Commercial and Industrial Network Improvement and Programming Policy







Iowa Department of Transportation



January 3, 1992

Ref. No. 763

Dear Report Recipient:

A copy of the Iowa Transportation Commission's recently approved Commercial and Industrial Network Improvement and Programming Policy report is enclosed.

The report provides a technical assessment of improvement needs on this network for the next 20-year period. The policy will be used as a guide in programming construction projects, it provides direction for the department, and also informs the public where and when major improvements to the network are needed from a technical analysis standpoint. Please note this is not a program of projects or schedule for construction.

I have also enclosed a 15-page brochure entitled "Who to Contact." This brochure is organized by topic and lists phone numbers, as well as the appropriate office to contact to answer your questions or help with your concerns.

I trust these documents will be helpful to you. If you have comments or wish to discuss this material, please contact Don Ward at (515)239-1137 or myself.

Thank you for your interest in Iowa's transportation system.

Sincerely

I. MacGalligray, Director Planning and Research Division

CIM:DGW:SDP:rel Enclosure

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NOVEMBER 1991 COMMERCIAL AND INDUSTRIAL NETWORK IMPROVEMENT AND PROGRAMMING POLICY SUMMARY

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The Commercial and Industrial Network improvement and programming policy reflected in this summary report was adopted for use in future highway programming by the Transportation Commission on November 5, 1991. The Iowa Department of Transportation, as directed by the Legislature, has established a 2,331-mile network of commercial and industrial highways and is directing a significant amount of primary construction funding resources toward improvements to this network.

This summary outlines the technical needs assessment for improvements on the Commercial and Industrial Network for the next 20-year period. The portions of the network which require four-lane capacity, as well as major improvements to the twolane sections, are graphically displayed. Detailed improvement needs and costs are listed in tabular form for the first two fiveyear periods (1992-1996 and 1997-2001). It is essential to note that these improvement needs are the result of a technical assessment and do not imply any funding commitment.

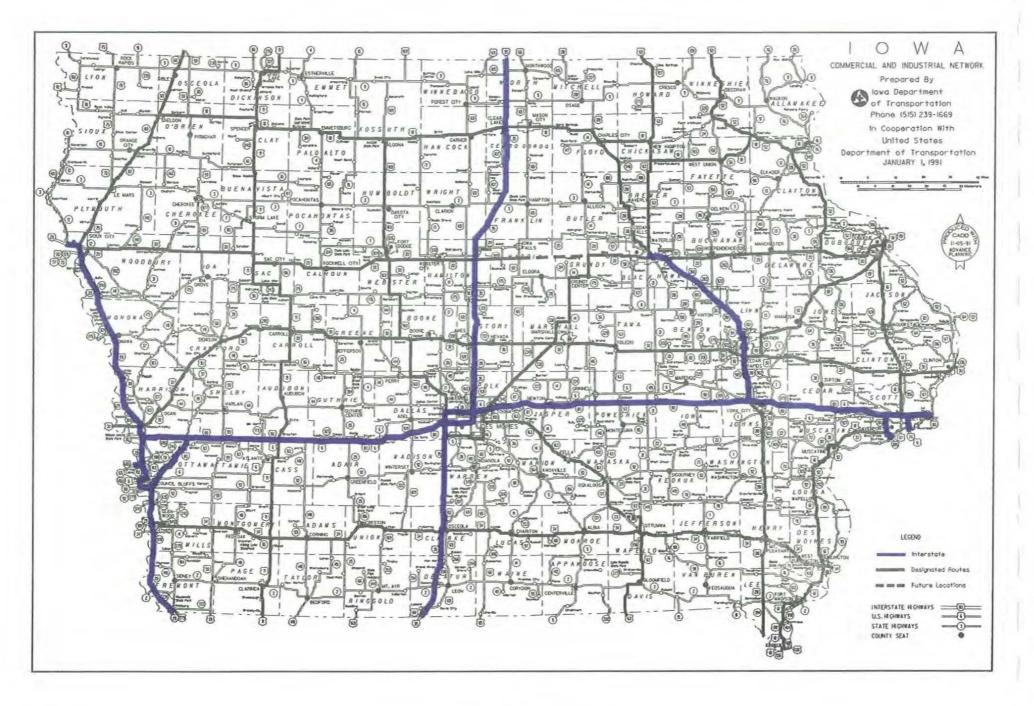
The Commercial and Industrial Network improvement and programming policy will be used as a guide in programming construction projects and developing the Iowa Transportation Improvement Program, which determines where federal and state highway funds will be spent across the state. This policy provides direction for the department and also informs the public where and when major improvements to the network are needed from a technical analysis standpoint. Continuity has been incorporated into the 20-year improvement needs through the specific types of improvements and the timing of corridor improvements. The Commercial and Industrial Network improvement programming policy reflects an emphasis on the development of long corridors (60 to 80 miles) rather than shorter spot improvements, thereby maximizing the benefits of investment dollars.

This report identifies the expected schedule for improvements on the Commercial and Industrial Network based on a technical assessment. Naturally, as specific design work develops and a more detailed project assessment is made, adjustments to this system level planning study could occur.

When looking at the total network improvement costs and funding levels, it is important to note two items. First, the available funds for the 20-year period do not include any special federal funds (such as demonstration funds). Second, project costs could increase due to a variety of reasons: costs will increase as projects are delayed and moved back in the construction program due to time required to design major highway projects; environmental concerns can increase overall project costs and delay projects; and as projects are built, unforeseen circumstances, such as adverse weather or oil embargoes, could increase total costs.

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Commercial and Industrial Network



Introduction

lowa is served by 112,771 miles of highways and streets under the jurisdiction of the state, municipalities, and counties. The state primary highway system comprises 9,746 miles (excludes ramps) of this total and is classified into five levels:

- Interstate Highway System
- · Commercial and Industrial Network
- · Area Development routes
- Access routes
- · Local Service routes

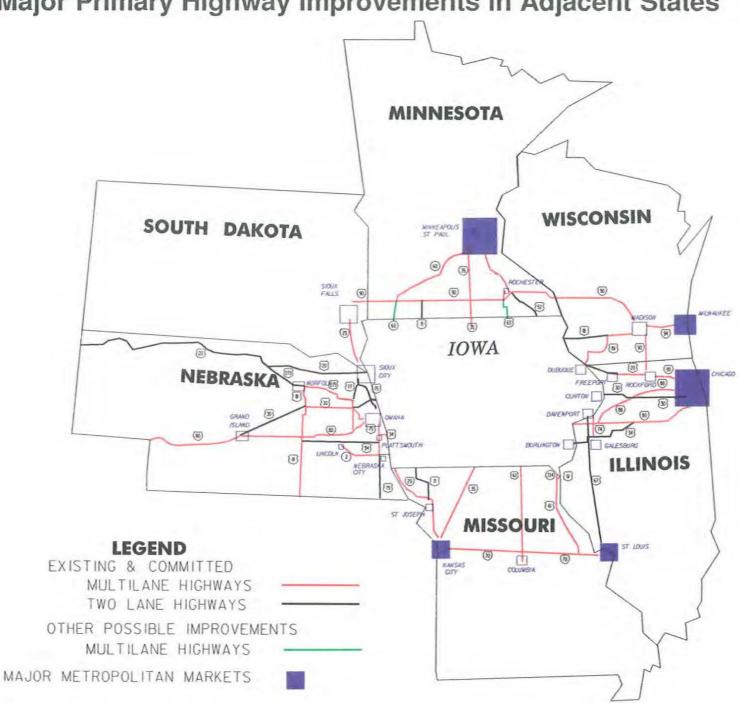
This plan deals only with the second level--the Commercial and Industrial Network. In 1988 the State Legislature directed the Transportation Commission to "identify within the primary road system a network of commercial and industrial highways." In the same legislation, the department was instructed to allocate a minimum of \$30 million annually of primary road funds to the network beginning with fiscal year 1991.

During its 1989 session the lowa Legislature established a need for the department to give the Commercial and Industrial Network a high priority in programming future improvements. This legislation clearly states the purpose for developing the Commercial and Industrial Network is "to enhance opportunities for the development and diversification of the state's economy." The 1989 legislation further states, "The purpose of this highway network shall be to improve the flow of commerce; to make travel more convenient, safe, and efficient; and to better connect lowa with regional, national, and international markets. The Commission shall concentrate a major portion of its annual construction budget on this network of commercial and industrial highways."

The State Transportation Commission initially designated the Commercial and Industrial Network in June 1988 and made additions to the network in October 1989 and November 1990. The map on page 2 (Figure 1) reflects the currently designated Commercial and Industrial Network. The criteria used to designate the network are:

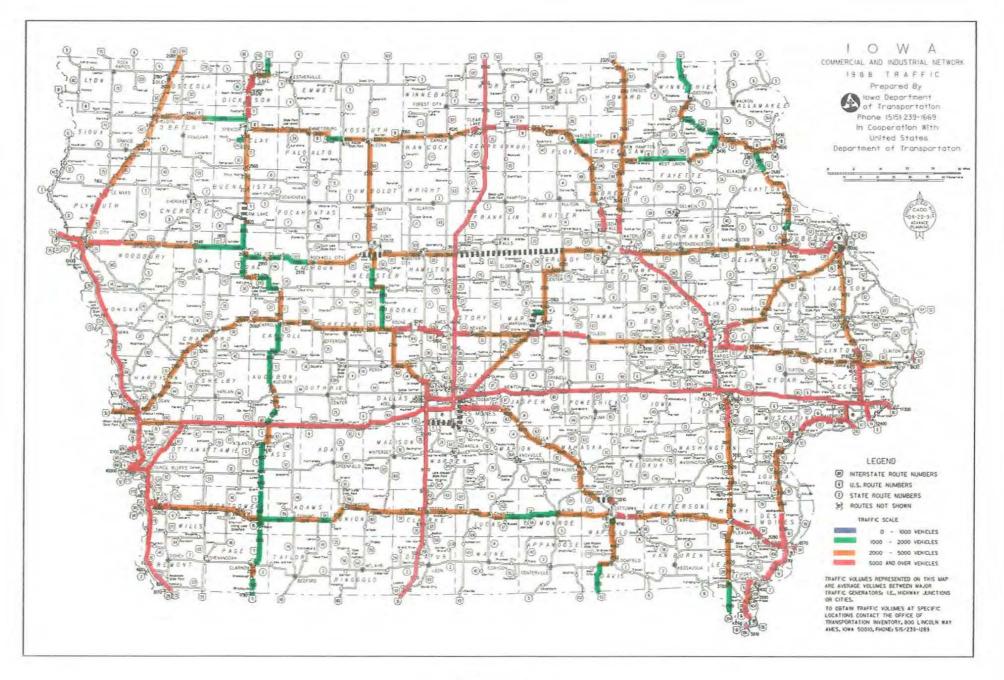
- · Service to regional growth centers
- Continuity with major primary highways in adjacent states (see Figure 2)
- Current annual average daily traffic (ADT) and changes in ADT since 1980
- Current annual average daily large truck traffic and changes since 1980
- · Area coverage

An average rural segment of the Commercial and Industrial Network carries 3,400 vehicles per day, of which 350 are large trucks. Twenty-six percent of vehicle miles of travel on the entire rural state highway system occur on the rural portion of the Commercial and Industrial Network. This system, in conjunction with the Interstate Highway System, comprises 32 percent of lowa's total state primary system but carries 60 percent of total rural primary travel.

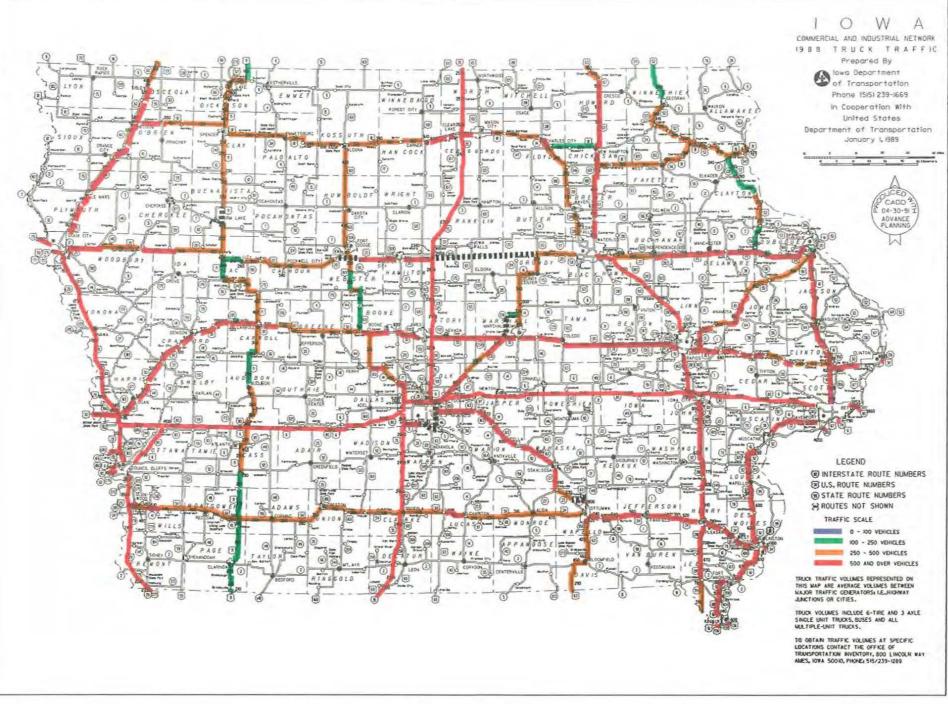


Major Primary Highway Improvements in Adjacent States

1988 Traffic



1988 Truck Traffic

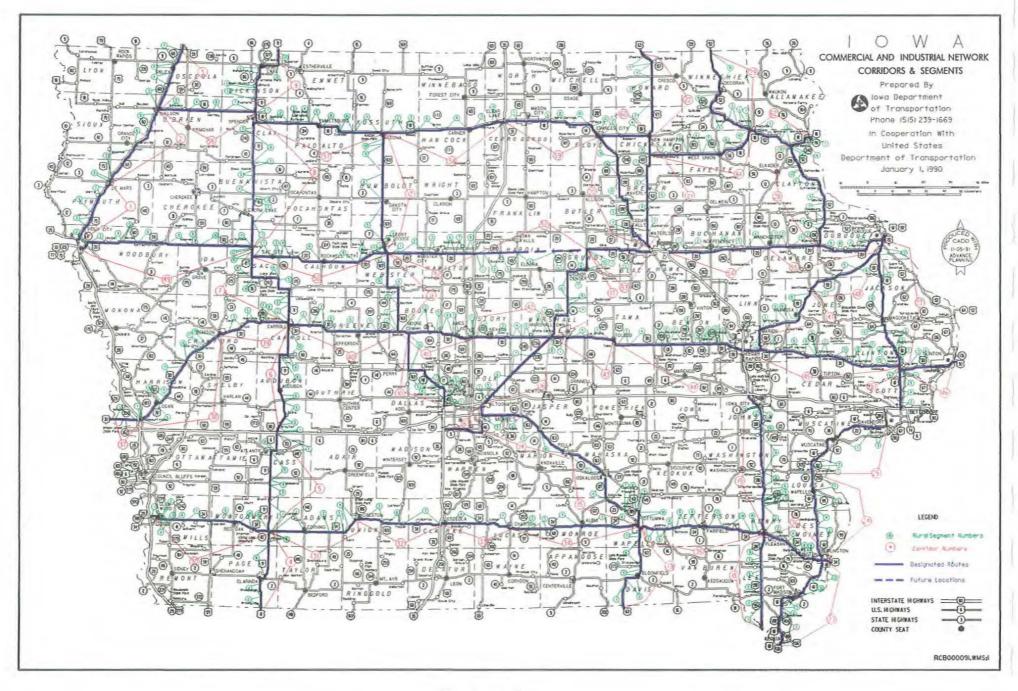


The Commercial and Industrial Network includes 2,331 miles: 2,082 rural miles and 249 urban miles. Legislative action in 1989 restricted the size of the Commercial and Industrial Network to 2,500 miles. The 2,331 miles comprising the Commercial and Industrial Network represent the most important non-Interstate system primary highway routes in Iowa. This network complements Iowa's 782 miles of Interstate Highway System and provides high quality highway access to all areas of the state to serve Iowa's economy. Over 72 percent of the land area of Iowa, over 80 percent of Iowa's population, and over 85 percent of all 150 Iowa cities with more than 2,000 residents are on or within 10 highway miles of the Commercial and Industrial Network.

The 1988 annual average daily traffic and annual average daily large truck traffic for all sections of the Commercial and Industrial Network are shown on the maps on pages 5 and 6 (Figures 3 and 4).



Corridors and Segments



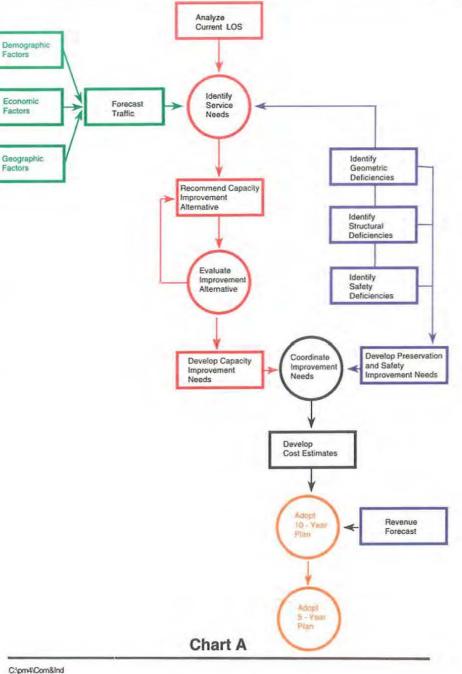
Improvement Programming Process

For purposes of analyzing the Commercial and Industrial Network, the 2,331-mile system was subdivided into three levels:

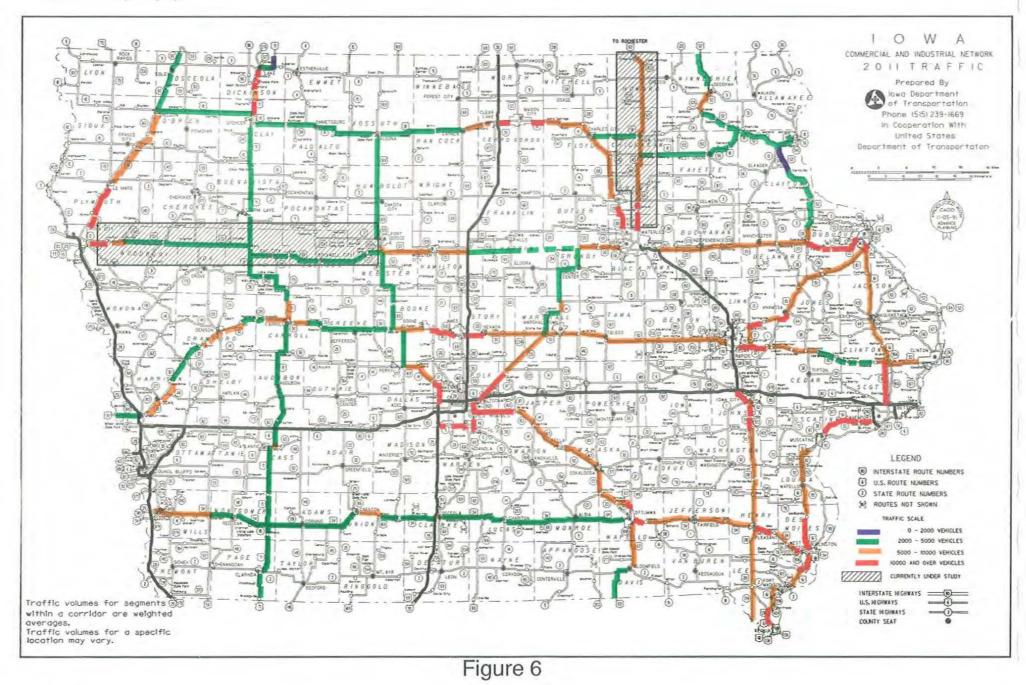
- Route--connects major population and economic activity centers
- Corridor--portion of route between logical terminal points, such as major highway junctions
- Segment--portion of corridor used as basis for improvement needs analysis and program management

The map on page 8 (Figure 5) shows the Commercial and Industrial Network routes, corridors, and segments.

The flow chart (Chart A) outlines the process which was used in developing the improvement needs assessment on the Commercial and Industrial Network.



FutureTraffic



Economic development was brought into the process through traffic forecasts which were based on demographic (population, density, and labor force), economic (employment trends in manufacturing, wholesale, retail, service, and personal income), and geographic (distance to the nearest metropolitan area and market accessibility) factors. Also considered were efforts being undertaken by cities and counties to assist the growth and diversification of local economies. The forecasted daily traffic by the year 2011 is shown on the map on page 10 (Figure 6).

Improvement needs were identified on the basis of a level of service analysis using future traffic to assess current highways. The Transportation Commission's objective was to have all rural segments of the Commercial and Industrial Network operating under conditions represented by a level of service "B." Level of service "B" represents stable traffic flow. The current level of service (current road conditions and existing traffic) and the year 2011 level of service (current road conditions and future traffic) are shown on the following maps (Figures 7 and 8).

Reconstruction/construction and resurface improvement needs were calculated using highway sufficiency rating, pavement condition rating, and accident experience criteria. These improvement needs are listed for each of the 63 corridors representing the Commercial and Industrial Network in the following tables and are also graphically displayed on the following maps. Needs are subdivided into four types:

 Capacity--improvements to the roadway which result in an increase in the number of vehicles which can pass over a given section of highway. Generally, this reflects constructing additional traffic lanes.

- Reconstruction/Construction--improvements which result in strengthening the structural integrity of the roadway. This may involve replacing the subbase or pavement, doing pavement inlay projects, or overlays of sufficient thickness to account for an equivalent pavement/roadbed condition improvement.
- Resurface-improvements consisting of an overlay of existing pavement.
- Bypass--new alignment of route around communities to alleviate capacity or congestion problems.

Detailed cost estimates were developed for each individual improvement identified during this 20-year time period. In concert with costs, revenue forecasts were developed for both state and federal highway funding. The process evaluated needs, costs, and revenues to develop a needs assessment for improvements on the Commercial and Industrial Network.

In developing the improvement needs assessment on the Commercial and Industrial Network, action was taken to facilitate and encourage increased local involvement. Extensive demographic and economic forecasts were sent to the 16 regional planning agencies for review and revision. Interaction with the regional planning agencies provided the basis for incorporating economic development considerations into the development of the improvement and programming policy for the Commercial and Industrial Network.

Current Level of Service

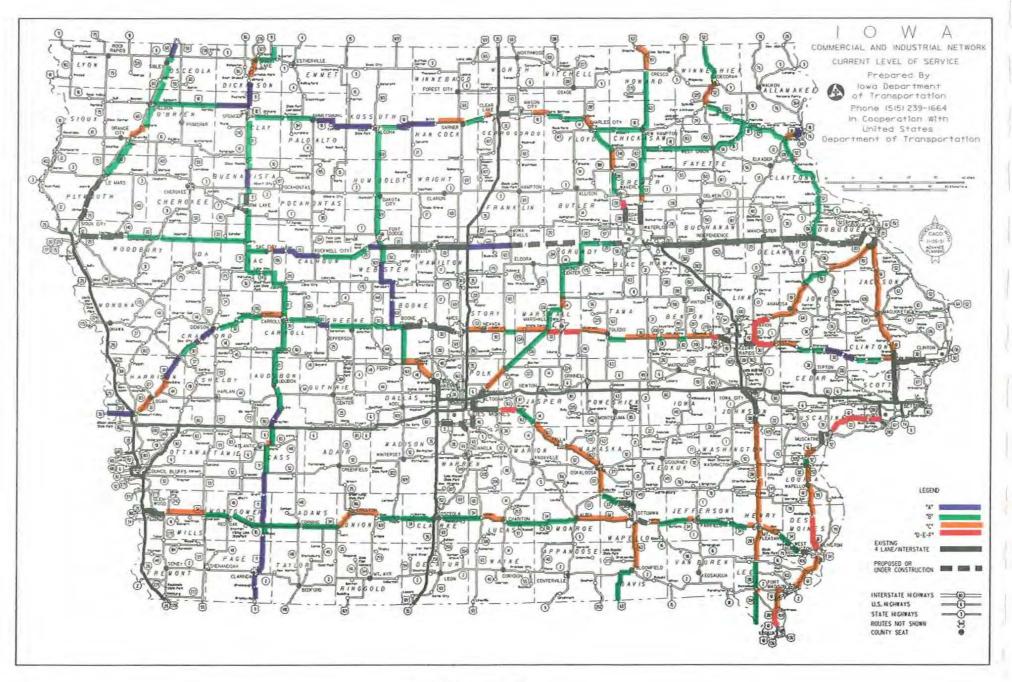


Figure 7

Future Level of Service

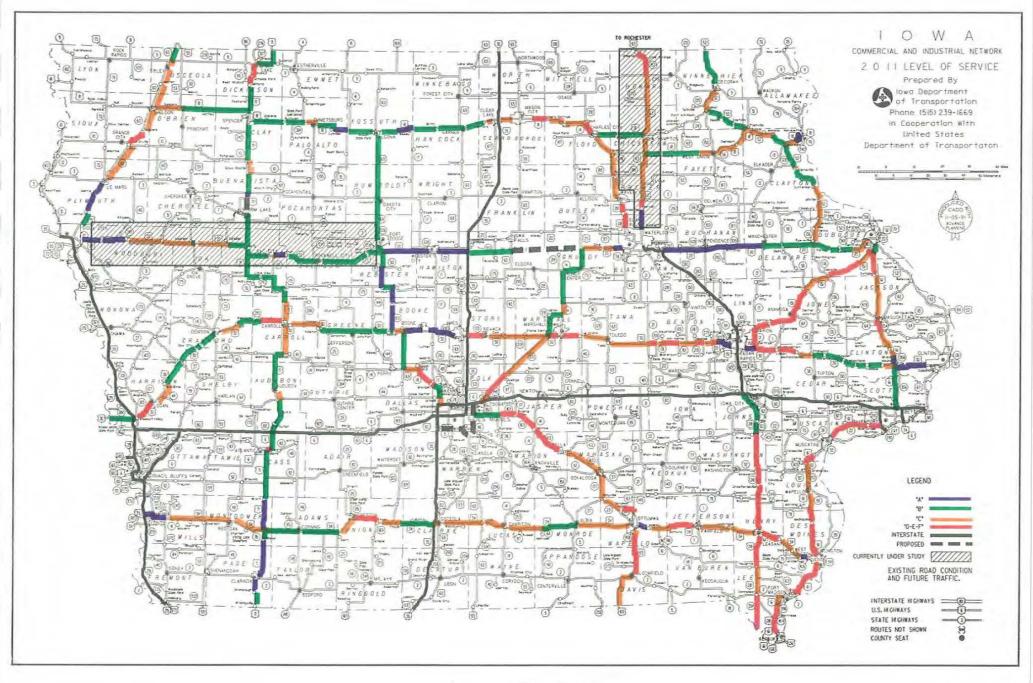
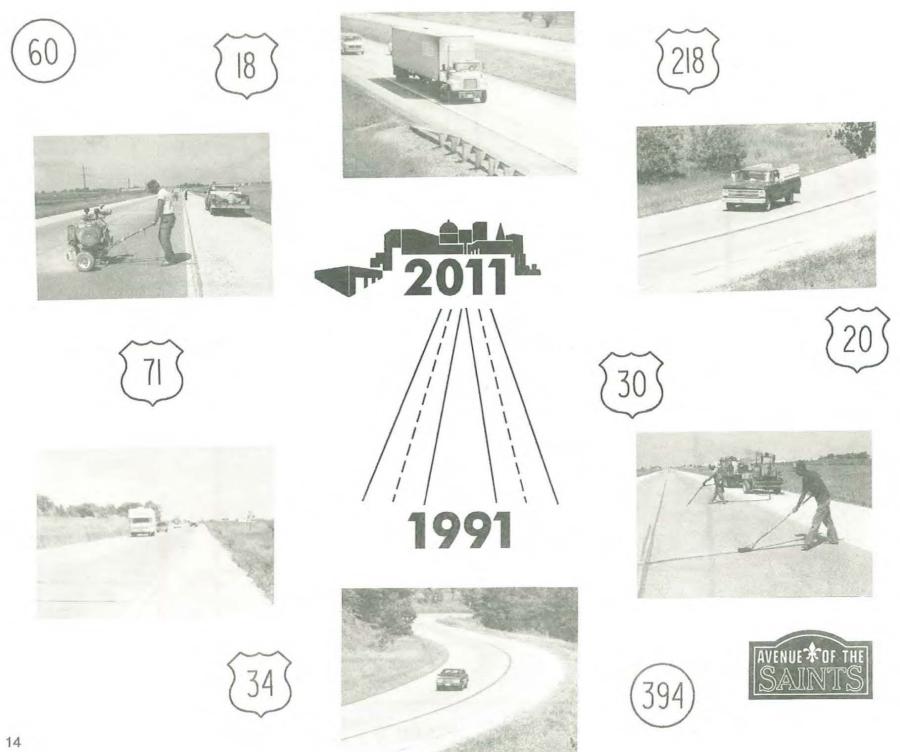
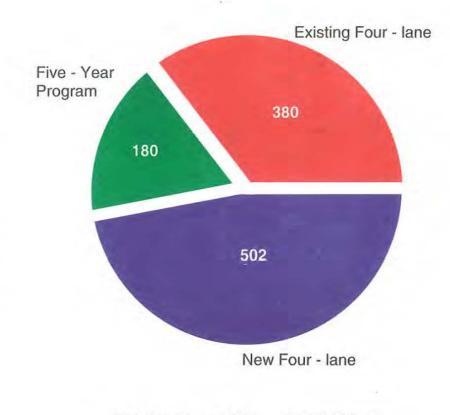


Figure 8



Improvement Needs

Commercial and Industrial Network Four - lane Mileage



Total in Year 2011 - - 1062 Miles* *Based upon projected needs, does not imply a funding comitment.

Chart B

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The existing 2,331-mile Commercial and Industrial Network consists of the following:

Existing four-lane sections380milesFive-Year Program four-lane sections180milesExisting two-lane sections1,771miles

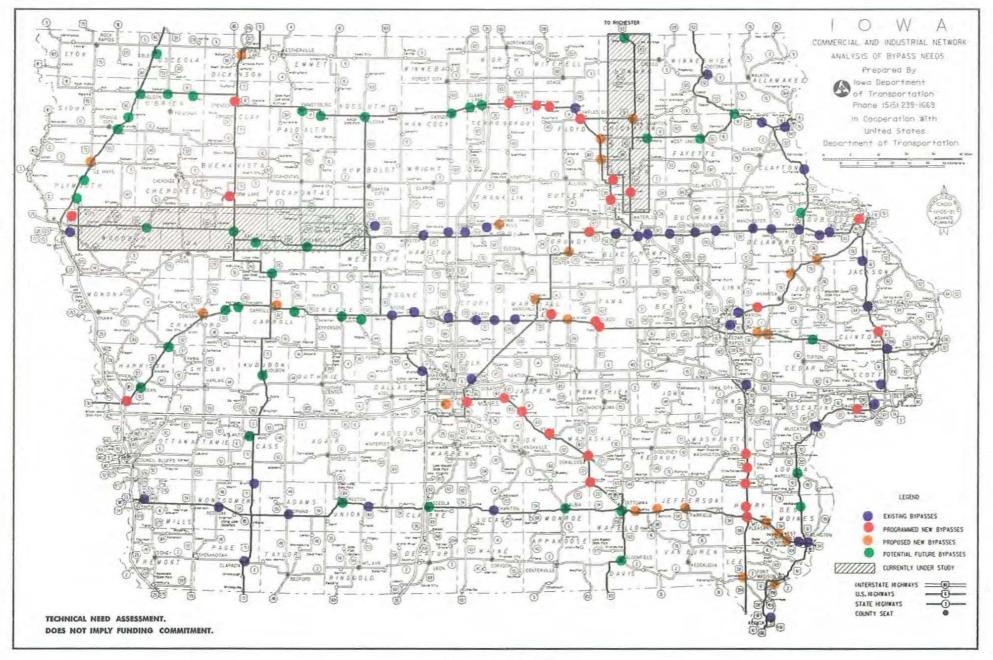
Twenty-four percent of the network is existing four-lane sections or programmed as four-lane sections in the 1991-1995 lowa Transportation Improvement Program.

The capacity analyses identified an additional 502 miles of existing two-lane highways with unacceptable levels of service for forecasted future traffic conditions. These 502 miles will need to be improved to four-lane standards within the next 20 years (Chart B). These capacity improvements would result in the following Commercial and Industrial Network configuration by the year 2011:

Four-lane sections1,062 milesTwo-lane sections1,269 miles

Forty-six percent of the network would become four-lane sections by the year 2011.

Summary of Bypass Needs



X

Summary of Bypass Needs

City	Route	Existing	Programmed	Proposed	Future	City	Route	Existing	Programmed	Proposed	Future
	3					Denison	US 30			х	
Afton	US 34	X				Denver	US 63		X		
Agency	US 34			×		Des Moines	US 65		×		
Ainsworth	US 218		Х			Des Moines	IA 5			х	
Albia	US 34				Х	De Witt	US 30	х			
Albion	IA 330			X		Dike	US 20	~	x		
Alden	US 20	X				Donnellson	US 218		A	×	
Algona	US 18				Х		US 61		x	~	
Alton	IA 60				х	Dubuque	US 30		~		X
Ames	US 30	х				Dunlap	US 20	x			~
Atlantic	US 71	C.			Х	Dyersville		~			x
Auburn	US 71				Х	Early	US 20		v		^
Audubon	US 71				X	Eddyville	IA 23/137		×		
Batavia	US 34			х		Eldridge	US 61	X			V
Blairsburg	US 20	х				Emmetsburg	US 18				X
Bloomfield	US 63	~			х	Epworth	US 20	Х			
	US 61		x		~	Fairfield	US 34			x	
Blue Grass Bondurant	US 65	х	^			Farley	US 20	X			
	US 30	x				Floyd	US 218	X			
Boone	US 34	x				Fort Dodge	US 169	X			
Burlington		~		×		Fort Madison	US 61			х	
Carroll	US 30			x x		Fredericksburg	US 18				X
Cascade	US 151			~		Garner	US 18				X
Cedar Falls	US 218		х			Glenwood	US 34	X			
Cedar Rapids	US 30	X				Glidden	US 30				X
Chariton	US 34	х				Grand Junction	US 30				x
Charles City	US 218		x			Granger	IA141	X			
Chester	US 63				X	Grant	US 71	x			
Clarence	US 30				Х	Grundy Center	IA 14			X	
Clarinda	US 71	х				Guttenberg	US 52	X			
Clear Lake	US 18				Х	Hartley	US 18				x
Colo	US 30	х				Hinton	US 75				× ×
Corning	US 34	х				Hospers	IA 60				x
Correctionville	US 20				х	Independence	US 20	X			
Crawfordsville	US 218		х			Iowa City	US 218	x			
Creston	US 34				Х	Iowa Falls	US 20	A		х	
Cylinder	US 18				х	Janesville	US 218		x		
Danville	US 34			х		Jefferson	US 30		^		х
Davenport	US 61	X					US 20	х			
Decorah	US 52	x				Jesup	US 61	x			
Delaware	US 20	X				Keokuk	US 30	^		х	
	1 A 1 A 1	0.0				Le Grand	05 30			~	

City	Route	Existing	Programmed	Proposed	Future	City	Route	Existing	Programmed	Proposed	Future	
Le Mars	IA 60			××		Red Oak	US 34	x				
Lisbon	US 30			X		Rockwell City	US 20	~			x	
Logan	US 30				X	Rudd	US 18		х		~	
Manchester	US 20	×				Sac City	US 20		~		x	
Maquoketa	US 61	×					US 18				x	
Marion	US 151	×				Sanborn	IA 60				\$	
Marshalltown	US 30	53	x			Sheldon					X X	
Mason City	US 18		X X			Sibley	IA 60		×		~	
McGregor	US 18	X	~			Sioux City	US 75		~			
Mediapolis	US 61	~			х	Sioux City	US 20	Х				
Merrill	US 75				x	Spencer	US 18		X			
Middletown	US 34			х	~	Springville	US 151		X			
Missouri Valley	US 30		×	~		State Center	US 30	Х				
	US 18	х	~			Storm Lake	US 71		X			
Monona	IA 163	~	x			Swedesburg	US 218		х			
Monroe			~	х		Tama	US 30		Х			
Monticello	US 151		v	^		Toledo	US 30		х			
Mount Pleasant	US 218		x x			Vail	US 30				× × ×	
Mount Pleasant	US 34		X	×.		Ventura	US 18				X	
Mount Vernon	US 30			×		Wapello	US 61				×	
Muscatine	US 61	Х				Waterloo	US 218	X				
Nashua	US 218			X		Waterloo	US 20	×				
Nevada	US 30	Х		-		Waveriy	US 218		х			
New Hampton	US 63			××		Wever	US 61		X			
New London	US 34			X		Webster City	US 20	X				
New Vienna	IA 136				Х	Welton	US 61		X			
Nora Springs	US 18		x			West Burlington	US 34	х				
Ogden	US 30	×				West Union	US 18				× ×	
Okoboji	US 71			x		Westside	US 30				×	
Olds	US 218		X			Williams	US 20	X				
Osceola	US 34				Х	Winthrop	US 20	X				
Oskaloosa	IA 163		×			Zwingle	US 61	×				
Otley	IA 163		х				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1					
Ottumwa	US 34				Х							
Pella	IA 163		Х									
Plainfield	US 218			×								
Postville	US 18				Х							
Prairie City	IA 163		X									
Raymond	US 20	X										

Commercial and Industrial Network routes through communities were evaluated for alternatives to make travel more efficient by decreasing travel time, congestion, and delay. A summary of community bypass needs during the 20-year period is shown on the map on page 16 (Figure 9). A list of each community currently bypassed and those with an identified need for a future bypass during the 20-year period is detailed on pages 17 and 18.

In addition to capacity improvements, significant amounts of reconstruction/ construction and resurfacing work will need to be completed. For the 20-year period, this work includes:

Reconstruction/construction	570 miles
Resurfacing	1,480 miles

The proposed schedule for improvements involved a thorough evaluation of traffic volume-to-capacity relationships using level of service criteria, as well as an assessment of pavement history/ condition and accident experience. For analyzing reconstruction projects, a roadbed life of 60 years was used. Resurfacing projects were forecasted as needed every 15 years for highways with a low pavement condition rating. Capacity improvement projects were listed whenever an unacceptable level of service was forecasted in concert with appropriate traffic volumes for that time period. These projects were coordinated so that improvements would not be duplicative or inefficient. For example, if a resurfacing improvement was needed more than five years prior to a capacity improvement, the resurface and capacity improvements were scheduled independently. However, if a resurface and capacity improvement were needed within five years of one another, the improvements were coordinated to occur simultaneously.

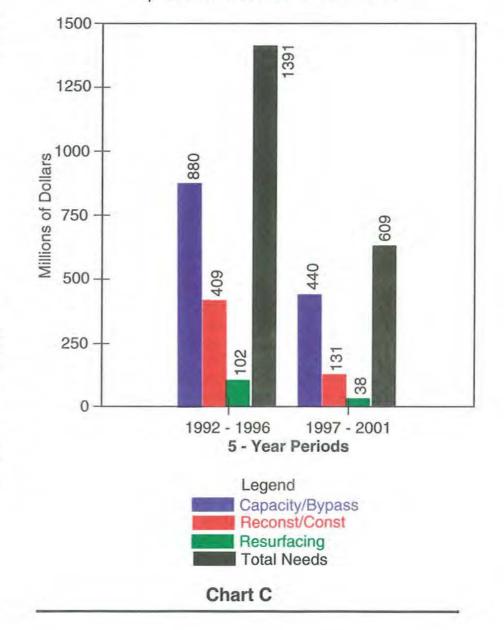
Costs of these improvements to the year 2011 would be \$2,580 million or approximately \$129 million per year. These costs (represented in 1992 constant dollars) are summarized in the following table.

Commercial & Industrial Network Cost Summary

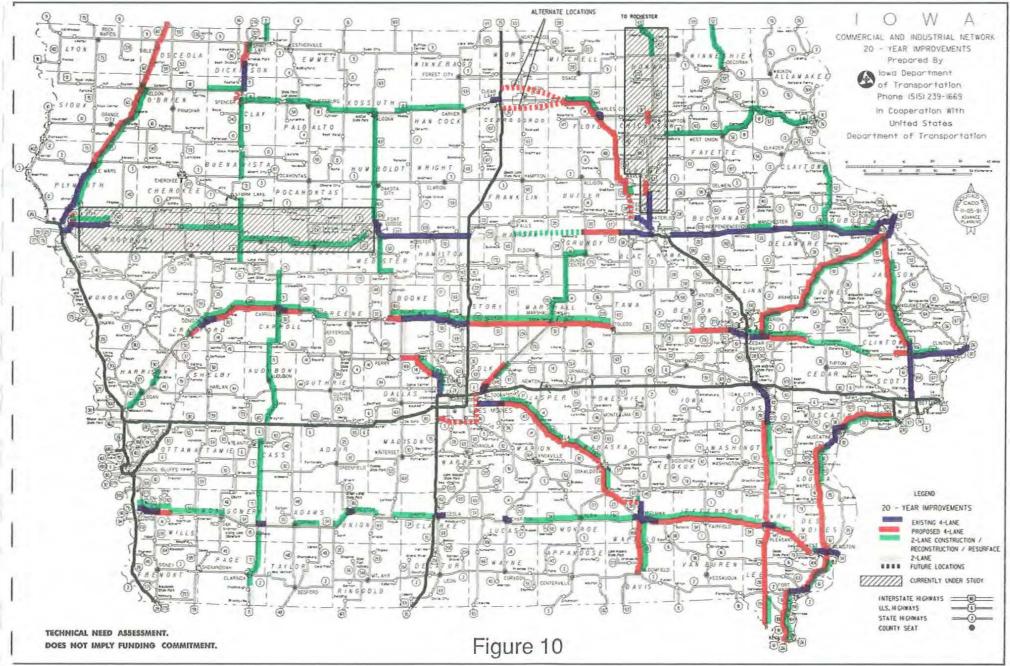
				20-Year
	1992-1996	1997-2001	2002-2011	Total
Capacity/				1
Bypass	\$ 880	\$ 440		
Reconstruction/				
Construction	409	131	\$580	\$2,580
Resurface	102	38		
Total	\$1,391	\$ 609	\$580	\$ 2,580 million

The Commercial and Industrial Network technical assessment improvement needs for the first 10-year period (1992-1996 and 1997-2001) are listed by work type for each of the 63 corridors in the following pages. Costs are totaled for each corridor. Costs by improvement type are shown in Chart C for the first two fiveyear periods (1992-1996 and 1997-2001). Improvement needs for the entire 20-year period are graphically shown on the map on page 21 (Figure 10). State and federal revenue projections (in constant 1992 dollars) resulted in \$2,752 million being available for improvement projects on the Commercial and Industrial Network for the 20-year period.

Commercial and Industrial Network Improvement Needs 1992 - 2001



20-Year Improvements



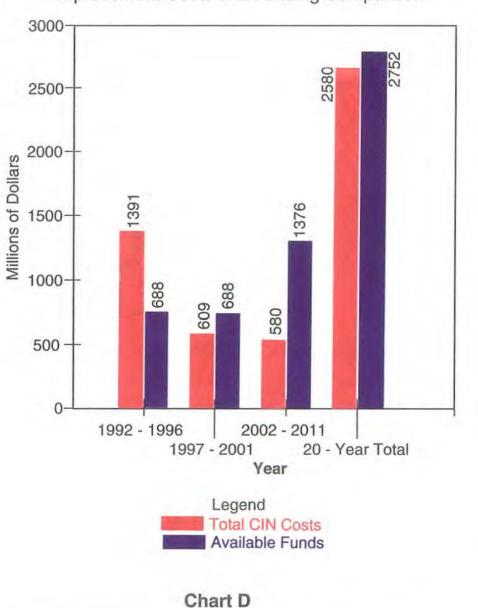
				20-Year	
	1992-1996	1997-2001	2002-2011	Total	
Available Funds	\$688	\$688	\$1,376	\$2,752 million	

Approximately \$688 million in federal and state funding would be available over each five-year period. The total \$2,752 million or \$138 million per year that would be available for Commercial and Industrial Network improvements assumes state highway construction purchasing power continues at the current level (Chart D).

Implementation of these Commercial and Industrial Network improvements over the next 20-year period is realistic and reasonable. By incorporating these improvement priorities in the department's highway programming efforts, financially responsible decisions can be made. This schedule of 20-year improvements is achievable based on this comparison of total costs and programming funds available.

	1992-1996	1997-2001	2002-2011	20-Year Total
Total Improvement Costs	\$1,391	\$609	\$ 580	\$2,580 million
Available Funds	\$ 688	\$688	\$ 1,376	\$2,752 million

Commercial and Industrial Network Improvement Costs and Funding Comparison



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Improvement Prioritization Summary

1992 \$ (in 1000's)

Work Type Code:Pr1-Capacity1-2-Construction/Reconstruction2-3-Resurface3-4-Bypass4-5-

Technical need assessment.

Does not imply funding commitment.

Programming Status Code: 1-In 1991-1995 Program 2-In Planning Section of 1991-1995 Program 3-In Recommended 1992-1996 Program 4-In Planning Section of Recommended 1992-1996 Program 5-Not Programmed

Roadway Segment	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
Sioux City Bypass	1	US 75	6.50	\$23,800		4				1	
Sioux City Bypass to Merrill	1	US75	11.94	\$22,300		2				2	
Merrill to Le Mars Bypass	1	US 75	3.13	\$1,400		3				2	
Le Mars Bypass	1	US 75	4.25				\$11,200		4	2	
					\$47,500			\$11,200			\$58,700
Le Mars to Sheldon	2	IA 60	32.33				\$23,400		2	2	
Le Mars to Sheldon	2	IA 60	32.33				\$20,800		1	2	
								\$44,200			\$44,200
Sheldon to Sibley	3	IA 60	15.68							5 5	
Sibley to MN State Line	3	IA 60	7.70							5	
MO State Line to Shambaugh	4	US71	5.76			- 3	1.			5	
Shambaugh to Clarinda	4	US71	5.11				\$700		3	1	
Clarinda to Villisca	4	US71	15.28				\$2,000		3	1	
Villisca to US 34	4	US71	3.52							5	
								\$2,700			\$2,700
US 34 to Atlantic	5	US71	29.47	\$4,200		3				5	
Atlantic to I-80	5	US71	8.45								5
					\$4,200						\$4,200
I-80 to Carroll	6	US71	44.25	\$34,900		2				1	
			2.1	+	\$34,900						\$34,900

					1992\$	(in 1000	's)				
Technical need assessm Does not imply funding com		1-C: 2-C: 3-R:	rk Type Co apacity onstruction esurface ypass	de: /Reconstructio	1-In n 2-In 3-In 4-In	1991-19 Planning Recomm	g Status Code 95 Program 9 Section of 19 1 Section of F 19 Section of F 10 mmed	91-1995 Prog 1996 Program		996 Progra	ım
	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
Carroll to IA 217 (Seg. 2)	7	US71	7.46	\$5,600		2				5	
A 217 to E IA 175	7	US71	4.97	40,000		-	\$3,700		2	5	
Jct IA 175 to W Jct IA 175	7	US71	17.67				40,100		-	5	
V Jct IA 175 to S Jct US 20	7	US71	7.57				\$5,700		2	5	
Jct US 20 to N Jct US 20	7	US71	3.54	\$2,700		2	40,100		-	1	
1001002010110010020	1	0071	0.04	ψ2,700	\$8,300	2		\$9,400			
Jct US 20 to Storm Lake Bypass	8	US71	9.48	\$8,200		2				5	
storm Lake Bypass	8	US71	7.50	\$7,900		4				1	
Storm Lake Bypass to IA 3	8	US71	2.12	\$300		3				5	
A 3 to N Jct IA 10	8	US71	12.14	4000						5	
Jct IA 10 to Spencer Bypass	8	US71	12.63	\$9,400		2				1	
Spencer Bypass	8	US71	7.71	\$16,200		4				1	
pencer bypass	0	0071	1.11	φ10,200	\$42,000	-				<i>.</i>	\$42,000
Spencer Bypass	9	US71	9.94							1	
Milford to Arnolds Park	9	US71	3.12	\$4,600		1				1	
Arnolds Park to W Jct IA 9	9	US71	3.97	\$3,000		2				1	
Arnolds Park to W Jct IA 9	9	US71	3.97	\$5,800		1				1	
V Jct IA 9 to MN State Line	9	US71	11.89	1.000						5	
					\$13,400						\$13,400
35/80 to IA 17	10	IA141	8.41				\$1,800		3	5	
A 17 to IA 210	10	IA141	8.60	\$9,000		1	\$1,400		3	1	
A 210 to US 169	10	IA141	5.47	\$6,200		1				1	
JS 169 to E Jct US 30	10	US 169	13.45							5	
	-										

	1	992 \$ (in 1000's)
	Work Type Code: 1-Capacity	Programming Status Code: 1-In 1991-1995 Program
Technical need assessment.	2-Construction/Reconstruction	2-In Planning Section of 1991-1995 Program
Does not imply funding commitment.	3-Resurface	3-In Recommended 1992-1996 Program
	4-Bypass	4-In Planning Section of Recommended 1992-1996 Program
		5-Not Programmed

Roadway Segment	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
US 30 to E Jct IA 175	11	US 169	16.10							1	
E Jct IA 175 to W Jct IA 175	11	US 169	3.82	\$2,800		2				1	
W Jct IA 175 to US 20	11	US 169	11.02	\$10,600		2	1			1	
US 20 to Ft. Dodge	11	US 169	3.71							5	
					\$13,400						\$13,400
Ft. Dodge to US 18	12	US 169	42.77							1	
MO State Line to E Jct IA 2	13	US 63	15.18							5	
E Jct IA 2 to US 34	13	US 63	18.58				\$13,500		1	2	
								\$13,500			\$13,500
Relocated US 65 to IA 316	14	IA 163	6.18							5	
IA 316 to Prairie City Bypass	14	IA 163	4.41	\$6,700		1				1	
IA 316 to Prairie City Bypass	14	IA 163	4.41	\$3,300		2				1	
Prairie City Bypass	14	IA 163	3.48	\$9,000		4				1	
Prairie City to Monroe Bypass	14	IA 163	4.70	\$3,600		1				1	
Prairie City to Monroe Bypass	14	IA 163	4.70	\$3,500		2				1	
Monroe Bypass	14	IA 163	3.96	\$9,200		4				3	
Monroe Bypass to Otley Bypass	14	IA 163	2.62	\$3,100		1				1	
Monroe Bypass to Otley Bypass	14	IA 163	2.62	\$1,900		2				1	
Otley Bypass	14	IA 163	2.14	\$3,700		4				3	
Otley Bypass to Pella Bypass	14	IA 163	4.81	\$5,600		1	64			1	
Otley Bypass to Pella Bypass	14	IA 163	4.81	\$3,400		2				1	
Pella Bypass	14	IA 163	3.84	\$9,300		4				1	
					\$62,300						\$62,300

					1992\$	(in 1000	's)				
Technical need assessme Does not imply funding comm		1-C 2-C 3-R	rk Type Co apacity construction esurface typass	de: /Reconstructio	1-In n 2-In 3-In 4-In	1991-19 Planning Recomm	g Status Code 95 Program 9 Section of 19 hended 1992- 9 Section of F ammed	91-1995 Prog 1996 Program	l.	996 Progra	am
	orridor umber	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
Pella Bypass to Oskaloosa Bypa	ss 15	IA 163	14.05	\$20,100		1				1	
Pella Bypass to Oskaloosa Bypa		IA 163	14.05	\$10,500		2				1	
Oskaloosa Bypass	15	IA 163	6.50	\$7,900		4				1	
Oskaloosa Bypass to Eddyville	15	IA 137	5.60	\$6,500		1				1	
Oskaloosa Bypass to Eddyville	15	IA 137	5.60	\$4,200		2				1	
Eddyville Bypass	15	IA 137	3.20	\$5,300		4				1	
Eddyville Bypass to Relocated IA	23 15	IA 23	5.20	\$5,900		1				1	
Eddyville Bypass to Relocated IA	23 15	IA 23	5.20	\$3,900		2				1	
Relocated IA 23 to IA 389/US 63	15	IA 23	5.70	\$7,500		1				1	
Relocated IA 23 to IA 389/US 63	15	IA 23	1.25	\$4,200		2				1	
A 389/US 63 to Ottumwa (US 34)	15	US 63	5.91							5	
					\$76,000	1.1					\$76,000
-80 to End Existing 4 -lane	16	US 65	4.41	\$3,400		2				5	
Begin 2-lane - IA 931	16	US 65	2.11	\$3,600		1				5	
A 931 to IA 117/330	16	US 65	7.28	\$6,400		1				5	
A 931 to IA 117/330	16	US 65	7.28	\$4,200		2				5	
A 330 to US 30	16	IA 330	20.31							5	
					\$17,600						\$17,600
JS 30 to Albion Bypass	17	IA330	6.89				\$5,800		2	2	
Albion Bypass	17	IA330	1.80				\$2,100		4	2	
Albion Bypass to IA 14	17	IA330	4.44				\$3,600		2	2	
A 330 to Grundy Center Bypass	17	IA 14	22.12				\$6,500		2	5	
Grundy Center Bypass	17	IA 14	1.75				\$2,500		4	5	
Grundy Center Bypass to US 20	17	IA 14	6.63							5	
								\$20,500			\$20,500

						1992\$	(in 1000	's)				
Technical need asse Does not imply funding]	1-Ca 2-Co 3-Re	k Type Co apacity onstruction esurface ypass	de: /Reconstruct	1-In 2-In 3-In 4-In	1991-19 Planning Recomm	3 Status Code 95 Program 9 Section of 19 19 Section of F 19 Section of F 10 mmed	91-1995 Prog 1996 Program		1996 Progra	am
Roadway Segment	Corrido Numbe		Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
WO State Line to US 218/Bypa	ISS	8	IA 394	10.67				\$2,700		2	2	
MO State Line to US 218/Bypa		8	IA394	10.67				\$13,200		1	2	
Donnellson Bypass		8	US 218					\$5,300		4	2	
Donnellson Bypass to Co Rd J		8	US218					\$9,800		1	2	
Co Rd J20 to Mt. Pleasant Byp			US 218		\$5,300		1				2	
Mt. Pleasant Bypass to US 34		8	US 218		\$400		3				2	
21						\$5,700			\$31,000			\$36,700
vit. Pleasant Bypass	1	9	US 218	6.24	\$15,600		4				2	
At. Pleasant Bypass to Olds B	ypass 1	9	US 218	6.53	\$5,200		1				1	
Olds-Swedesburg Bypass	1	9	US 218	4.58	\$8,800		4				1	
Crawfordsville Bypass	1	9	US 218	6.33	\$13,000		4				1	
Crawfordsville Bypass to IA 22	1	9	US 218	19.36	\$24,300		1				1	
A 22 to I-80	1	9	US 218	16.10							5	
						\$66,900						\$66,900
-380 to Janesville Bypass	2	20	US 218	13.01	\$59,700		1				1	
Janesville Bypass		20	US 218	1.80	\$6,100		4				1	
Janesville Bypass to Waverly E			US 218		\$6,000		1				1	
Janesville Bypass to Waverly E	Bypass 2		US218		\$3,200		2				1	
Waverly Bypass			US 218		\$12,400		4	6			1	
Naverly Bypass to Charles City	y 2		US 218					\$31,600		1	1	
Charles City Bypass	2	0	US 218	10.17				\$22,000		4	1	
						\$87,400			\$53,600			\$141,000
Waterloo to Denver Bypass	2	1	US 63	12.70							2	
Denver Bypass	2	1	US 63	0.98	\$4,200		4				1	
Denver Bypass to IA 3	2	1	US 63	2.51	\$2,000		1				1	
A 3 to New Hampton Bypass	2	1	US 63	23.63							2	
New Hampton Bypass	2	1	US 63	2.50			4	\$4,200		4	4	
						\$6,200			\$4,200			\$10,400

	1	992 \$ (in 1000's)
	Work Type Code: 1-Capacity	Programming Status Code: 1-In 1991-1995 Program
Technical need assessment. Does not imply funding commitment.	2-Construction/Reconstruction 3-Resurface	2-In Planning Section of 1991-1995 Program 3-In Recommended 1992-1996 Program
	4-Bypass	4-In Planning Section of Recommended 1992-1996 Program 5-Not Programmed

	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
New Hampton Bypass to IA 9	22	US 63	21.52							2	
IA 9 to MN State Line	22	US 63	10.70	\$5,500		2				1	
				40,000	\$5,500						\$5,500
MO State Line to S Jct US 218	23	US61	3.87	\$8,000		1	\$500		3	5	
S Jct US 218 to Ft. Madison Bypas	ss 23	US 61	14.71	\$18,200		1				1	
S Jct US 218 to Ft. Madison Bypas	ss 23	US 61	14.71	\$2,000		3				1	
Ft. Madison Bypass	23	US 61	9.00				\$23,900		4	5	
Ft. Madison Bypass to Burlington	23	US 61	13.33	\$8,600		1				1	
Ft. Madison Bypass to Burlington	23	US 61	13.33	\$5,500		2				1	
					\$42,300			\$24,400			\$66,700
Burlington to Mediapolis	24	US 61	13.09	\$12,600		1				2	
Mediapolis to Wapello	24	US 61	12.08	\$7,500		2				1	
Mediapolis to Wapello	24	US 61	12.08	\$8,700		1				2	
Wapello to S Jct IA 92	24	US 61	7.40	\$4,900		2				1	
Wapello to S Jct IA 92	24	US 61	7.40	\$6,500		1				2	
					\$40,200						\$40,200
S Jct IA 92 to IA 305	25	US 61	3.08	\$1,400		2	\$3,100		1	1	
IA 305 to Muscatine Bypass	25	US 61	8.53	\$8,000		1				3	
IA 305 to Muscatine Bypass	25	US 61	8.53	\$5,800		2				3	
Muscatine Bypass	25	US 61	7.15	and the second						5	
Muscatine Bypass to Blue Grass	25	US 61	15.06	\$23,300		1				1	
Muscatine Bypass to Blue Grass	25	US 61	15.06	\$3,000		3				1	
Blue Grass to I-280	25	US 61	5.32	\$7,100		1				1	
Blue Grass to I-280	25	US 61	5.32	\$3,300		2				1	
					\$51,900			\$3,100		1	\$55,000

					1992\$	(in 1000	's)					
Technical need assess Does not imply funding co		4-Bypass 4-In Planning Section of Recommended 1992-1996 Program 5-Not Programmed										
Roadway Segment	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total	
I-80 (Davenport) to N Jct US 30	26	US 61	15.98							5		
N Jct US 30 to IA 956	27	US 61	3.00							5		
IA 956 to IA 136	27	US 61	10.68	\$15,600		1				1		
IA 956 to IA 136	27	US 61	10.68	\$1,800		3				- 1		
A 136 to NCL Maquoketa	27	US 61	5.75	\$8,900		1				1		
A 136 to NCL Maquoketa	27	US 61	5.75	\$3,400		2	a local sector and			1		
NCL Maquoketa to Zwingle SCL		US 61	15.65	\$28,000		1	\$3,100		3	4		
SCL Zwingle to US 151	27	US 61	8.40	\$19,200		1	40,100		0	1		
US 151 to US 20	27	US 61	4.55	\$10,200						5		
JS 20 to Mississippi River	27	US 61	3.56	\$25,100		1				1		
	21	00 01	0.00	φ20,100	\$102,000	· ` .		\$3,100			\$105,100	
10.00 to 100 10 00 10 50	00	14 100	10.10	£1.000								
US 20 to Jct IA 3/US 52	28	IA 136	10.16	\$1,900		3				1		
Jct IA 3 to S Jct US 18	28	US 52	33.69		64 000					5	AL 000	
					\$1,900						\$1,900	
N Jct US 18 to Jct IA 150/24	29	US 52	16.80							5		
Jct IA 150 to MN State Line	29	US 52	25.10				\$3,200		3	5		
								\$3,200			\$3,200	
-29 to E Jct US 275	30	US 34	8.31	\$2,300		3				5		
JS 275 to IA 41	30	US 34	4.51	44,000		· ·	\$3,200	1		2		
A 41 to IA 48	30	US 34	18.46				\$2,600	3		2		
A 48 to US 71	30	US 34	13.70				4-,000	5		5		
and 1 a - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -					\$2,300			\$5,800			\$8,100	
JS 71 to W Jct IA 25	01	110.04	00.07							r		
W Jct IA 25 to SCL Creston	31 31	US 34 US 34	26.97	¢5 400		0				5		
N JCI IA 20 10 JUL CIESION	31	0534	6.84	\$5,400	¢E 400	2				5	CE 100	
					\$5,400						\$5,400	

	1	992\$(in 1000's)
Technical need assessment. Does not imply funding commitment.	Work Type Code: 1-Capacity 2-Construction/Reconstruction 3-Resurface 4-Bypass	Programming Status Code: 1-In 1991-1995 Program 2-In Planning Section of 1991-1995 Program 3-In Recommended 1992-1996 Program 4-In Planning Section of Recommended 1992-1996 Program 5-Not Programmed

Roadway Segment	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
SCL Creston to W Jct US 169	32	US 34	10.25	\$1,900		3				5	
W Jct US 169 to E Jct US 169	32	US 34	6.20			-				5	
E Jct US 169 to I-35	32	US 34	15.12	\$2,000		3				1	
					\$3,900						\$3,900
I-35 to Jct IA 14	33	US 34	26.21							1	
IA 14 to IA 97	34	US 34	6.05							1	
IA 97 to IA 68	34	US 34	7.18	\$5,700		2				1	
IA 68 to IA 5	34	US 34	13.23	\$1,800		3				5	
IA 5 to Wapello County	34	US 34	8.87				\$1,200		3	1	
Wapello County to W Jct US 63	34	US 34	11.58							5	
					\$7,500			\$1,200			\$8,700
W Jct US 63 to ECL Ottumwa	35	US 34	3.50							1	
ECL Ottumwa to WCL Agency	35	US 34	3.24	\$1,000		3				1	
Agency Bypass	35	US 34	2.00				\$3,000		4	5	
ECL Agency to Jct IA 16	35	US 34	3.30	\$2,300		1				2	
ECL Agency to Jct IA 16	35	US 34	3.30	\$2,500		2				2	
Jct IA 16 to WCL Batavia	35	US 34	3.33	\$2,400		1				2	
Jct IA 16 to WCL Batavia	35	US 34	3.33	\$2,500		2				2	
WCL Batavia to NCL Batavia	35	US 34	0.53	\$800		1				2	
WCL Batavia to NCL Batavia	35	US 34	0.53	\$100		3				2	
NCL Batavia to Co Rd V64	35	US 34	6.54	\$4,700		1	\$1,400		3	2	
Co Rd V64 to WCL Fairfield	35	US 34	2.24	\$1,600		1	\$500		3	2	
Fairfield Bypass	35	US 34	10.30			1.1	\$12,600		4	2	
ECL Fairfield to 6.85 miles east	35	US 34	6.85	\$1,400		3				1	
ECL Fairfield to 6.85 miles east	35	US 34	6.85				\$4,900		1	2	
10.45 miles west to Co Rd W55	35	US 34	10.45	\$2,000		3				5	

					1992\$	(in 1000	's)					
Technical need assessme Does not imply funding comm		Work Type Code:Programming Status Code:1-Capacity1-In 1991-1995 Program2-Construction/Reconstruction2-In Planning Section of 1991-1995 Program3-Resurface3-In Recommended 1992-1996 Program4-Bypass4-In Planning Section of Recommended 1992-1996 Program5-Not Programmed										
	orridor lumber	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total	
10.45 miles west to Co Rd W55	35	US 34	10.45				\$7,500		1	2		
Co Rd W55 to WCL Mt. Pleasant	35	US 34	2.29				\$1,500		1	5		
WCL Mt. Pleasant to Jct US 218	35	US 34	2.04							3		
					\$21,300			\$31,400			\$52,700	
Mt. Pleasant Bypass	36	US 34	9.00	\$19,700		4				3		
ECL Mt. Pleasant to WCL New Lor	don 36	US 34	6.00	\$1,100		3				3		
ECL Mt. Pleasant to WCL New Lor	idon 36	US 34	6.00	\$4,300		1				3		
New London Bypass	36	US 34	3.00				\$6,400		4	3		
ECL New London to WCL Danville	36	US 34	5.24				\$3,800		1	3		
Danville Bypass	36	US 34	1.00				\$10,800		4	3		
ECL Danville to WCL Middletown	36	US 34	3.24				\$2,300		1	3		
Middletown Bypass	36	US 34	0.80				\$1,300		4	3		
WCL New London to ECL New Lo	ndon 36	US 34	1.05							3		
ECL Middletown to WCL W Burling		US 34	2.23	\$1,300		2				3		
ECL Middletown to WCL W Burling		US 34	2.23	\$300		3				3		
WCL W Burlington to Miss River	36	US 34	6.20							1		
					\$26,700			\$24,600			\$51,300	
NE State Line to I-29	37	US 30	9.22							1		
-29 Interchange to Mo Valley Bypa	iss 38	US 30	0.31							5		
Missouri Valley Bypass	38	US 30	4.86	\$12,100		4				1		
Missouri Valley Bypass to WCL Lo		US 30	6.82	\$5,100		2				5		
WCL Logan to Jct IA 44	38	US 30	4.76	and the second second						5		
Jct IA 44 to SCL Woodbine	38	US 30	4.46	\$3,400		2				5		
SCL Woodbine to ECL Arion	38	US 30	20.71							1		
ECL Arion to WCL Denison	38	US 30	5.29	\$2,300		3				1		
WCL Denison to S Jct US 59	38	US 30	0.31	1000						1		
					\$22,900						\$22,900	

					1992\$	(in 1000	's)						
Technical need assessme Does not imply funding com		1-0 2-0 3-F	rk Type Co Capacity Construction Resurface Bypass	de: /Reconstruc	tion 2-In 3-In 4-In	1991-19 Planning Recomm	g Status Code: 95 Program 9 Section of 1991-1995 Program nended 1992-1996 Program 9 Section of Recommended 1992-1996 Program ammed						
	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total		
Denison Bypass	39	US 30	2.85				\$10,500		4	4			
ECL Denison to Carroll County	39	US 30	8.46	\$6,300		2			,	1			
County Line to Carroll Bypass	39	US 30	10.26	\$8,800		2	\$4,800		1	1			
,					\$15,100			\$15,300			\$30,400		
Carroll Bypass	40	US 30	8.88				\$21,300		4	2			
Carroll Bypass to IA 286	40	US 30	5.75	\$4,000		2	\$6,900		1	4			
Ict IA 286 to ECL Ralston	40	US 30	6.75				10,000			5			
CL Raiston to IA 25	40	US 30	3.05	\$400		3				5			
Ict IA 25 to W Jct US 169	40	US 30	23.04							5			
					\$4,400			\$28,200			\$32,600		
W Jct US 169 to I-35	41	US 30	28.30	\$8,800		3				5			
					\$8,800						\$8,800		
-35 to Jct US 65	42	US 30	13.53	\$1,200		3				5			
-35 to Jct US 65	42	US 30	13.53	\$10,700		1				1			
Ict US 65 to Marshall County Line	42	US 30	4.00	\$800		3				5			
Ict US 65 to Marshall County Line	42	US 30	4.00	\$2,900		1				2			
Story County Line to Jct IA 234	42	US 30	3.43	\$700		3				5			
Story County Line to Jct IA 234	42	US 30	3.43	\$2,500		1				2			
Ict IA 234 to IA 330 (Reloc. US 30)	42	US 30	7.45	\$1,400		3				5			
Ict IA 234 to IA 330 (Reloc. US 30)	42	US 30	7.45	\$4,800		1				2			
,,					\$25,000						\$25,000		
Aarshalltown Bypass	43	US 30	12.50	\$27,000		4				1			
Itown Bypass to Le Grand Bypa		US 30	6.19	\$4,600		1				3			
Itown Bypass to Le Grand Bypas		US 30	6.19	\$1,200		3				3			
e Grand Bypass	43	US 30	1.50	\$3,400		4				3			
e Grand Bypass to Toledo Bypa		US 30	9.10	\$6,900		1				3			
e Grand Bypass to Toledo Bypa		US 30	9.10	\$1,700		3				3			
	Carlo Carlo	ALCON CONTRACT	1740 S. 74	A	\$44,800						\$44,80		

					1992\$	(in 1000	's)				
Technical need assessme Does not imply funding com		1-C 2-C 3-R	rk Type Co apacity onstruction esurface ypass	de: /Reconstruc	1-In 2-In 3-In 4-In	1991-19 Planning Recomm	3 Status Code 35 Program Section of 19 nended 1992- 3 Section of F mmed	91-1995 Prog 1996 Program	0	996 Progra	am.
	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
Tama-Toledo Bypass	44	US 30	8.50				\$17,000		4	3	
Tama-Toledo Bypass to IA 287	44	US 30	28.28							2	
IA 287 to Relocated US 30	44	US 30	8.52	\$11,300		1				1	
Relocated US 30 to I-380	44	US 30	7.49							5	
					\$11,300			\$17,000			\$28,300
I-380 to IA 13	45	US 30	6.60	\$2,400		3				5	
A 13 to Lisbon	45	US 30	8.48	\$12,600		1				1	
IA 13 to Lisbon	45	US 30	8.48	\$1,600		3				5	
ECL Lisbon to WCL Mechanicsville	9 45	US 30	6.19	\$4,600		2	\$4,500		1	5	
WCL Mechanicsville to WCL Clare	nce 45	US 30	10.27	\$8,400		2				5	
WCL Clarence to ECL Clarence	45	US 30	1.27			1.00				5	
ECL Clarence to WCL Wheatland	45	US 30	11.10	\$2,100		3				5	
WCL Wheatland to ECL Grand Mo	und 45	US 30	10.56							5	
ECL Grand Mound to N Jct US 61	45	US 30	3.85				\$2,900		1	5	
					\$31,700			\$7,400			\$39,100
S Jct US 61 to WCL Clinton	46	US 30	11.55							5	
WCL Clinton to Miss River Bridge	46	US 30	9.01	\$1,900		2				5	
					\$1,900						\$1,900
US 30 to N Jct US 13	47	US 151	7.70	\$7,900		1				1	
US 30 to N Jct US 13	47	US 151		\$1,500		3				1	
N Jct US 13 to IA 1	47	US1 51		\$4,300		1				1	
Springville Bypass	47	US 151	2.33	\$5,200		4				5	
IA 1 to Monticello Bypass	47	US 151		\$12,300		1	\$5,300		3	2	
Monticello Bypass	47	US 151					\$11,300		4	5	
					\$31,200			\$16,600			\$47,800

						1992\$(in 1000	's)				
Technical need assessme Does not imply funding comm			1-Ca 2-Co 3-Re	k Type Co apacity onstruction esurface /pass	de: /Reconstruct	1-In 2-In 3-In 4-In	1991-19 Planning Recomm	g Status Code 95 Program 9 Section of 19 nended 1992-1 g Section of F ammed	91-1995 Progr 996 Program		996 Progra	am
	Corridor Number	R	oute	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
Monticello Bypass to Cascade By	pass 4	8 1	JS 151	11.34				\$5,100		1	2	
A 38 N to Cascade Bypass			JS 151					\$1,000		3	1	
Cascade Bypass	4		JS 151					\$6,300		4	5	
Cascade Bypass to S Jct US 61	4	8 1	JS 151	18.00	\$3,600		3	\$13,400		1	2	
						\$3,600			\$25,800			\$29,400
-129 to Jct IA 12	4	9 (JS 20	4.13							5	
A 12 to IA 140	4	9 (JS 20	12.67	\$5,200		3				5	
Jct IA 140 to Four-lane Section	4	9 1	JS 20	26.49							5	
Four-lane Section to E Jct US 59	4		JS 20	2.23							5	
E Jct US 59 to N Jct US 71	4	9 (JS 20	18.85	\$11,200	\$16,400	2				2	\$16,400
S Jct US 71 to WCL Sac City	5		JS 20	6.41	\$4,800		2				2	
WCL Sac City to ECL Sac City	5		JS 20	2.52	\$4,000		4				2	
ECL Sac City to WCL Rockwell Ci			JS 20	17.19				\$13,700		2	2	
WCL to ECL Rockwell City	5		JS 20	2.00				010,700		-	2	
ECL Rockwell City to WCL Moorla			JS 20	16.23	\$13,100		2				2	
WCL Moorland to US 169	5		JS 20	6.30							5	
						\$17,900			\$13,700			\$31,600
US 169 to I-35	5	1 1	JS 20	32.64							5	
-35 to US 65	5	2 L	JS 20	15.80							5	
JS 65 to IA 14	5	2 1	JS 20	27.80				\$49,000		2	2	
									\$49,000			\$49,000
E IA 14 to Beg Div Section W Wa			JS 20	12.52				\$9,300		1	3	
E IA 14 to Beg Div Section W Wa			JS 20	12.52	\$13,300		2				3	
Beg Divided Section to I-380	5	3 L	JS 20	11.25							5	
						\$13,300	1		\$9,300			\$22,600

	1992 \$ (in 1000's)					
Technical need assessment. Does not imply funding commitment.	Work Type Code: 1-Capacity 2-Construction/Reconstruction 3-Resurface 4-Bypass	Programming Status Code: 1-In 1991-1995 Program 2-In Planning Section of 1991-1995 Program 3-In Recommended 1992-1996 Program 4-In Planning Section of Recommended 1992-1996 Program 5-Not Programmed				

Roadway Segment	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total
E Jct I-380 to IA 13	54	US 20	36.50							5	
IA 13 to ECL Delaware	55	US 20	7.98							5	
ECL Delaware to WCL Dubuque	55	US 20	32.45	\$11,600		3				5	
WCL Dubuque to Grandview Aver		US 20	2.86	\$8,200		2				5	
Grandview Avenue to Miss River	55	US 20	1.20	\$32,500		2				1	
	55	0020	1.20	WD2,000	\$52,300	2				,	\$52,300
Jct IA 60 to Clay County Line	56	US 18	23.59							5	
O'Brien County Line to N Jct US 71	71 56	US 18	11.82	\$8,800		2				5 5	
					\$8,800						\$8,800
S Jct US 71 to ECL Spencer	57	US 18	1.09							5	
ECL Spencer to IA 341	57	US 18	11.32	\$2,100		3				1	
IA 341 to IA 314	57	US 18	3.16							5	
IA 314 to WCL Emmetsburg	57	US 18	6.84				\$1,300		3	5	
WCL to ECL Emmetsburg	57	US18	2.71							5	
ECL Emmetsburg to W Jct IA 15	57	US 18	12.99	\$9,700		2				1	
W Jct IA 15 to WCL Algona	57	US 18	8.85	\$1,700		3				1	
WCL Algona to US 169	57	US 18	1.49							5	
					\$13,500			\$1,300			\$14,800
Jct US 169 to Co Rd P60	58	US 18	8.25							5	
Co Rd P60 (Sexton) to ECL Game	er 58	US 18	24.68	\$4,800		3				5	
ECL Garner to I-35	58	US 18	12.32	and an and a second						4	
					\$4,800						\$4,800

			1992\$ (in 1000's)									
Technical need assessment. Does not imply funding commitment		Work Type Code:Programming Status Code:1-Capacity1-In 1991-1995 Program2-Construction/Reconstruction2-In Planning Section of 1991-1995 Program3-Resurface3-In Recommended 1992-1996 Program4-Bypass4-In Planning Section of Recommended 1992-1996 Program								996 Progr	gram	
	Corridor Number	Route	Mileage	1992-96 Cost	1992-96 Total	Work Type	1997-2001 Cost	1997-2001 Total	Work Type	Program Status	10-Year Total	
I-35 to S Jct US 218 I-35 to Rudd (Mason City Bypass)	59 59	US 18 US 18	37.21 24.58	\$5,100	\$5,100	3	\$48,000	\$48,000	1	5 3	\$53,100	
S Jct US 218 to N Jct US 63	60	US 18	18.43							5		
S Jct US 63 to ECL Fredericksburg ECL Fredericksburg to WCL W. U WCL to ECL West Union		US 18 US 18 US 18	6.45 18.55 1.26				\$3,500		3	5 5 5		
ECL West Union to W Jct US 52	61	US 18	15.84	\$11,800	\$11,800	2		\$3,500		5	\$15,300	
W Jct US 52 to SCL Postville Allamakee County Line to Jct IA 7 E Jct IA 76 to Mainline Bridge	6 62 62 62	US 18 US 18 US 18	1.52 19.23 3.82				\$3,700	\$3,700	3	5 5 5	\$3,700	
-80 to IA 163 A 163 to US 65/69 Ict US 65/69 to I-35	63 63 63	US 65 US 65 US 65/IA	4.40 9.50 5 10.97	\$19,500 \$33,800	\$53,300	4 4			4	1 1	\$53,300	
Subtotal				\$1	,209,800			\$529,100		\$1	,738,900	
Engineering TOTAL					\$181,500 ,391,300			\$79,400 \$608,500			260,900 ,999,800	