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SCENIC BYWAY EVALUATION GREAT RIVER ROAD

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MARCH 1995

**IOWA'S
"GREAT RIVER ROAD"
SCENIC BYWAY EVALUATION**

Prepared For:
IOWA DEPARTMENT OF TRANSPORTATION

By:
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INTRODUCTION

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) renewed interest in scenic byway programs across the United States. The funds allocated through this Act allowed states to receive funding and establish new programs, update existing programs, and to make improvements, establish enhancements and provide resource management to previously designated scenic byways. In 1987, State of Iowa legislation paved the way to establish a Scenic Route/Highways/Byways Program for Iowa.

In 1992 the Iowa Department of Transportation (Iowa DOT) received an ISTEA grant to inventory and evaluate approximately 1650 miles of roads. The purpose of this pilot scenic byways project was "to identify four pilot scenic highway routes across two or more counties each for trial promotion in the state's tourism marketing program". The roads evaluated in the scope of this grant were nominated by local groups and organizations and included state highways, county roads and local roads.

1992 Scenic Byway Evaluation Results

Results of the inventory completed in 1992 are described in the report entitled "Iowa Scenic Byway Evaluation" (1). Decision Data Inc. performed the field inventory and evaluation analyses described in the report. Four pilot routes were chosen and signed as Iowa Scenic Byways.

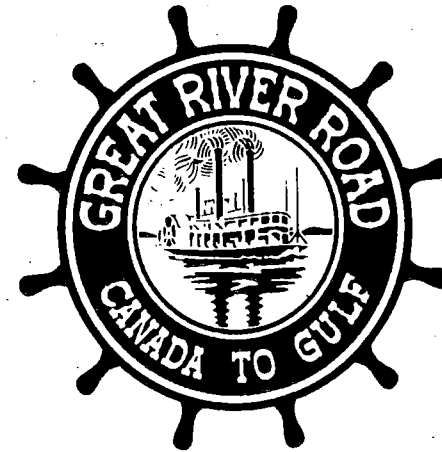
CURRENT SCENIC BYWAY EVALUATION PROJECT

In 1993 the Iowa DOT received funds to pursue designating additional scenic byways in their on-going Scenic Byways Program. The purpose of this project was twofold. First, scenic quality evaluations were to be performed on approximately 1000 miles of roads across Iowa. Second, a scenic quality evaluation was to be conducted on the Great River Road along the Mississippi River in Iowa. This report is an evaluation of the Great River Road segment of the project.

Great River Road

The Great River Road parallels the Mississippi River from Canada to the Gulf of Mexico. Iowa's segment is seen in Figure 1. The three thousand mile network consists of federal, state and county roads. Approximately 320 miles of this signed road are in Iowa.

The concept of the Great River Road began in 1936 when the idea was first introduced by the Mississippi River Parkway Commission (MRPC). Each state adjacent to the river had a member on the Commission. A feasibility study was performed and in 1954 Congress approved the Great River Road concept. The marker (shown to the right) depicts a steamboat steering helm and guides travelers along the entire route.



PROJECT OBJECTIVES

The Iowa DOT project objective was to drive and evaluate the scenic quality of the Great River Road segment located in Iowa (called the Great River Road throughout this report). The segment in Iowa is signed as the Great River Road (and implies good scenic quality) but a study had not been undertaken, prior to this project, to evaluate its scenic quality. The scope of work for the project was to employ the inventory system and set of evaluation criteria used in the 1992 study (1).

Overview of Scenic Byway Evaluation Process

The criteria developed and employed in the 1992 study (1) was based on research conducted in 1991-92 by a research group in conjunction with the Midwest Transportation Center. (See References 2, 3, 4, 5) The following specific work tasks were performed in evaluating Iowa's Great River Road:

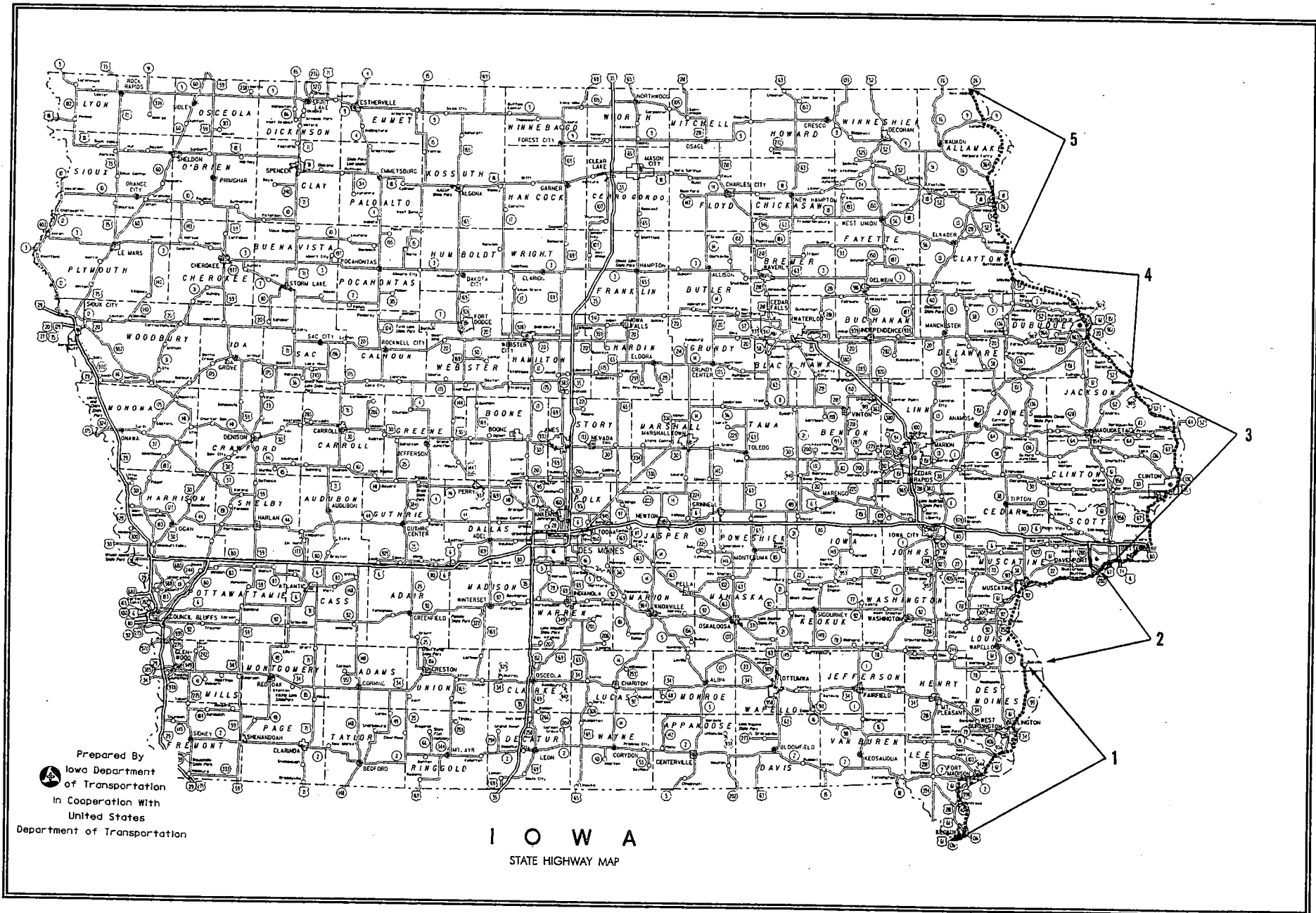


FIGURE 1. GREAT RIVER ROAD SECTIONS IN IOWA

- 1) inventory the Great River Road (Iowa's segment),
- 2) evaluate the scenic, historic and cultural character of the Great River Road based upon the inventory information,
- 3) report on the inventory and evaluation process and document the relative attributes of the Great River Road.

INVENTORY PROCEDURE

The purpose of the field inventory (survey) of the Great River Road was to gather information on the general scenic quality. Individual visual factors, intrinsic qualities, historic and cultural elements were identified along the route including roadway aesthetics, i.e., horizontal (road ribbon) and vertical (road terrain) alignment. The vast amount of information was stored in the on-board vehicle computer system for use later in the evaluation process.

Route Sections

The approximately 320 miles of Great River Road in Iowa was divided into five sections in order to more easily manage, analyze and report the information gathered. It is necessary to divide long lengths of roadway to adequately present graphic data. Figure 1 displays the route breakdown into five sections. Urban areas were chosen as the termini for each section.

Each section was driven in both directions and rated accordingly. Experience in the research project (2) and the 1992 inventory project (1) indicated that different ratings could be expected depending on the direction of travel.

BASIC EVALUATION

The purpose of the evaluation process was to obtain a numerical scenic quality rating for each section of the Great River Road. The scenic quality rating is based on the data collected in the field inventory of the sections.

Scenic quality rating is determined by compiling the data collected in the field inventory (survey). See Reference (1). The following attributes were observed and recorded and are the basis for the scenic quality rating:

- the type of view, (panorama, scene or focal point) and the recorded quality of that view (1-excellent, outstanding to 7 very poor, completely distracting)
- the quality of presentations or displays of view (1-straight ahead to 5-out the side window).
- the distance over which the view can be seen (view beginning and ending location was captured with the on-board Distance Measuring Device [DMD])
- the quality of roadway alignment
 - road ribbon - horizontal alignment - the ribbon of roadway ones sees.
 - road terrain - vertical alignment of the roadway.
- background or land use adjacent to the roadway (agricultural, native grasslands, urban, etc.)
- historic and cultural districts or sites
- amenities such as rest areas, overlooks, accommodations for tourists
- variety or lack of variety (degree of monotony)
- the collective perception of the above events.

The field survey was based on the inventory elements shown in Table 1.

**Table 1
Inventory Elements**

Visual Elements in the Inventory			
Types of Views	Primary Visual Composition Elements Associated with View	Secondary Visual Composition Elements Associated with View	Definition of Secondary Composition Elements Associated with View
<p>Panorama</p> <p><u>Note:</u> "Large" vista that provides a comprehensive view</p>	<p>Landform</p> <p>Water</p> <p>Vegetation</p> <p>Agriculture</p> <p>Structures</p> <p>Man-made</p>	<p>Basic Material Unique Features Basic Basic Color/Pattern Unique Features Basic Color/Pattern Basic Color/Pattern Color/Pattern</p>	<p>Hills, valleys - general forms Visible rocks, soils, etc. Unusual forms or materials Water bodies or channels Forests, grasslands, etc. general form Vegetation producing colors or patterns Unusual vegetation Farmlands without specific composition Agriculture producing colors or patterns General buildings, etc. Structures producing colors or patterns Man-made features producing colors or patterns</p>
<p>Scenes</p> <p><u>Note:</u> A single view of a composite or comprehensive subject:</p>	<p>Landform</p> <p>Water</p> <p>Vegetation</p> <p>Agriculture</p> <p>Structures</p> <p>Man-made</p>	<p>Basic Material Unique Features Basic Moving Basic Edge Color/Pattern Unique Features Color/Pattern Activity/Operations Structures Unique Basic Color/Pattern Color/Pattern</p>	<p>Hills, valleys - general forms Visible rocks, soils, etc. Unusual forms or materials Water bodies or channels Moving water Forests, grasslands, etc. general form Transition zone between vegetation types Vegetation producing colors or patterns Unusual vegetation Agriculture producing colors or patterns Ag features, i.e., farm animals, hay bales, etc. General buildings - farmsteads, barns, etc. Unusual agricultural features General buildings, etc. Structures producing colors or patterns Man-made features producing colors or patterns</p>

Table 1 (Cont.)
Inventory Elements

Visual Elements in the Inventory			
Types of Views	Primary Visual Composition Elements Associated with View	Secondary Visual Composition Elements Associated with View	Definition of Secondary Composition Elements Associated with View
Focal Points Note: A "short" view of a single feature or a detail of that feature.	Landform Water Vegetation Agriculture Structures Man-made Man-made	Basic Material Moving Edge Basic Edge Color/Pattern Unique Features Activity/Operations Structures Unique Basic Color/Pattern Color/Pattern Unique	Hills, valleys - general forms Visible rocks, soils, etc. Moving water Transition zone between vegetation types Forests, grasslands, etc. - general form Transition zone between vegetation types Vegetation producing colors or patterns Unusual vegetation Ag features, i.e., farm animals, hay bales, etc. General buildings - farmsteads, barns, etc. Unusual agricultural features General buildings, etc. Structures producing colors or patterns Man-made features producing colors or patterns Unusual man-made features

Other Elements in the Inventory		
Types of Corridor Characteristics	Primary Features Associated with Characteristic	Definition of Feature Associated with Characteristic
Roadway Aesthetics Background Note: Land use along the road corridor. Amenities/Conditions Historic Features	Terrain Ribbon Woodlands/forests Wetlands Mixed Native Vegetation Agriculture Urban/Suburban Accommodations Museums/Tours Parks & Recreation Pull Offs/Rest Areas Traffic Historic Structure Historic Area	Roadway flows with the terrain (good vertical alignment) Roadway meanders with the terrain (good horizontal alignment) Woodlands are the primary corridor land use Wetlands are the primary corridor land use The primary corridor land use is mixed vegetation Agriculture is the primary corridor land use Intense man-made land use along the corridor Motels, camping, etc. Museums, tours and other organized activities Developed recreation areas with public facilities Overlooks and other rest areas High traffic volumes encountered Structure having historic or cultural interest Area having historic or cultural interest

Numeric Rating of Visual Quality

A numeric rating of visual quality was calculated for each section. A measure of the visual quality of a section can be seen by plotting, for each viewed item or event, the normalized quality of view (4 minus the recorded quality of view), adjusted for presentation quality, as the ordinate vs. the distance over which the item is viewed (abscissa). A measure of the visual quality (numerical rating) at any point is the total height of the cumulative plot for the length of section being considered.

The numerical rating is the average height of the cumulative plot. It is also the area under the plot or curve, for any section, divided by the length of that section. All plots and numerical rating calculations are made by computer from the information stored in the database.

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evaluation

ROUTE EVALUATION

The inventory (survey) process provides extensive sets of data on the type, location and "value" of scenic vistas, road characteristics, historic features and cultural elements. Up to fifteen events can be maintained simultaneously in the computer as the inventory is being performed. Typically, inventory data is collected during the summer season. The summer data can be used to project spring and fall forecasts by increasing the rated quality on vegetative items such as vegetation scenes and edges. Inventory of the Great River Road was performed in October of 1994, therefore, these "seasonal" adjustments were reversed to reflect the decreased values associated with summer colors. Iowa's Great River Road north of Dubuque is adorned with roads weaving their way through the hilly landscape surrounded by vibrant hardwood forests in the fall. Terraced farmlands with splendid displays of agricultural crops in the summer have less impact in the fall season, none-the-less still pleasing. For this report, the agriculture color/pattern feature was increased and vegetative element ratings decreased to reflect the rated value in the projected (adjusted) summer analyses.

Numeric Analyses

Numeric evaluations were made for each section inventoried (both directions) and each seasonal projection (both directions). The analyses were designed to reflect the following concerns:

1. What is the general scenic value of the section?
2. How diverse is the visual character of the section? Does it provide a good "change of pace" and hold the observer's interest?
3. How uniform is the section's scenic quality? Does it have high visual quality along its entire length?
4. Does the section have areas with outstanding views?
5. Does the section have views that provide lasting impressions?

The first concern was addressed by calculating the average (mean) rating. This number indicates the normal scenic value that would be experienced along each section. For instance, an average rating of 4.0 would mean that at least two visual events or features perfectly presented and rated as "good" would be visible at all times.

The diversity of the visual character of the route was addressed by calculating the variance from the mean. A section with a high variance will have many changes in the features displayed and in the relative nature of these features.

Uniformity along the section was demonstrated by the percentage of the route with ratings above the "minimum scenic rating level" of 4.0. The higher this percentage the more uniform the section's visual character.

Areas with outstanding views are demonstrated by the mean of the ratings in the route segment identified as being above the minimum scenic rating. The higher the mean rating in these route segment ratings the more likely the segments contained outstanding views.

The issue of route impressions is addressed by analyzing each five mile segment and calculating the variance of the mean rating within each segment. Sections that have high segment variance hold views that are well above the average value and may provide signature vistas or vistas producing lasting impressions.

Table 2 provides the results of the numeric evaluation of each section. Note that the table shows individual directional evaluations and projected ratings. Key columns in this table are columns 4, 5, 7, 8 and 9. Column 4 shows the mean rating of the inventories and projected ratings. A mean rating of 4.0 indicates that the section has minimum visual character. A mean rating of 6.0 or above indicates that a section has good overall visual character. Column 5 shows the variance of the ratings from the mean along a section. A variance of 10.0 or more indicates that the section has some significant visual peaks. A variance above 15.0 indicates a section with good visual peaks. Generally, this statistic identifies sections with good change in pace and visual diversity.

Column 7 shows the percentage of the section that is above the "minimum scenic rating". A section with 50% or more above this rating will generally indicate a section with minimum levels of uniform visual character. Sections with 60% or more generally indicate good uniformity in visual quality.

**Table 2
Route Evaluations**

GREAT RIVER ROAD SECTION NUMBER AND INVENTORY DIRECTION		[1] LENGTH (MILES)	[2] HIGH RATING THIS SECTION	[3] LOW RATING THIS SECTION	[4] MEAN OF ALL RATINGS ALONG THIS SECTION	[5] VARIANCE ALONG THIS SECTION	[6] MILES WITH RATING ABOVE 4 THIS SECTION	[7] PERCENTAGE OF ROUTE ABOVE 4 THIS SECTION	[8] AVERAGE RATING WHEN ABOVE 4 THIS SECTION	[9] HIGH SEGMENT VARIANCE ALONG THIS SECTION
Section 1 KEOKUK TO OAKVILLE	NORTHBOUND FALL		21.80	-3.80	3.91	20.96	22.71	33.94	8.90	177.38
	SOUTHBOUND FALL		18.70	-3.00	3.56	16.49	24.70	36.93	8.02	72.99
	NORTHBOUND PROJECTED SUMMER		18.80	-5.00	2.18	17.06	13.56	20.27	8.75	125.12
	SOUTHBOUND PROJECTED SUMMER		16.20	-3.80	2.04	12.61	14.62	21.87	7.61	49.11
TOTAL SECTION 1		66.91	18.88	-3.90	2.92	16.78	18.90	28.25	8.32	106.15
Section 2 OAKVILLE TO DAVENPORT	NORTHBOUND FALL		15.80	-5.60	1.47	9.40	6.13	11.47	7.57	43.99
	SOUTHBOUND FALL		10.60	-4.80	1.47	5.52	6.07	11.35	5.87	5.00
	NORTHBOUND PROJECTED SUMMER		13.00	-6.60	.05	7.04	2.79	5.23	8.15	28.10
	SOUTHBOUND PROJECTED SUMMER		8.70	-4.80	.24	3.42	2.07	3.88	5.46	3.12
TOTAL SECTION 2		53.55	12.03	-5.45	.81	6.35	4.27	7.98	6.76	20.05
Section 3 DAVENPORT TO BELLEVUE	NORTHBOUND FALL		17.40	-5.00	3.71	18.37	34.25	43.68	7.73	40.98
	SOUTHBOUND FALL		19.80	-5.00	4.54	19.32	41.54	52.99	8.00	31.64
	NORTHBOUND PROJECTED SUMMER		14.20	-5.00	2.43	13.04	22.19	28.30	7.13	33.08
	SOUTHBOUND PROJECTED SUMMER		17.00	-5.00	2.93	13.27	28.42	36.25	6.86	12.93
TOTAL SECTION 3		78.42	17.10	-5.00	3.40	16.00	31.60	40.31	7.43	29.66
Section 4 BELLEVUE TO GUTTENBERG	NORTHBOUND FALL		27.40	-3.60	7.90	27.80	44.94	73.67	10.07	103.67
	SOUTHBOUND FALL		21.80	-3.00	7.89	16.25	49.47	81.09	9.26	22.69
	NORTHBOUND PROJECTED SUMMER		23.80	-4.50	6.41	22.60	40.87	67.00	8.81	89.25
	SOUTHBOUND PROJECTED SUMMER		20.30	-3.00	6.47	12.59	45.78	75.04	7.94	21.89
TOTAL SECTION 4		61.01	23.33	-3.53	7.17	19.81	45.27	74.20	9.02	59.38
Section 5 GUTTENBERG TO NEW ALBIN	NORTHBOUND FALL		22.60	-1.00	10.29	23.12	53.20	91.24	11.02	85.36
	SOUTHBOUND FALL		24.40	-1.00	10.32	20.12	54.57	93.59	10.85	185.14
	NORTHBOUND PROJECTED SUMMER		19.10	-1.00	7.99	17.29	45.42	77.91	9.48	48.71
	SOUTHBOUND PROJECTED SUMMER		21.40	-2.00	8.22	14.61	49.68	85.21	9.16	113.19
TOTAL SECTION 5		58.31	21.88	-1.25	9.21	18.79	50.72	86.99	10.13	108.10

Column 8 shows the mean scenic rating in areas that are above the minimum scenic rating. A mean rating of 6.5 indicates section segments with good scenic quality. A mean rating of 7.5 and above in these segments indicates that the scenic quality is very good and may offer outstanding views.

Column 9 shows the results of the segment analyses on each section. A rating of 10.0 or more in this column indicates one or more unique vistas. A rating of 15.0 and above indicates outstanding vistas, well above the value, existed along most of the section.

These statistics should be viewed as a composite in evaluating a section. For instance, an exceptional section will have a high average quality [Column 4 - above 6.0] complimented by areas of high quality [Column 5 - variance above 15.0]. This visual character will be consistent along the entire section [Column 7 - above 6.0] contain outstanding views [Column 8 - above 7.5] and contain unique impressive "signature" vistas [Column 9 - above 15.0].

Sections that meet only one or two of these criteria may indicate some detrimental characteristics. A section with a mean above 4.0 but a section mean variance and a segment variance below 10.0 may be pleasant but lack visual diversity and unique visual features.

A section with a high variance but a mean below 4.0, and a section percentage below 50%, may have only isolated areas of high quality. Or, the section may extend beyond scenic areas, i.e. parts of the section should not be considered a byway but rather a byway access.

Graphic Displays

Graphs were developed for each section of the Great River Road inventoried and for each seasonal projection. These graphs provide a continuous summary of the visual features encountered along each section.

Accompanying each graph is the section event summary. This summary shows the events and features that make up the visual character of the section. The number associated with each feature represents the average section value contributed by that feature. The higher the number, the greater the influence. Note that some features have a negative number indicating that the feature, on the average, was visually distracting. A feature with a zero average rating indicates that the event exists but

contributed a rather low average rating to the section's visual character. Negative ratings may occur, for example, when completely distracting man-made objects such as large power poles obstruct the view.

Each graph shows the section rating and the "minimum scenic rating". This provides the reader with a guide to the visual character along a section compared with the other sections.

Use of the table and graphs allows the reader to assess section segments and compare sections. Combined, this data is sufficient to determine the byway scenic quality elements of Iowa's Great River Road.

The Great River Road was divided into 5 sections for inventory (survey) purposes. The list below describes the five sections and their beginning and ending points.

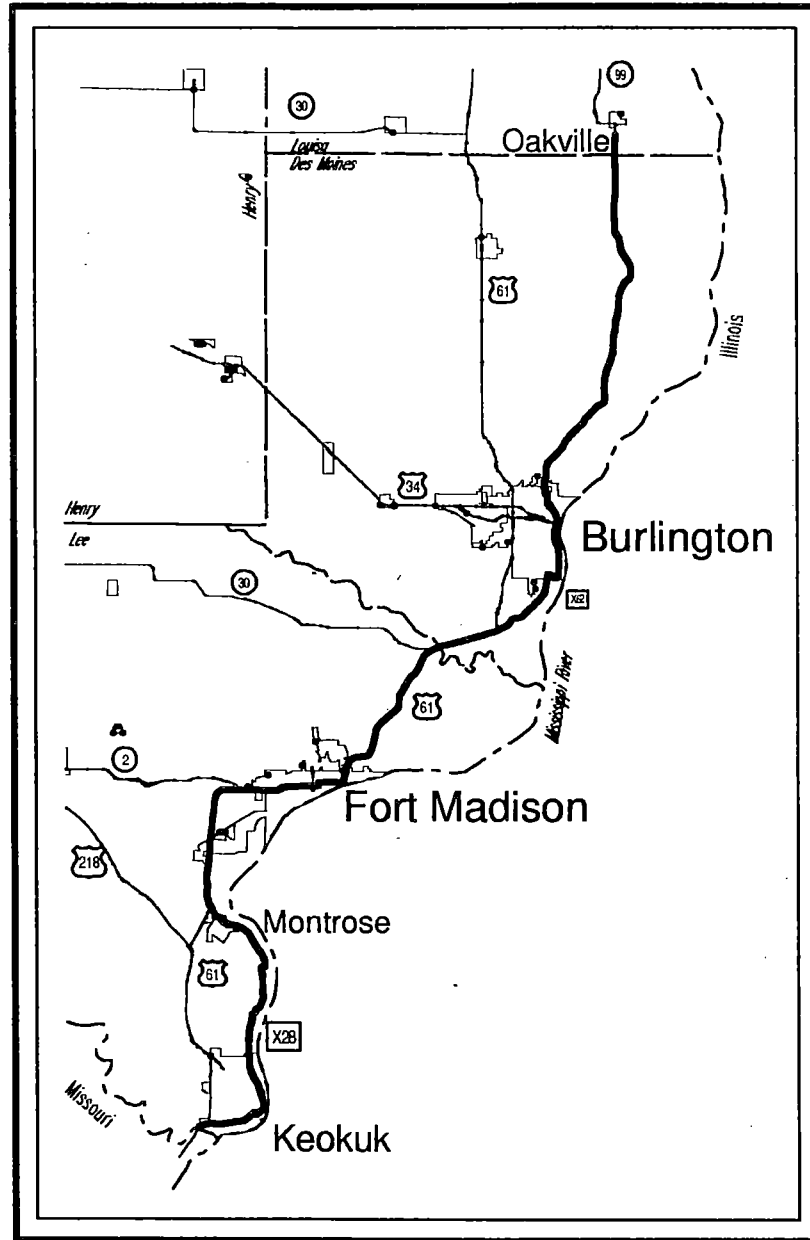
Section 1	Missouri State Line @ Keokuk to Oakville	66.91 miles
Section 2	Oakville to Davenport	53.49 miles
Section 3	Davenport to Bellevue	78.42 miles
Section 4	Bellevue to Guttenberg	61.01 miles
Section 5	Guttenberg to Minnesota State Line	58.31 miles

route evaluation graphic displays

- section location ■
- section description ■
- section visual elements ■
- section evaluation summary ■
- section evaluation rating ■
- section impressions ■
- section information ■
- graphic display of section ■

section 1

Great River Road



SECTION 1

GREAT RIVER ROAD

Route Location:

Counties: • Lee • Des Moines • Louisa

Road Description:

Length: • 66.91 miles
Designations: • U.S.61 from State Line to County X28
• County X28 in Keokuk to U.S.61 at Montrose
• U.S.61 to County X62
• County X62 to Parkway Drive in Burlington
• Parkway Drive to State 99 in Burlington
• State 99 to JCT with County H22 at Oakville
Termini: • U.S.61 at Missouri/Iowa State Line
• JCT of State 99 & County H22 in Oakville
Access: • U.S.136, U.S.218, State 2, State 16, U.S.34

Roadway Character:

Road Surface: Hard surfaced and gravel
Road Ribbon: High quality roadway ribbon is present between Keokuk and Montrose and in several spots between Burlington and Oakville.
Road Terrain: Nice vertical alignment is limited to the section between Keokuk and Montrose and 12 to 15 miles south of Oakville.

Route's Key Visual Elements:

Landform: The views of the hills associated with the Mississippi River bluffs are quite impressive as one travels north out of Keokuk. This section does however lack elevation variance.
Vegetation: Notable vegetation areas are confined to areas north of Keokuk and south of Oakville. Agricultural land accents the landscape throughout the section.

Road Ribbon: The roadway ribbon adds some interest to this section but is not a major attribute.

Road Terrain: Terrain changes in the roadway are a benefit north of Keokuk as it allows better presentation of river views.

Water: The Mississippi River is the major focal point at the beginning of this section. The road parallels the river much of the way from Keokuk to Montrose. Selected trimming and site enhancements would benefit this section. River edge scenes are pleasant focal points.

Historic: Mississippi River history abounds in the old cities.

Route's Visual Evaluation Summary:

Ave. Rating: • 3.74 (average both directions - fall season)
Adj. Rating: • 2.11 (adjusted both directions - summer season)
High Rating: • 21.80 (northbound)
Low Rating: • -5.00 (northbound)
High Section: • City park area on County X28 going north from Keokuk
Low Section: • Fort Madison urban/industrial area

Towns Along Corridor:

• Keokuk • Montrose • Fort Madison • Burlington

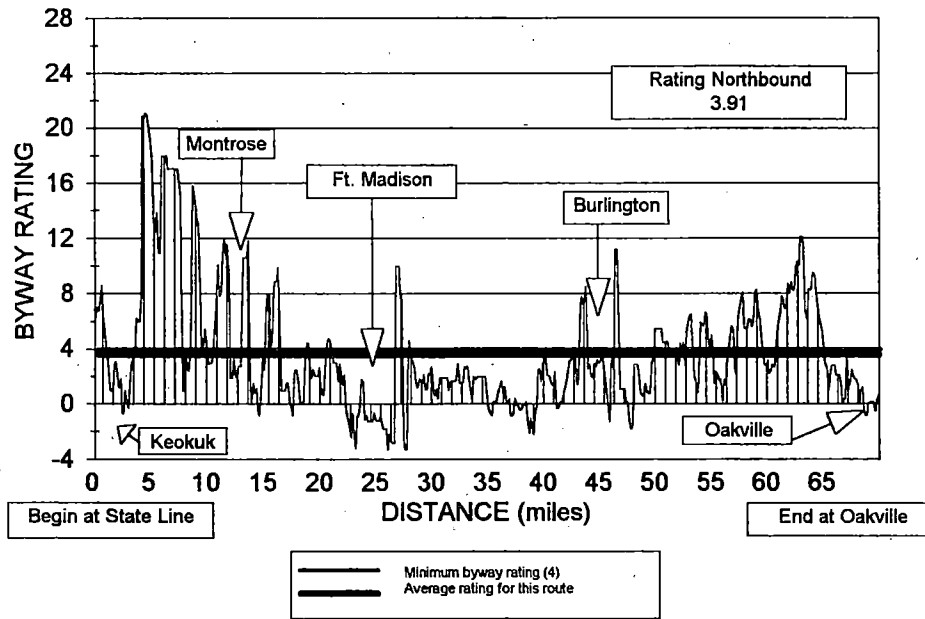
Historic Register Listings:

• Keokuk (10 sites) • Montrose (1 site)
• Fort Madison (10 sites) • Burlington (19 sites)

Route Impressions:

Three historic river cities provide interest to this section of the Great River Road. Keokuk, Fort Madison and Burlington display outstanding 19th Century homes. Each city is fortunate to have renowned parks overlooking the Mississippi River. Views of the river enhance the roadway between Keokuk and Montrose. One can enter the small town of Montrose along an attractive tree covered roadway from the south. The remainder of the section displays pleasing Iowa farmland. Bluffs in an area north of Burlington add a nice vegetative border. Generally this section provides only limited segments of high visual quality. Selected trimming of brush along the river would expose more scenic vistas. The road surface north of Keokuk needs major improvements before passenger cars could travel comfortably.

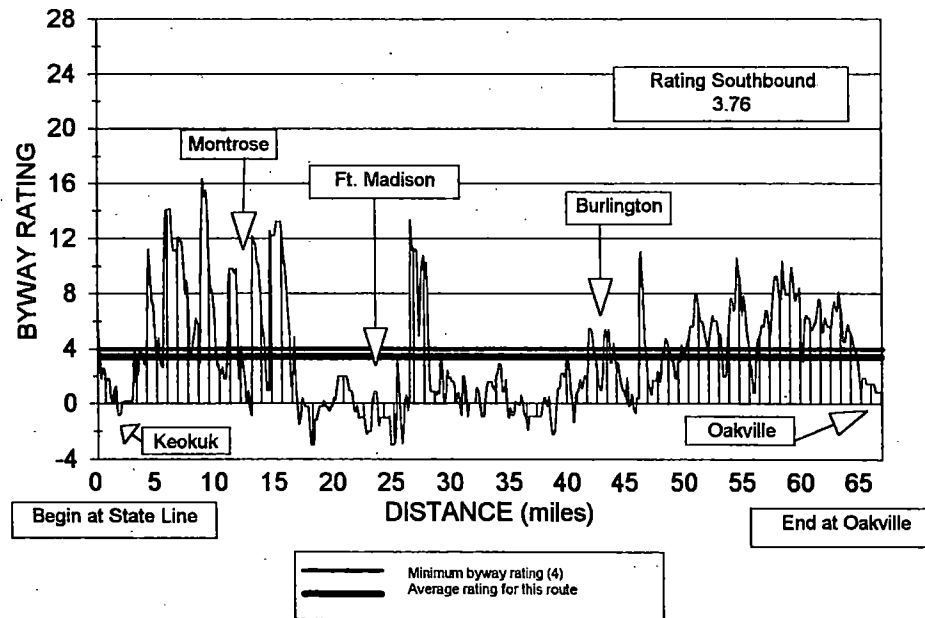
**GREAT RIVER ROAD
SECTION 1 - FALL - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.29
Avg. F:Agriculture Act/Op	0.00
Avg. F:Agriculture Structures	0.09
Avg. F:Landform	0.01
Avg. F:Landform Material	0.04
Avg. F:Man Made Color/Pattern	-0.53
Avg. F:Man Made Unique	0.03
Avg. F:Structures	0.07
Avg. F:Vegetation	1.08
Avg. F:Vegetation Color/Pattern	0.04
Avg. F:Vegetation Unique	0.00
Avg. F:Water Edge	0.24
Avg. Mixed Agriculture	0.00
Avg. Mixed Native	0.03
Avg. P:Landform	0.10
Avg. P:Vegetation Color/Pattern	0.02
Avg. P:Vegetation	0.11
Avg. Road Ribbon	0.30
Avg. Road Terrain	0.19
Avg. S:Agriculture Act/Op	-0.01
Avg. S:Landform	0.25
Avg. S:Landform Unique	0.02
Avg. S:Man Made Color/Pattern	-0.15
Avg. S:Moving Water	0.02
Avg. S:Structures	-0.14
Avg. S:Vegetation	0.38
Avg. S:Vegetation Color/Pattern	0.73
Avg. S:Vegetation Edge	0.23
Avg. S:Vegetation Unique	0.01
Avg. S:Water	0.27
Avg. Suburban/Urban	0.15
Avg. Woodlands	0.06
Avg. Total Route Summary	3.91

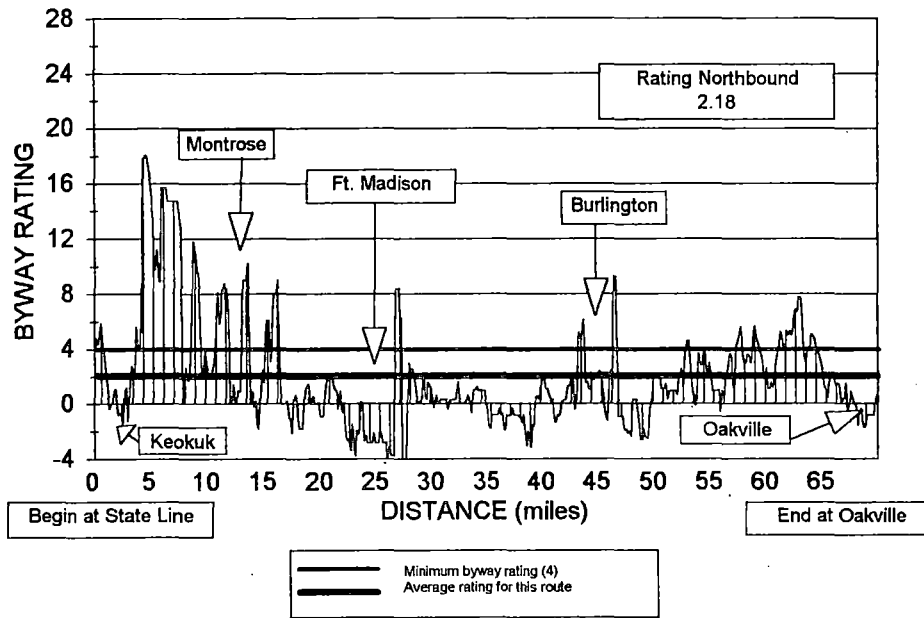
**GREAT RIVER ROAD
SECTION 1 - FALL - SOUTHBOUND**



SOUTH RATING SUMMARY

Avg. Agriculture	0.13
Avg. F:Agriculture Act/Op	0.00
Avg. F:Agriculture Structures	0.10
Avg. F:Landform	0.01
Avg. F:Landform Material	0.00
Avg. F:Man Made Color/Pattern	-0.58
Avg. F:Man Made Unique	0.01
Avg. F:Structures	0.06
Avg. F:Structures Color/Pattern	0.00
Avg. F:Vegetation	1.03
Avg. F:Water Edge	0.25
Avg. Mixed Agriculture	0.13
Avg. Mixed Native	0.05
Avg. P:Landform	0.05
Avg. P:Vegetation	0.12
Avg. Road Ribbon	0.35
Avg. Road Terrain	0.17
Avg. S:Agriculture Act/Op	-0.01
Avg. S:Landform	0.21
Avg. S:Landform Unique	0.02
Avg. S:Man Made Color/Pattern	-0.14
Avg. S:Moving Water	0.00
Avg. S:Structures	0.03
Avg. S:Structures Color/Pattern	-0.03
Avg. S:Vegetation	0.32
Avg. S:Vegetation Color/Pattern	0.62
Avg. S:Vegetation Edge	0.11
Avg. S:Water	0.28
Avg. Suburban/Urban	0.16
Avg. Woodlands	0.26
Avg. Total Route Summary	3.76

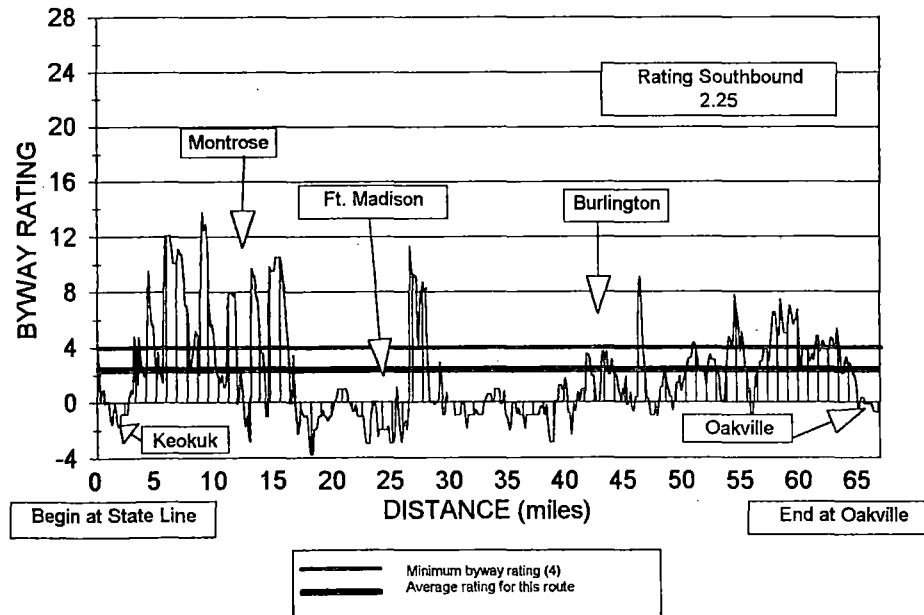
**GREAT RIVER ROAD
SECTION 1 - PROJECTED SUMMER - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.29
Avg. F:Agriculture Structures	0.09
Avg. F:Landform	0.01
Avg. F:Landform Material	0.04
Avg. F:Man Made Color/Pattern	-0.53
Avg. F:Man Made Unique	0.03
Avg. F:Structures	0.07
Avg. F:Vegetation	0.29
Avg. F:Vegetation Color/Pattern	0.02
Avg. F:Vegetation Unique	0.00
Avg. F:Water Edge	0.24
Avg. Historic Site	0.02
Avg. Mixed Agriculture	0.00
Avg. Mixed Native	0.03
Avg. P:Landform	0.10
Avg. P:Vegetation Color/Pattern	0.02
Avg. P:Vegetation	0.11
Avg. Road Ribbon	0.30
Avg. Road Terrain	0.19
Avg. S:Agriculture Act/Op	-0.01
Avg. S:Landform	0.25
Avg. S:Landform Unique	0.02
Avg. S:Man Made Color/Pattern	-0.15
Avg. S:Moving Water	0.02
Avg. S:Structures	-0.14
Avg. S:Vegetation	0.14
Avg. S:Vegetation Color/Pattern	0.22
Avg. S:Vegetation Edge	0.04
Avg. S:Vegetation Unique	0.01
Avg. S:Water	0.27
Avg. Suburban/Urban	0.15
Avg. Woodlands	0.06
Avg. Total Route Summary	2.18

**GREAT RIVER ROAD
SECTION 1 - PROJECTED SUMMER - SOUTHBOUND**

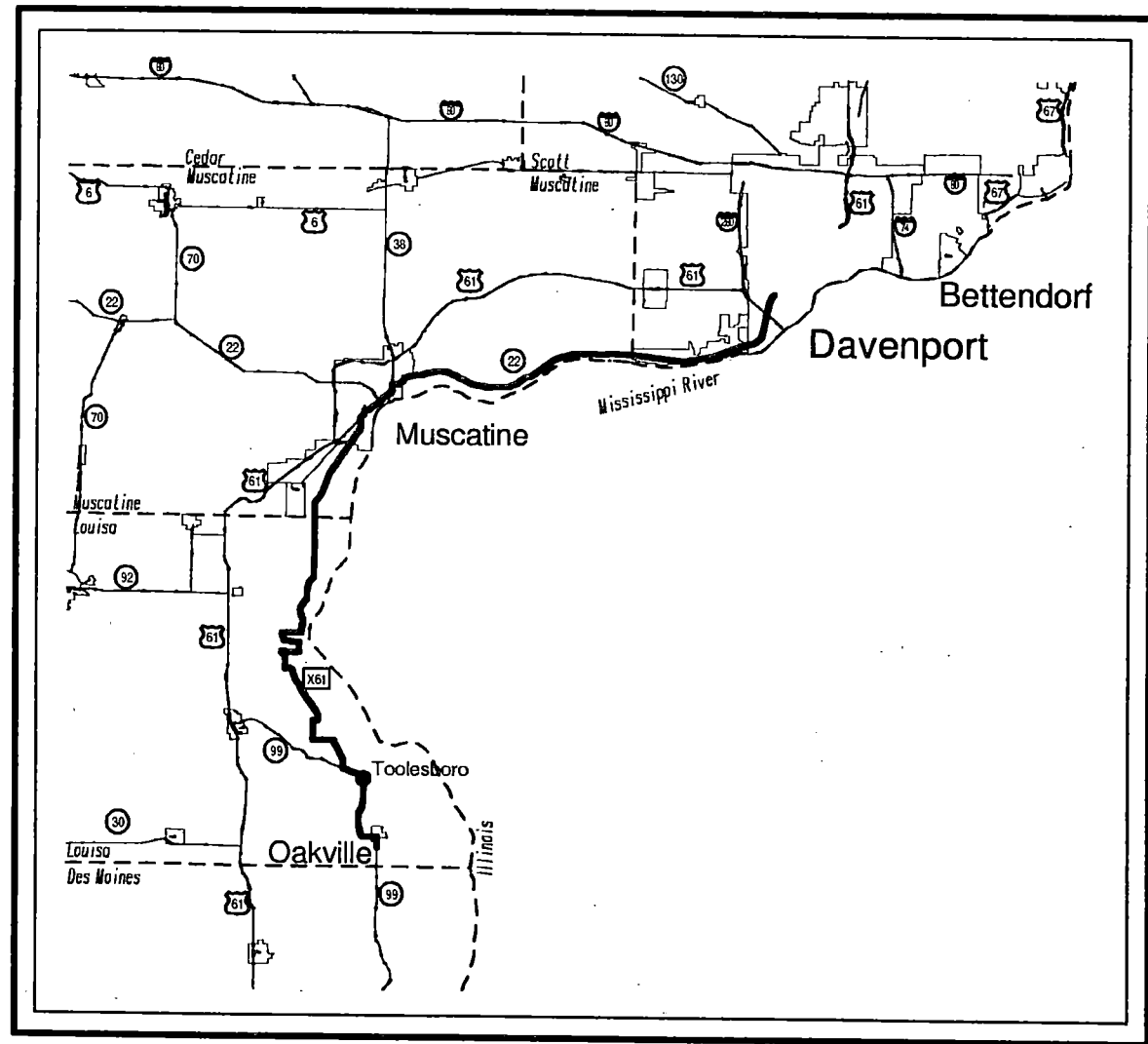


SOUTH RATING SUMMARY

Avg. Agriculture	0.13
Avg. F:Agriculture Act/Op	0.00
Avg. F:Agriculture Structures	0.10
Avg. F:Landform	0.01
Avg. F:Landform Material	0.00
Avg. F:Man Made Color/Pattern	-0.58
Avg. F:Man Made Unique	0.01
Avg. F:Structures	0.06
Avg. F:Structures Color/Pattern	0.00
Avg. F:Vegetation	0.30
Avg. F:Water Edge	0.25
Avg. Historic Area	0.00
Avg. Historic Site	0.01
Avg. Mixed Agriculture	0.13
Avg. Mixed Native	0.05
Avg. P:Landform	0.05
Avg. P:Vegetation	0.12
Avg. Road Ribbon	0.35
Avg. Road Terrain	0.17
Avg. S:Agriculture Act/Op	-0.01
Avg. S:Landform	0.21
Avg. S:Landform Unique	0.02
Avg. S:Man Made Color/Pattern	-0.14
Avg. S:Moving Water	0.00
Avg. S:Structures	0.03
Avg. S:Structures Color/Pattern	-0.03
Avg. S:Vegetation	0.05
Avg. S:Vegetation Color/Pattern	0.19
Avg. S:Vegetation Edge	0.02
Avg. S:Water	0.28
Avg. Suburban/Urban	0.16
Avg. Woodlands	0.26
Avg. Total Route Summary	2.25

section 2

Great River Road



SECTION 2

GREAT RIVER ROAD

Route Location:

Counties: • Louisa • Muscatine • Scott

Road Description:

- Length:** • 53.55 miles
- Designations:**
- State 99 from Oakville to JCT with County X61
 - County X61 to JCT of U.S.61 & State 99 in Muscatine
 - U.S.61/State 99 to JCT with State 22
 - State 22 to JCT U.S.61 & U.S.67 in Davenport
- Termini:**
- JCT County H22 & State 99 at Oakville
 - JCT State 22 & U.S.67 in Davenport
- Access:**
- U.S.61, State 92, State 38, U.S.67, I-80

Roadway Character:

- Road Surface:** Hard surfaced with approx. 14 miles of gravel road
- Road Ribbon:** High quality roadway ribbon is limited to a small section on the gravel road north of Toolesboro and again northeast of Muscatine for about 8 miles.
- Road Terrain:** Terrain changes create nice vertical roadway alignment on the gravel road section about 15 miles north of Oakville and northeast of Muscatine.

Route's Key Visual Elements:

- Landform:** Landform scenes are occasional in the area below Muscatine. The bluffs northeast of Muscatine are attractive and provide a pleasing relief.

Vegetation: The farmlands provide most of the vegetation for the first half of this section. Northeast of Muscatine the bluffs are covered with attractive forests.

Ribbon/Terrain: The quality of vertical and horizontal roadway alignment is limited along this section and provides only minimal interest to the route.

Water: The Mississippi River is out of the traveler's view most of this section. Pleasurable sightings of the river become visible northeast of Muscatine. Selected trimming of trees and brush would be desirable along many sections of roadway.

Route's Visual Evaluation Summary:

- Ave. Rating:** • 1.47 (average both directions - fall season)
- Adj. Rating:** • 0.15 (adjusted both directions - summer season)
- High Rating:** • 15.80 (northbound)
- Low Rating:** • -6.60 (northbound)
- High Section:** • 5 mile section north of Muscatine
- Low Section:** • Industrial area south of Muscatine

Towns Along Corridor:

- Oakville • Toolesboro • Muscatine • Davenport (Quad Cities)

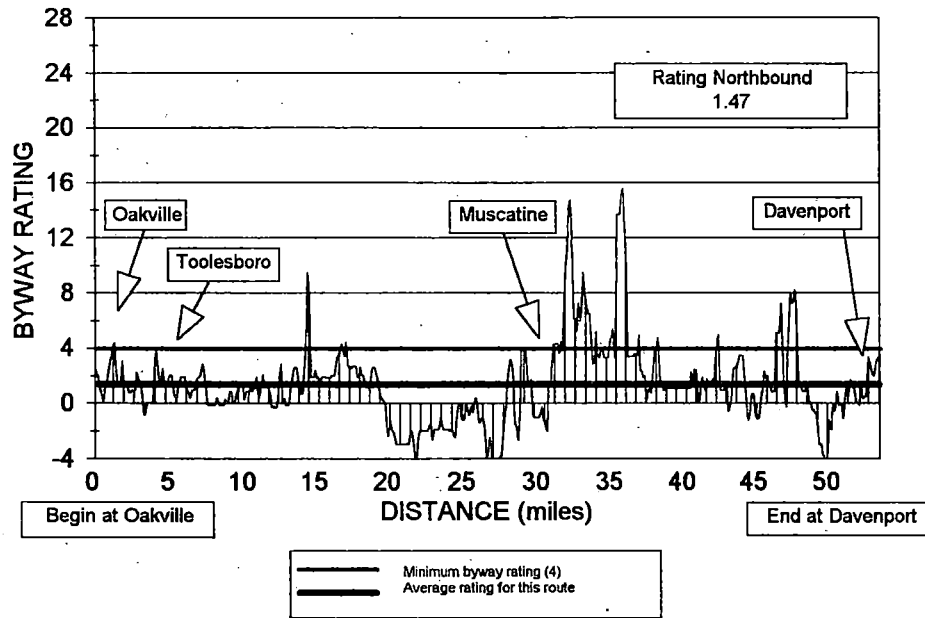
Historic Register Listings:

- Oakville (1 site) • Toolesboro (1 site)
- Muscatine (12 sites) • Quad Cities (100 ± sites)

Route Impressions:

Visual quality was low throughout most of this section. The river was only a minor positive attribute. The major factors contributing to the low rating were the unsightly industrial locations, unkempt dwellings along the river, and lack of scenic elements. Some sections could be improved with enhancements and cleanup operations but a good alternative might be to bypass these areas with other roads. The traveler would be disappointed with the infrequent views of the river and low scenic diversity.

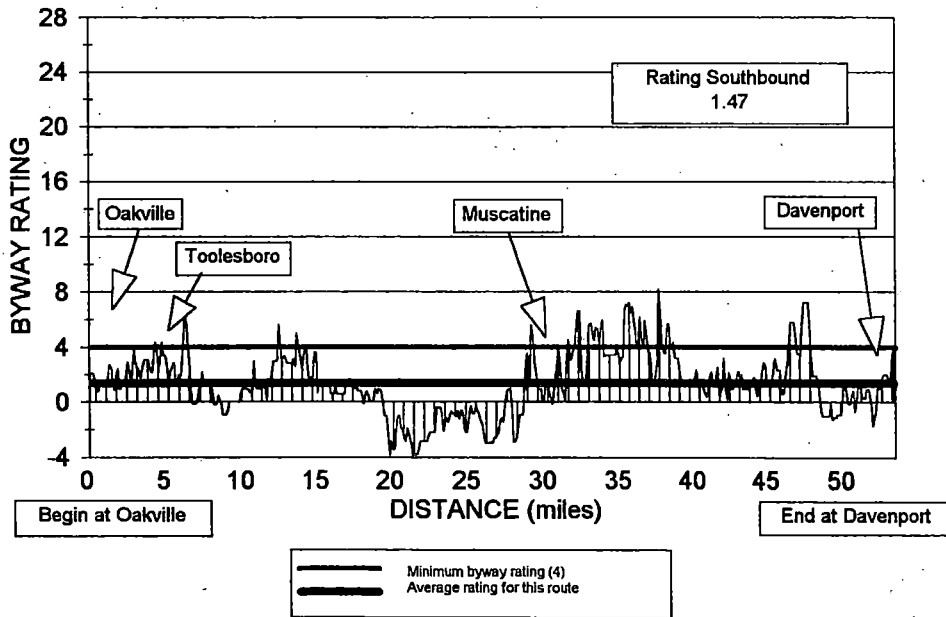
**GREAT RIVER ROAD
SECTION 2 - FALL - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.15
Avg. F:Agriculture Structures	0.09
Avg. F:Landform Material	0.00
Avg. F:Man Made Color/Pattern	-0.74
Avg. F:Man Made Unique	0.03
Avg. F:Structures	0.05
Avg. F:Vegetation	0.78
Avg. F:Water Edge	0.14
Avg. Mixed Agriculture	0.00
Avg. Mixed Native	0.05
Avg. P:Landform	0.00
Avg. P:Vegetation	0.08
Avg. Road Ribbon	0.12
Avg. Road Terrain	0.01
Avg. S:Agriculture Act/Op	-0.01
Avg. S:Landform	0.05
Avg. S:Landform Unique	0.03
Avg. S:Man Made Color/Pattern	-0.23
Avg. S:Moving Water	0.00
Avg. S:Structures	-0.22
Avg. S:Vegetation	0.07
Avg. S:Vegetation Color/Pattern	0.50
Avg. S:Vegetation Edge	0.24
Avg. S:Water	0.21
Avg. Suburban/Urban	0.08
Avg. Total Route Summary	1.47

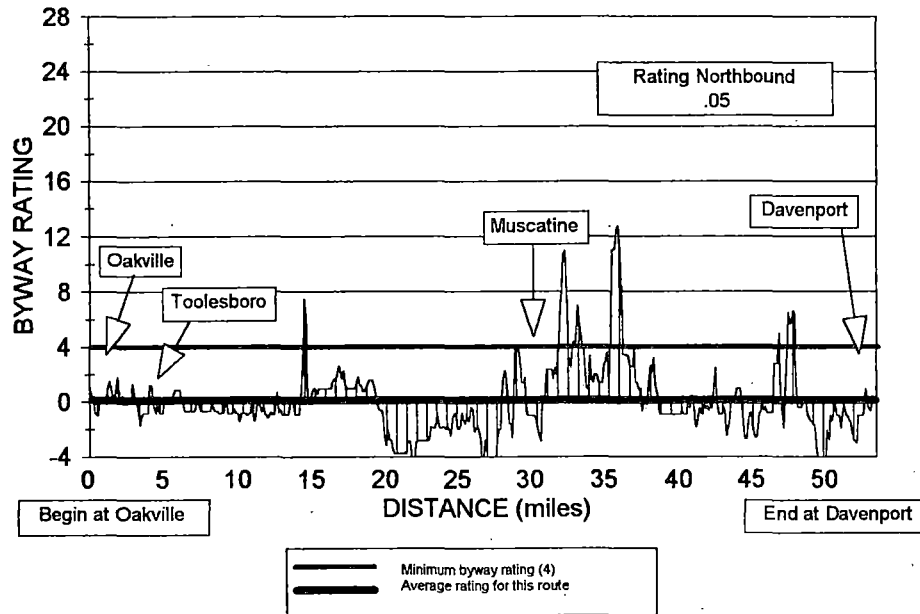
**GREAT RIVER ROAD
SECTION 2 - FALL - SOUTHBOUND**



SOUTH RATING SUMMARY

Avg. Agriculture	0.05
Avg. F:Agriculture Act/Op	0.00
Avg. F:Agriculture Structures	0.08
Avg. F:Landform Material	0.01
Avg. F:Man Made Color/Pattern	-0.65
Avg. F:Man Made Unique	0.00
Avg. F:Structures	0.02
Avg. F:Vegetation	0.55
Avg. F:Water Edge	0.09
Avg. Historic Site	0.00
Avg. Mixed Agriculture	0.09
Avg. Mixed Native	0.13
Avg. P:Landform	0.00
Avg. P:Vegetation	0.02
Avg. Road Ribbon	0.07
Avg. Road Terrain	0.04
Avg. S:Agriculture Act/Op	0.00
Avg. S:Landform	0.05
Avg. S:Landform Unique	0.00
Avg. S:Man Made Color/Pattern	-0.20
Avg. S:Moving Water	0.01
Avg. S:Structures	-0.08
Avg. S:Structures Color/Pattern	-0.01
Avg. S:Vegetation	0.15
Avg. S:Vegetation Color/Pattern	0.54
Avg. S:Vegetation Edge	0.26
Avg. S:Water	0.16
Avg. Suburban/Urban	0.11
Avg. Total Route Summary	1.47

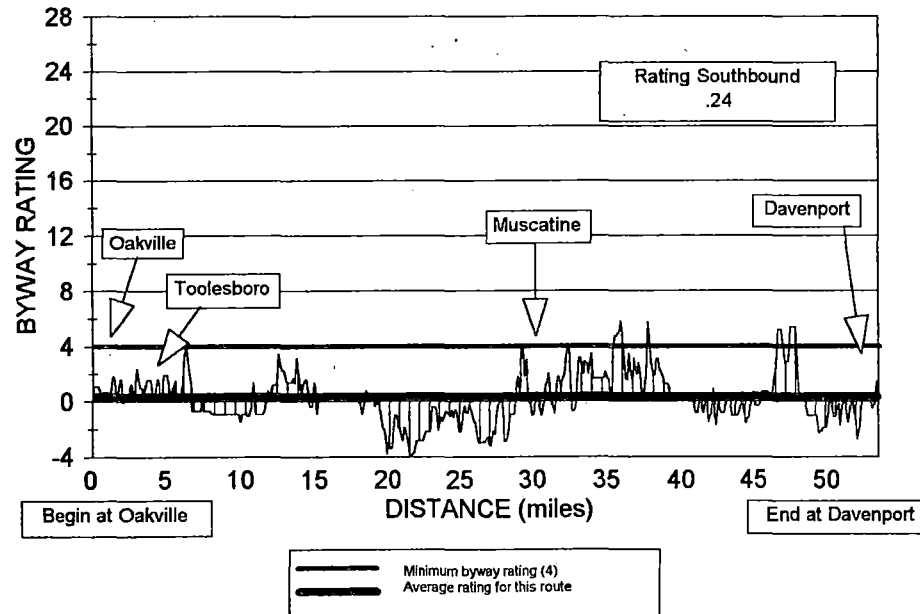
**GREAT RIVER ROAD
SECTION 2 - PROJECTED SUMMER - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.15
Avg. F:Agriculture Structures	0.09
Avg. F:Landform Material	0.00
Avg. F:Man Made Color/Pattern	-0.74
Avg. F:Man Made Unique	0.03
Avg. F:Structures	0.05
Avg. F:Vegetation	0.04
Avg. F:Water Edge	0.14
Avg. Mixed Agriculture	0.00
Avg. Mixed Native	0.05
Avg. P:Landform	0.00
Avg. P:Vegetation	0.08
Avg. Road Ribbon	0.12
Avg. Road Terrain	0.01
Avg. S:Agriculture Act/Op	-0.01
Avg. S:Landform	0.05
Avg. S:Landform Unique	0.03
Avg. S:Man Made Color/Pattern	-0.23
Avg. S:Moving Water	0.00
Avg. S:Structures	-0.22
Avg. S:Vegetation	0.02
Avg. S:Vegetation Color/Pattern	0.04
Avg. S:Vegetation Edge	0.06
Avg. S:Water	0.21
Avg. Suburban/Urban	0.08
Avg. Total Route Summary	0.05

**GREAT RIVER ROAD
SECTION 2 - PROJECTED SUMMER - SOUTHBOUND**

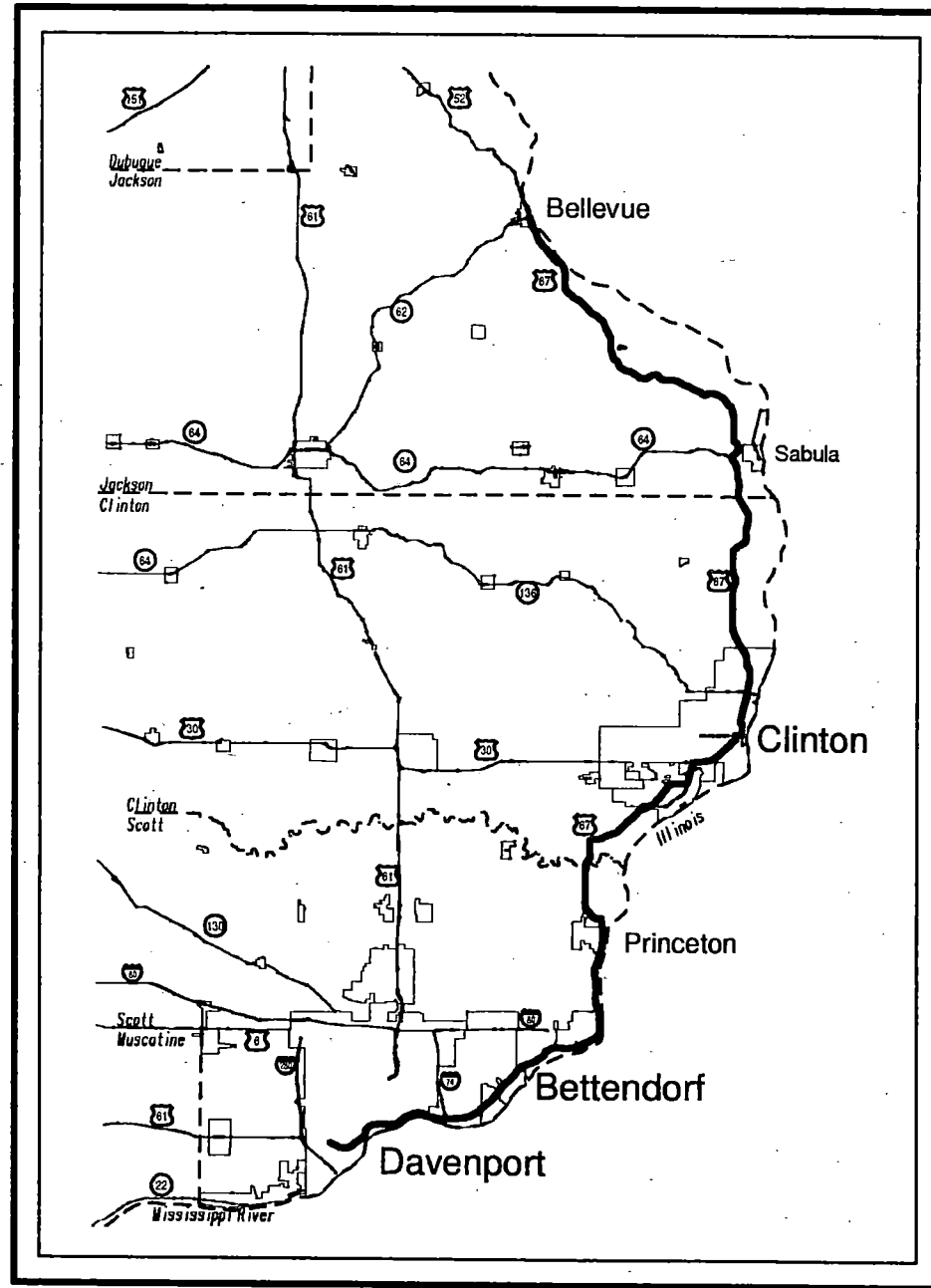


SOUTH RATING SUMMARY

Avg. Agriculture	0.05
Avg. F:Agriculture Act/Op	0.00
Avg. F:Agriculture Structures	0.08
Avg. F:Landform Material	-0.01
Avg. F:Man Made Color/Pattern	-0.65
Avg. F:Man Made Unique	0.00
Avg. F:Structures	0.02
Avg. F:Vegetation	0.02
Avg. F:Water Edge	0.09
Avg. Historic Site	0.00
Avg. Mixed Agriculture	0.09
Avg. Mixed Native	0.13
Avg. P:Landform	0.00
Avg. P:Vegetation	0.02
Avg. Road Ribbon	0.07
Avg. Road Terrain	0.04
Avg. S:Agriculture Act/Op	0.00
Avg. S:Landform	0.05
Avg. S:Landform Unique	0.00
Avg. S:Man Made Color/Pattern	-0.20
Avg. S:Moving Water	0.01
Avg. S:Structures	-0.08
Avg. S:Structures Color/Pattern	-0.01
Avg. S:Vegetation	0.07
Avg. S:Vegetation Color/Pattern	0.11
Avg. S:Vegetation Edge	0.06
Avg. S:Water	0.16
Avg. Suburban/Urban	0.11
Avg. Total Route Summary	0.24

section 3

Great River Road



SECTION 3

GREAT RIVER ROAD

Route Location:

Counties: • Scott • Clinton • Jackson

Road Description:

Length: 78.42 miles
Designations: U.S.61/67 from JCT with State 22 in Davenport
U.S.67 from Davenport to U.S. 52 at Sabula
U.S.52 to Bellevue
Termini: JCT U.S. 61 & 67 with State 22 in Davenport
JCT U.S.52 & State 62 in Bellevue
Access: U.S.61, I-80, I-280, I-74, U.S.30, State 136, 64 & 62

Roadway Character:

Road Surface: Hard surfaced
Road Ribbon: This section has pleasing roadway ribbon north of Clinton and near Princeton.
Road Terrain: High quality vertical alignment is limited to the sections north and south of Sabula.

Route's Key Visual Elements:

Landform: The northern portion of this section has rolling hills creating an abundance of vegetative scenes. The hardwood covered bluffs near Princeton make an attractive backdrop for the Mississippi River.
Vegetation: Farmlands seen south of Clinton in the floodplain are indicative of Iowa's farm economy. Forest covered bluffs are present west of the river. The forested hills north of Clinton provide great seasonal color. The road meanders through woodlands in several areas.
Road Ribbon: The horizontal roadway alignment is a positive element throughout much of this section. Good river views are

present in the Princeton area. The ribbon is excellent north of Clinton traveling into Bellevue.

Road Terrain:

Vertical roadway alignment combined with the horizontal roadway ribbon create the platform for excellent scenic diversity in the Sabula region.

Water:

Water views of the Mississippi River & bridge structures are impressive in Davenport and traveling north into Princeton. Excellent glimpses of the river surface again near Green Island and Bellevue.

History:

The historic river towns along this section add interest.

Route's Visual Evaluation Summary:

Ave. Rating: • 4.125 (average both directions - fall season)
Adj. Rating: • 2.68 (adjusted both directions - summer season)
High Rating: • 19.80 (southbound)
Low Rating: • -5.00 (north & southbound)
High Section: • South of Bellevue
Low Section: • Davenport & Clinton industrial areas

Towns Along Corridor:

• Quad Cities* • Princeton • Clinton • Sabula • Bellevue

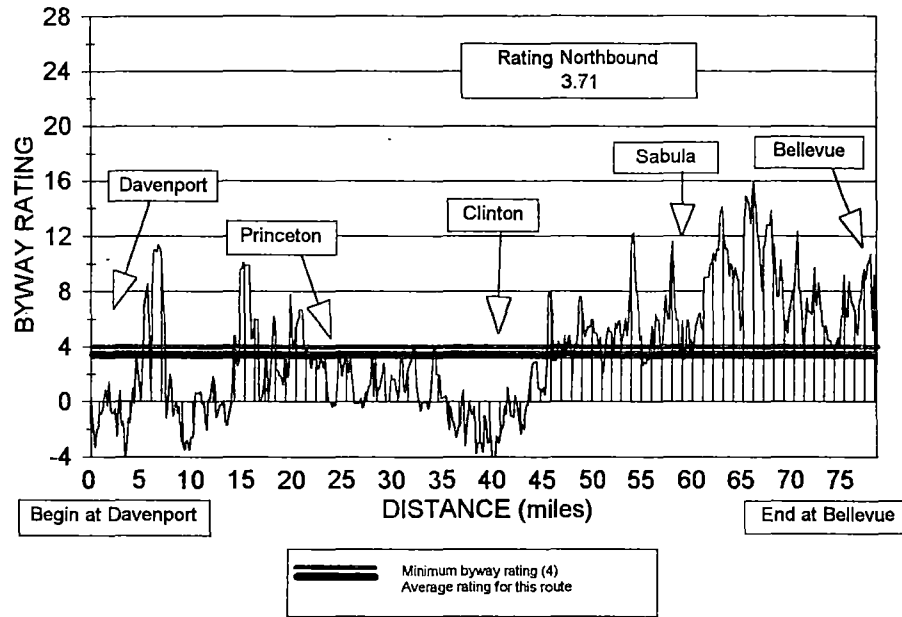
Historic Register Listings:

• Quad Cities (100 ± sites)* • Clinton (6 sites) • Sabula (2 sites)
• Bellevue (20 sites)
[*Quad Cities are Davenport, Bettendorf, Moline & Rock Island]

Route Impressions:

The portion of this section north of Clinton into Bellevue has great roadway alignment which creates an enjoyable change of pace and diversity. Excellent road presentation of the landscape and beautiful vegetation keeps the traveler's attention. The drive along the river between Davenport and Princeton presents an abundance of river views, nice old homes and bridges across the Mississippi. However, Davenport and Clinton's river industrial areas detract from the overall quality of this section, thus creating a misrepresentation of the overall scenic rating. This section would benefit from tree removal and maintenance to enhance the route.

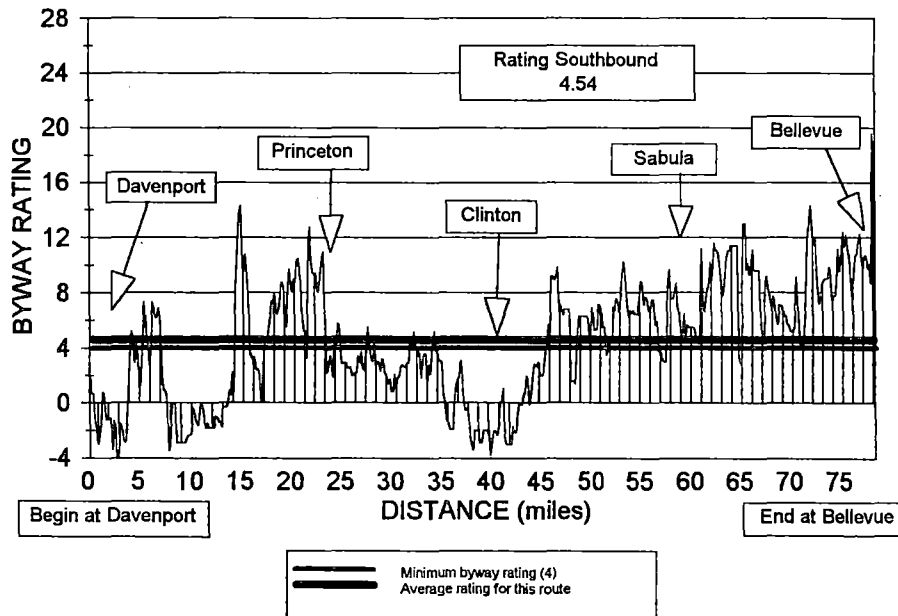
**GREAT RIVER ROAD
SECTION 3 - FALL - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.13
Avg. F:Agriculture Act/Op	0.03
Avg. F:Agriculture Structures	0.14
Avg. F:Landform	0.01
Avg. F:Landform Material	0.08
Avg. F:Man Made Color/Pattern	-0.42
Avg. F:Man Made Unique	0.02
Avg. F:Structures	0.10
Avg. F:Vegetation	0.57
Avg. F:Water Edge	0.09
Avg. Historic Site	0.00
Avg. Mixed Agriculture	0.22
Avg. Mixed Native	0.03
Avg. Museums/Tours	0.00
Avg. P:Landform	0.06
Avg. P:Vegetation Color/Pattern	0.01
Avg. P:Vegetation	0.03
Avg. Road Ribbon	0.43
Avg. Road Terrain	0.21
Avg. S:Agriculture Act/Op	0.01
Avg. S:Agriculture Color/Pattern	0.04
Avg. S:Landform	0.49
Avg. S:Man Made Color/Pattern	-0.19
Avg. S:Moving Water	0.12
Avg. S:Structures	-0.03
Avg. S:Structures Color/Pattern	-0.01
Avg. S:Vegetation	0.27
Avg. S:Vegetation Color/Pattern	0.70
Avg. S:Vegetation Edge	0.29
Avg. S:Water	0.08
Avg. Suburban/Urban	0.03
Avg. Woodlands	0.18
Avg. Total Route Summary	3.71

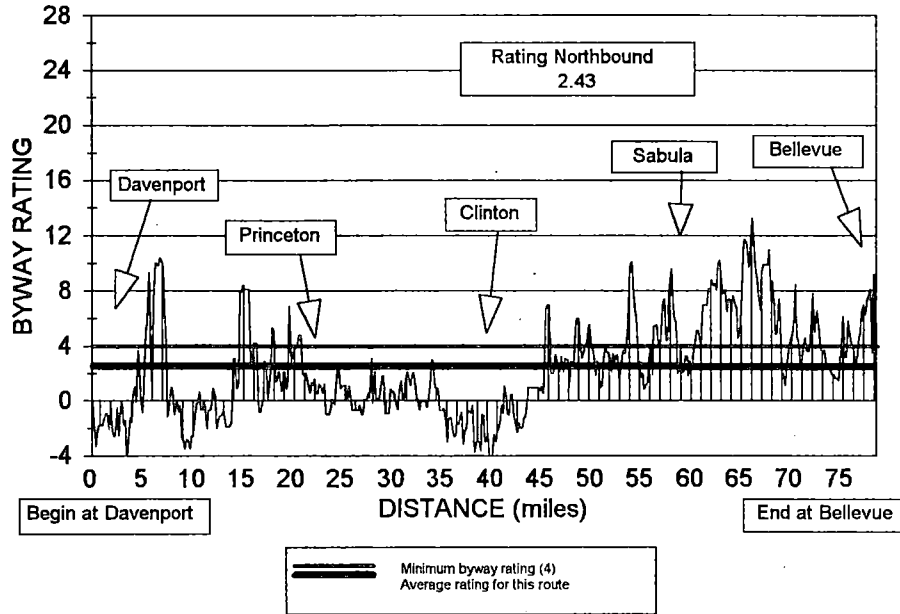
**GREAT RIVER ROAD
SECTION 3 - FALL - SOUTHBOUND**



SOUTH RATING SUMMARY

Avg. Agriculture	0.31
Avg. F:Agriculture Structures	0.08
Avg. F:Landform	0.12
Avg. F:Landform Material	0.12
Avg. F:Man Made Color/Pattern	-0.40
Avg. F:Man Made Unique	0.03
Avg. F:Structures	0.02
Avg. F:Vegetation	0.93
Avg. F:Water Edge	0.19
Avg. Historic Site	0.00
Avg. Mixed Agriculture	0.06
Avg. Mixed Native	0.03
Avg. Museums/Tours	0.00
Avg. Road Ribbon	0.49
Avg. Road Terrain	0.20
Avg. S:Agriculture Act/Op	0.03
Avg. S:Agriculture Structures	0.00
Avg. S:Landform	0.43
Avg. S:Landform Unique	0.03
Avg. S:Man Made Color/Pattern	-0.07
Avg. S:Moving Water	0.01
Avg. S:Structures	-0.07
Avg. S:Vegetation	0.38
Avg. S:Vegetation Color/Pattern	0.94
Avg. S:Vegetation Edge	0.32
Avg. S:Vegetation Unique	0.02
Avg. S:Water	0.25
Avg. Suburban/Urban	0.00
Avg. Woodlands	0.10
Avg. Total Route Summary	4.54

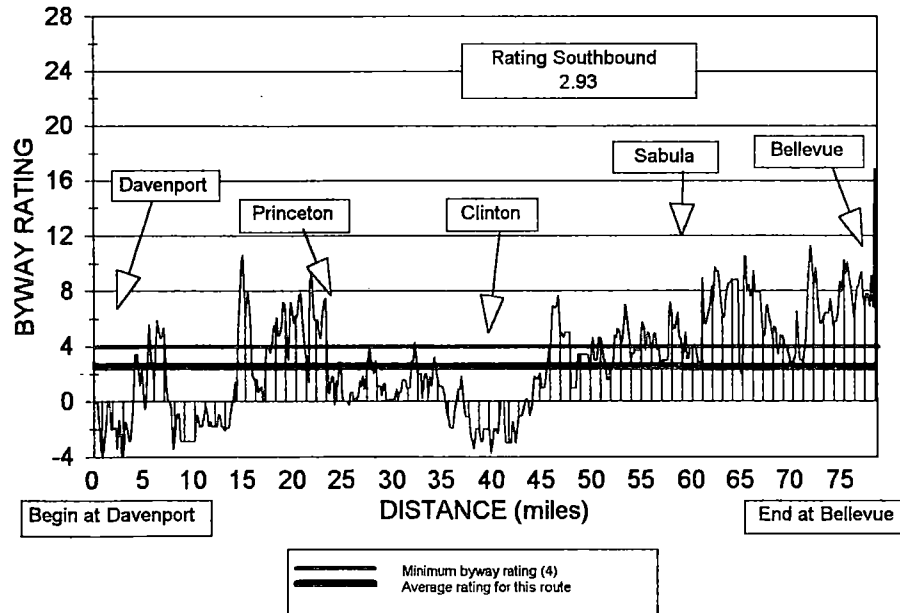
**GREAT RIVER ROAD
SECTION 3 - PROJECTED SUMMER - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.13
Avg. F:Agriculture Act/Op	0.03
Avg. F:Agriculture Structures	0.14
Avg. F:Landform	0.01
Avg. F:Landform Material	0.08
Avg. F:Man Made Color/Pattern	-0.42
Avg. F:Man Made Unique	0.02
Avg. F:Structures	0.10
Avg. F:Vegetation	0.17
Avg. F:Water Edge	0.09
Avg. Historic Site	0.02
Avg. Mixed Agriculture	0.22
Avg. Mixed Native	0.03
Avg. Museums/Tours	0.00
Avg. P:Landform	0.06
Avg. P:Vegetation Color/Pattern	0.01
Avg. P:Vegetation	0.03
Avg. Road Ribbon	0.43
Avg. Road Terrain	0.21
Avg. S:Agriculture Act/Op	0.01
Avg. S:Agriculture Color/Pattern	0.07
Avg. S:Landform	0.49
Avg. S:Man Made Color/Pattern	-0.19
Avg. S:Moving Water	0.12
Avg. S:Structures	-0.03
Avg. S:Structures Color/Pattern	-0.01
Avg. S:Vegetation	0.09
Avg. S:Vegetation Color/Pattern	0.17
Avg. S:Vegetation Edge	0.07
Avg. S:Water	0.08
Avg. Suburban/Urban	0.03
Avg. Woodlands	0.18
Avg. Total Route Summary	2.43

**GREAT RIVER ROAD
SECTION 3 - PROJECTED SUMMER - SOUTHBOUND**

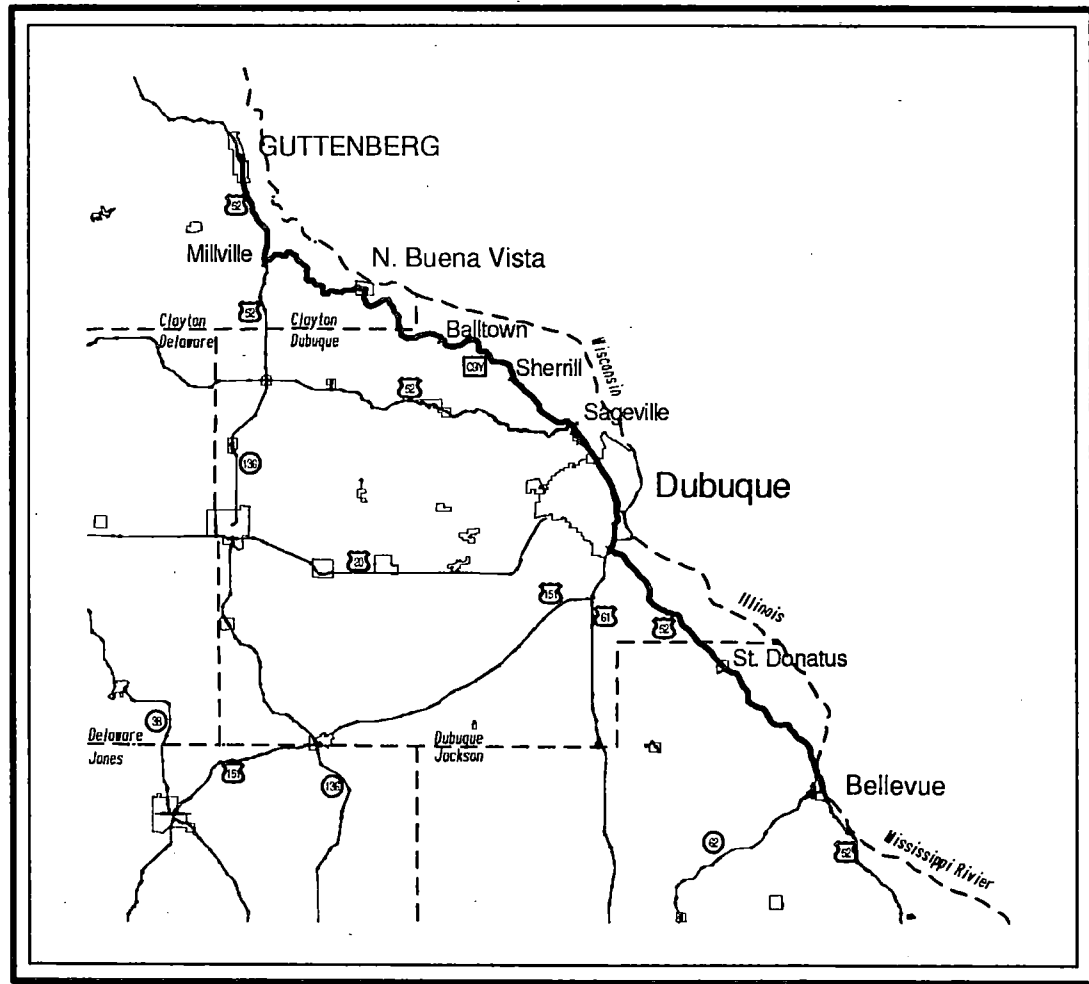


SOUTH RATING SUMMARY

Avg. Agriculture	0.31
Avg. F:Agriculture Structures	0.08
Avg. F:Landform	0.12
Avg. F:Landform Material	0.12
Avg. F:Man Made Color/Pattern	-0.40
Avg. F:Man Made Unique	0.03
Avg. F:Structures	0.02
Avg. F:Vegetation	0.28
Avg. F:Water Edge	0.19
Avg. Historic Site	0.00
Avg. Mixed Agriculture	0.06
Avg. Mixed Native	0.03
Avg. Museums/Tours	0.00
Avg. Road Ribbon	0.49
Avg. Road Terrain	0.20
Avg. S:Agriculture Act/Op	0.03
Avg. S:Agriculture Structures	0.00
Avg. S:Landform	0.43
Avg. S:Landform Unique	0.03
Avg. S:Man Made Color/Pattern	-0.07
Avg. S:Moving Water	0.01
Avg. S:Structures	-0.07
Avg. S:Vegetation	0.17
Avg. S:Vegetation Color/Pattern	0.39
Avg. S:Vegetation Edge	0.11
Avg. S:Vegetation Unique	0.02
Avg. S:Water	0.25
Avg. Suburban/Urban	0.00
Avg. Woodlands	0.10
Avg. Total Route Summary	2.93

section 4

Great River Road



SECTION 4

GREAT RIVER ROAD

Route Location:

Counties: • Jackson • Dubuque • Clayton

Road Description:

- Length:** • 61.01 miles
Designations: • U.S.52 from Bellevue to County C9Y at Sageville near Dubuque
• County C9Y from Sageville to U.S.52 at Millville
• U.S.52 to Guttenberg
Termini: • JCT U.S. 52 & State 62 in Bellevue
• JCT County X56 & U.S.52 in Guttenberg
Access: • State 62, U.S.61, U.S.151, U.S.20, & State 3

Roadway Character:

- Road Surface:** Hard surfaced
Road Ribbon: Exceptional horizontal roadway alignment is standard.
Road Terrain: Good vertical alignment exists throughout much of this route. A particularly excellent section is from Balltown to Millville.

Route's Key Visual Elements:

- Landform:** The entire section has rolling hills and areas of bluffs. The road journeys along the ridge and dips into the valleys presenting incredible panoramas of the landscape. Many focal points of rock outcrop are visible.
Vegetation: Panoramas, scenes and focal points of vegetation entertain the traveler this entire route. Views of beautifully terraced farmlands, hardwood forests, and exquisite color displays in the fall provide superior scenic excellence.
Road Ribbon: The roadway threads through the landscape in this section creating high quality presentations of scenic

elements. Every turn affords a new and exciting picture.

Road Terrain:

The match of roadway to the terrain is outstanding through parts of this section. Ascending up tree covered hills, riding across the hill's crest and then descending into the lush valleys excites the traveler's anticipation.

Water:

Good views of the Mississippi River, bridges and locks are presented at various locations along this section.

History:

Small, quaint historic river towns are a bonus.

Route's Visual Evaluation Summary:

- Ave. Rating:** • 7.895 (average both directions - fall season)
Adj. Rating: • 6.44 (adjusted both directions - summer season)
High Rating: • 27.40 (northbound)
Low Rating: • -4.50 (northbound)
High Section: • South of Millville along ridge overlooking river
Low Section: • Dubuque industrial area

Towns Along Corridor:

- Bellevue • St. Donatus • Dubuque • Sherrill • Balltown
• N. Buena Vista • Millville • Guttenberg

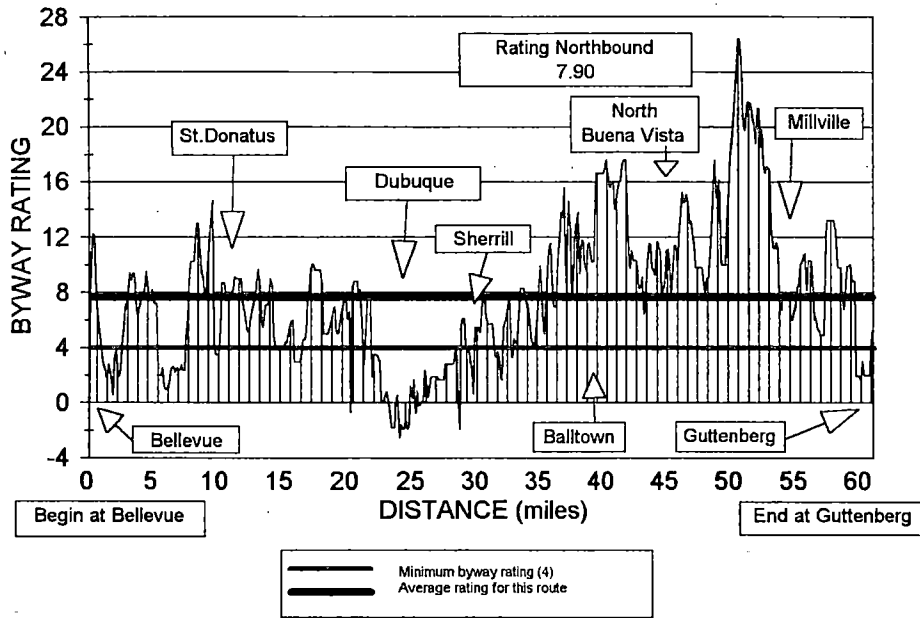
Historic Register Listings:

- Bellevue (20 sites) • St. Donatus (2 sites) • Dubuque (37 sites)
• Sherrill (1 site) • Millville (2 sites) • Guttenberg (17 sites)

Route Impressions:

The splendid river park in Bellevue begins this scenic section of the Great River Road. Proceeding north, nice roadway alignment takes the traveler through beautiful Iowa farmlands and lush woodlands. After departing the Dubuque area, the drive from Sherrill to North Buena Vista is a gorgeous piece of roadway with grand panoramas and scenes of the Mississippi River valley. The quality continues to excel as the traveler descends into Millville and winds down into Guttenberg. A strategically placed overlook (south of Guttenberg) welcomes the traveler to view the Mississippi River after observing it from the ridge above. The overall assessment is superb! This section could be enhanced with crucial tree trimming. Perhaps an alternative route could be found through Dubuque, or more route signs could be added to keep the traveler from getting lost.

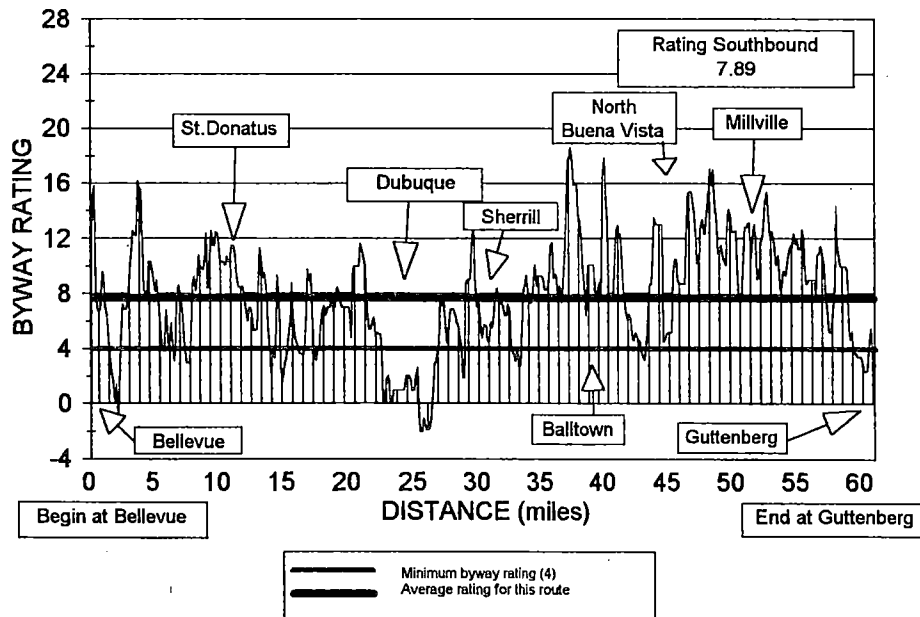
**GREAT RIVER ROAD
SECTION 4 - FALL - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.47
Avg. F.Agriculture Act/Op	0.30
Avg. F.Agriculture Structures	0.20
Avg. F.Landform	0.35
Avg. F.Landform Material	0.32
Avg. F.Man Made Color/Pattern	-0.21
Avg. F.Man Made Unique	0.03
Avg. F.Structures	0.06
Avg. F.Vegetation	0.85
Avg. F.Water Edge	0.01
Avg. Historic Site	0.00
Avg. Mixed Agriculture	0.23
Avg. Mixed Native	0.05
Avg. P.Agriculture	0.02
Avg. P.Landform	0.29
Avg. P.Vegetation Color/Pattern	0.06
Avg. P.Vegetation	0.15
Avg. Road Ribbon	1.15
Avg. Road Terrain	0.74
Avg. S.Agriculture Color/Pattern	0.02
Avg. S.Agriculture Structures	0.08
Avg. S.Landform	0.90
Avg. S.Landform Material	0.03
Avg. S.Man Made Color/Pattern	-0.18
Avg. S.Moving Water	0.08
Avg. S.Structures	0.04
Avg. S.Vegetation	0.54
Avg. S.Vegetation Color/Pattern	0.84
Avg. S.Vegetation Edge	0.22
Avg. S.Water	0.05
Avg. Suburban/Urban	0.04
Avg. Woodlands	0.16
Avg. Total Route Summary	7.90

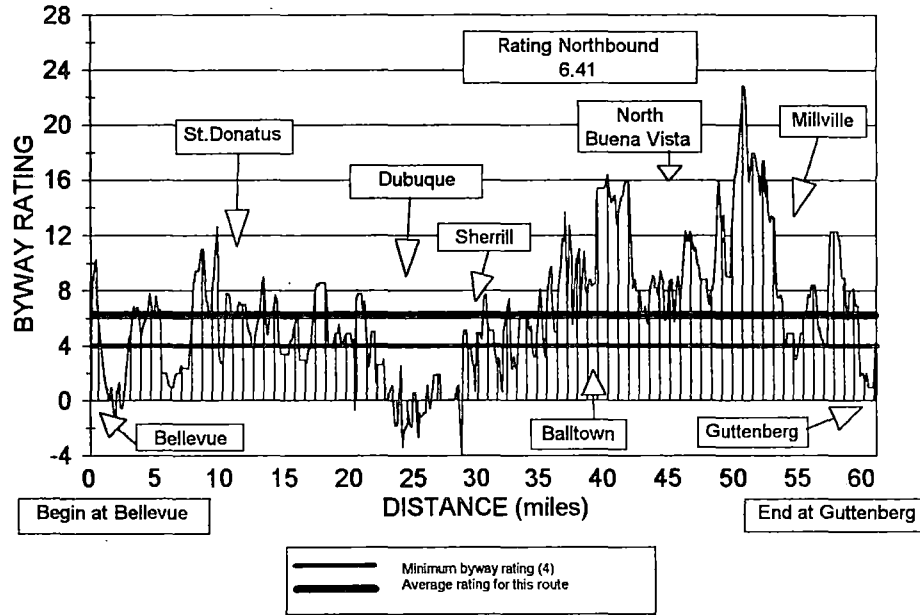
**GREAT RIVER ROAD
SECTION 4 - FALL - SOUTHBOUND**



SOUTH RATING SUMMARY

Avg. Agriculture	0.45
Avg. F.Agriculture Act/Op	0.03
Avg. F.Agriculture Structures	0.26
Avg. F.Landform	0.31
Avg. F.Landform Material	0.40
Avg. F.Man Made Color/Pattern	-0.24
Avg. F.Man Made Unique	0.05
Avg. F.Moving water	0.01
Avg. F.Structures	0.08
Avg. F.Vegetation	0.68
Avg. F.Vegetation Edge	0.02
Avg. F.Vegetation Unique	0.02
Avg. F.Water Edge	0.04
Avg. Historic Area	0.01
Avg. Mixed Agriculture	0.15
Avg. P.Agriculture	0.09
Avg. P.Landform	0.23
Avg. P.Vegetation Color/Pattern	0.04
Avg. P.Vegetation	0.09
Avg. Road Ribbon	1.16
Avg. Road Terrain	0.49
Avg. S.Agriculture Act/Op	0.25
Avg. S.Agriculture Color/Pattern	0.02
Avg. S.Landform	1.02
Avg. S.Landform Unique	0.03
Avg. S.Man Made Color/Pattern	-0.06
Avg. S.Moving Water	0.01
Avg. S.Structures	-0.02
Avg. S.Vegetation	0.48
Avg. S.Vegetation Color/Pattern	1.25
Avg. S.Vegetation Edge	0.10
Avg. S.Water	0.12
Avg. Suburban/Urban	0.10
Avg. Woodlands	0.19
Avg. Total Route Summary	7.89

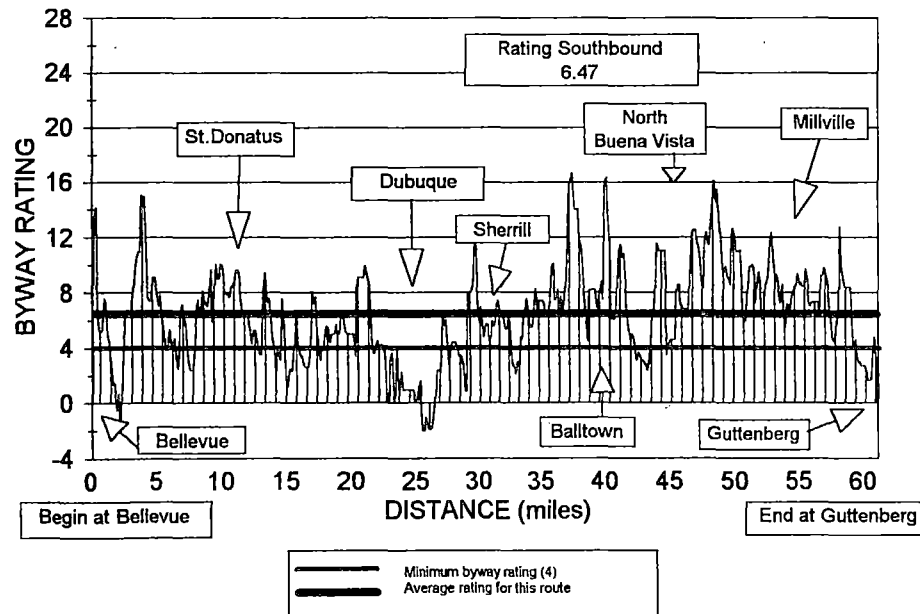
**GREAT RIVER ROAD
SECTION 4 - PROJECTED SUMMER - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.47
Avg. F:Agriculture Act/Op	0.30
Avg. F:Agriculture Structures	0.20
Avg. F:Landform	0.35
Avg. F:Landform Material	0.32
Avg. F:Man Made Color/Pattern	-0.21
Avg. F:Man Made Unique	0.03
Avg. F:Structures	0.06
Avg. F:Vegetation	0.30
Avg. F:Water Edge	0.01
Avg. Historic Site	0.02
Avg. Mixed Agriculture	0.23
Avg. Mixed Native	0.05
Avg. P:Agriculture	0.02
Avg. P:Landform	0.29
Avg. P:Vegetation Color/Pattern	0.06
Avg. P:Vegetation	0.15
Avg. Road Ribbon	1.15
Avg. Road Terrain	0.74
Avg. S:Agriculture Color/Pattern	0.03
Avg. S:Agriculture Structures	0.08
Avg. S:Landform	0.90
Avg. S:Landform Material	0.03
Avg. S:Man Made Color/Pattern	-0.18
Avg. S:Moving Water	0.08
Avg. S:Structures	0.04
Avg. S:Vegetation	0.23
Avg. S:Vegetation Color/Pattern	0.31
Avg. S:Vegetation Edge	0.09
Avg. S:Water	0.05
Avg. Suburban/Urban	0.04
Avg. Woodlands	0.16
Avg. Total Route Summary	6.41

**GREAT RIVER ROAD
SECTION 4 - PROJECTED SUMMER - SOUTHBOUND**

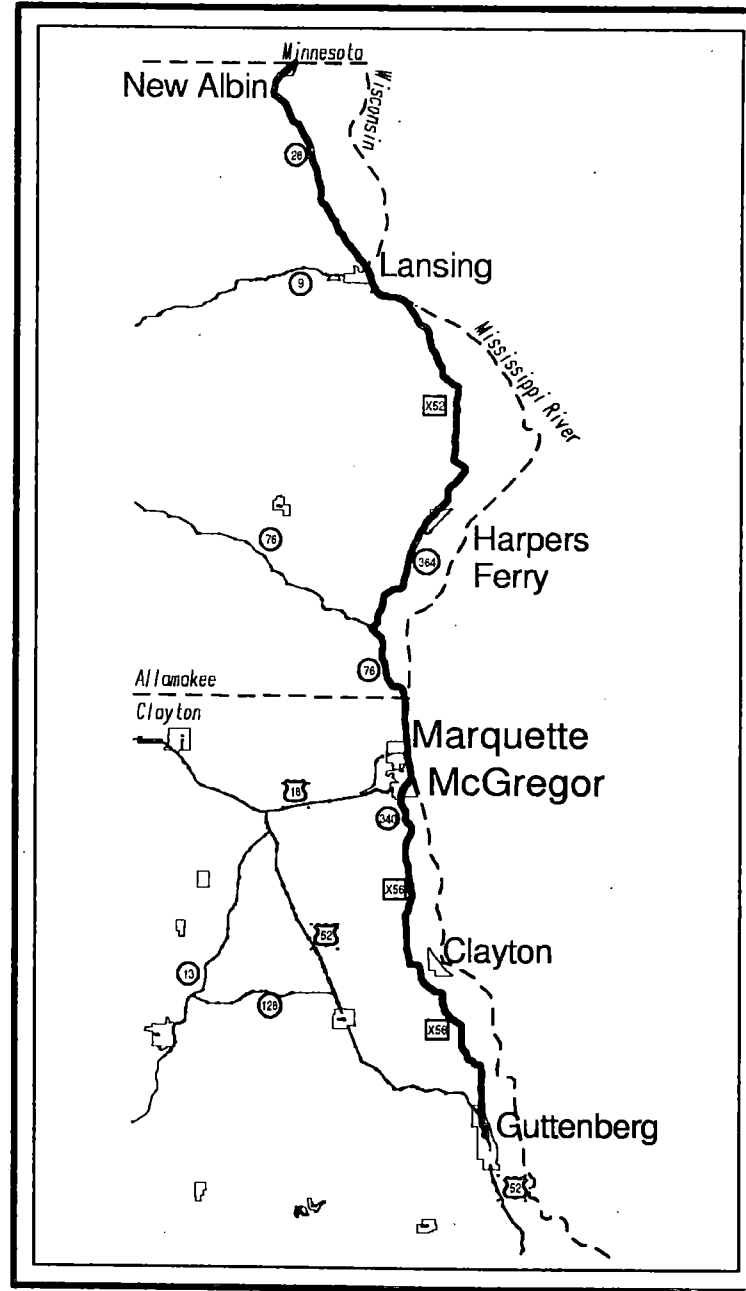


SOUTH RATING SUMMARY

Avg. Agriculture	0.45
Avg. F:Agriculture Act/Op	0.03
Avg. F:Agriculture Structures	0.26
Avg. F:Landform	0.31
Avg. F:Landform Material	0.40
Avg. F:Man Made Color/Pattern	-0.24
Avg. F:Man Made Unique	0.05
Avg. F:Moving water	0.01
Avg. F:Structures	0.08
Avg. F:Vegetation	0.17
Avg. F:Vegetation Edge	0.01
Avg. F:Vegetation Unique	0.02
Avg. F:Water Edge	0.04
Avg. Historic Area	0.01
Avg. Historic Site	0.02
Avg. Mixed Agriculture	0.15
Avg. P:Agriculture	0.09
Avg. P:Landform	0.23
Avg. P:Vegetation Color/Pattern	0.04
Avg. P:Vegetation	0.09
Avg. Road Ribbon	1.16
Avg. Road Terrain	0.49
Avg. S:Agriculture Act/Op	0.25
Avg. S:Agriculture Color/Pattern	0.03
Avg. S:Landform	1.02
Avg. S:Landform Unique	0.03
Avg. S:Man Made Color/Pattern	-0.06
Avg. S:Moving Water	0.01
Avg. S:Structures	-0.02
Avg. S:Vegetation	0.25
Avg. S:Vegetation Color/Pattern	0.62
Avg. S:Vegetation Edge	0.03
Avg. S:Water	0.12
Avg. Suburban/Urban	0.10
Avg. Woodlands	0.19
Avg. Total Route Summary	6.47

section 5

Great River Road



SECTION 5

GREAT RIVER ROAD

Route Location:

Counties: • Clayton • Allamakee

Road Description:

- Length:** • 58.31 miles
- Designations:**
- County X56 from U.S.52 in Guttenberg to State 340 at Pikes Peak State Park
 - State 340 to U.S.18 in McGregor
 - U.S.18 to State 76 in Marquette
 - State 76 to State 364 near Effigy Mounds
 - State 364 to County X52 at Harpers Ferry
 - County X52 to State 26 at Lansing
 - State 26 to Minnesota State Line
- Termini:**
- JCT County X56 & U.S. 52 in Guttenberg
 - State 26 and Minnesota State Line
- Access:**
- U.S.52, U.S.18, State 76, & State 9

Roadway Character:

- Road Surface:** Hard surfaced
- Road Ribbon:** The entire section has good to exceptional roadway ribbon providing windows of changing views.
- Road Terrain:** The change in vertical alignment from the elevated croplands to the river valley lowlands creates great visual diversity along this section.

Route's Key Visual Elements:

- Landform:** The land formations are a key visual feature along this section. The hills of the region are magnificent focal points and the topography provides the stage for the impressive 8% downgrade into McGregor. The bluffs along this section are spectacular.
- Vegetation:** Vegetation is a primary attribute throughout this section. Traveling north from Guttenberg, attractive farmland is displayed on the high plateau region. The hardwood forests with spectacular displays of autumn color are exceptional from McGregor north.

Road Ribbon: The road weaves through croplands, forests and along the Mississippi presenting a myriad of scenes for the viewer. Alignment is excellent.

Road Terrain: This section of roadway matches the terrain exceptionally well from the higher elevation above the river to the valley basin of the Mississippi River. The contrast in elevation affords excellent driving variety and vistas for the traveler.

Water: Water views of the Mississippi River are plentiful. Bridges at Marquette and Lansing are impressive focal points. The fascinating braided-river views invite examination.

History: The historic river towns provide delightful stops along the way. The Indian burial grounds (Effigy Mounds National Monument) are a major attraction.

Route's Visual Evaluation Summary:

- Ave. Rating:** • 10.31 (average both directions - fall season)
- Adj. Rating:** • 8.11 (adjusted both directions - summer season)
- High Rating:** • 24.40 (southbound)
- Low Rating:** • -2.00 (southbound)
- High Section:** • 3 miles north of Guttenberg traveling northbound
- Low Section:** • New Albin urban area

Towns Along Corridor:

- Guttenberg
- McGregor
- Marquette
- Harpers Ferry
- Lansing
- New Albin

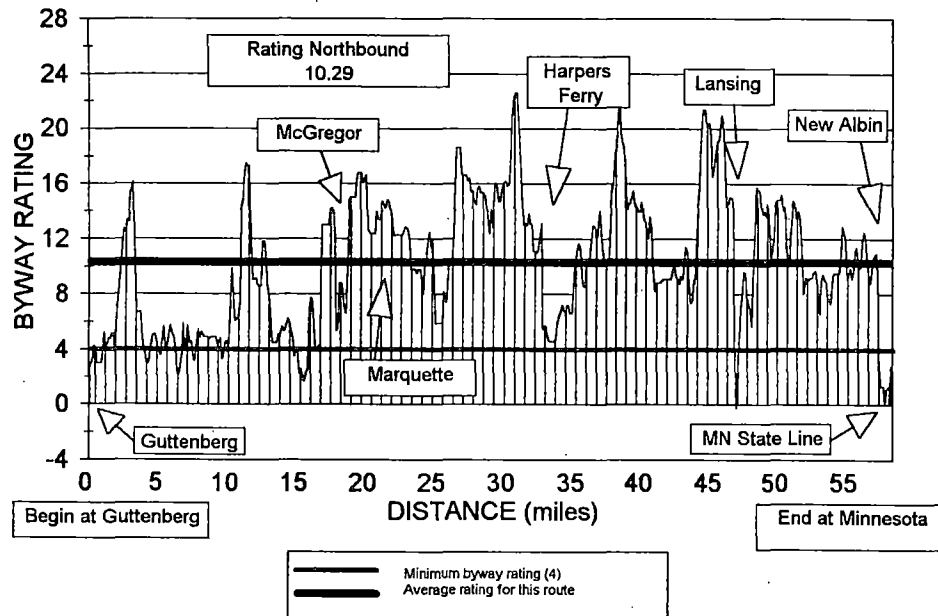
Historic Register Listings:

- Guttenberg (17 sites)
- McGregor (2 sites)
- Marquette (1 site)
- Lansing (5 sites)
- New Albin (3 sites)

Route Impressions:

The scenic quality along this section is extraordinarily high and consistent which is necessary for a good Scenic Byway. The climb north of Guttenberg into elevated lowa farmland is pleasurable. The descent into McGregor generates scenes of forests, river views and bluffs. The entire route has tremendous views of landform created by the river and abounds with panoramic expression. Traveling along the roadway through the river towns provides great access to the Mississippi and to the unique historic towns. Several locations along this section could be enhanced with selective cutting of brush and trees to open views of the river. Numerous areas with disorderly homesteads (mobile homes along the river) need to be shielded from view as they detract from the beauty of the route.

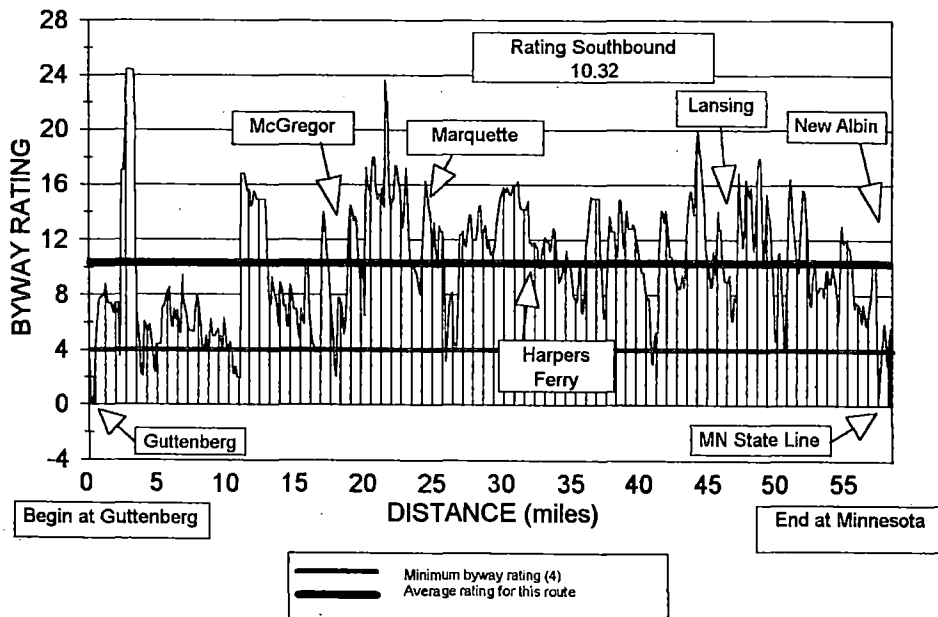
**GREAT RIVER ROAD
SECTION 5 - FALL - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.06
Avg. F:Agriculture Act/Op	0.12
Avg. F:Agriculture Structures	0.06
Avg. F:Landform	0.62
Avg. F:Landform Material	0.51
Avg. F:Man Made Color/Pattern	-0.10
Avg. F:Man Made Unique	0.06
Avg. F:Moving water	0.04
Avg. F:Structures	0.07
Avg. F:Vegetation	1.03
Avg. F:Vegetation Color/Pattern	0.32
Avg. F:Vegetation Unique	0.01
Avg. F:Water Edge	0.32
Avg. Mixed Agriculture	0.30
Avg. Mixed Native	0.01
Avg. P:Landform	0.16
Avg. P:Vegetation	0.07
Avg. Road Ribbon	1.07
Avg. Road Terrain	0.66
Avg. S:Agriculture Act/Op	0.15
Avg. S:Landform	1.10
Avg. S:Landform Unique	0.18
Avg. S:Man Made Color/Pattern	-0.02
Avg. S:Moving Water	0.15
Avg. S:Structures	-0.04
Avg. S:Vegetation	0.84
Avg. S:Vegetation Color/Pattern	1.24
Avg. S:Vegetation Edge	0.47
Avg. S:Water	0.20
Avg. Suburban/Urban	0.07
Avg. Woodlands	0.56
Avg. Total Route Summary	10.29

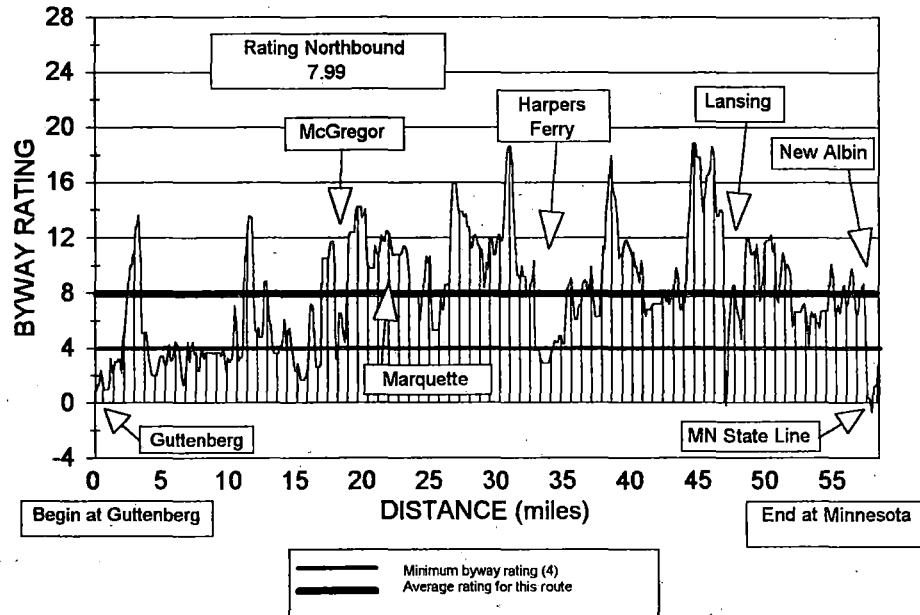
**GREAT RIVER ROAD
SECTION 5 - FALL - SOUTHBOUND**



SOUTH RATING SUMMARY

Avg. Agriculture	0.24
Avg. F:Agriculture Structures	0.08
Avg. F:Landform	0.36
Avg. F:Landform Material	0.74
Avg. F:Man Made Color/Pattern	-0.13
Avg. F:Man Made Unique	0.01
Avg. F:Structures	0.03
Avg. F:Vegetation	1.13
Avg. F:Vegetation Edge	0.00
Avg. F:Vegetation Unique	0.04
Avg. F:Water Edge	0.29
Avg. Mixed Agriculture	0.11
Avg. Mixed Native	0.01
Avg. P:Landform	0.33
Avg. P:Vegetation Color/Pattern	0.05
Avg. P:Vegetation	0.09
Avg. P:Water	0.04
Avg. Road Ribbon	1.10
Avg. Road Terrain	0.45
Avg. S:Agriculture Act/Op	0.13
Avg. S:Landform	1.21
Avg. S:Landform Unique	0.21
Avg. S:Man Made Color/Pattern	-0.03
Avg. S:Moving Water	0.03
Avg. S:Structures	-0.02
Avg. S:Vegetation	1.09
Avg. S:Vegetation Color/Pattern	1.39
Avg. S:Vegetation Edge	0.36
Avg. S:Water	0.40
Avg. Suburban/Urban	0.08
Avg. Woodlands	0.52
Avg. Total Route Summary	10.32

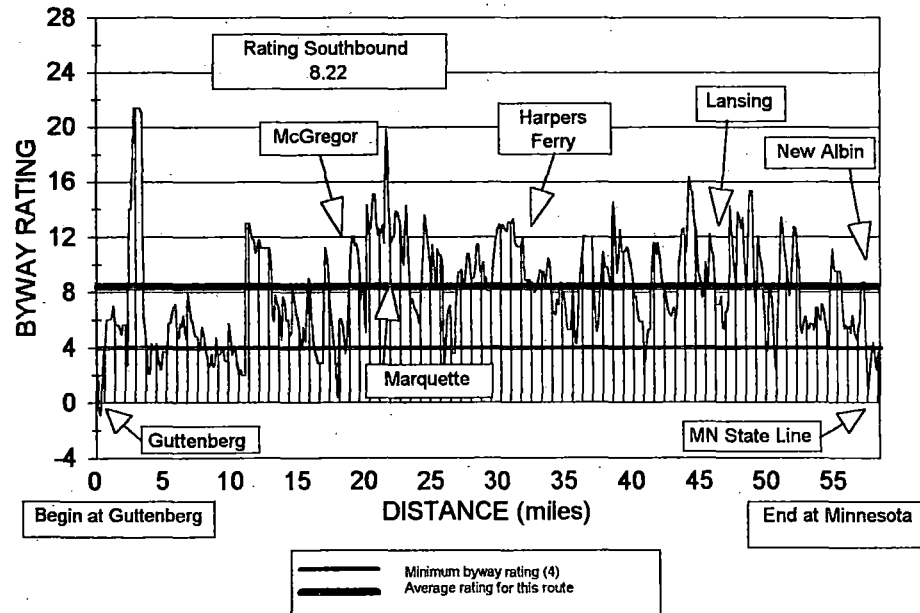
**GREAT RIVER ROAD
SECTION 5 - PROJECTED SUMMER - NORTHBOUND**



NORTH RATING SUMMARY

Avg. Agriculture	0.06
Avg. F:Agriculture Act/Op	0.12
Avg. F:Agriculture Structures	0.06
Avg. F:Landform	0.62
Avg. F:Landform Material	0.51
Avg. F:Man Made Color/Pattern	-0.10
Avg. F:Man Made Unique	0.06
Avg. F:Moving water	0.04
Avg. F:Structures	0.07
Avg. F:Vegetation	0.34
Avg. F:Vegetation Color/Pattern	0.16
Avg. F:Vegetation Unique	0.01
Avg. F:Water Edge	0.32
Avg. Historic Site	0.01
Avg. Mixed Agriculture	0.30
Avg. Mixed Native	0.01
Avg. P:Landform	0.16
Avg. P:Vegetation	0.07
Avg. Road Ribbon	1.07
Avg. Road Terrain	0.68
Avg. S:Agriculture Act/Op	0.15
Avg. S:Landform	1.10
Avg. S:Landform Unique	0.18
Avg. S:Man Made Color/Pattern	-0.02
Avg. S:Moving Water	0.15
Avg. S:Structures	-0.04
Avg. S:Vegetation	0.36
Avg. S:Vegetation Color/Pattern	0.59
Avg. S:Vegetation Edge	0.15
Avg. S:Water	0.20
Avg. Suburban/Urban	0.07
Avg. Woodlands	0.56
Avg. Total Route Summary	7.99

**GREAT RIVER ROAD
SECTION 5 - PROJECTED SUMMER - SOUTHBOUND**



SOUTH RATING SUMMARY

Avg. Agriculture	0.24
Avg. F:Agriculture Act/Op	0.00
Avg. F:Agriculture Structures	0.08
Avg. F:Landform	0.36
Avg. F:Landform Material	0.74
Avg. F:Man Made Color/Pattern	-0.13
Avg. F:Man Made Unique	0.01
Avg. F:Structures	0.03
Avg. F:Vegetation	0.48
Avg. F:Vegetation Edge	0.00
Avg. F:Vegetation Unique	0.04
Avg. F:Water Edge	0.29
Avg. Mixed Agriculture	0.11
Avg. Mixed Native	0.01
Avg. P:Landform	0.33
Avg. P:Vegetation Color/Pattern	0.05
Avg. P:Vegetation	0.09
Avg. P:Water	0.04
Avg. Road Ribbon	1.10
Avg. Road Terrain	0.45
Avg. S:Agriculture Act/Op	0.13
Avg. S:Landform	1.21
Avg. S:Landform Unique	0.21
Avg. S:Man Made Color/Pattern	-0.03
Avg. S:Moving Water	0.03
Avg. S:Structures	-0.02
Avg. S:Vegetation	0.55
Avg. S:Vegetation Color/Pattern	0.69
Avg. S:Vegetation Edge	0.16
Avg. S:Water	0.40
Avg. Suburban/Urban	0.08
Avg. Woodlands	0.52
Avg. Total Route Summary	8.22

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references

Note: In 1990 the following reports, (Volumes I, II, and III) were sent to each of the five sponsors of the Scenic Byway Research Project. The reports were not generally published and are, therefore, not readily available.

Smith, Bob L., Volume I - Executive Summary "Scenic Byways: Their Economic Benefits/Selection/Designation/Protection and Safety", Midwest Transportation Center, Iowa State University, 1990.

Smith, Bob L., Volume II - Research/Development "Scenic Byways: Their Economic Benefits/Selection/Designation/Protection and Safety", Midwest Transportation Center, Iowa State University, 1990.

Smith, Bob L., Volume III - Recommended Procedures "Scenic Byways: Their Economic Benefits/Selection/Designation/Protection and Safety", Midwest Transportation Center, Iowa State University, 1990.

Note: References 2, 3, 4 and 5 are readily available. Reference 4 replaces the above volumes I, II and III.

1. "Iowa Scenic Byway Evaluation", prepared by Decision Data Inc. for the Iowa Department of Transportation, Ames, Iowa December 1992.
2. "Selection and Designation of Scenic Byways: A Quantitative Approach", Bob L. Smith, William L. Smith, Proceedings of Transportation Research Board 5th International Conference on Low-Volume Roads, Transportation Research Record 1291, Volume 1, Transportation Research Board, Washington, DC 1991.
3. "Scenic Byways: Their Selection and Designation", Bob L. Smith, William L. Smith, Transportation Research Record 1363, Transportation Research Board, Washington, DC, 1992.
4. "Scenic Byways: Their Selection, Designation, Protection and Safety", Bob L. Smith, Midwest Transportation Center, a Consortium of Iowa State University and the University of Iowa, Ames, Iowa, November 1992.
5. "Scenic Byways", publication FHWA-DF-88-004, Federal Highway Administration, U.S. Department of Transportation, Washington, D.C., July 1988.