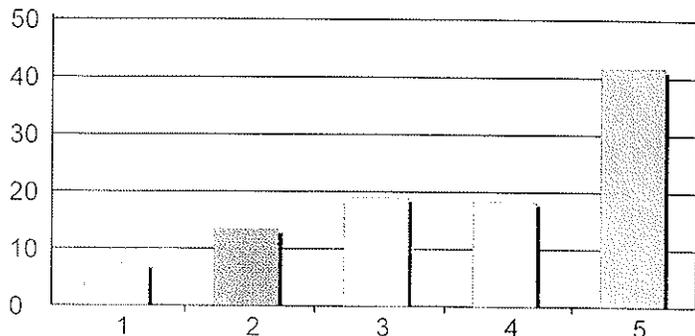
Open Space Survey

Creation Date: 4/25/2007

Time Interval: 4/6/2007 to 4/25/2007

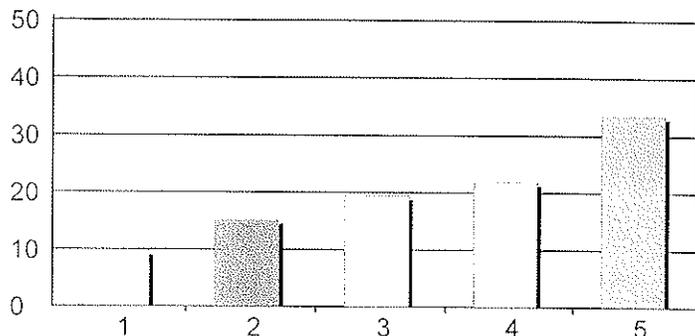
Total Respondents: 165

A. open space for conservation of water and air



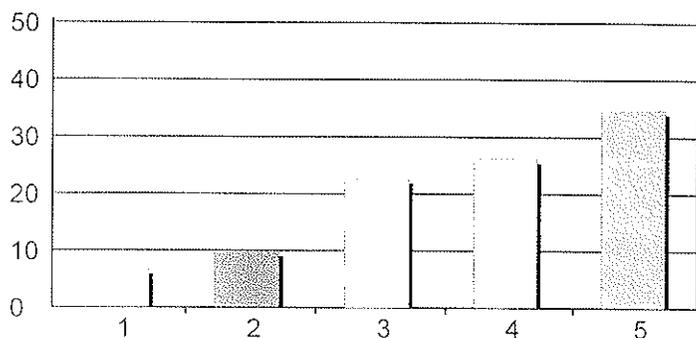
1. Not Important	12	7%
2. Somewhat Important	22	13%
3. Important	31	19%
4. Very Important	30	18%
5. Essential	68	42%
Total Responses:	163	
Mean: 3.74	Standard Deviation: 1.32	

B. open space for wildlife conservation



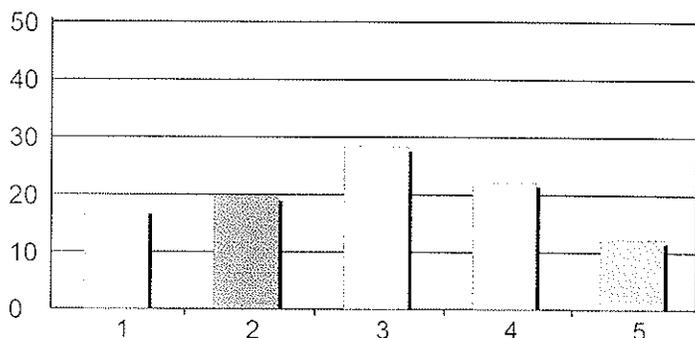
1. Not Important	16	10%
2. Somewhat Important	25	15%
3. Important	32	20%
4. Very Important	36	22%
5. Essential	55	34%
Total Responses:	164	
Mean: 3.54	Standard Deviation: 1.35	

C. the natural beauty of the area



1. Not Important	11	7%
2. Somewhat Important	16	10%
3. Important	37	23%
4. Very Important	43	26%
5. Essential	57	35%
Total Responses:	164	
Mean: 3.73	Standard Deviation: 1.23	

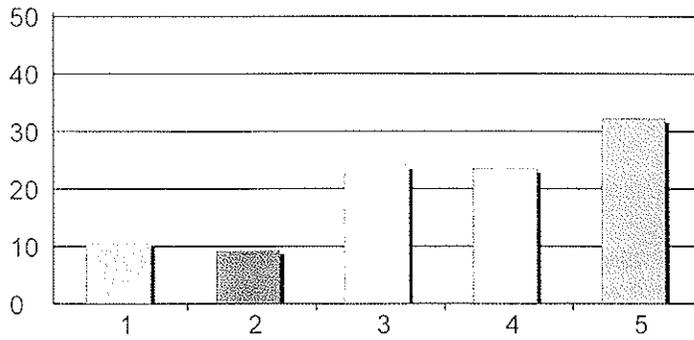
D. open space to attract tourists



1. Not Important	28	17%
2. Somewhat Important	32	20%
3. Important	46	28%
4. Very Important	36	22%
5. Essential	20	12%
Total Responses:	162	
Mean: 2.93	Standard Deviation: 1.27	

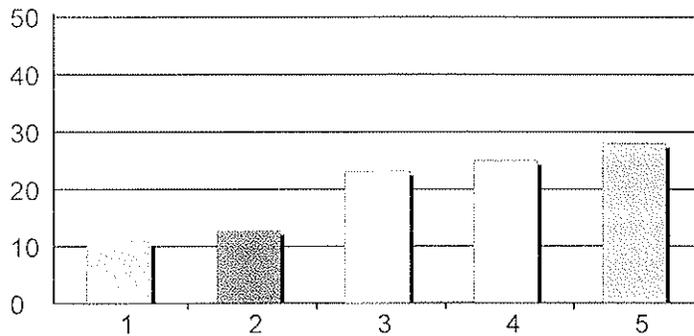
Open Space Survey

E. a balance between developed and undeveloped land



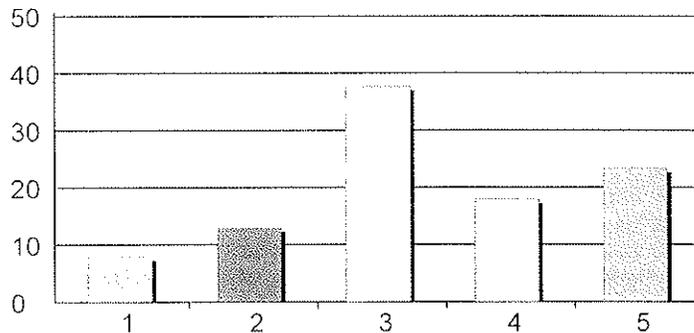
1. Not Important	17	11%
2. Somewhat Important	15	9%
3. Important	39	24%
4. Very Important	38	24%
5. Essential	52	32%
Total Responses:	161	
Mean: 3.58	Standard Deviation: 1.31	

F. neighborhood parks



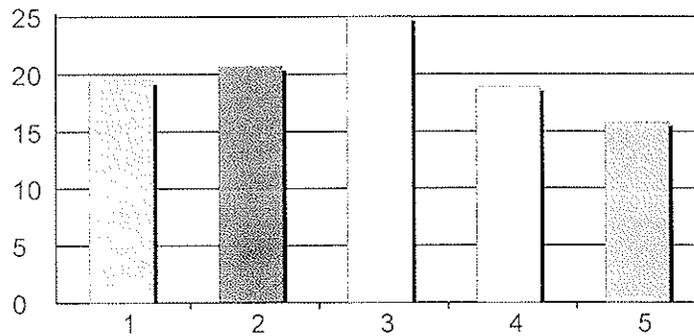
1. Not Important	18	11%
2. Somewhat Important	21	13%
3. Important	38	23%
4. Very Important	41	25%
5. Essential	46	28%
Total Responses:	164	
Mean: 3.46	Standard Deviation: 1.32	

G. playgrounds



1. Not Important	13	8%
2. Somewhat Important	21	13%
3. Important	61	38%
4. Very Important	29	18%
5. Essential	38	23%
Total Responses:	162	
Mean: 3.36	Standard Deviation: 1.20	

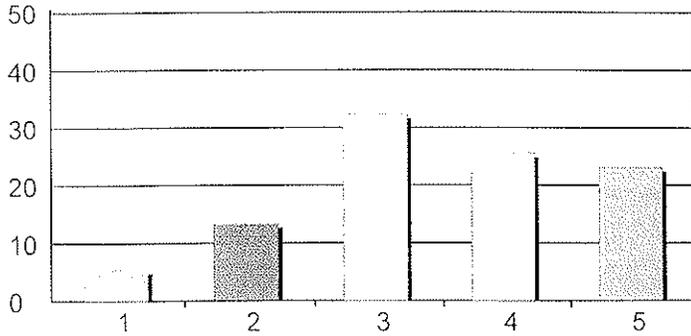
H. community gardens



1. Not Important	32	20%
2. Somewhat Important	34	21%
3. Important	41	25%
4. Very Important	31	19%
5. Essential	26	16%
Total Responses:	164	
Mean: 2.91	Standard Deviation: 1.35	

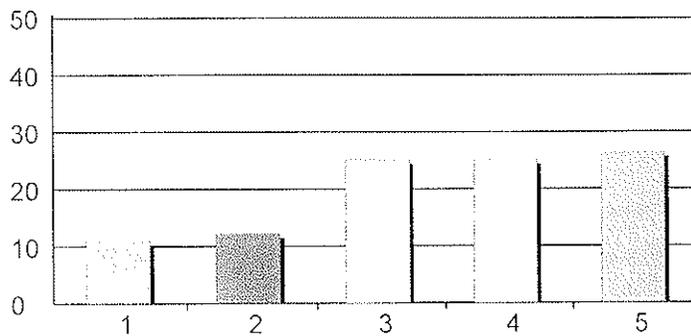
Open Space Survey

I. recreation fields: baseball/soccer, etc.



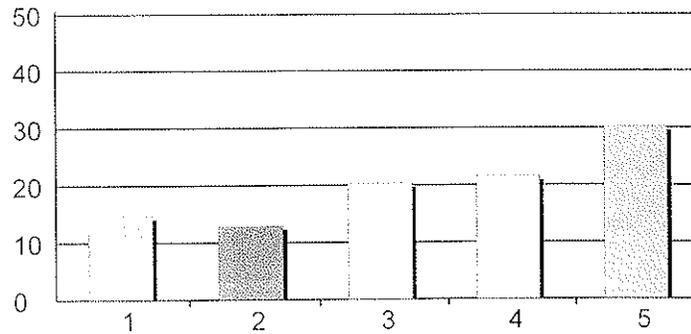
1. Not Important	9	5%
2. Somewhat Important	22	13%
3. Important	53	32%
4. Very Important	42	26%
5. Essential	38	23%
Total Responses:	164	
Mean: 3.48	Standard Deviation: 1.15	

J. hiking/skiing trails



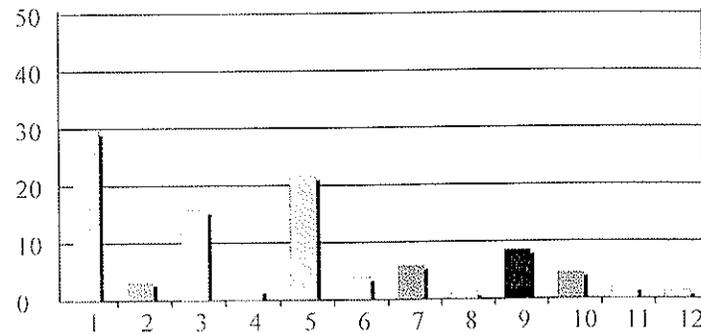
1. Not Important	18	11%
2. Somewhat Important	20	12%
3. Important	41	25%
4. Very Important	41	25%
5. Essential	43	26%
Total Responses:	163	
Mean: 3.44	Standard Deviation: 1.30	

K. farmlands and agriculture



1. Not Important	24	15%
2. Somewhat Important	21	13%
3. Important	33	20%
4. Very Important	35	22%
5. Essential	49	30%
Total Responses:	162	
Mean: 3.40	Standard Deviation: 1.42	

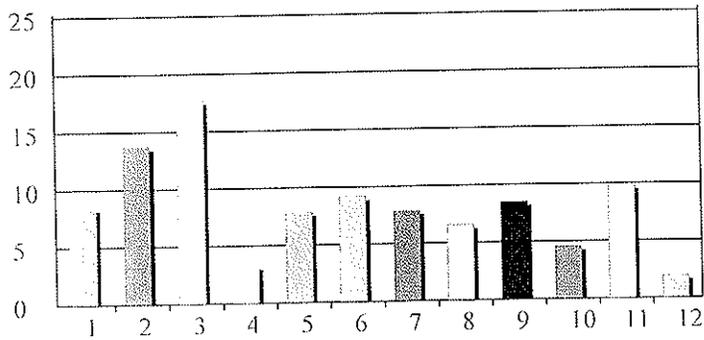
Ist



1. A	45	30%
2. B	5	3%
3. C	24	16%
4. D	3	2%
5. E	33	22%
6. F	6	4%
7. G	9	6%
8. H	2	1%
9. I	13	9%
10. J	7	5%
11. K	3	2%
12. L	2	1%
Total Responses:	152	
Mean: 4.36	Standard Deviation: 3.10	

Open Space Survey

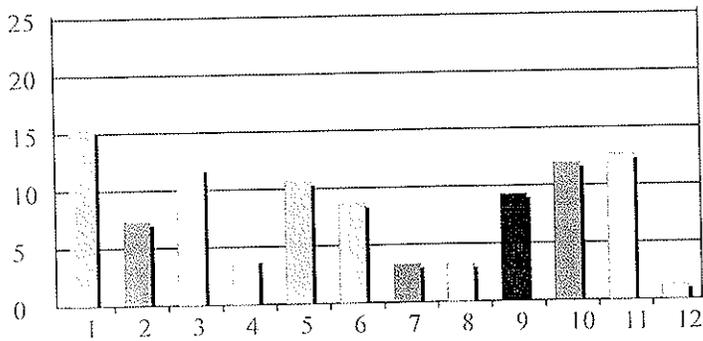
2nd



1. A	13	9%
2. B	21	14%
3. C	27	18%
4. D	5	3%
5. E	12	8%
6. F	14	9%
7. G	12	8%
8. H	10	7%
9. I	13	9%
10. J	7	5%
11. K	15	10%
12. L	3	2%
Total Responses:	152	

Mean: 5.61 Standard Deviation: 3.33

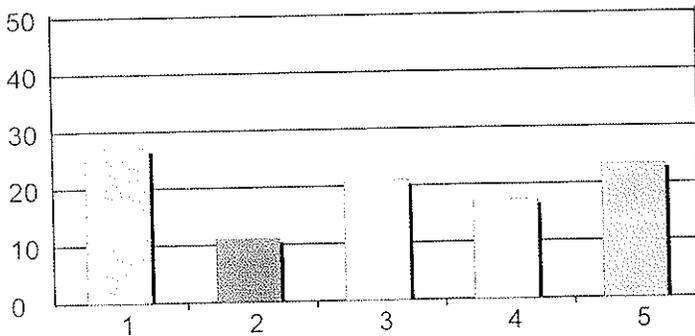
3rd



1. A	23	15%
2. B	11	7%
3. C	18	12%
4. D	6	4%
5. E	16	11%
6. F	13	9%
7. G	5	3%
8. H	5	3%
9. I	14	9%
10. J	18	12%
11. K	19	13%
12. L	2	1%
Total Responses:	150	

Mean: 5.97 Standard Deviation: 3.61

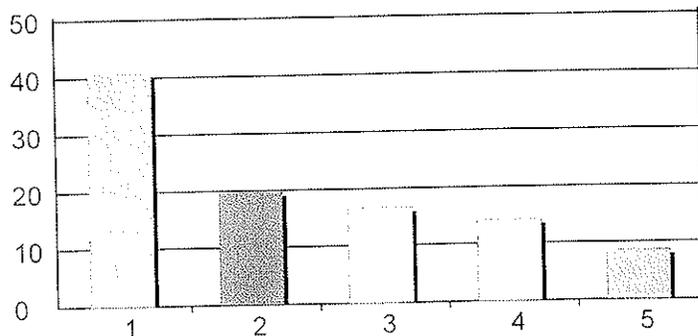
vote for city to purchase land



1. Not likely	44	27%
2. Somewhat likely	18	11%
3. Likely	34	21%
4. Very likely	28	17%
5. Definitely	38	23%
Total Responses:	162	

Mean: 2.99 Standard Deviation: 1.52

support a tax increase

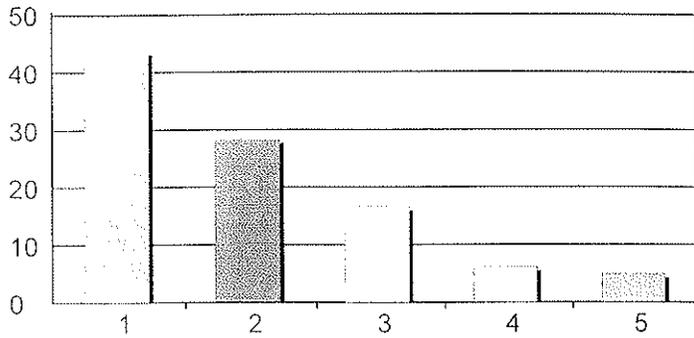


1. Not likely	66	41%
2. Somewhat likely	32	20%
3. Likely	27	17%
4. Very likely	23	14%
5. Definitely	14	9%
Total Responses:	162	

Mean: 2.30 Standard Deviation: 1.36

Open Space Survey

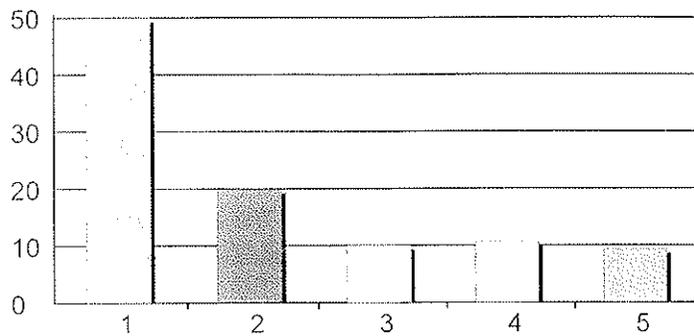
donate money to buy land



- 1. Not likely 71 44%
- 2. Somewhat likely 46 28%
- 3. Likely 27 17%
- 4. Very likely 10 6%
- 5. Definitely 8 5%

Total Responses: 162
 Mean: 2.00 Standard Deviation: 1.14

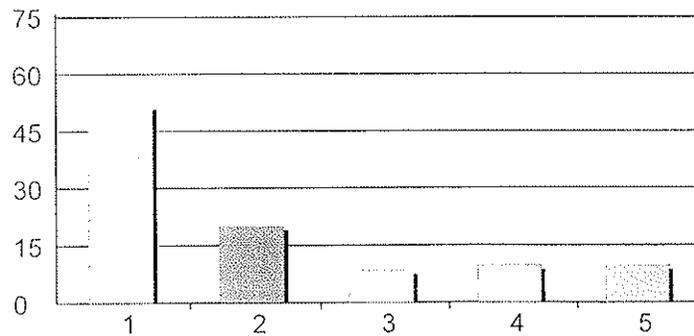
donate an easement to provide trail access



- 1. Not likely 75 50%
- 2. Somewhat likely 30 20%
- 3. Likely 15 10%
- 4. Very likely 16 11%
- 5. Definitely 14 9%

Total Responses: 150
 Mean: 2.09 Standard Deviation: 1.37

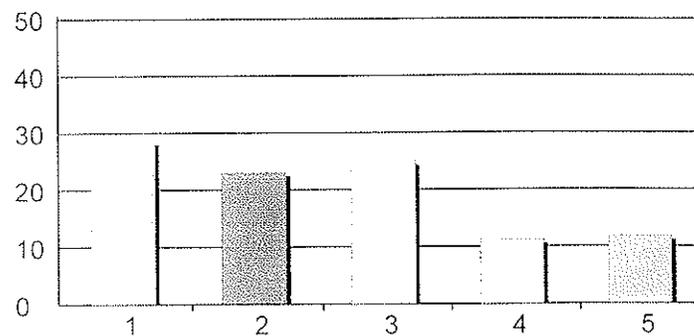
donate an easement, on some portion of your property, to protect it as open space



- 1. Not likely 80 52%
- 2. Somewhat likely 31 20%
- 3. Likely 13 8%
- 4. Very likely 15 10%
- 5. Definitely 15 10%

Total Responses: 154
 Mean: 2.05 Standard Deviation: 1.37

help fund-raise or work in some other volunteer capacity

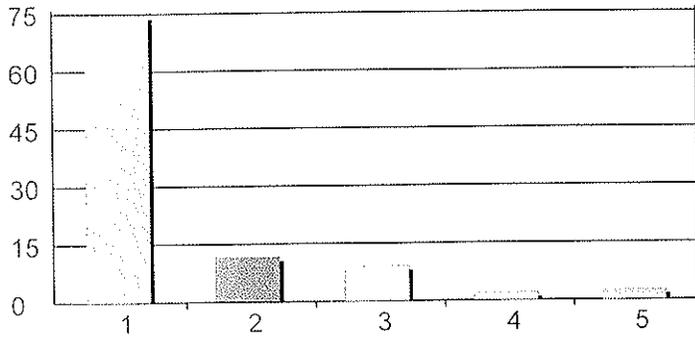


- 1. Not likely 46 29%
- 2. Somewhat likely 37 23%
- 3. Likely 40 25%
- 4. Very likely 18 11%
- 5. Definitely 19 12%

Total Responses: 160
 Mean: 2.54 Standard Deviation: 1.33

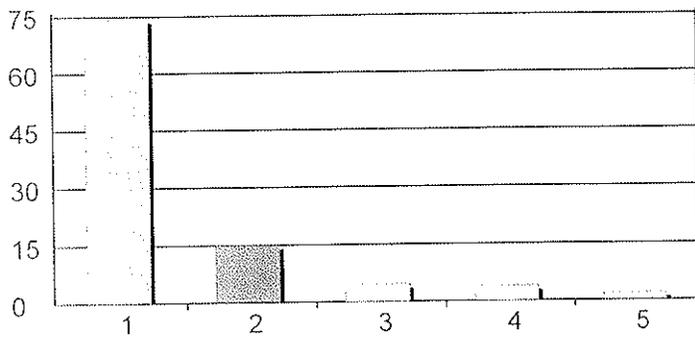
Open Space Survey

donate land to the city



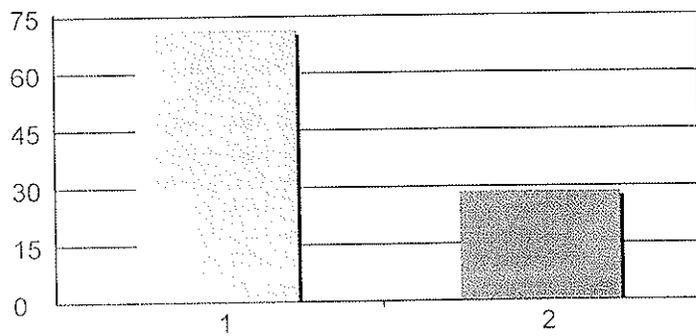
1. Not likely	115	75%
2. Somewhat likely	18	12%
3. Likely	14	9%
4. Very likely	3	2%
5. Definitely	4	3%
Total Responses:	154	
Mean: 1.46	Standard Deviation: 0.93	

sell land to the city at below market value



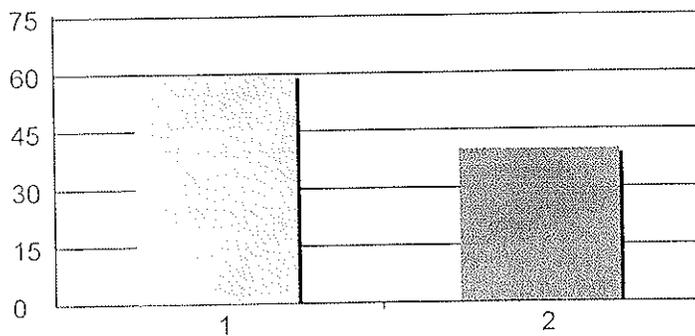
1. Not likely	114	75%
2. Somewhat likely	23	15%
3. Likely	7	5%
4. Very likely	6	4%
5. Definitely	3	2%
Total Responses:	153	
Mean: 1.44	Standard Deviation: 0.90	

rezoning undeveloped land by requiring the clustering of new houses near roads and services, protecting blocks of open space (same number of houses allowed but "clustered")?



1. Yes	114	71%
2. No	46	29%
Total Responses:	160	
Mean: 1.29	Standard Deviation: 0.45	

rezoning portions of undeveloped land to preserve it as part of new housing developments (just applies to larger developments)?

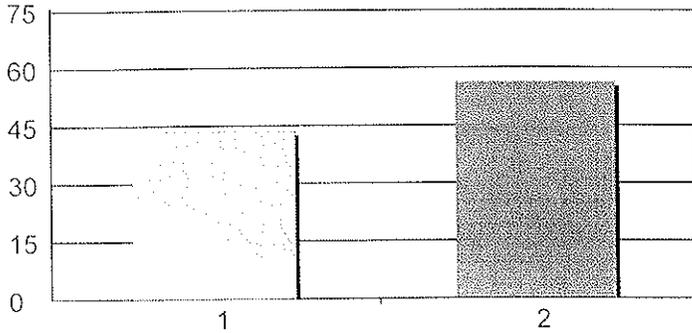


1. Yes	90	60%
2. No	60	40%
Total Responses:	150	
Mean: 1.40	Standard Deviation: 0.49	

Open Space Survey

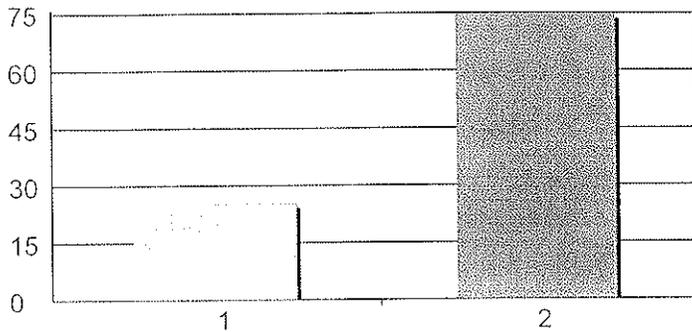
rezoning undeveloped land to conserve it as open space (reduction of landowner's current development rights)?

1. Yes	65	44%
2. No	84	56%
Total Responses:	149	
Mean: 1.56	Standard Deviation: 0.50	

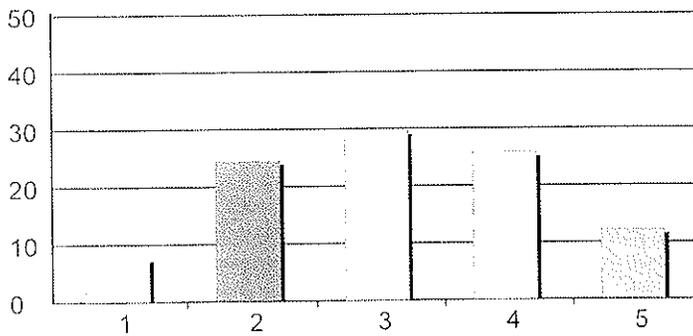


open space should not be protected through zoning regulations?

1. Yes	34	25%
2. No	100	75%
Total Responses:	134	
Mean: 1.75	Standard Deviation: 0.44	

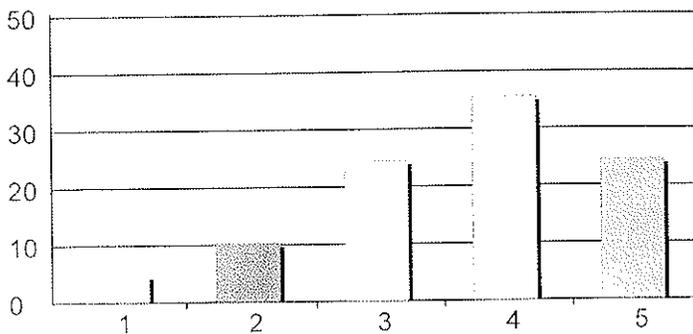


1. Develop all lands possible	12	8%
2. Develop about 3/4 of land but preserve some ...	38	25%
3. Balance the two equally	46	30%
4. Develop about 1/4 of land but preserve most o...	40	26%
5. Preserve all remaining open space	19	12%
Total Responses:	155	
Mean: 3.10	Standard Deviation: 1.14	



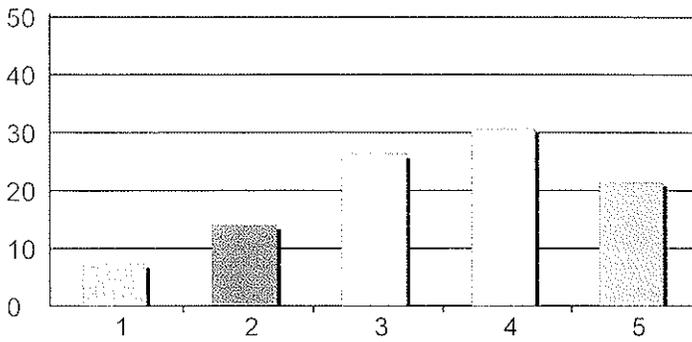
More and higher paying jobs.

1. Least Important	8	5%
2. Somewhat Important	17	10%
3. Important	40	25%
4. Very Important	58	36%
5. Most Important	40	25%
Total Responses:	163	
Mean: 3.64	Standard Deviation: 1.11	



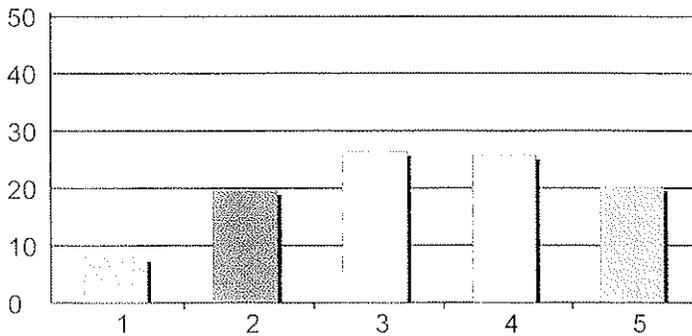
Open Space Survey

Improved parking and traffic management.



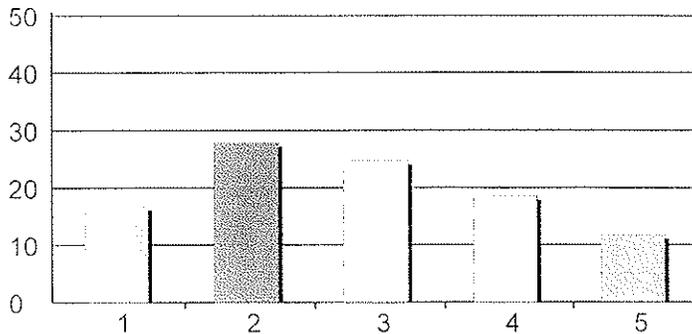
1. Least Important	12	7%
2. Somewhat Important	23	14%
3. Important	43	26%
4. Most Important	50	31%
5. Urgent	35	21%
Total Responses:	163	
Mean: 3.45	Standard Deviation: 1.19	

More housing.



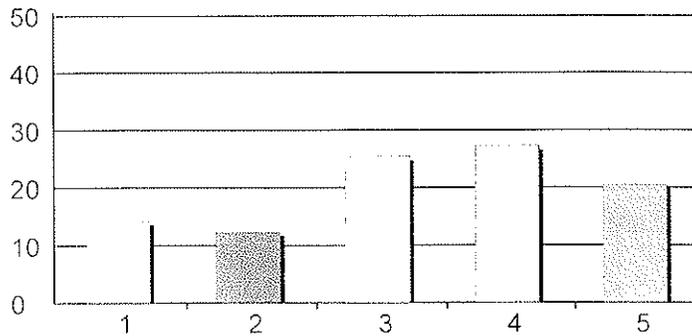
1. Least Important	13	8%
2. Somewhat Important	32	20%
3. Important	43	26%
4. Most Important	42	26%
5. Urgent	33	20%
Total Responses:	163	
Mean: 3.31	Standard Deviation: 1.22	

More commercial development.



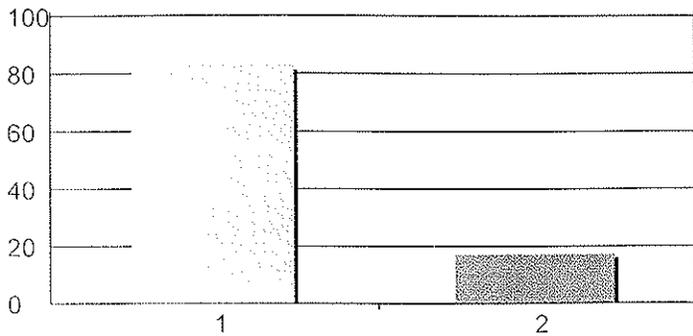
1. Least Important	27	17%
2. Somewhat Important	45	28%
3. Important	40	25%
4. Most Important	30	19%
5. Urgent	19	12%
Total Responses:	161	
Mean: 2.81	Standard Deviation: 1.26	

Open space.

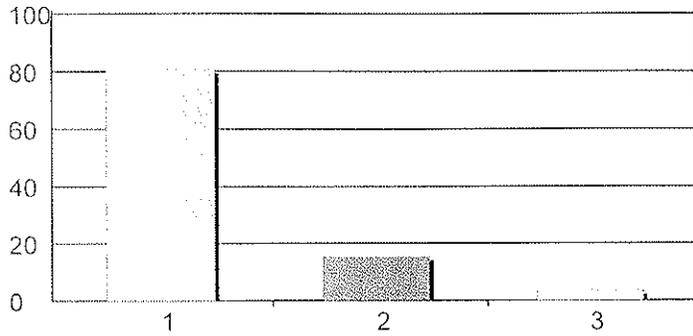


1. Least Important	23	14%
2. Somewhat Important	20	12%
3. Important	41	25%
4. Most Important	44	27%
5. Urgent	33	20%
Total Responses:	161	
Mean: 3.27	Standard Deviation: 1.31	

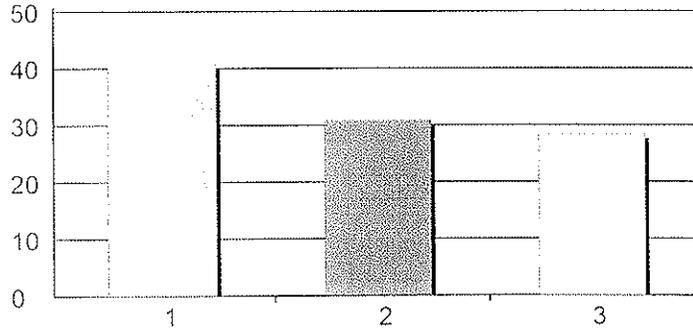
Open Space Survey



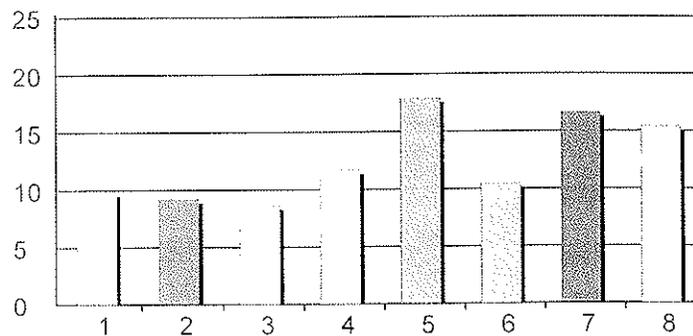
1. Own 134 83%
 2. Rent 28 17%
 Total Responses: 162
 Mean: 1.17 Standard Deviation: 0.38



1. 1 acre or less 115 81%
 2. more than 1 acre but not more than 5 acres 22 15%
 3. more than 5 acres 5 4%
 Total Responses: 142
 Mean: 1.23 Standard Deviation: 0.50



1. less than 5 minutes 66 41%
 2. between 5 and 10 minutes 50 31%
 3. more than 10 minutes 46 28%
 Total Responses: 162
 Mean: 1.88 Standard Deviation: 0.82



1. Less than \$24,999 16 10%
 2. \$25,000 to \$34,999 15 9%
 3. \$35,000 to \$44,999 14 9%
 4. \$45,000 to \$54,999 19 12%
 5. \$55,000 to \$79,999 29 18%
 6. \$80,000 to \$99,999 17 10%
 7. \$100,000 or more 27 17%
 8. Prefer not to say 25 15%
 Total Responses: 162
 Mean: 4.94 Standard Deviation: 2.25

Open Space

By Period 7 Statistics Class

Developing the Survey



- Learned about open space
- Looked at other cities' and towns' surveys
- Brainstormed what we thought was important
- Based on everyone's input we developed questions

Developing the Survey (Cont.)

- Edited questions and made multiple revisions with input from Geoff Beyer, Ken Jones, the Planning and Conservation Commissions, city officials and faculty from Montpelier High School.
- Revised and developed new questions
- Shared results with Ken and Geoff
- Finalized survey... added questions 4 and 5

Distributing the Survey

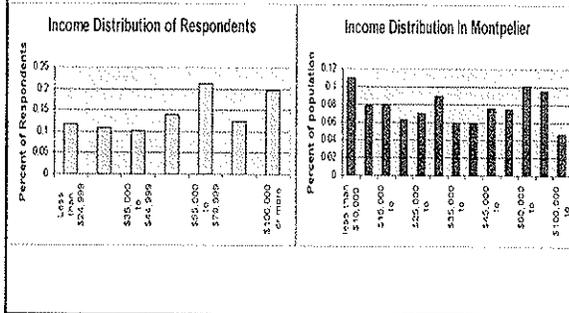


- Voter registration list
- Took a representative sample from each district
- Total of 600 surveys sent out (little more than 10% of registered voters)



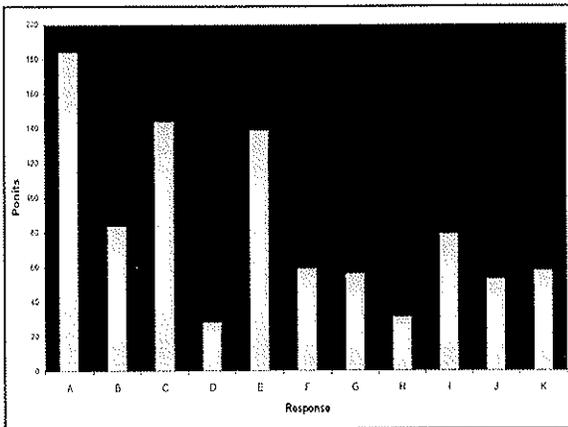
Analysis

Income Distribution



Questions 1&2

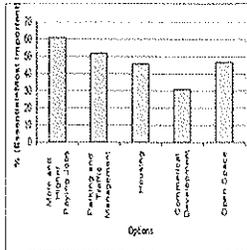
- Three points were earned for being the first choice
- Two points were earned for being the second choice
- One point was earned for being the third choice



How important do you feel it is to preserve open space in Montpelier for:

- Option A- open space for conservation of air and water
 - 60% of people thought it was very important or essential
- Option C- the natural beauty of the area
 - 61% of people thought it was very important or essential
- Option E- a balance between developed and undeveloped land
 - 56% of people thought it was very important or essential

Question 6 continued...



- More and higher paying jobs received highest number of very important or essential responses
- Commercial development received the fewest responses in the categories very important or essential
- Open space and housing, have similar percentages

Comments! Actual quotes!

- Montpelier has more than enough "open space". We need development to reduce the tax burden on residents.
- The city should keep out of citizen's rights to do what they wish with their own property... The city has too many regulations, laws and citizens have few rights.
- 1/3 of the land area of Montpelier is "open space". Taxes are at an all time high. To designate more + more land as non-taxable... is fiscal ignorance
- There is no more need for additional open space we have Hubbard Park—we need more development that pays into the tax base
- Why do we always push so hard for growth? Let's slow down building apartments and housing, not stop, just slow down
- Thank you for caring about the people and our community
- Open space is essential to preserve the character of Montpelier
- Many more walking + bike trails/paths
- Parking for automobiles
- Ban Cars from Downtown.
- Space to allow ourselves not to feel packed in like animals in cages.

Compiled by Thomas-M!

Surprises

- Return Rate (27.5%)
- Amount of respondents who did not follow directions
- High percentage of respondents indicated a willingness to volunteer or help fund raise (58%)
