

CHAPTER IV

RESULTS & INTERPRETATIONS

The results and interpretations of the survey of adjacent landowners are divided into the following four sections:

1. Characteristics of owners and property
2. Trail desirability
3. Problems, concerns, and opinions
4. Adjacent property valuations

The first section describes the general traits of the owners and property involved in this study. The types of background information covered includes: age and sex of owner, length and type of ownership, property use and size, and owners use of the trail. These traits help to identify trends in the analysis of the other three sections.

The findings in these sections are studied in several ways:

1. Analyzing current attitudes of selected groups
2. Analyzing past concerns of selected groups
3. Comparing current attitudes with past concerns
4. Examining factors affecting current attitudes

Selected groups under study involve continuing landowners (acquired adjacent property prior to trail development), new owners (purchased adjacent property after trail development), farmland owners

(possess cropland or pasture), and residential owners. These groups were selected because they offer some contrasting viewpoints.

Observations are made on the combined results of both trails, unless special findings on individual trails warrant further discussion. To help with the clarity in the analysis, the Root River and Luce Line Trails, are referred to as RRT and LLT in this chapter.

Supporting information gathered from professionals during the inquiry are included in the analysis of the results from the landowner survey. Trail managers, conservation officers, and law enforcement agents present professional opinions about crime and other problems associated with the trails. Information from county commissioners is used in the opinions section. Appraisers and real estate agents state views on adjacent property valuations.

Tables presenting the major findings of the owner survey, are included in this chapter. Percentages listed in the tables are based on the number of respondents in the survey, except where noted. All percentages are rounded to the nearest one percent. Total percentages for each question may be less than 100% due to the "no response" rate. This "no response" rate is less than 10% for each question.

CHARACTERISTICS OF OWNERS & PROPERTY

Analyzing the characteristics of owners and property indicates the similarities and differences between the two trails. These traits have a bearing on the interpretation of results. The opinions about the trail vary between residential, commercial, and farmland owners, as well as between new and continuing residents. This variation between groups affects the overall rating for the trails.

This section is divided into three areas for interpretation: landowner traits, adjacent property, and owner use of trail.

Landowner Traits

Table 4.1 Characteristics of Landowners describes the respondents. As stated in Chapter III, 91% of the owners along the Root River were surveyed (N = 21), while 23.5% of the Luce Line owners were questioned (N = 53). However, a larger number of respondents contacted were from the Luce Line Trail. The longer distance surveyed plus the higher population densities along the Luce Line, reflect this larger number.

The average age of the RRT and LLT owners is over 50 years (55.3 and 51.4), however all age groups are well represented. The male-to-female ratio is also well balanced (53% to 47%), although more males completed the survey, especially on the Root River. Most of the respondents (96%), live or work next to the trails, but 14% of the RRT owners are absentee landlords with little exposure to the Root River. A vast majority of all participants (96%), own the property adjacent to the trails.

More than one-half of the respondents (58%) owned property before trail development. However, a difference exists between the breakdown in RRT and LLT owners. About one-half of the LLT respondents (51%) purchased property after the conversion of the trail 14 years ago. This indicates a large change in ownership, with fewer respondents involved with the issues during trail development. On the Root River, 81% owned property before trail development, which seems to indicate a population with less change. But comparing the previous landowner survey in 1979, the number of owners along the right-of-way has decreased in the past

CHARACTERISTICS	ROOT RIVER TRAIL	LUCE LINE TRAIL	BOTH TRAILS
Number of Respondents (N)*	21	53	74
Age of Respondent:			
29-45 Years	33%	32%	32%
46-60 Years	24%	45%	39%
> 60 Years	38%	19%	24%
Mean Years**	55.3	51.4	-
Sex of Respondent:			
Male	57%	51%	53%
Female	43%	49%	47%
Live/Work Next to Trail:			
Yes	86%	100%	96%
No	14%	0%	4%
Type of Ownership:			
Own	86%	100%	96%
Rent	5%	0%	1%
Own & Rent	10%	0%	3%
Property Acquisition:			
Before Trail	81%	49%	58%
After Trail	19%	51%	42%
Mean Years Property Owned***			
Before Trail Land	25.3	24.6	-
After Trail Land	4.8	6.7	-
All Property	21.2	15.4	-

* Except where noted

** Number of respondents - 20 Root, 51 Luce

*** Total respondents - 20 Root, 53 Luce

Table 4.1 Characteristics of Landowners

years (Genereux, 1979). Due to the large percent of continuing landowners, the RRT respondents owned their property for a longer time.

Adjacent Property

Table 4.2 Physical Characteristics of Property describes the land use along the trails. Two-thirds of the property is less than 36 acres, but there is a large difference between the two trails. The average property size along the Root River is much greater (216 acres) than on the Luce Line (21 acres). Two-thirds of the RRT land (67%) is larger than 36 acres, while 81% of the LLT property is 36 acres or less.

The trails form a border with three-fourths of the adjacent property. But over 50% of the Root River land is divided by the trail, which could indicate a problem with access.

The land use along the trails is more than one-half small and large residential (59%), about one-third in farmland (cropland and pasture) (36%), and one-tenth in commercial (9%). On the Root River, two-thirds of the property is farmland and one-third is used for commercial, with most of this located in downtown Lanesboro. The Luce Line, on the other hand, is about three-fourths residential with only one-fourth of the property used for farmland. On both trails, wooded areas or water features are located on a considerable amount of land.

A house (residence) is located on a vast majority of the property adjacent to the trails (82%). But on the Root River, only one-half of the property (48%) is used as a place of residence, while one-third has vacant buildings or no major structures. Three-fourths of all the buildings are 500 feet or closer to the trails. However, the average distance on the Root River is much greater (1100 feet).

CHARACTERISTICS	ROOT RIVER TRAIL	LUCE LINE TRAIL	BOTH TRAILS
Number of Respondents (N)*	21	53	74
Acres Owned/Rented:			
< 3.5 Acres	29%	51%	45%
3.5 - 36 Acres	5%	30%	23%
> 36 Acres	67%	19%	32%
Mean Acres	216	21	-
Relationship of Trail to Land:			
Forms Outside Boundary	43%	87%	74%
Divides Property	57%	11%	24%
Current Land Use**			
Small Residential	5%	53%	39%
Large Residential	5%	26%	20%
Commercial	33%	0%	9%
Public use	0%	2%	1%
Cropland, Pasture	67%	25%	36%
Woods	52%	77%	70%
Marsh, Lake, Stream	38%	55%	50%
Other	5%	2%	3%
Structure Type of Property:			
House, Residence	48%	96%	82%
Commercial Building	19%	2%	7%
Vacant Buildings	10%	0%	3%
None	24%	2%	8%
Distance - Trail to Structure:			
< 250 feet	37%	56%	51%
250 - 500 feet	19%	25%	24%
501 feet - .25 miles	19%	17%	18%
>.25 miles	25%	2%	7%
Mean Distance	1100'	350'	-
No. of Respondents	16	52	68

* Except where noted

** Property used for one or more categories

Table 4.2 Physical Characteristics of Property

Owner Use of Trail

Another characteristic of the landowner is their current and potential use of the trails. Table 4.3 Landowner Use of Trail shows a vast majority of the owners and their families/employees (88%) have engaged in one or more activities in the past year. This also includes the use by married children of elderly parents. The three most popular activities for these landowners are: 1) walking hiking, and jogging (86%), 2) bicycling (82%), and 3) cross-country skiing (36%). Luce Line participants generally engage in more activities and more often than individuals on the Root River. Activities in which few respondents participate include: camping, snowmobiling, picnicking, and horseback riding. This may be due to the limited interest in these activities, the lack of designated areas such as for camping, or the use restrictions in some sections of the trail such as for snowmobiling.

Table 4.4 Allowed Trail Activities indicates the types of activities that owners would encourage, if they managed the trails. A overwhelming majority of the respondents would permit bicycling, walking/jogging, and cross-country skiing. About one-half also approve of horseback riding and picnicking. However, hunting and snowmobiling, which are permitted in restricted areas, would not be allowed by these owners. In addition, the majority of residents do not want to add other uses such as motorized trail bikes, night-time use, or camping. On the Luce Line, conflicts between users sometime occur with existing activities such as cross-country skiing and snowmobiling. Adding more uses would compound some of the problems experienced on this heavily used trail.

FAMILY/EMPLOYEE USE OF TRAIL THIS PAST YEAR	ROOT RIVER	LUCE LINE	BOTH TRAILS
Yes	81%	91%	88%
No	14%	8%	9%
Number of Respondents:	21	53	74

	ROOT RIVER TRAIL			LUCE LINE TRAIL			BOTH TRAILS		
TYPE OF ACTIVITIES	OFTEN	SOMETIME	NEVER	OFTEN	SOMETIME	NEVER	OFTEN	SOMETIME	NEVER
Snowmobiling	6%	6%	88%	0%	2%	98%	2%	3%	95%
Cross Country Skiing	6%	24%	71%	23%	17%	60%	18%	18%	63%
Horseback Riding	0%	12%	88%	4%	4%	92%	3%	6%	91%
Bicycling	29%	59%	12%	40%	40%	21%	37%	45%	18%
Camping	0%	0%	100%	0%	0%	100%	0%	0%	100%
Walking/Hiking/Jogging	29%	59%	12%	69%	31%	0%	58%	38%	3%
Commuting	6%	0%	94%	4%	10%	85%	5%	8%	88%
Picnicking	0%	12%	88%	0%	6%	94%	0%	8%	92%
Other Activities	0%	12%	-	0%	2%	-	0%	5%	-
Number of Respondents:		17			48			65	

Table 4.3 Landowner Use of Trail

TYPE OF ACTIVITIES	ROOT RIVER TRAIL			LUCE LINE TRAIL			BOTH TRAILS		
	YES	NO	DM*	YES	NO	DM*	YES	NO	DM*
Picnicking	62%	14%	19%	51%	42%	6%	54%	34%	9%
Camping	43%	43%	10%	23%	74%	2%	28%	65%	4%
Night Time Use	33%	29%	33%	28%	66%	4%	30%	55%	12%
Motorized Trail Biking	5%	81%	10%	9%	83%	6%	8%	82%	7%
Bicycling	81%	5%	10%	96%	2%	0%	92%	3%	3%
Walking or Jogging	76%	5%	14%	96%	2%	0%	91%	3%	4%
Snowmobiling	24%	52%	19%	17%	81%	0%	19%	73%	5%
Hunting	24%	57%	14%	9%	89%	0%	14%	73%	4%
Horseback Riding	29%	52%	14%	70%	17%	11%	58%	27%	12%
Cross-Country Skiing	76%	5%	10%	96%	2%	0%	91%	3%	3%
Other Activities	5%	-	-	2%	-	-	3%	-	-
Number of Respondents:		21			53			74	

* Doesn't Matter

Table 4.4 Allowed Trail Activities

Findings on Owner & Property Characteristics

Several findings can be summarized about the landowners and their property that is adjacent to the trails.

1. Over three-fourths of the Root River (81%) and one-half of the Luce Line respondents (49%), owned property before trail development. Years of ownership along the Root River are generally longer.
2. Average property size is larger along the Root River (216 acres) compared with the Luce Line (21 acres).
3. Three-fourths of all property forms an outside boundary with the trail. However, 52% of the Root River property is divided by the trail.
4. Land use along the trails vary (property may be included in several categories):

	Root River	Luce Line	Both Trails
Residential	10%	79%	59%
Farmland	67%	25%	36%
Commercial	33%	0%	9%

5. Most of the property adjacent to the trails (82%) is used as a place of residency. But one-third of the RRT property has vacant buildings or no structure. Three-fourths of all structures are 500 feet or closer to the trails, but on the Root River, the average distance is 1100 feet.
6. Most of the respondents or their families/employees (88%) have used the trails in the past year. The most popular activities for owners who use the trail are: 1) walking, hiking, and jogging (96%); 2) bicycling (82%); and 3) cross-country skiing (36%).
7. The majority of owners would allow: bicycling, walking and jogging, cross-country skiing, picnicking, and horseback riding. Hunting, snowmobiling, motor trail bikes, camping, and night-time use would be restricted by the majority of owners.

TRAIL DESIRABILITY

Respondents in the survey were asked to rate the desirability of the trails. Table 4.5 Current Trail Desirability shows that a large majority of owners (73%) view the trails as a desirable feature. Owners

TRAIL DESIRABILITY	ALL OWNERS	FARMLAND OWNERS	RESIDENTIAL OWNERS
=====			
Root River Trail:			
Desirable Feature	52%	43%	100%
No Factor	24%	21%	0%
Undesirable Feature	24%	36%	0%
No. of Respondents:	21	14	2*
Luce Line Trail:			
Desirable Feature	81%	69%	86%
No Factor	8%	8%	7%
Undesirable Feature	9%	15%	7%
No. of Respondents:	53	13	42
Both Trails:			
Desirable Feature	73%	56%	86%
No Factor	12%	15%	7%
Undesirable Feature	14%	26%	7%
No. of Respondents:	74	27	44

* Number of respondents too low for an accurate measurement.

Table 4.5 Current Trail Desirability

of farmland (cropland or pasture), which represent 36% of all respondents, consider the trails desirable (56%), but not as favorable as all landowners (73%). In contrast, residential owners, which are 59% of all participants, view the trails as a more desirable feature (86%) compared with all landowners. LLT owners (81%) perceived the trail to be higher in desirability than RRT owners (52%). The reasons for the lower rating on the Root River may be due to the number of rural landowners who feel the trail is undesirable (36%).

Many of the owners had different opinions about the trails prior to development. Table 4.6 Position Before Development represents the position held by respondents who owned property adjacent to the railroad

right-of-way before trail conversion (continuing owners). An equal number of these owners favored or opposed the trails (44% to 40%). However, farmland owners were against the proposed trails (68%), while non-farming owners favored development (67%).

Over one-half of the RRT owners were against the proposed trail (53%). Most of the opposition came from rural landowners who were against the project (82%). The non-farming respondents, which consisted of owners in Lanesboro, generally favored the trail (67%) and saw it as an opportunity to increase tourism and economic growth. By contrast, over one-half of the LLT owners (54%) supported the proposed trail. The non-farming respondents, which consisted of suburban residential owners, favored development (67%), while more farmers opposed the project (50%).

POSITION BEFORE TRAIL	ALL CONTINUING OWNERS	CONTINUING FARMLAND OWNERS	CONTINUING NON-FARM OWNERS
=====			
Root River Trail:			
Favor	29%	9%	67%
Unsure	18%	9%	33%
Against	53%	82%	0%
No. of Respondents:	17	11	6
Luce Line Trail:			
Favor	54%	25%	67%
Unsure	15%	25%	11%
Against	31%	50%	22%
No. of Respondents:	26	8	18
Both Trails:			
Favor	44%	16%	67%
Unsure	16%	16%	17%
Against	40%	68%	17%
No. of Respondents:	43	19	24

Table 4.6 Position Before Development

Comparison of Desirability

Landowner attitudes about the Root River and the Luce Line Trails have greatly improved since their establishment several years ago. Table 4.7 Comparison of Desirability illustrates the change between the current desirability and the opinions in the past. The current desirability rating of continuing owners (63%) is much higher than their position on the trails before development (44%). On the other hand, when new owners purchase their property after trail development, a large majority already considered the trail a desirable feature (71%). Several stated that the proximity of the trail was one of the reasons for acquiring the property. Now these owners currently view the trail even more favorable (87%). In addition, the new owners give the trails a much higher desirability rating than continuing residents.

The reasons for the increase in the desirability rating vary on the two trails. On the Root River, 53% were against the proposed Root River Trail, but now 53% count this trail as desirable. Commercial owners continue to be supportive, but the change in attitude has come from the farming community. Two-thirds of these rural owners now rate the trail desirable or "no factor." In addition, since a vast majority of residents owned their property before the trail, most of the improvement in the desirability is due to a change in the attitudes of these continuing owners (N = 17), rather than new residents (N = 4).

However, on the Luce Line, the improvement in the desirability rating is due to two reasons. Owners who possessed property before the trail, now perceive it as more desirable (69% to 54%). But the greatest impact is the large percent of owners that are new residents who

CONTINUING OWNERS POSITION BEFORE DEVELOPMENT					CONTINUING OWNERS CURRENT DESIRABILITY		
TRAILS	NO.	FAVOR	UNSURE	AGAINST	DESIRABLE FEATURE	NO FACTOR	UNDESIRABLE FEATURE
Root River Trail	17	29%	18%	53%	53%	18%	29%
Luce Line Trail	26	54%	15%	31%	69%	8%	19%
Both Trails	43	44%	16%	40%	63%	12%	23%

NEW OWNERS DESIRABILITY WHEN PURCHASING PROPERTY					NEW OWNERS CURRENT DESIRABILITY		
TRAILS	NO.	DESIRABLE FEATURE	NO FACTOR	UNDESIRABLE FEATURE	DESIRABLE FEATURE	NO FACTOR	UNDESIRABLE FEATURE
Root River Trail	4	25%	75%	0%	50%	50%	0%
Luce Line Trail	27	78%	19%	4%	93%	7%	0%
Both Trails	31	71%	26%	3%	87%	13%	0%

Table 4.7 Comparison of Desirability

overwhelmingly view the trail as desirable (93%). Many of these owners were influenced to purchase their property because of the proximity of the trail.

Factors Affecting Desirability

Table 4.8 Selected Factors Affecting Desirability indicates four factors that contribute to the desirability rating of the trails: 1) past owner desires for right-of-way, 2) owner use of trail, 3) trail proximity relationship, and 4) distance of structure to trail.

Owners who were prevented from purchasing the right-of-way in the past, rate the trails lower in desirability than owners who did not view it as a problem. Approximately 50% of the owners who regarded the right-of-way purchase a past concern, still view the trail as undesirable. Most owners who have no problem with the purchase, rate the trail desirable.

Landowners use of the trail has some impact on the desirability rating. A vast majority of landowners who use the trail rate it desirable. But a few owners consider the trails undesirable or "no factor" and still use the trail.

The physical relationship of the trail to the property may affect the desirability. A majority of owners who have property that forms an outside boundary with the trail, rate the trail desirable. In addition, about one-half of the owners with property divided by a trail, view it as undesirable. Divided property may experience more problems due to the double exposure, and this results in a lower rating.

The distance of the owners structure to the trail, has little impact on the desirability rating. Respondents with structures closer

TRAIL DESIRABILITY	PREVENT PURCHASE OF ROW		LANDOWNER USE OF TRAIL		RELATIONSHIP OF TRAIL TO PROPERTY		DISTANCE OF STRUCTURE TO TRAIL		
	NO PROBLEM	MIN/MAJ PROBLEM	YES	NO	OUTSIDE BORDER	DIVIDES PROPERTY	NO STRUCTURE	<250 FEET	>250 FEET
Root River Trail:									
Desirable Feature	35%	18%	52%	0%	29%	24%	0%	19%	33%
No Factor	12%	6%	14%	10%	14%	10%	5%	10%	10%
Undesirable Feature	0%	29%	14%	5%	0%	24%	19%	0%	5%
Number of Respondents:		17		21		21		21	
Luce Line Trail:									
Desirable Feature	50%	19%	87%	4%	75%	4%	2%	42%	38%
No Factor	0%	8%	6%	2%	8%	0%	0%	6%	2%
Undesirable Feature	0%	19%	8%	2%	4%	6%	0%	8%	2%
Number of Respondents:		26		53		53		53	
Both Trails:									
Desirable Feature	44%	19%	70%	3%	62%	9%	1%	35%	36%
No Factor	5%	7%	8%	4%	9%	3%	1%	7%	4%
Undesirable Feature	0%	23%	9%	3%	3%	11%	5%	5%	3%
Number of Respondents:		43		74		74		74	

Table 4.8 Selected Factors Affecting Desirability

than 250 feet or further than 250 feet, both rate the trails equally desirable. However, most landowners who have no structures on their property, view the trails as undesirable.

Based on these four factors, many of the owners who currently rate the trails undesirable, wanted to develop the right-of-way in the past and at the present time, have little or no contact with the trails. It is possible these owners may never view the trails as a desirable feature, even if they experience few or no problems.

Findings on Trail Desirability

The major findings on the desirability of the trails can be summarized with the following points.

1. About three-fourth of the landowners view the trails as a desirable feature (73%). New residents rate the trails higher than continuing owners (87% to 56%). Residential owners regard the trails more desirable than farmland owners (86% to 56%). LLT owners perceive the trail to be higher in desirability than RRT owners (81% to 52%).
2. The current desirability rating of the trails is much higher than the opinions of the owners in the past. Prior to development, 44% of the continuing owners favored the trails, but now 63% find them desirable. When new owners purchase their property, 71% rated the trails desirable, as compared with 87% who now view them as a desirable feature.
3. The increase in the desirability rating on the Root River is due to a change in the attitude of the continuing residents who own farmland. The increase on the Luce Line is because of changes in two groups: 1) continuing owners who now rate the trail higher, and 2) a large percent of owners that are new residents who overwhelmingly view the trail desirable.
4. The following general characteristics reflect owners who tend to view the trails more undesirable, however not every trait applies to each owner. 1) Owners who intended to purchase and develop the right-of-way, but were prevented by the establishment of the trail. 2) Owners whose property is divided by the trail. 3) Owners who do not live on the adjacent property or work in a commercial building next to the trail.

PROBLEMS, CONCERNS, & OPINIONS

Landowners were questioned about the type and degree of problems and concerns experienced from before trail development to the present. Table 4.9 Current Problems of Owners shows that a vast majority of landowners do not experience major problems with the trail. However, four issues are of some concern for 25% to 33% of the residents: loss of privacy, trespass, litter, and access to their property. In addition, one-fourth of all respondents have major problems which are not listed in the table. But most of these problems are experienced by owners when using the trail, rather than as an adjacent landowner (Appendix F: Comments of Landowners).

Farmland owners on the other hand, perceive more problems with the trails, than do residential or commercial owners (Table 4.10 Current Problems of Farmland Owners). This may be due to actual negative experiences or to a past negative bias towards the trails. One-fourth of these owners consider trespass, loss of privacy, litter, and poor access a major problem (Fig. 4.1 Farmer Access). And yet, a vast majority of farmland owners experience no major problems with the trails.

Trail user requests for help, is a problem for 36% of the farmland owners and 16% of all residents. Table 4.11 Trail User Requests shows that users have asked one-third of all landowners for help. The type of assistance most requested was for using the telephone, wanting directions, and asking for a drink of water.

Prior to trail development, landowners were concerned about many issues. Table 4.12 Pre-development Concerns indicates about one-half of

PROBLEMS	ROOT RIVER TRAIL			LUCE LINE TRAIL			BOTH TRAILS		
	NONE	MINOR	MAJOR	NONE	MINOR	MAJOR	NONE	MINOR	MAJOR
Access Problems	67%	14%	14%	81%	4%	15%	77%	7%	15%
Interrupted Drainage	95%	0%	0%	91%	6%	4%	92%	4%	3%
Reduce Productive Use	76%	5%	14%	89%	6%	6%	85%	5%	8%
Weed Problems	76%	10%	10%	87%	9%	4%	84%	9%	5%
Loss of Privacy	62%	19%	14%	66%	21%	13%	65%	20%	14%
Noise	90%	5%	0%	74%	15%	11%	78%	12%	8%
Stealing	76%	10%	10%	85%	6%	9%	82%	7%	9%
Harassment of Farm Animals	76%	10%	10%	89%	6%	6%	85%	7%	7%
Vandalism	81%	5%	10%	87%	6%	8%	85%	5%	8%
Litter	67%	19%	10%	72%	13%	15%	70%	15%	14%
Trespass	67%	14%	14%	68%	17%	15%	68%	16%	15%
Trail Users Ask For Help	86%	10%	5%	83%	11%	6%	84%	11%	5%
Other Problems	-	0%	19%	-	21%	28%	-	15%	26%
Number of Respondents:		21			53			74	

Table 4.9 Current Problems of All Landowners

PROBLEMS	ROOT RIVER TRAIL			LUCE LINE TRAIL			BOTH TRAILS		
	NONE	MINOR	MAJOR	NONE	MINOR	MAJOR	NONE	MINOR	MAJOR
Access Problems	57%	21%	14%	54%	8%	38%	56%	15%	26%
Interrupted Drainage	93%	0%	0%	77%	15%	8%	85%	7%	4%
Reduce Productive Use	64%	7%	21%	77%	0%	23%	70%	4%	22%
Weed Problems	79%	14%	0%	77%	15%	8%	78%	15%	4%
Loss of Privacy	43%	29%	21%	62%	8%	31%	52%	19%	26%
Noise	86%	7%	0%	54%	15%	31%	70%	11%	15%
Stealing	64%	14%	14%	85%	8%	8%	74%	11%	11%
Harassment of Farm Animals	64%	14%	14%	54%	23%	23%	59%	19%	19%
Vandalism	71%	7%	14%	69%	8%	23%	70%	7%	19%
Litter	57%	21%	14%	54%	8%	38%	56%	15%	26%
Trespass	50%	21%	21%	46%	23%	31%	48%	22%	26%
Trail Users Ask For Help	79%	14%	7%	54%	23%	23%	67%	19%	15%
Other Problems	-	0%	29%	-	8%	38%	-	4%	33%
Number of Respondents:		14			13			27	

Table 4.10 Current Problems of Farmland Owners

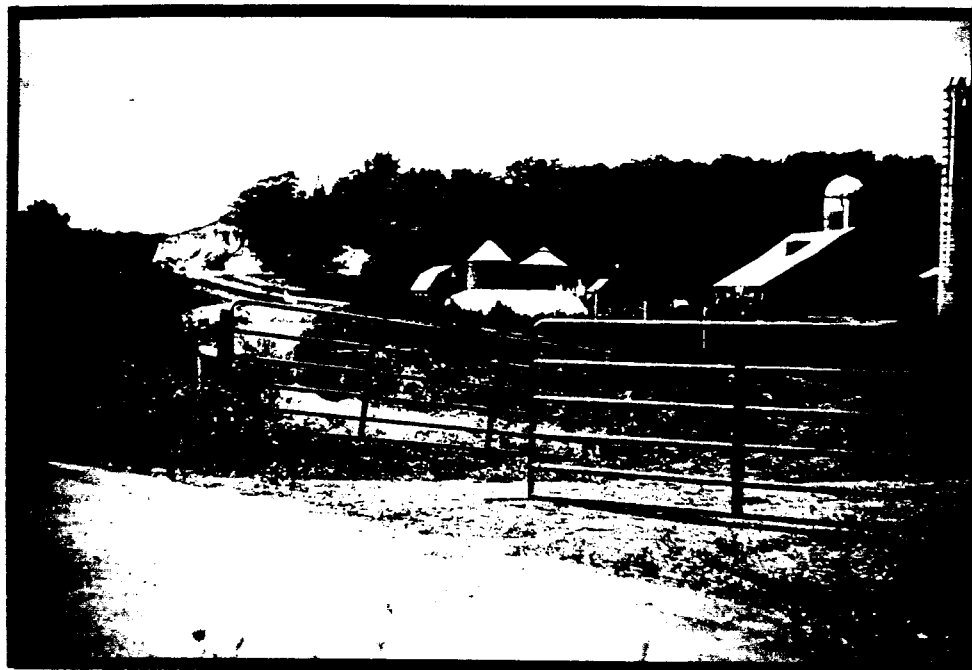


Figure 4.1 Farmer Access Access for a dairy farmer across the Root River Trail to his fields.

ISSUES	ROOT RIVER TRAIL	LUCE LINE TRAIL	BOTH TRAILS
=====			
Trail User Asking For Help:			
Yes	29%	38%	35%
No	67%	60%	62%
No. of Respondents	21	53	74
Type of Assistance Requested*			
Telephone	2	13	15
Bathroom	0	4	4
Drink of Water	2	9	11
Get Directions	4	11	15
Buy/Borrow Gas	0	1	1
Borrow Tools	0	6	6
Other	3	7	10
No. of Respondents	6	20	26

* Data listed in raw numbers

Table 4.11 Trail User Requests

PRE-DEVELOPMENT CONCERNS		ALL CONTINUING LANDOWNERS			CONTINUING FARMLAND OWNERS		
		ROOT RIVER	LUCE LINE	BOTH TRAILS	ROOT RIVER	LUCE LINE	BOTH TRAILS
Access Problems:	None	41%	50%	47%	18%	25%	21%
	Minor	24%	15%	19%	36%	25%	32%
	Major	35%	35%	35%	45%	50%	47%
Interrupted Drainage:	None	71%	88%	81%	55%	62%	58%
	Minor	29%	8%	16%	45%	25%	37%
	Major	0%	4%	2%	0%	13%	5%
Reduce Productive Use:	None	71%	69%	70%	55%	62%	58%
	Minor	18%	12%	14%	27%	0%	16%
	Major	12%	19%	16%	18%	38%	26%
Weed Problems:	None	47%	73%	63%	27%	62%	42%
	Minor	24%	4%	12%	36%	13%	26%
	Major	24%	23%	23%	27%	25%	26%
Loss of Privacy:	None	47%	54%	51%	27%	37%	32%
	Minor	24%	12%	16%	27%	13%	21%
	Major	24%	35%	30%	36%	50%	42%
Noise:	None	41%	46%	44%	27%	25%	26%
	Minor	35%	19%	26%	36%	25%	32%
	Major	18%	35%	29%	27%	50%	37%
Stealing:	None	41%	54%	49%	18%	50%	32%
	Minor	18%	8%	12%	18%	0%	11%
	Major	41%	38%	40%	64%	50%	58%
Harass Farm Animals:	None	47%	81%	67%	18%	62%	37%
	Minor	24%	8%	14%	36%	13%	26%
	Major	29%	12%	19%	45%	25%	37%
Vandalism:	None	41%	42%	42%	18%	37%	26%
	Minor	29%	23%	26%	36%	13%	26%
	Major	29%	35%	33%	45%	50%	47%
Litter:	None	41%	50%	47%	18%	25%	21%
	Minor	6%	19%	14%	9%	37%	21%
	Major	47%	31%	37%	64%	37%	53%
Trespassing:	None	47%	42%	44%	18%	50%	32%
	Minor	18%	15%	16%	27%	0%	16%
	Major	35%	42%	40%	55%	50%	53%
Number of Respondents:		17	26	43	11	8	19

Table 4.12 Pre-development Concerns

the continuing owners anticipated problems with vandalism, trespass, noise, access, stealing, litter, and loss of privacy. Farmland owners expressed much more concern than did residential or commercial owners. A majority of these farmers expected problems with almost all of the issues in the table.

Comparison of Problems With Concerns

The concerns anticipated by continuing owners before trail development, are greater than the current problems experienced by these same respondents. Table 4.13 Comparison of Problems With Concerns shows that on all issues, the past concerns are greater than the current problems. In several cases, the change has been dramatic. Most of the continuing owners (59%) considered vandalism a concern in the past, but now 79% experience no current problem. Stealing was a concern for 52% of the residents, but at the present time, 74% have no theft problem. On both trails, problems experienced by continuing owners with access, noise, litter, and trespassing are much lower than the level of pre-development concern. Although continuing residents experience fewer problems than originally anticipated, new owners report even fewer difficulties. This is more evident on the issues of loss of privacy, where almost one-half of the continuing residents (44%) state some type of problem. New owners, who view the trails more desirable, experience few or no problems. This is not a major factor on the Root River, but on the Luce Line, new residential owners represent one-half of all residents. As older landowner are replaced, the trail may be perceived to have fewer problems due to the more tolerant nature of the new residents.

CONTINUING OWNER ISSUES		CURRENT PROBLEMS			PRE-DEVELOPMENT CONCERNS		
		ROOT RIVER	LUCE LINE	BOTH TRAILS	ROOT RIVER	LUCE LINE	BOTH TRAILS
Access Problems:	None	65%	69%	67%	41%	50%	47%
	Minor	18%	4%	9%	24%	15%	19%
	Major	12%	27%	21%	35%	35%	35%
Interrupted Drainage:	None	94%	81%	86%	71%	88%	81%
	Minor	0%	12%	7%	29%	8%	16%
	Major	0%	8%	5%	0%	4%	2%
Reduce Productive Use:	None	76%	77%	77%	71%	69%	70%
	Minor	6%	12%	9%	18%	12%	14%
	Major	12%	12%	12%	12%	19%	16%
Weed Problems:	None	76%	73%	74%	47%	73%	63%
	Minor	12%	19%	16%	24%	4%	12%
	Major	6%	8%	7%	24%	23%	23%
Loss of Privacy:	None	53%	54%	53%	47%	54%	51%
	Minor	24%	19%	21%	24%	12%	16%
	Major	18%	27%	23%	24%	35%	30%
Noise:	None	88%	54%	67%	41%	46%	44%
	Minor	6%	23%	16%	35%	19%	26%
	Major	0%	23%	14%	18%	35%	29%
Stealing:	None	71%	77%	74%	41%	54%	49%
	Minor	12%	4%	7%	18%	8%	12%
	Major	12%	19%	16%	41%	38%	40%
Harass Farm Animals:	None	71%	81%	77%	47%	81%	67%
	Minor	12%	12%	12%	24%	8%	14%
	Major	12%	8%	9%	29%	12%	19%
Vandalism:	None	82%	77%	79%	41%	42%	42%
	Minor	0%	8%	5%	29%	23%	26%
	Major	12%	15%	14%	29%	35%	33%
Litter:	None	59%	65%	63%	41%	50%	47%
	Minor	24%	12%	16%	6%	19%	14%
	Major	12%	23%	19%	47%	31%	37%
Trespassing:	None	65%	65%	65%	47%	42%	44%
	Minor	18%	19%	19%	18%	15%	16%
	Major	12%	15%	14%	35%	42%	40%
Number of Respondents:		17	26	43	17	26	43

Table 4.13 Comparison of Problems With Concerns

Professionals Opinion on Trail Problems

According to law enforcement agents, conservation officers, and the trail managers, few incidents of crime or major problems have occurred on the trails. The Luce Line, which is near an urban area and is heavily used, has reported most of the cases. One suburban house adjacent to the trail was burglarized twice. The owner was convinced the Luce Line contributed to the problem. However, according to police, the trail was not a factor in the theft. Some of the other problem that have occurred include:

1. A few cases of indecent exposure
2. An accident involving a snowmobile striking a trail hiker
3. A dog attacking a trail user
4. Reports of stolen bikes and gas

More of the complaints to law enforcement agents and conservation officers, come from trail users with landowners reporting fewer problems. Most of these problems are infractions rather than crime. Some of the violations include:

1. Vehicles on the trail such as three-wheelers, dirt bikes, snowmobiles, and motorcycles
2. Hunting violations
3. Trespass
4. Snowmobile trespass and noise
5. Vandalism, litter, and dumping on the trail
6. A few cases of consumption
7. Unleashed dogs on the trail

One law enforcement agent, who now feels the trail is an asset to the community, expressed concern on several issues prior to development. This professional anticipated problems with vandalism and theft, regulation enforcement, and access for emergency vehicles. But the main problem was the oversight of the Department of Natural Resources (DNR)

to involve the local law enforcement agencies in the early planning stages of the trail. However, after public hearings the DNR began to work with local agencies.

According to law enforcement agents, there has been little or no increase in their work load as a result of the trails. However, a few of the professionals offered suggestions or comments about specific problems:

1. The Luce Line allows too many different types of activities, especially in the winter.
2. Luce Line Trail users park on the side of the road at Co Rd 19 and Co Rd 110. A parking lot at either location would solve the problem.
3. Location signs to the Isinours Unit parking lot near the Root River Trail, would help to relieve some of the congestions problems in Lanesboro.
4. Trail crossing signs placed on county roads are needed to prevent accidents on several blind intersections on the Root River Trail.
5. On the Root River Trail, several biking accidents have occurred on steep grades in the Lost Lake State Game Refuge near Lanesboro. Rail-trails usually have gentle grades, but this design is a result of a land exchange with a local farmer.

Current Landowner Opinions

Landowners were surveyed about their current opinions on trail problems and other issues. Table 4.14 Current Opinions indicates that a vast majority of owners (80%) believe that trails have not increased the rate of violent crime. In addition, about three-fourths of all landowners (76%) feel secure about their safety on their property. But a couple of the individuals who expressed concern with this issues, stated that reports of indecent exposure was the reason.

CURRENT OPINIONS OF ALL LANDOWNERS	ROOT RIVER TRAIL			LUCE LINE TRAIL			BOTH TRAILS		
	AGREE	DISAGREE	UNSURE	AGREE	DISAGREE	UNSURE	AGREE	DISAGREE	UNSURE
Trail has increased rate of violent crime:	0%	90%	5%	17%	75%	8%	12%	80%	7%
Less secure about safety on property due to trail:	10%	81%	5%	21%	74%	6%	18%	76%	5%
Summer trail users cause few problems:	95%	0%	0%	87%	9%	4%	89%	7%	3%
Winter trail users cause few problems:	86%	5%	5%	79%	17%	4%	81%	14%	4%
DNR patrols trail enough to control users:	24%	0%	71%	28%	40%	32%	27%	28%	43%
DNR does a good job maintaining the trail:	57%	19%	19%	81%	11%	8%	74%	14%	11%
Local people use and enjoy the trail:	71%	5%	19%	94%	4%	2%	88%	4%	7%
Trail is a worthwhile expenditure of money:	48%	24%	24%	79%	15%	6%	70%	18%	11%
Trail has benefited the local economy:	57%	14%	24%	28%	34%	38%	36%	28%	34%
Number of Respondents:		21			53			74	

CURRENT FARMLAND OWNER OPINIONS	ROOT RIVER TRAIL			LUCE LINE TRAIL			BOTH TRAILS		
	AGREE	DISAGREE	UNSURE	AGREE	DISAGREE	UNSURE	AGREE	DISAGREE	UNSURE
Trail has increased rate of violent crime:	0%	86%	7%	31%	69%	0%	15%	78%	4%
Less secure about safety on property due to trail:	14%	71%	7%	38%	54%	8%	26%	63%	7%
Summer trail users cause few problems:	93%	0%	0%	69%	23%	8%	81%	11%	4%
Winter trail users cause few problems:	79%	7%	7%	62%	38%	0%	70%	22%	4%
DNR patrols trail enough to control users:	36%	0%	57%	23%	62%	15%	30%	30%	37%
DNR does a good job maintaining the trail:	57%	14%	21%	85%	15%	0%	70%	15%	11%
Local people use and enjoy the trail:	64%	7%	21%	85%	8%	8%	74%	7%	15%
Trail is a worthwhile expenditure of money:	36%	29%	29%	54%	38%	8%	44%	33%	19%
Trail has benefited the local economy:	57%	21%	14%	23%	54%	23%	41%	37%	19%
Number of Respondents:		14			13			27	

Table 4.14 Current Opinions About Trails

A large majority of owners believe that summer and winter trail users cause few or no problems (81% and 81%). But some of the farmland owners (22%) report abuses by snowmobiles on or near the trail in winter. Law enforcement agents, conservation officers, and trail managers state that more problems and complaints occur in spring, summer, and fall.

Many of the landowners (43%) are unsure whether the trails are patrolled often enough by the DNR. However, 40% of all LLT owners and 62% of the LLT farmland owners want the Luce Line patrolled more often. LLT conservation officers state the trail is monitored on the average five to seven days a week for two to three hours.

Three-fourths of the owners (74%) believe the DNR does a good job maintaining the trail, especially on the Luce Line (81%). However, in a couple of cases, the lack of maintenance on adjacent property is a detraction for the trail. The Wayzata Country Club disposal area was located next to the Luce Line after the trail was established (Fig. 4.2 Country Club Disposal Area). In addition, the trail is crossed at this point in order to gain access to the dump. The view of most of the county club from the trail is in sharp contrast to this disposal area (Fig. 4.3 Golf Course).

A vast majority of owners (88%) believe that local people use and enjoy the trail. In addition, almost three-fourths of the respondents (70%) regard the trails as a worthwhile expenditure of public money. But only one-half of the RRT owners (48%) agree with the investment in the trail. One factor may be the limited time that the trail has been in use.



Figure 4.2 Country Club Disposal Area View from the Luce Line Trail of the disposal area for the Wayzata County Club.



Figure 4.3 Golf Course View from the Luce Line Trail of the well maintained golf course at the Wayzata Country Club.

All three of the county commissioners believe the trails are an asset to the community. One of these professionals suggests that an additional section to the Root River Trail along the river to Preston, should be constructed. But another commissioner feels that mass transit should have the first priority for abandoned rail lines.

Landowners are divided on whether the trails have benefited the local economy. However, a majority of RRT owners (57%) believe the Root River contributes economically to the community. This reflects the difference in the type and use of the two trails. The Root River lies in a scenic rural setting, passes through a small historic village, and is viewed by many as an attraction for tourism. On the other hand, the Luce Line passes through a wooded suburban area and the rural countryside near a metropolitan city, but has few adjacent businesses catering to the trail user. Additional owner opinions on the most and least desirable characteristics of the trails are located in Appendix F: Comments of Landowners.

Findings on Problems, Concern, & Opinions

The major findings on the problems, concerns, and opinions about the trails can be summarized with the following points.

1. A vast majority of all landowners do not experience major problems with the trails. However, loss of privacy, trespass, litter, and access to their property are of some concern for 25% to 33% of the owners.
2. A majority of farmland owners do not experience major problems with the trails. However, these owners perceive more difficulties than do residential or commercial owners. This may be due to more problems experienced in the rural areas, less tolerance for trail users, or a past negative bias towards the trails.

3. One-third of the landowners have been approached by trail users asking for help. The most frequent requests were for directions, phone, and water.
4. Before trail conversion, about one-half of the continuing owners anticipated problems with noise, vandalism, trespass, loss of privacy, stealing, litter, and poor access. Farmland owners expressed much greater concern over the proposed trail than other owners.
5. The concerns of continuing owners before trail development were much greater than the current problems experienced by these same owners. However, new residents have even fewer problems than continuing owners.
6. According to professionals, few incidents of crime or other major problems have occurred on the trails. Cases of indecent exposure and stolen bikes and gas have been reported, but most of the problem are infractions rather than crime.
7. A vast majority of owners (80%) believe the trails do not increase the rate of violent crime. Three-fourths of the owners feel secure about their safety on their property (76%).
8. A majority of owners state that summer and winter trail users cause only a few problems (89% and 81%). However 40% of the Luce Line respondents want the DNR to patrol the trail more often. Conservation officers on the average check the trail five to seven times a week for two to three hours.
9. Three-fourths of the owners (74%) think the DNR does a good job maintaining the trails.
10. A vast majority of owners (88%) believe that local people use and enjoy the trails. In addition, about three-fourths regard the trails as a worthwhile expenditure of public money (70%).
11. Three county commissioners feel the trails are an asset to the community. One commissioner suggests an additional section to the Root River. However, another thinks that mass transit should have first priority for abandoned rail lines.
12. A majority of Root River owners (57%) believe the trail benefits the local economy. This reflects the potential for the trail to increase tourism in the area.

ADJACENT PROPERTY VALUATION

Landowners were surveyed about the impact of the trails on the value of their property (Table 4.15 Trail Influence on Property Value). A vast majority of landowners (87%) believe the trails contribute to an increase or had no affect on the value of their property. Only 11% feel the trail lowered their property values. Most farmland owners (56%) think there was no affect on their land, while two-thirds of the residential respondents state the trails increased their values. New owners generally feel the trails have a more positive affect on adjacent land values than continuing owners (65% to 33%).

On the Root River, most residents (62%) think there has been no affect on land values, while most LLT owners (58%) feel the trail has contributed to an increase. This reflects the contrast in adjacent land use between the rural Root River and the suburban Luce Line. Areas with a growth potential benefit more with the amenity of a trail.

Most appraisers and real estate agents believe the trails either contribute to an increase or have no affect on the value of residential property. The trails are more of an asset for suburban residential land than for housing in small towns. One suburban agent stated that residential property near the trail generally has more showings and sells faster than property further away. However, another agent felt the trail would be a slight negative feature for homes located very close to it (Fig. 4.4 House Near Trail).

According to the professionals, the impact on farmland ranges from increased to slightly decreased value depending on the use. For agricultural farmland, the trail has no affect or a slight decrease.

TRAIL IMPACT ON PROPERTY VALUE	ALL OWNERS	RESIDENTIAL OWNERS	FARMLAND OWNERS	NEW OWNERS	CONTINUING OWNERS
=====					
Root River Trail:					
Increased the Value	14%	50%	7%	0%	18%
No Affect	62%	50%	64%	75%	59%
Lowered the Value	14%	0%	21%	25%	12%
No. of Respondents:	21	2*	14	4	17
Luce Line Trail:					
Increased the Value	58%	62%	38%	74%	42%
No Affect	32%	31%	46%	26%	38%
Lowered the Value	9%	7%	15%	0%	19%
No. of Respondents:	53	42	13	27	26
Both Trails:					
Increased the Value	46%	61%	22%	65%	33%
No Affect	41%	32%	56%	32%	47%
Lowered the Value	11%	7%	19%	3%	16%
No. of Respondents:	74	44	27	31	43

* Number of respondents too low for an accurate measurement.

Table 4.15 Trail Influence on Property Value



Figure 4.4 House Near Trail One of the few residential homes located close to the Luce Line Trail at Orono.

However, the trail is an asset for hobby horse farms, and for farmland proposed for development. In the next few years, development near the Luce Line Trail is expected to increase due to the construction of a freeway to the city (Fig. 4.5 House Under Construction).

An economic growth potential may exist for Lanesboro when the Root River Trail is completed. Three of the professionals, state that downtown commercial property has slightly increased in value because of the trail (Fig. 4.6 Downtown Lanesboro). This increase would be a result of additional tourism in town, rather than the amenity of owning property adjacent to the trail. For example, two rural landowners have opened bed and breakfasts on property near the trail, as a result of the increase in the number of visitors to the area.



Figure 4.5 House Under Construction View from the Luce Line Trail of a house under construction near Stubbs Bay. This area is in the transition zone between rural and suburban residential.



Figure 4.6 Downtown Lanesboro View of part of the downtown business district in Lanesboro one block from the Root River Trail. Mrs. B's Bed and Breakfast is the first building on the corner.

CONTINUING OWNERS PRE-DEVELOPMENT CONCERNS	ROOT RIVER TRAIL	LUCE LINE TRAIL	BOTH TRAILS
=====			
Trail will reduce value of my land:			
No Concern	65%	69%	67%
Minor Concern	12%	12%	12%
Major Concern	18%	19%	19%
No. of Respondents	17	26	43

Table 4.16 Pre-development Concerns About Property Value

Table 4.16 Pre-development Concerns About Property Value indicates that prior to trail conversion, reduced property value was a concern for one-third of continuing owners (31%). But now, only 16% feel the trails have lowered their value, and 80% state it has either increased or had no affect. The concern about lower property values before trail development is greater than the current number of owners who state lower values as a result of the trails.

Findings on Property Valuation

The findings on the value of property can be summarized with the following points.

1. A vast majority of owners (87%) believe the trails contribute to an increase or have no affect on the value of their property. Most farmland residents (56%) think the trails have no affect on their values, while two-thirds of the residential owners (61%) state an increase as a result of the trails. New owners generally feel the trails have a more positive affect on adjacent property values than do continuing owners.
2. Most RRT owners (62%) think there has been no affect on their land values, while most LLT owners (58%) state an increase.

3. According to appraisers and real estate agents, trails are a selling point for suburban residential property, hobby farms, farmland proposed for development, and some types of small town commercial property. However, trails have no affect or they are a slight negative feature for agricultural land and small town residential property.
4. The concern about lower property values before trail development is greater than the current number of owners who state lower values as a result of the trails.

ANALYSIS OF THE STUDY

The methodology developed in this study worked well for obtaining landowner attitudes about rail-trails. However, several observations are noteworthy.

This study was limited to two sites because of the restraints of time and resources. One limiting factor in surveying several trails, is identifying all the adjacent landowners. The results presented in this study, represent the attitudes along two trails and may not reflect the opinions of owners in other areas.

The selection of the Luce Line and Root River Trails was appropriate for surveying several distinctive groups. But extending the survey on the Luce Line to Winsted, could have included more of the small town and farming populations. Although a number of farmland owners were included, few studies have been completed on rural trails and more information would be valuable.

The role of the DNR was important in this study. Their assistance was critical in obtaining information such as landowner names and the documentation of past events. However, conducting an independent study allowed for more credibility with the adjacent landowners due to the opposition in the past.

The advance letter did not appear to improve the participation rate. Owners who did not receive a letter, participated at about the same rate as individuals with advance notification. This may be due to owner interest with the subject matter. However, the initial contact with the respondent was much easier due to the advance letter.

For this study, the phone survey was effective in gathering information and helped to increase the participation rate. On studies involving several trails and a number of adjacent landowners, the mail survey approach would be equally effective as long as an accurate list of names was available.

The landowner questionnaire worked well in gathering the necessary information (Appendix B: Landowner Questionnaire - Telephone Survey). However, a few minor changes could improve this testing instrument. The survey took 10 to 15 minutes to administer and could be shortened by eliminating some of the questions on the landowner use of the trail. In addition, some of the current opinion questions should be reworded as problem questions for easier comparison with the pre-development concerns.

Ten landowners who were not contacted by phone, received questionnaires through the mail. Although the response rate was only 40%, this approach allowed every owner the opportunity to participate in the study.

The interview forms for trail manger, county commissioners, conservation officers, and law enforcement agents were effective in gathering information (Appendix G: Interview Forms). However, one law enforcement agent in the metropolitan area, was unsure about precise

crime statistics. An advance letter to these professional could help in gathering more information. The appraisers and real estate agent forms, on the other hand, need to be reworked. Many of the questions are too detailed and should be phrased in an open ended style.