

NOACA

Technical Memorandum

Pavement Conditions in the NOACA Region As part of the Regional Transportation System



The Northeast Ohio Areawide Coordinating Agency (NOACA) is a public Organization serving the counties of and municipalities & townships within Cuyahoga, Geauga, Lake, Lorain and Medina (covering an area with 2.1 million people). NOACA is the agency designated or recognized to perform the following functions:

- **Serve as the Metropolitan Planning Organization (MPO), with responsibility for comprehensive cooperative and continuous planning for highways, public transit, and bikeways, as defined in the Transportation Equity Act for the 21st Century.**
- **Perform continuous water quality, transportation-related air quality and other environmental planning functions.**
- **Administer the area clearinghouse function, which includes providing local government with the opportunity to review a wide variety of local or state applications for federal funds.**
- **Conduct transportation and environmental planning and related demographic, economic and land use research.**
- **Serve as an information center for transportation and environmental and related planning.**
- **At NOACA Governing Board direction, provide transportation and environmental planning assistance to the 172 units of local, general purpose government.**

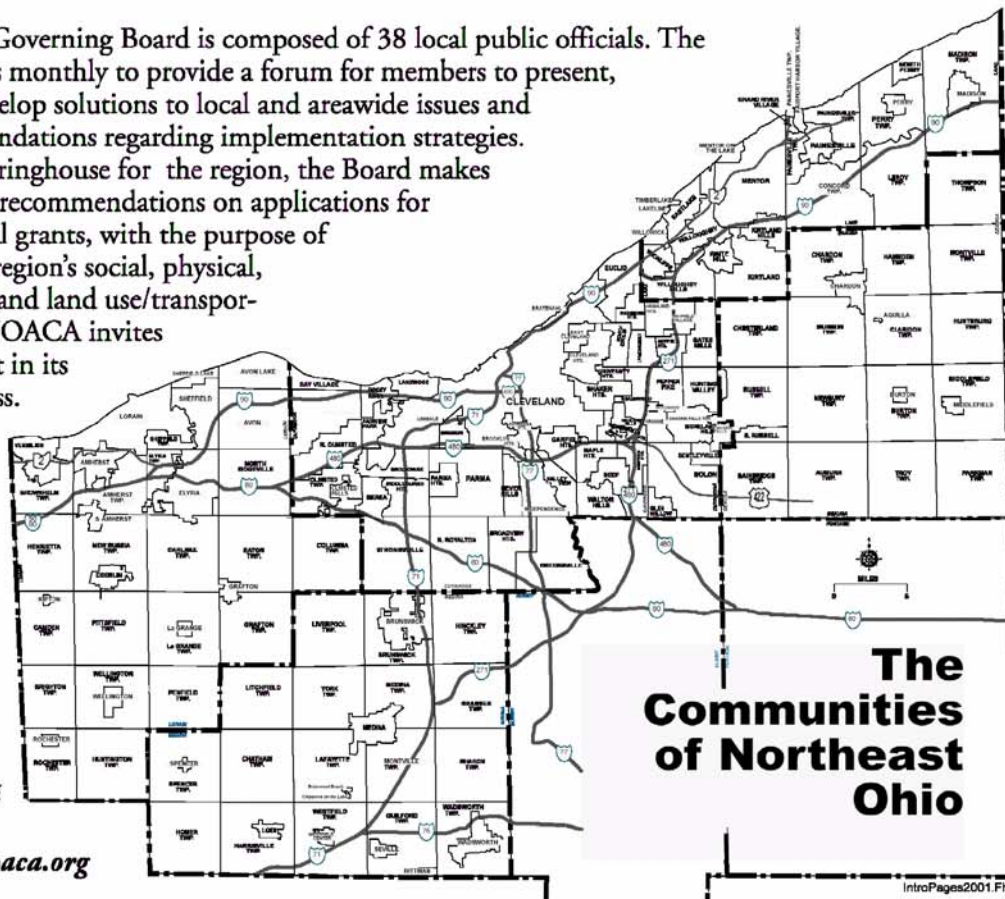
The NOACA Governing Board is composed of 38 local public officials. The Board convenes monthly to provide a forum for members to present, discuss and develop solutions to local and areawide issues and make recommendations regarding implementation strategies. As the area clearinghouse for the region, the Board makes comments and recommendations on applications for state and federal grants, with the purpose of enhancing the region's social, physical, environmental and land use/transportation fabric. NOACA invites you to take part in its planning process.

Feel free to participate, to ask questions and to learn more about areawide planning. For more information, call:

(216) 241-2414

or log on at:

<http://www.noaca.org>



2004 NOACA BOARD MEMBERS

President: Daniel P. Troy, President, Lake County Board of Commissioners
First Vice-President: Robert C. Klaiber, P.E., P.S., Cuyahoga County Engineer
Second Vice President: Mark Ricchiuto, Director of Public Services, City of Cleveland
Secretary: Stephen D. Hambley, Medina County Commissioner
Assistant Secretary: J. Timothy McCormack, Cuyahoga County Commissioner

Assistant Secretary: William M. Grace, Mayor City of Elyria (Lorain County)
Treasurer: Neil C. Hofstetter, Geauga County Commissioner
Assistant Treasurer: James R. Gills, P.E., P.S., Lake County Engineer
Assistant Treasurer: Erwin J. Odeal, Director of NEORS (Cuyahoga County)
Immediate Past President: Betty C. Blair, President, Lorain County Board of Commissioners

Members:

Cuyahoga County

Joseph Biddlecombe, Mayor, City of Berea
Lydia F. Champlin, Mayor, Chagrin Falls Village
Scott E. Coleman, Mayor, City of Highland Heights
Jimmy Dimora, Cuyahoga County Commissioner
Robert C. Downey, City Manager, City of Cleveland Heights
Peter Lawson Jones, President, Cuyahoga County Board of Commissioners
Robert C. Klaiber, P.E., P.S., Cuyahoga County Engineer
Cathy Luks, Mayor, City of North Royalton
J. Timothy McCormack, Cuyahoga County Commissioner
Michael S. Procuk, Mayor, Village of Brooklyn Heights
Deborah Sutherland, Mayor, City of Bay Village

City of Cleveland

Jane Campbell, Mayor, City of Cleveland
Joseph Cimperman, Councilman, City of Cleveland
Roosevelt Coats, Councilman, City of Cleveland
Mark Ricchiuto, Director of Public Services, City of Cleveland
Chris Ronayne, Director, City of Cleveland Planning Commission
Edward W. Rybka, Councilman, City of Cleveland

Lake County

Robert E. Aufuldish, Lake County Commissioner
James R. Gills, P.E., Lake County Engineer
Rita C. McMahon, City Manager, City of Painesville
Raymond E. Sines, Lake County Commissioner
Daniel P. Troy, President, Lake County Board of Commissioners

Geauga County

Neil C. Hofstetter, Geauga County Commissioner
Mary Samide, Geauga County Commissioner
William S. Young, President, Geauga County Board of Commissioners

Lorain County

Robert J. Berner, Mayor, Avon Lake
Betty C. Blair, President, Lorain County Board of Commissioners
Kenneth P. Carney, Sr., P.E., P.S., Lorain County Engineer
Craig Foltin, Mayor, City of Lorain
William M. Grace, Mayor, City of Elyria
David J. Moore, Lorain County Commissioner
Kenneth W. Roth, Trustee, Columbia Township

Medina County

James Dudek, Trustee of Sharon Township
Chris Easton, Director of Public Service, City of Wadsworth
Stephen D. Hambley, Medina County Commissioner

Northeast Ohio Regional Sewer District (NEORS)

Erwin J. Odeal, Director

The Greater Cleveland Regional Transit Authority (GCRTA)

George M. Dixon, Board President

The Ohio Department of Transportation (ODOT)

David J. Coyle, Deputy Director, ODOT District 12

Ex officio Member:

William T. Skowronski, Chief, Northeast District Office
Ohio Environmental Protection Agency

NOACA Transportation Advisory Committee

Chairperson: Robert C. Klaiber, Jr., P.E., P.S., Cuyahoga County Engineer

Cuyahoga County

Paul A. Alsenas, Director, Cuyahoga County Planning Commission
Joseph A. Calabrese, General Manager, GCRTA
Joseph Cimperman, Councilman, City of Cleveland
Randall DeVaul, P.E., Commissioner, Cleveland Div. of Eng. & Cons.
Jimmy Dimora, Cuyahoga County Commissioner
Robert C. Downey, City Manager, City of Cleveland Heights
Robert C. Klaiber, Jr., P.E., P.S., Cuyahoga County Engineer
Rob Mavec, Commissioner, Cleveland Traffic Engineering
J. Timothy McCormack, Cuyahoga County Commissioner
Chris Ronayne, Director, City of Cleveland Planning Commission

Lake County

Robert E. Aufuldish, Lake County Commissioner
James R. Gills, P.E., P.S., Lake County Engineer
Raymond Jurkowski, General Manager, LAKETRAN
Rita C. McMahon, City Manager, City of Painesville
Daniel P. Troy, President, Lake County Board of Commissioners
Darrell Webster, Director, Lake County Planning Commission

Lorain County

Betty C. Blair, President, Lorain County Board of Commissioners
Kenneth P. Carney, Sr., P.E. Lorain County Engineer
(vacant) General Manager, Lorain County Transit
Ronald Twining, Director, Lorain County Planning Commission

Geauga County

David Dietrich, Director, Geauga County Planning Commission
R.L. Phillips, P.E., Geauga County Engineer
Kristina Fenselon, General Manager, Geauga County Transit
William S. Young, President, Geauga County Board of Commissioners

Medina County

Chris Easton, Director of Public Service, City of Wadsworth
Stephen D. Hambley, Medina County Commissioner
(vacant) General Manager, Medina County Transit
David L. Miller, P.E., Medina County Engineer
Patrice Theken, Director, Medina County Planning Commission

Other Voting Members: District Deputy Directors:

David J. Coyle (ODOT-12); Thomas O'Leary (ODOT-3)
William T. Skowronski, Chief, Northeast District Office Ohio EPA

NOACA Transportation Advisory Committee (Continued)

Private Sector Voting Members:

Frank Detillio, President, Lorain County Chamber of Commerce (Lorain County)
James Douth, Executive Director, Medina County Economic Development Corporation (Medina County)
Martin Gareau, Mentor Economic Development Director (Lake County)
David Goss, Director, Greater Cleveland Growth Association (Cuyahoga County)
Jeffrey R. Huntsberger, Esquire (Geauga County)

Non-voting members:

Dennis Decker, FHWA Ohio Division Administrator
Gary L. Failor, Cleveland-Cuyahoga County Port Authority
John Mok, Director, Cleveland Department of Port Control, Cleveland Hopkins International Airport
Ernest Gubry, Federal Aviation Administration
Richard Novak, Lorain Port Authority
William Schuster, Fairport Harbor Port Authority
Gary Suhadolnik, Executive Director, Ohio Turnpike Commission

Environmental Advisory Committee

Chairperson: James R. Gills, P.E., Lake County Engineer

Air Quality Subcommittee Chair: William M. Grace, Mayor, City of Elyria

Water Quality Subcommittee Chair: James R. Gills, P.E., Lake County Engineer

Cuyahoga County

Terry Allen, Cuyahoga County Health Commissioner
Darnell Brown, City of Cleveland
Joseph Cimperman, Councilman, City of Cleveland
Jimmy Dimora, Cuyahoga County Commissioner
Ed Masonis (*representing Sanitary Engineers*)
Erwin J. Odeal, Director, NEORS
Jim Storer, Cuyahoga County Soil and Water Conservation District (*representing Soil and Water Conservation Districts*)
Cleveland Health Director (To be determined)
Deborah Sutherland, Mayor, City of Bay Village

Lake County

James R. Gills, P.E., P.S., Lake County Engineer
Frank Kellogg, Lake County Environmental Health Director (*representing Local Air Agencies*)
Daniel P. Troy, President, Lake County Board of Commissioners

Lorain County

Betty C. Blair, President, Lorain County Board of Commissioners
David J. Moore, Lorain County Commissioner
Ken Pearce, Lorain County Health Commissioner (*representing Health Districts*)

Medina County

Stephen D. Hambley, Medina County Commissioner

Geauga County

Neil C. Hofstetter, Geauga County Commissioner

Non-Voting Members:

David J. Coyle, Deputy Director, ODOT District 12
William T. Skowronski, Chief, Northeast District Office, Ohio Environmental Protection Agency

Planning Advisory Committee

Chairperson: Stephen D. Hambley, Medina County Commissioner

Paul A. Alsenas, Director, Cuyahoga County Planning Commission
David Dietrich, Director, Geauga County Planning Commission
Chris Ronayne, Director, City of Cleveland Planning Commission

Patrice Theken, Director, Medina County Planning Commission
Ronald Twining, Director, Lorain County Planning Commission
Darrell Webster, Director, Lake County Planning Commission

NOACA Directors:

Howard R. Maier, Executive Director

Ronald T. Eckner, P. E., Director of Transportation Planning
John Hosek, Director of Transportation Programs

John Beeker, Ph.D., Director of Environmental Planning
Stephen E. DeJohn, Esq., Legal Counsel/Director of Human Resources
Cheryl A. Kurkowski, CPA, Director of Finance & Operations
Jamy Wheeler, Director of Planning & Administrative Services

Communication Coordinators:

Sharon Hosek
Cheryl Onesky

<p>1) Title & Subtitle Pavement Conditions in the NOACA Region As part of the Regional Transportation System</p>	<p>2) NOACA Report No. TM-04-03</p>
<p>3) Author(s) Gary Grano Contributors: Mona Aziz, RTS Team</p>	<p>4) Report Date July 2004</p>
<p>5) Performing Organization Name & Address Northeast Ohio Areawide Coordinating Agency 1299 Superior Avenue, Cleveland, OH 44114-3204 Phone: (216) 241-2414 FAX: (216) 621-3024 Web site: www.noaca.org</p>	<p>6) Project/Task No. 6050-2 (FY 2004)</p>
	<p>7) NOACA Contract/Grant No. ODOT/FHWA</p>
<p>8) Sponsoring Agency Name & Address Ohio Department of Transportation 1980 W. Broad St., Box 899 Columbus, OH 43216-0899</p>	<p>9) Type of Report & Period Covered (July 1 2003 – June 30 2004)</p>
	<p>10) Sponsoring Agency Code</p>
<p>11) Supplementary Notes Federal funding for this project was provided by the Federal Highway Administration and administered by the Ohio Department of Transportation.</p>	
<p>12) Abstracts This technical memorandum summarizes the condition of pavements surveyed by the Ohio Department of transportation in the NOACA region. Only roads with a functional classification higher than a local on both the urban and rural system were surveyed.</p>	
<p>13) Key Words & Document Analysis A. Descriptors PCR ratings, pavement distress types B. Identifiers/Open Ended Terms</p>	
<p>14) Availability Statement NOACA</p>	<p>15) No. Pages 31</p>
	<p>16) Price</p>

Pavement Conditions in the NOACA Region

As part of the Regional Transportation System

July 2004

Prepared by

NORTHEAST OHIO AREAWIDE COORDINATING AGENCY

Principal Author:

Gary Grano

DANIEL P. TROY
BOARD PRESIDENT

HOWARD R. MAIER
EXECUTIVE DIRECTOR

The preparation of this publication was financed through grants received from the Federal Highway Administration and the Ohio Department of Transportation and appropriations from the counties of and municipalities within Cuyahoga, Geauga, Lake, Lorain and Medina. The contents do not necessarily reflect official views or policies of the U.S. department of Transportation or the Ohio Department of Transportation. This report does not constitute a standard or regulation.

Abstract

A goal of the Regional Transportation System (RTS) project is to identify infrastructure assets that improve the mobility of people and goods in the NOACA region. These assets must constantly be monitored and kept in a good state of repair to serve the public need.

This technical memo takes a look at the more than 3,000 miles of roadway surveyed for pavement condition ratings. This data was supplied by the Ohio Department of Transportation (ODOT), which maintains a statewide database that tracks the condition and maintenance effort on roadways throughout the state. This technical memo summarizes the data received from ODOT at a county level on the state and non-state systems.

In May 2002, the NOACA Governing Board approved a Regional Pavement Management Program to help planners identify pavements in the region that most urgently need repair. Since that time the NOACA Governing Board formed a task force to oversee the development of a Regional Pavement Management System (RPMS).

In June 2004, NOACA is in the process of hiring a consultant to develop a pavement management system. This soon to be developed computerized software will use pavement data provided by ODOT and local communities to help decision makers prioritize projects and minimize the cost of maintaining the region's pavement network in a good state of repair.

This document will also be used as input into the 2030 Transportation Plan update.

Introduction

In the spring of 2004, NOACA received pavement condition ratings (PCR's) from ODOT, which had collected PCR information for many years on the State, US and Interstate systems. Recently in 2003 ODOT's pavement engineering staff began collecting PCR information on non-state highways that had a federal functional classification higher than a local road on both the urban and rural systems. ODOT has agreed to re-inspect all functionally classified roadways in the NOACA region every 2-3 years.

While the pavements were being inspected in 2003, a re-evaluation of the functional classification system was taking place. This functional classification re-evaluation occurs after each decennial census and reclassifies roadways if their importance or function to the regional roadway network has changed. Pavement conditions were collected in 2003 on the old functional classification system before any adjustments were made. The next time pavements will be rated in 2005 or 2006, a slightly different system of roadways will be evaluated.

2003 Pavement Conditions

NOACA received the pavement condition ratings from ODOT in GIS format. The data are in two separate files: one for Interstate, US and State highways and the other for non-state roads. For both files only roadways with a functional classification higher than a local road were surveyed. The non-state file also contains general information about the condition of sidewalks and curbs.

The pavement condition ratings are generated by a visual inspection of roadways. ODOT staff completes pavement condition rating forms during their inspections. There is a different form for each type of pavement. The different pavement types and forms are as follows:

1. CRCP – Continuous Reinforced Concrete Pavement
2. JTCP – Jointed Concrete Pavement
3. FLEX – Flexible Pavement
4. COMP – Composite Pavement
5. LOCAL – used on non-state roadways

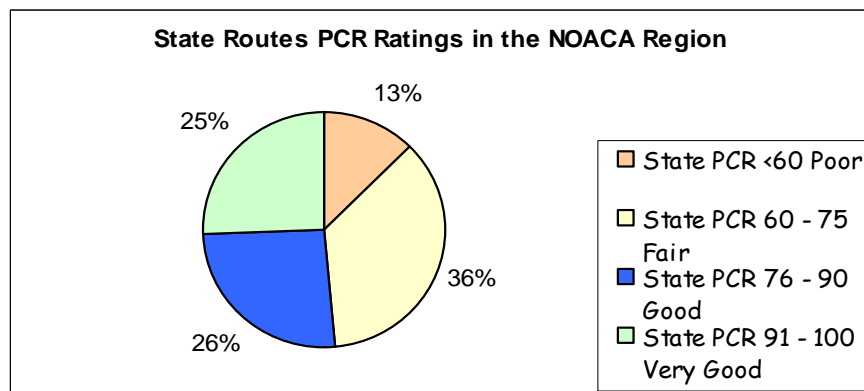
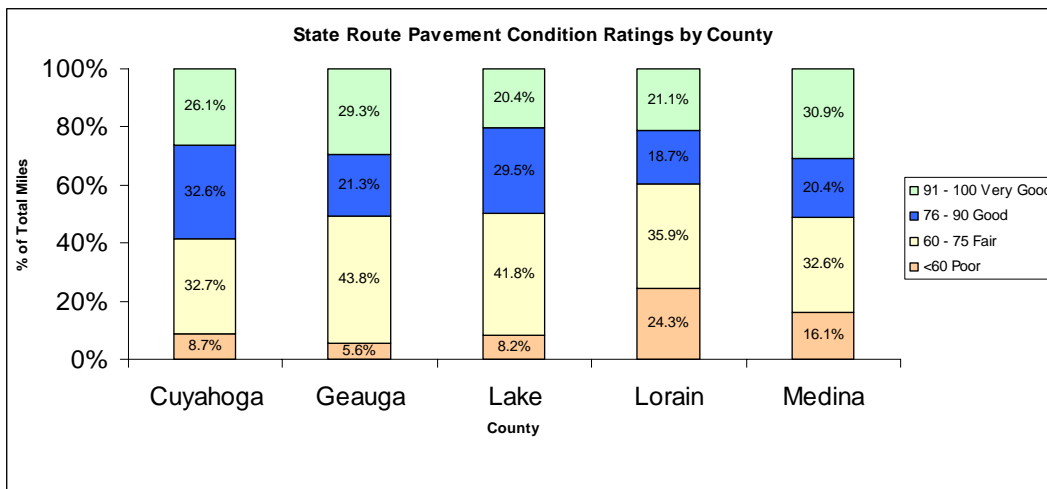
A sample of each of these forms is included in the appendix of this technical memorandum. Also in the appendix is a description of the fields of information in the GIS pavement databases currently at NOACA. There is a description for each pavement type mentioned above in the appendix.

The Pavement Condition Rating is a mathematical expression in which different pavement distress types, severity and extent of the distresses are rated. This formula will deduct points from a perfect PCR rating of 100. (See page 11 for more details on the PCR rating formula.)

The tables and graphs below show the pavement conditions on the state system in 2003.

Road Condition on the State System by County (Miles of roadway, by PCR rating)

	<60 Poor	60 - 75 Fair	76 - 90 Good	91 - 100 Very Good	Total
Cuyahoga	52.25	197.1	196.65	157.24	603.24
Geauga	11.67	91.33	44.42	61.13	208.55
Lake	21.97	112.31	79.31	54.9	268.49
Lorain	81.16	120.19	62.4	70.71	334.46
Medina	49.8	100.86	63.31	95.74	309.71
Total	216.85	621.79	446.09	439.72	1724.45



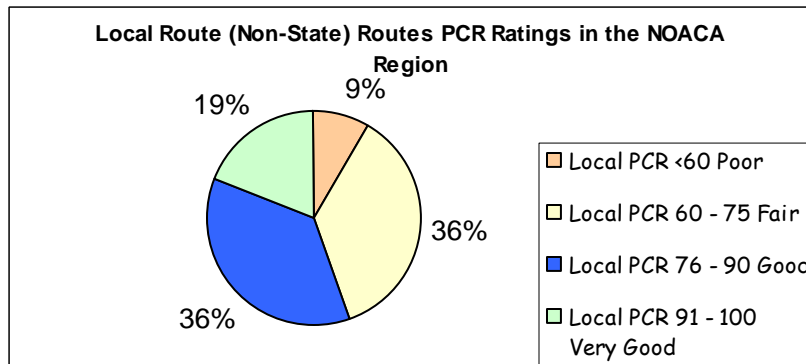
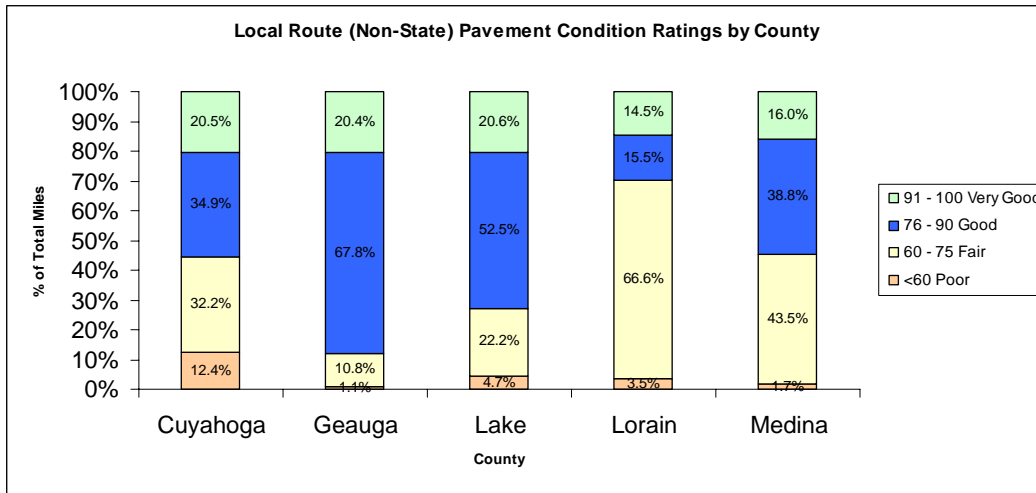
The table and graphs above show 2003 pavement condition ratings for state highways in the NOACA region. Overall, the data shows that 13% of state highways in NOACA's region had a condition rating in the poor category, while over 50% of the state highways had a PCR rating within the good and very good range.

County comparisons show that Geauga County had only 5.6% of its state highways in poor condition, while Lorain County had over 24% of its state roads in the poor category. The other counties fall between these.

On the next page is similar information showing condition of non-state highways in the NOACA region.

**Road Condition on the Local (Non-State) System by County
(Miles of roadway, by PCR rating)**

	<60 Poor	60 - 75 Fair	76 - 90 Good	91 - 100 Very Good	Total
Cuyahoga	107.55	278.48	302.33	177.55	865.91
Geauga	1.12	11.32	71.08	21.36	104.88
Lake	5.69	27.22	64.21	25.23	122.35
Lorain	7.34	141.02	32.72	30.59	211.67
Medina	2.01	51.13	45.53	18.81	117.48
Total	123.71	509.17	515.87	273.54	1422.29

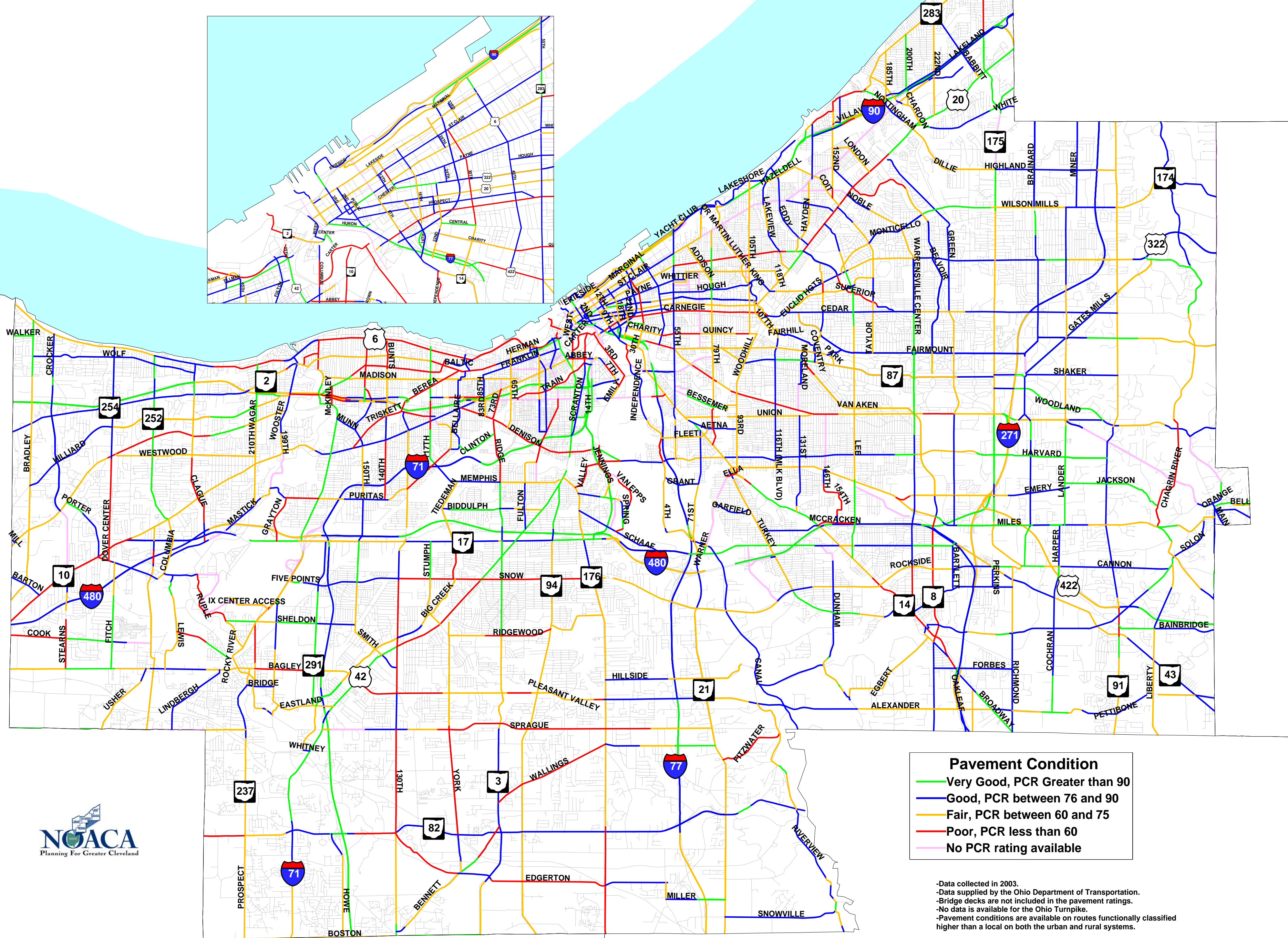


Overall, non-state highways show fewer roadways with PCR values in the poor category than state highways. Less than 9% of non-state roads were in the poor category. Non-state roadways had 19% of their total mileage with a PCR value greater than 90 in the very good range. The county analysis shows that Cuyahoga County had over 12% of its non-state roads in poor condition while both Geauga and Medina Counties had less than 2% of their local roads in poor condition.

When looking at both state and non-state highways that have PCR data in the NOACA Region, over 50% of the roadways have PCR ratings in the good or very good range. Only 10% of the region's roadways fell into the poor category. Geauga County's roads are in the best condition with over 63% of its surveyed roads in the very good or good range. Conversely, Lorain County only has 36 % of its surveyed roads in the very good to good category. The other counties in our region (Cuyahoga, Lake and Medina) had over 50% of their roadways in the good or very good categories.

On the next five pages are county maps showing roadway pavement condition for all roads surveyed on both the state and non-state (local systems).

Cuyahoga County Pavement Condition Ratings (PCR's)



Pavement Condition

- Very Good, PCR Greater than 90
- Good, PCR between 76 and 90
- Fair, PCR between 60 and 75
- Poor, PCR less than 60
- No PCR rating available

-Data collected in 2003.
 -Data supplied by the Ohio Department of Transportation.
 -Bridge decks are not included in the pavement ratings.
 -No data is available for the Ohio Turnpike.
 -Pavement conditions are available on routes functionally classified higher than a local on both the urban and rural systems.

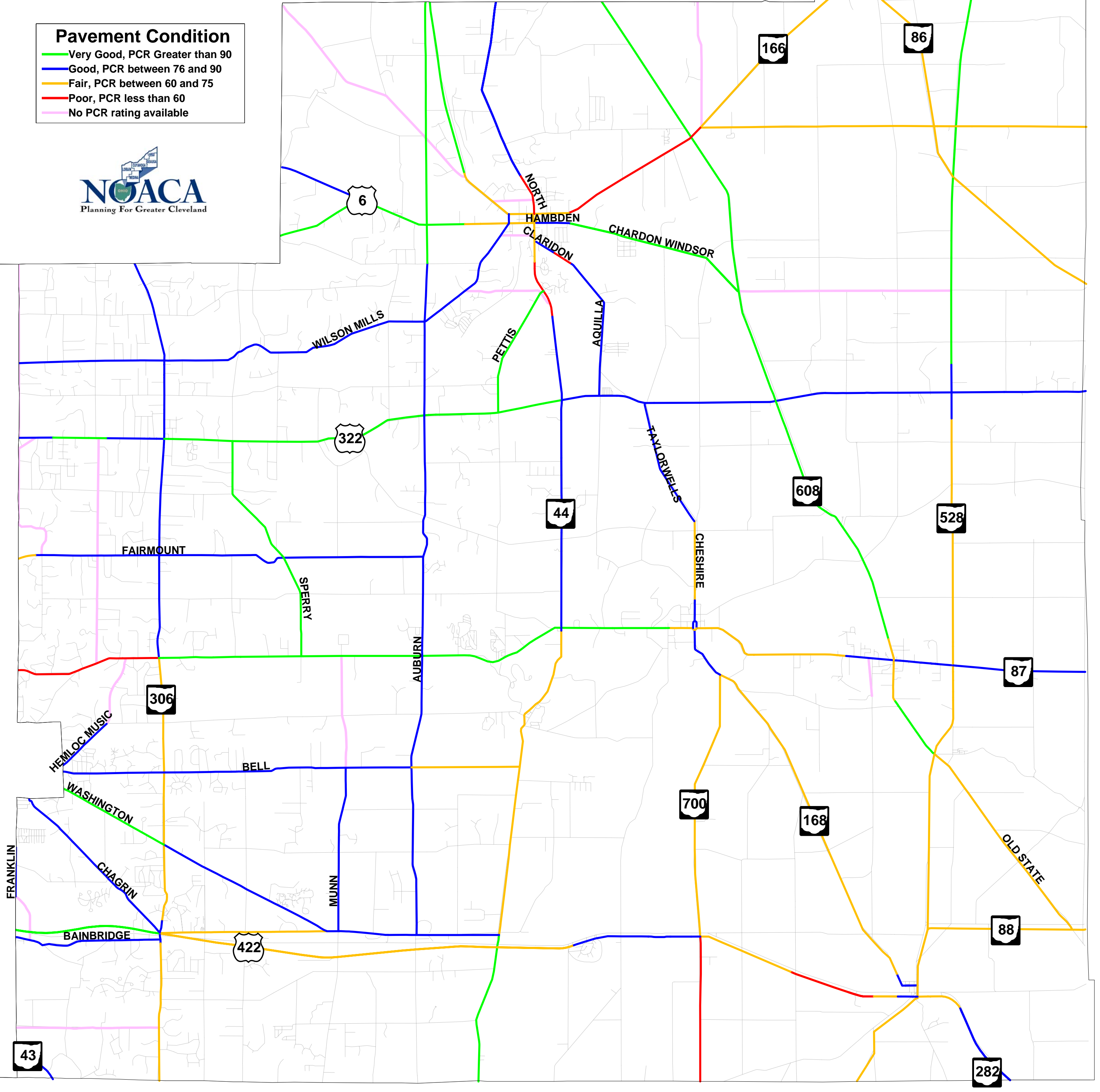


Geauga County Pavement Condition Ratings (PCR's)

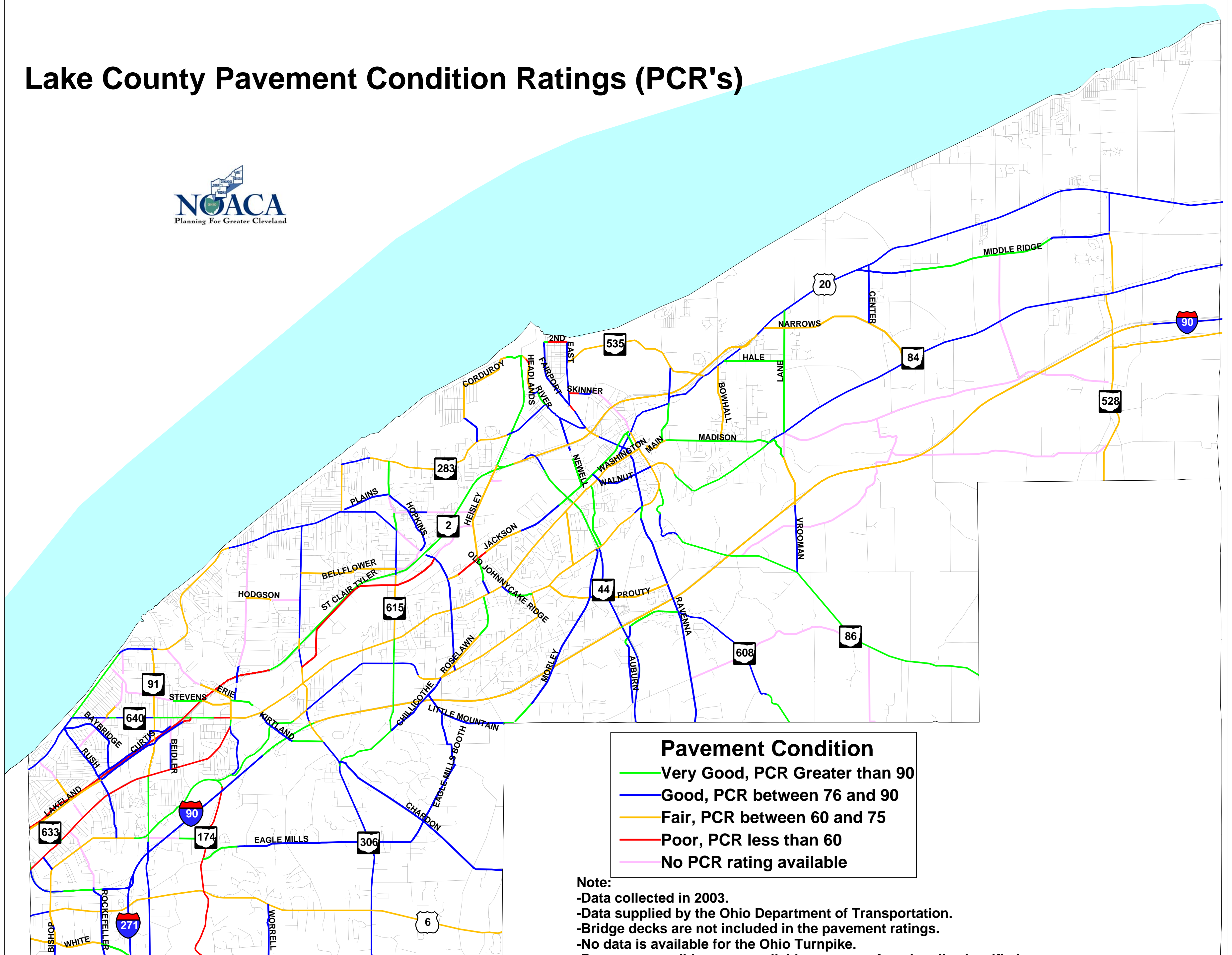
Note:
 -Data collected in 2003.
 -Data supplied by the Ohio Department of Transportation.
 -Bridge decks are not included in the pavement ratings.
 -No data is available for the Ohio Turnpike.
 -Pavement conditions are available on routes functionally classified higher than a local on both the urban and rural systems.

Pavement Condition

- Very Good, PCR Greater than 90
- Good, PCR between 76 and 90
- Fair, PCR between 60 and 75
- Poor, PCR less than 60
- No PCR rating available



Lake County Pavement Condition Ratings (PCR's)



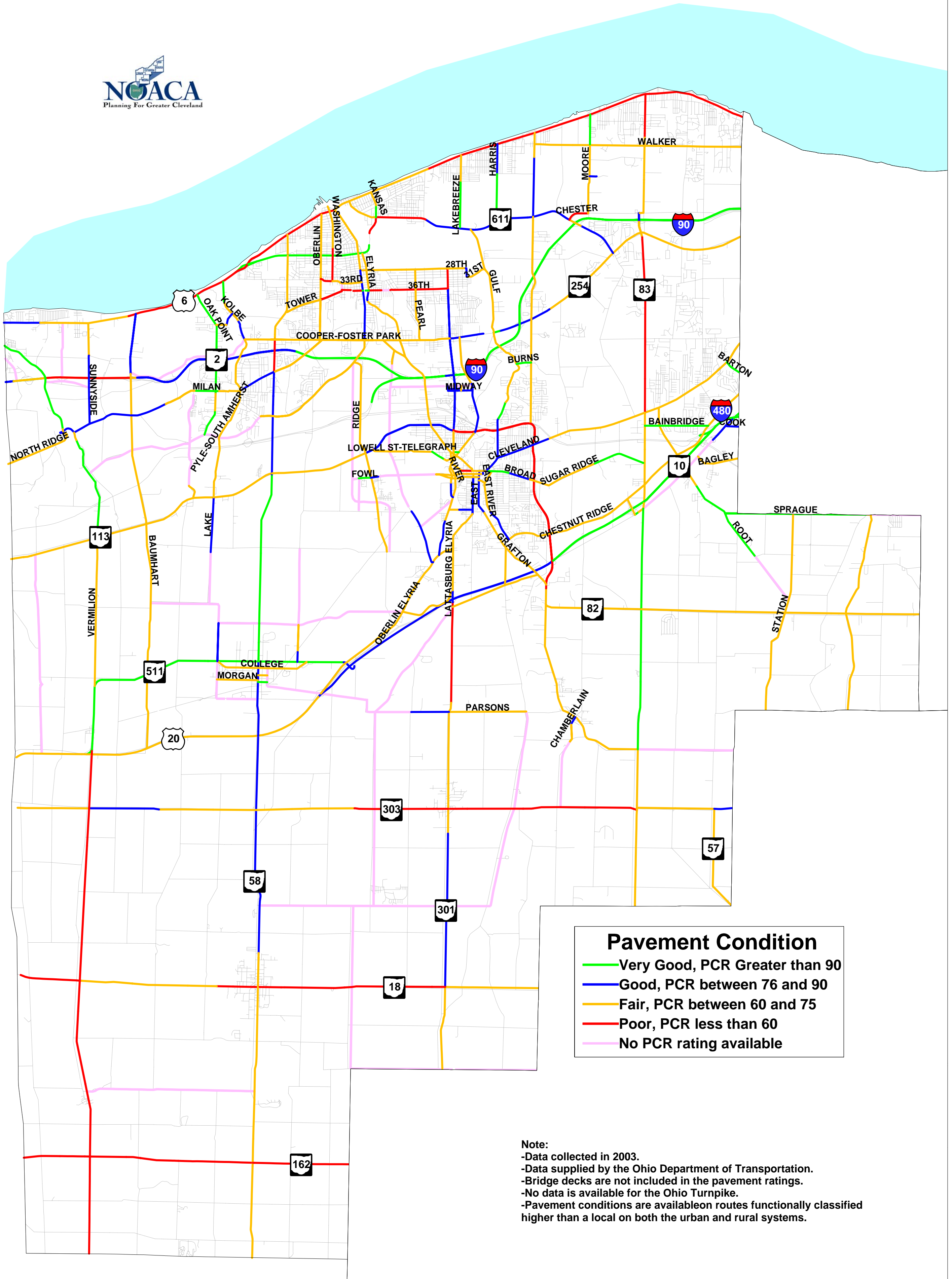
Pavement Condition

- Very Good, PCR Greater than 90
- Good, PCR between 76 and 90
- Fair, PCR between 60 and 75
- Poor, PCR less than 60
- No PCR rating available

Note:

- Data collected in 2003.
- Data supplied by the Ohio Department of Transportation.
- Bridge decks are not included in the pavement ratings.
- No data is available for the Ohio Turnpike.
- Pavement conditions are available on routes functionally classified higher than a local on both the urban and rural systems.

Lorain County Pavement Condition Ratings (PCR's)



Pavement Condition

- Very Good, PCR Greater than 90
- Good, PCR between 76 and 90
- Fair, PCR between 60 and 75
- Poor, PCR less than 60
- No PCR rating available

Note:
 -Data collected in 2003.
 -Data supplied by the Ohio Department of Transportation.
 -Bridge decks are not included in the pavement ratings.
 -No data is available for the Ohio Turnpike.
 -Pavement conditions are available on routes functionally classified higher than a local on both the urban and rural systems.

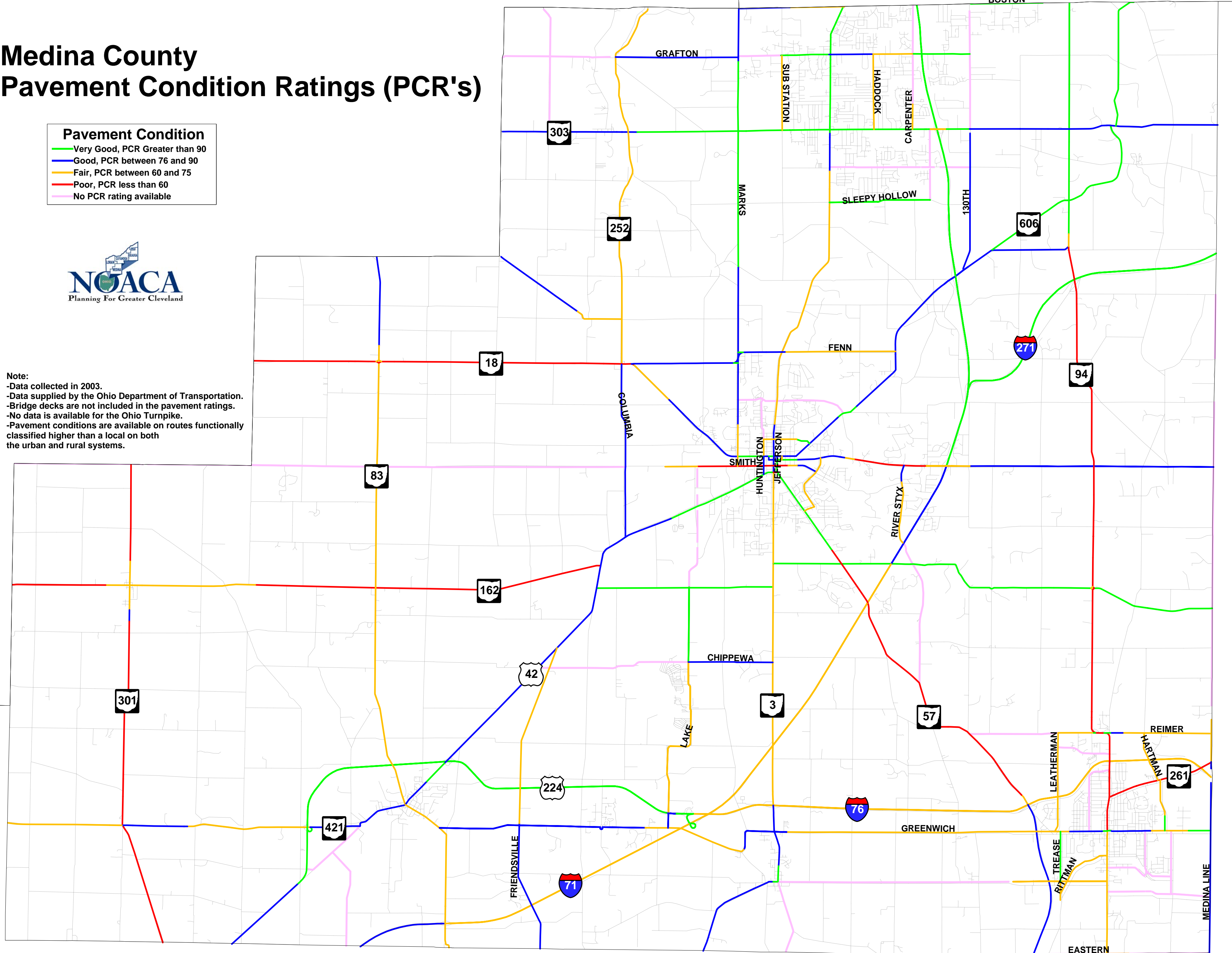
Medina County Pavement Condition Ratings (PCR's)

Pavement Condition

- Very Good, PCR Greater than 90
- Good, PCR between 76 and 90
- Fair, PCR between 60 and 75
- Poor, PCR less than 60
- No PCR rating available



Note:
 -Data collected in 2003.
 -Data supplied by the Ohio Department of Transportation.
 -Bridge decks are not included in the pavement ratings.
 -No data is available for the Ohio Turnpike.
 -Pavement conditions are available on routes functionally classified higher than a local on both the urban and rural systems.



The appendix on the following pages contains Pavement Condition Rating forms for the different types of pavements in the NOACA region. These forms show how the PCR ratings are calculated by allowing point deductions for different pavement distress types. The different pavement distresses are given point values to subtract from the overall PCR ratings (a perfect pavement condition is 100). Deductions in PCR values are a function of the distress type, severity and extent of the distress. The mathematical expression for calculation of a PCR rating is as follows:

$$\text{PCR} = 100 - (\text{distress deductions})$$

$$\text{Distress deductions} = (\text{weight for distress})(\text{weight for severity})(\text{weight for extent})$$

The appendix also contains information that explains all of the fields currently in the pavement condition databases. There is a different set of forms for each pavement type and in some cases if the information is on the state or local database.

Conclusions

This technical memorandum summarizes pavement conditions in NOACA's planning area. The overall condition of roadways can be monitored and updated every 2-3 years when new information becomes available. This information will help NOACA in determining where to allocate funds to keep the area roadway network in good condition.

Next Steps

NOACA is currently seeking a consultant to develop a Regional Pavement Management System. The goal of this system will be to assist decision makers in developing strategies to minimize the long-term costs of maintaining the region's pavement network. Also it will help the NOACA Governing Board and local governments prioritize the regions' reconstruction and resurfacing projects. Once a consultant is selected, the work to develop a Regional Pavement Management System should take around six months. This system will be operational in 2005.

Appendix

CRCP - PMS field descriptions

(description for form 1 - continous reinforced concrete pavement)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
ODOT District	District_N	Number	3 - ODOT District 3 12 - ODOT District 12
County Abbreviation	County_Abb	Character	CUY - Cuyahoga GEA - Geauga LAK - Lake LOR - Lorain MED - Medina
Jurisdiction	Trans_Juri	Character	S - State
Route Number	Trans_Rout	Number	Numeric Route Number
??????	Trans_Id_D	Character	??????
Direction	DIRECTION	Character	Up - Generally, West to East Down - Generally South to North
Beginning LOG pt.	Logpoint_C	Number	Beginning Log Point of the segment being surveyed
Ending LOG pt.	Logpoint_C1	Number	Ending Log Point of the segment being surveyed
Segment Length	Section_Le	Number	Length of surveyed segment
Pavement Condition Rating	Pcr_Nbr	Number	Between 0 - 100 0 - 40 Very poor 40 - 55 Poor 55 - 65 Fair to Poor 65 - 75 Fair 75 - 90 Good 90 - 100 Very Good
Total Deductions	Deduct_Tot	Character	Total distress, point deductions
Structural Deductions	Deduct_Str	Number	Structural point deductions
Rater who prefomed inspection	RATER1	Character	Raters initials
Second Rater	RATER2	Number	2nd raters initials if any
Inspection Date	Pcr_Date	Number	Date of inspection MMDDYY
Pavement Type	Pavement_T	Number	1 - CRCP - Continous reinforced concrete pavement 2 - JTCP - Jointed concrete pavement 3 - FLEX - Flexible pavement 4 - COMP - Composite pavement 5 - LOCAL
Surface deterioration	CODE1	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Popouts	CODE2	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Patching (deterioration of patch)	CODE3	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Pumping	CODE4	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Settlement & Waves	CODE5	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Transverse Crack Spacing	CODE6	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Longitudinal cracking	CODE7	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Punchouts or Edge Breaks	CODE8	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)

CRCP - PMS field descriptions

(description for form 1 - continous reinforced concrete pavement)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
Spalling	CODE9	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Pressure Damage	CODE10	Character	(see CRC (continous reinforced concrete pavement) condition Rating form)
Divided Undivided	DIVIDED_UN	Character	U - Undivided D - Divided
Surface type	SURFACE_TY	Character	A - Primitive B - Unimproved Road C - Graded and Drained earth road E2 - Gravel Road F - Bituminous (surface treated) G1 - Mixed Bituminous road <7" G2 - Mixed Bituminous road >7" H1 - Bituminous Penetration <7" H2 - Bituminous Penetration >7" I - Bituminous concrete, sheet asphalt J - Portland cement concrete road K - Brick Road L - Block Road
Surface width	SURFACE_WI	Number	Surface width in feet
Functional Classification	FUNCTIONAL	Character	01 - Rural, Interstate 02 - Rural, Principal Arterial 06 - Rural, Minor Collector 07 - Rural, Major Collector 08 - Rural, Minor collector 09 - Rural, Local 11 - Urban, Principal Arterial, Interstate 12 - Urban, Principal Arterial, Freeways/Expressways 14 - Urban, Principal Arterial, Other 16 - Urban, Minor Arterial 17 - Urban, Collector 19 - Urban, Local
Municipality	Municipali	Character	MCD Name
???????????	System_Loc	Character	??????????
Network Linear Feature Inentification NLFID		Character	1 - first character is jurisdiction (State, County, Township, Municipal, etc.) 2 - Next three characters represent county name abbreviation ex.(CUY = Cuyahoga) 3 - Next two characters represent route type ex.(IR, SR, CR, etc) 4 - next five numbers indicated route number. This may have leading zeros. 5 - next character is route number extension (State system is always *) 6 - last two characters show route suffix & Cardinal Direction
???????????	Priority_S	Character	??????????
Geometry_s	GEOMETRY_S	Character	Blank field no data ?????

Section: _____
 Log mile: _____ to _____
 Sta: _____ to _____

Date: _____
 Rated by: _____

CRCP PAVEMENT

PAVEMENT CONDITION RATING FORM

Distress	Distress Weight	Severity Weight *			Extent Weight **			Deduct points***
		L	M	H	O	F	E	
Surface Deterioration	10	0.4	0.7	1	0.5	0.8	1	
Popout	5	1	1	1	0.4	0.6	1	
Patching	5	0.4	0.7	1	0.5	0.8	1@	
Pumping	15	0.7	0.7	1	0.3	0.7	1@	
Settlement & Waves	10	0.3	0.7	1	0.4	0.7	1@	
Transverse Crack Spacing	10	0.4	0.7	1	0.4	0.8	1@	
Longitudinal Cracking	10	0.4	0.8	1	0.5	0.8	1@	
Punchouts or Edge Breaks	15	0	0.8	1	0.6	0.9	1@	
Spalling	15	0.3	0.6	1	0.5	0.8	1	
Pressure Damage	5	1	1	1	0.7	0.9	1	

* L = Low

** O = Occasional

Total Deductions = _____
 Sum of Structural Deductions (@) = _____
 100 - Total Deductions = **PCR** = _____

M = Medium

F = Frequent

H = High

E = Extensive

*** Deduct points = (Distress Weight) X (Severity Weight) X (Extent Weight)

Jointed Concrete Pavement - PMS field descriptions

(description for form 2 - on the local system)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
ODOT District	DISTRICT	Number	3 - ODOT District 3 12 - ODOT District 12
County Abbreviation	COUNTY	Character	CUY - Cuyahoga GEA - Geauga LAK - Lake LOR - Lorain MED - Medina
Jurisdiction	JURIS	Character	C - County
Route Number	ROUTE_NO	Number	Numeric Route Number
Route Suffix	ROUTE_SUFF	Character	Route Suffix
Direction	DIRECTION	Character	Up - Generally, West to East Down - Generally South to North
Beginning LOG pt.	BLOG	Number	Beginning Log Point of the segment being surveyed
Ending LOG pt.	ELOG	Number	Ending Log Point of the segment being surveyed
Segment Length	LENGTH	Number	Length of surveyed segment
Pavement Condition Rating	PCR	Number	Between 0 - 100 0 - 40 Very poor 40 - 55 Poor 55 - 65 Fair to Poor 65 - 75 Fair 75 - 90 Good 90 - 100 Very Good
Total Deductions	TOTAL_DEDU	Number	Total distress, point deductions
Structural Deductions	STRUCTURAL	Number	Structural point deductions
Rater who prefomed inspection	RATER1	Character	Raters initials
Second Rater	RATER2	Number	2nd raters initials if any
Inspection Date	DATE	Number	Date of inspection MMDDYY
Inspection form Used	FORM_NO	Number	1 - CRCP - Continous reinforced concrete pavement 2 - JTCP - Jointed concrete pavement 3 - FLEX - Flexible pavement 4 - COMP - Composite pavement 5 - LOCAL
Surface Deterioration	CODE1	Character	(see Jointed Concrete Pavement Rating form)
Popout	CODE2	Character	(see Jointed Concrete Pavement Rating form)
Patching	CODE3	Character	(see Jointed Concrete Pavement Rating form)
Pumping	CODE4	Character	(see Jointed Concrete Pavement Rating form)
Faulting (Joints & Cracks)	CODE5	Character	(see Jointed Concrete Pavement Rating form)
Settlements	CODE6	Character	(see Jointed Concrete Pavement Rating form)
Transverse Joint Spalling	CODE7	Character	(see Jointed Concrete Pavement Rating form)
Joint Sealant Damage	CODE8	Character	(see Jointed Concrete Pavement Rating form)
Pressure Damage	CODE9	Character	(see Jointed Concrete Pavement Rating form)
Transverse Cracking	CODE10	Character	(see Jointed Concrete Pavement Rating form)
Longitudinal Cracking	CODE11	Character	(see Jointed Concrete Pavement Rating form)
Corner Breaks	CODE12	Character	(see Jointed Concrete Pavement Rating form)
Divided Undivided	DIVIDED_UN	Character	U - Undivided D - Divided

Jointed Concrete Pavement - PMS field descriptions

(description for form 2 - on the local system)

Description	Column name	Data Type	Value Description
Curb rating	CURB_RATIN	Character	<p>Rate the worse curb on either side of the roadway. Record the severity or the curb that occurs in more than 50% of the total curb present.</p> <p>G - Good -Curb is not cracked and in good shape.</p> <p>F - Fair - Curb has minimal cracking and minimal slumping, and is maintaining its function.</p> <p>P - Poor - Curb has multiple cracks with some loose or missing pieces and/or curb is even with the roadway. Functionality is impaired requiring immediate action.</p> <p>N - Not Applicable - Curb does not exist.</p>
Sidewalk Rating	SIDEWALK_R	Character	<p>Rate the worse sidewalk on either side of the roadway. Record the severity or the sidewalk that occurs in more than 50% of the total sidewalk present. Sidewalks need only to be present on one side of the roadway to be rated.</p> <p>G - Good - Sidewalk is not cracked and provides good, free pedestrian walk space.</p> <p>F - Fair - Sidewalk has some minimal cracking and separation facilitating pedestrians.</p> <p>P - Poor - Sidewalk has multiple cracks with spalling and loose or missing pieces requiring immediate maintenance or impeding pedestrian use.</p> <p>N - Not Applicable - Sidewalk does not exist.</p>
Year of rating	YEAR	Number	Year of rating
Beginning LOG Point description	BEG_LOG_DE	Character	Description of the field BLOG above.
Div_undiv_ri	DIV_UNDIV_	Character	???????????
Street prefix	STREET_PRE	Character	street_prefix
Street name	STREET_NAM	Character	street_name
Street suffix	STREET_SUF	Character	street_suffix
Surface type	SURFACE_TY	Character	<p>A - Primitive</p> <p>B - Unimproved Road</p> <p>C - Graded and Drained earth road</p> <p>E2 - Gravel Road</p> <p>F - Bituminous (surface treated)</p> <p>G1 - Mixed Bituminous road <7"</p> <p>G2 - Mixed Bituminous road >7"</p> <p>H1 - Bituminous Penetration <7"</p> <p>H2 - Bituminous Penetration >7"</p> <p>I - Bituminous concrete, sheet asphalt</p> <p>J - Portland cement concrete road</p> <p>K - Brick Road</p> <p>L - Block Road</p>
Surface width	SURFACE_WI	Number	Surface width in feet

Jointed Concrete Pavement - PMS field descriptions

(description for form 2 - on the local system)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
Functional Classification	FUNCTIONAL	Number	01 - Rural, Interstate 02 - Rural, Principal Arterial 06 - Rural, Minor Collector 07 - Rural, Major Collector 08 - Rural, Minor collector 09 - Rural, Local 11 - Urban, Principal Arterial, Interstate 12 - Urban, Principal Arterial, Freeways/Expressways 14 - Urban, Principal Arterial, Other 16 - Urban, Minor Arterial 17 - Urban, Collector 19 - Urban, Local
Town name	TOWN_NAME	Character	MCD Name
Municipal Street Number Suffix	MUNI_STREE	Character	street number suffix from the municipal file
Mile Class	MILEAGE_CL	Number	The mile class will be blank for end, leave, and suspend type records (id points field), and for name records (n sequence) 1 - Rural (not in an incorporated area) 2 - Rural (subdivision street) 5 - Old Federal-Aid Urban System (proposed) 6 - Impassable (legally dedicated) 7 - Private (open to the public) 8 - Municipal (entirely within an incorporated area) 9 - Overlap
Network Linear Feature Identification	NLFID	Character	1 - first character is jurisdiction (State, County, Township, Municipal, etc.) 2 - Next three characters represent county name abbreviation ex.(CUI = Cuyahoga) 3 - Next two characters represent route type ex.(IR, SR, CR, etc) 4 - next five numbers indicated route number. This may have leading zeros. 5 - next character is route number extension (State system is always *) 6 - last two characters show route suffix & Cardinal Direction
Geometry_s	GEOMETRY_S	Character	Blank field no data ?????

Jointed Concrete Pavement - PMS field descriptions

(description for form 2 - on the State system)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
ODOT District	District_N	Number	3 - ODOT District 3 12 - ODOT District 12
County Abbreviation	County_Abb	Character	CUY - Cuyahoga GEA - Geauga LAK - Lake LOR - Lorain MED - Medina
Jurisdiction	Trans_Juri	Character	S - State
Route Number	Trans_Rout	Number	Numeric Route Number
??????	Trans_Id_D	Character	??????
Direction	Direction	Character	Up - Generally, West to East Down - Generally South to North
Beginning LOG pt.	Logpoint_C	Number	Beginning Log Point of the segment being surveyed
Ending LOG pt.	Logpoint_C1	Number	Ending Log Point of the segment being surveyed
Segment Length	Section_Le	Number	Length of surveyed segment
Pavement Condition Rating	Pcr_Nbr	Number	Between 0 - 100 0 - 40 Very poor 40 - 55 Poor 55 - 65 Fair to Poor 65 - 75 Fair 75 - 90 Good 90 - 100 Very Good
Total Deductions	Deduct_Tot	Character	Total distress, point deductions
Structural Deductions	Deduct_Str	Number	Structural point deductions
Rater who prefomed inspection	Rater_1	Character	Raters initials
Second Rater	Rater_2	Number	2nd raters initials if any
Inspection Date	Pcr_Date	Number	Date of inspection MMDDYY
Pavement Type	Pavement_T	Number	1 - CRCP - Continous reinforced concrete pavement 2 - JTCP - Jointed concrete pavement 3 - FLEX - Flexible pavement 4 - COMP - Composite pavement 5 - LOCAL
Surface Deterioration	CODE1	Character	(see Jointed Concrete Pavement Rating form)
Popout	CODE2	Character	(see Jointed Concrete Pavement Rating form)
Patching	CODE3	Character	(see Jointed Concrete Pavement Rating form)
Pumping	CODE4	Character	(see Jointed Concrete Pavement Rating form)
Faulting (Joints & Cracks)	CODE5	Character	(see Jointed Concrete Pavement Rating form)
Settlements	CODE6	Character	(see Jointed Concrete Pavement Rating form)
Transverse Joint Spalling	CODE7	Character	(see Jointed Concrete Pavement Rating form)
Joint Sealant Damage	CODE8	Character	(see Jointed Concrete Pavement Rating form)
Pressure Damage	CODE9	Character	(see Jointed Concrete Pavement Rating form)
Transverse Cracking	CODE10	Character	(see Jointed Concrete Pavement Rating form)
Longitudinal Cracking	CODE11	Character	(see Jointed Concrete Pavement Rating form)
Corner Breaks	CODE12	Character	(see Jointed Concrete Pavement Rating form)
Divided Undivided	DIVIDED_UN	Character	U - Undivided D - Divided

Jointed Concrete Pavement - PMS field descriptions

(description for form 2 - on the State system)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
Surface type	SURFACE_TY	Character	A - Primitive B - Unimproved Road C - Graded and Drained earth road E2 - Gravel Road F - Bituminous (surface treated) G1 - Mixed Bituminous road <7" G2 - Mixed Bituminous road >7" H1 - Bituminous Penetration <7" H2 - Bituminous Penetration >7" I - Bituminous concrete, sheet asphalt J - Portland cement concrete road K - Brick Road L - Block Road
Surface width	SURFACE_WI	Number	Surface width in feet
Functional Classification	FUNCTIONAL	Character	01 - Rural, Interstate 02 - Rural, Principal Arterial 06 - Rural, Minor Collector 07 - Rural, Major Collector 08 - Rural, Minor collector 09 - Rural, Local 11 - Urban, Principal Arterial, Interstate 12 - Urban, Principal Arterial, Freeways/Expressways 14 - Urban, Principal Arterial, Other 16 - Urban, Minor Arterial 17 - Urban, Collector 19 - Urban, Local
Municipality	Municipali	Character	MCD Name
???????????	System_Loc	Character	???????????
Network Linear Feature Identification	NLFID	Character	1 - first character is jurisdiction (State, County, Township, Municipal, etc.) 2 - Next three characters represent county name abbreviation ex.(CUY = Cuyahoga) 3 - Next two characters represent route type ex.(IR, SR, CR, etc) 4 - next five numbers indicated route number. This may have leading zeros. 5 - next character is route number extension (State system is always *) 6 - last two characters show route suffix & Cardinal Direction
???????????	Priority_S	Character	???????????
Geometry_s	GEOMETRY_S	Character	Blank field no data ??????

Section: _____

Log mile: _____ to _____

Sta: _____ to _____

Date: _____

Rated by: _____

JOINTED CONCRETE

PAVEMENT CONDITION RATING FORM

Distress	Distress Weight	Severity Weight *			Extent Weight **			Deduct points***
		L	M	H	O	F	E	
Surface Deterioration	10	0.4	0.7	1	0.6	0.8	1	
Popout	5	1	1	1	0.4	0.6	1	
Patching	5	0.4	0.7	1	0.5	0.8	1	
Pumping	15	0.7	0.7	1	0.3	0.7	1@	
Faulting (Joints & Cracks)	10	0.4	0.7	1	0.5	0.8	1@	
Settlements	5	0.4	0.7	1	0.5	0.8	1	
Transverse Joint Spalling	15	0.4	0.7	1	0.5	0.8	1	
Joint Sealant Damage	5	1	1	1	0.5	0.8	1	
Pressure Damage	5	1	1	1	0.7	0.9	1	
Transverse Cracking	10	0.3	0.8	1	0.4	0.8	1@	
Longitudinal Cracking	5	0.5	0.7	1	0.4	0.9	1	
Corner Breaks	10	0.4	0.8	1	0.5	0.8	1@	

* L = Low

** O = Occasional

Total Deductions = _____
 Sum of Structural Deductions (@) = _____
 100 - Total Deductions = **PCR** = _____

M = Medium

F = Frequent

H = High

E = Extensive

*** Deduct points = (Distress Weight) X (Severity Weight) X (Extent Weight)

Flexible Pavement - PMS field descriptions

(description for form 3 - on the State system)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
ODOT District	District_N	Number	3 - ODOT District 3 12 - ODOT District 12
County Abbreviation	County_Abb	Character	CUY - Cuyahoga GEA - Geauga LAK - Lake LOR - Lorain MED - Medina
Jurisdiction	Trans_Juri	Character	S - State
Route Number	Trans_Rout	Number	Numeric Route Number
??????	Trans_Id_D	Character	??????
Direction	Direction	Character	Up - Generally, West to East Down - Generally South to North
Beginning LOG pt.	Logpoint_C	Number	Beginning Log Point of the segment being surveyed
Ending LOG pt.	Logpoint_C1	Number	Ending Log Point of the segment being surveyed
Segment Length	Section_Le	Number	Length of surveyed segment
Pavement Condition Rating	Pcr_Nbr	Number	Between 0 - 100 0 - 40 Very poor 40 - 55 Poor 55 - 65 Fair to Poor 65 - 75 Fair 75 - 90 Good 90 - 100 Very Good
Total Deductions	Deduct_Tot	Character	Total distress, point deductions
Structural Deductions	Deduct_Str	Number	Structural point deductions
Rater who prefomed inspection	Rater_1	Character	Raters initials
Second Rater	Rater_2	Number	2nd raters initials if any
Inspection Date	Pcr_Date	Number	Date of inspection MMDDYY
Pavement Type	Pavement_T	Number	1 - CRCP - Continous reinforced concrete pavement 2 - JTCP - Jointed concrete pavement 3 - FLEX - Flexible pavement 4 - COMP - Composite pavement 5 - LOCAL
Raveling	CODE1	Character	(see Flexible Pavement Rating form)
Bleeding	CODE2	Character	(see Flexible Pavement Rating form)
Patching	CODE3	Character	(see Flexible Pavement Rating form)
Potholes/Debonding	CODE4	Character	(see Flexible Pavement Rating form)
Crack Sealing Deficiency	CODE5	Character	(see Flexible Pavement Rating form)
Rutting	CODE6	Character	(see Flexible Pavement Rating form)
Settlement	CODE7	Character	(see Flexible Pavement Rating form)
Corrugations	CODE8	Character	(see Flexible Pavement Rating form)
Wheel Track Cracking	CODE9	Character	(see Flexible Pavement Rating form)
Block and Transverse Cracking	CODE10	Character	(see Flexible Pavement Rating form)
Longitudinal Cracking	CODE11	Character	(see Flexible Pavement Rating form)
Edge Cracking	CODE12	Character	(see Flexible Pavement Rating form)
Random Cracking	CODE13	Character	(see Flexible Pavement Rating form)
Divided Undivided	DIVIDED_UN	Character	U - Undivided D - Divided

Flexible Pavement - PMS field descriptions

(description for form 3 - on the State system)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
Surface type	SURFACE_TY	Character	A - Primitive B - Unimproved Road C - Graded and Drained earth road E2 - Gravel Road F - Bituminous (surface treated) G1 - Mixed Bituminous road <7" G2 - Mixed Bituminous road >7" H1 - Bituminous Penetration <7" H2 - Bituminous Penetration >7" I - Bituminous concrete, sheet asphalt J - Portland cement concrete road K - Brick Road L - Block Road
Surface width	SURFACE_WI	Number	Surface width in feet
Functional Classification	FUNCTIONAL	Character	01 - Rural, Interstate 02 - Rural, Principal Arterial 06 - Rural, Minor Collector 07 - Rural, Major Collector 08 - Rural, Minor collector 09 - Rural, Local 11 - Urban, Principal Arterial, Interstate 12 - Urban, Principal Arterial, Freeways/Expressways 14 - Urban, Principal Arterial, Other 16 - Urban, Minor Arterial 17 - Urban, Collector 19 - Urban, Local
Municipality	Municipali	Character	MCD Name
???????????	System_Loc	Character	???????????
Network Linear Feature Identification	NLFID	Character	1 - first character is jurisdiction (State, County, Township, Municipal, etc.) 2 - Next three characters represent county name abbreviation ex.(CUY = Cuyahoga) 3 - Next two characters represent route type ex.(IR, SR, CR, etc) 4 - next five numbers indicated route number. This may have leading zeros. 5 - next character is route number extension (State system is always *) 6 - last two characters show route suffix & Cardinal Direction
???????????	Priority_S	Character	???????????
Geometry_s	GEOMETRY_S	Character	Blank field no data ??????

Section: _____
 Log mile: _____ to _____
 Sta: _____ to _____

Date: _____
 Rated by: _____

FLEXIBLE PAVEMENT

PAVEMENT CONDITION RATING FORM

Distress	Distress Weight	Severity Weight *			Extent Weight **			Deduct points***
		L	M	H	O	F	E	
Raveling	10	0.3	0.6	1	0.5	0.8	1	
Bleeding	5	0.8	0.8	1	0.6	0.9	1	
Patching	5	0.3	0.6	1	0.6	0.8	1	
Potholes/Debonding	10	0.4	0.7	1	0.5	0.8	1@	
Crack Sealing Deficiency	5	1	1	1	0.5	0.8	1	
Rutting	10	0.3	0.7	1	0.6	0.8	1@	
Settlement	10	0.5	0.7	1	0.5	0.8	1	
Corrugations	5	0.4	0.8	1	0.5	0.8	1	
Wheel Track Cracking	15	0.4	0.7	1	0.5	0.7	1@	
Block and Transverse Cracking	10	0.4	0.7	1	0.5	0.7	1@	
Longitudinal Cracking	5	0.4	0.7	1	0.5	0.7	1	
Edge Cracking	5	0.4	0.7	1	0.5	0.7	1	
Random Cracking	5	0.4	0.7	1	0.5	0.7	1@	

* L = Low

** O = Occasional

Sum of Structural Deductions (@) =

M = Medium

F = Frequent

100 - Total Deductions = **PCR** =

H = High

E = Extensive

*** Deduct points = (Distress Weight) X (Severity Weight) X (Extent Weight)

Composite Pavement - PMS field descriptions

(description for form 4 - on the State system)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
ODOT District	District_N	Number	3 - ODOT District 3 12 - ODOT District 12
County Abbreviation	County_Abb	Character	CUY - Cuyahoga GEA - Geauga LAK - Lake LOR - Lorain MED - Medina
Jurisdiction	Trans_Juri	Character	S - State
Route Number	Trans_Rout	Number	Numeric Route Number
??????	Trans_Id_D	Character	??????
Direction	Direction	Character	Up - Generally, West to East Down - Generally South to North
Beginning LOG pt.	Logpoint_C	Number	Beginning Log Point of the segment being surveyed
Ending LOG pt.	Logpoint_C1	Number	Ending Log Point of the segment being surveyed
Segment Length	Section_Le	Number	Length of surveyed segment
Pavement Condition Rating	Pcr_Nbr	Number	Between 0 - 100 0 - 40 Very poor 40 - 55 Poor 55 - 65 Fair to Poor 65 - 75 Fair 75 - 90 Good 90 - 100 Very Good
Total Deductions	Deduct_Tot	Character	Total distress, point deductions
Structural Deductions	Deduct_Str	Number	Structural point deductions
Rater who prefomed inspection	Rater_1	Character	Raters initials
Second Rater	Rater_2	Number	2nd raters initials if any
Inspection Date	Pcr_Date	Number	Date of inspection MMDDYY
Pavement Type	Pavement_T	Number	1 - CRCP - Continous reinforced concrete pavement 2 - JTCP - Jointed concrete pavement 3 - FLEX - Flexible pavement 4 - COMP - Composite pavement 5 - LOCAL
Raveling	CODE1	Character	(see Composite Pavement Rating form)
Bleeding	CODE2	Character	(see Composite Pavement Rating form)
Patching	CODE3	Character	(see Composite Pavement Rating form)
Surface Disintegration or Debonding	CODE4	Character	(see Composite Pavement Rating form)
Rutting	CODE5	Character	(see Composite Pavement Rating form)
Pumping	CODE6	Character	(see Composite Pavement Rating form)
Shattered Slab	CODE7	Character	(see Composite Pavement Rating form)
Settlements	CODE8	Character	(see Composite Pavement Rating form)
Traverse Cracks, Unjointed Base	CODE9	Character	(see Composite Pavement Rating form)
Joint Reflection Cracks, Jointed Base	CODE10	Character	(see Composite Pavement Rating form)
Intermediate Transverse Cracks, Jointed Base	CODE11	Character	(see Composite Pavement Rating form)
Longitudinal Cracking	CODE12	Character	(see Composite Pavement Rating form)
Pressure Damage/Upheaval	CODE13	Character	(see Composite Pavement Rating form)
Crack Sealing Deficiency	CODE14	Character	(see Composite Pavement Rating form)
Divided Undivided	DIVIDED_UN	Character	U - Undivided D - Divided

Composite Pavement - PMS field descriptions

(description for form 4 - on the State system)

Description	Column name	Data Type	Value Description
Surface type	SURFACE_TY	Character	A - Primitive B - Unimproved Road C - Graded and Drained earth road E2 - Gravel Road F - Bituminous (surface treated) G1 - Mixed Bituminous road <7" G2 - Mixed Bituminous road >7" H1 - Bituminous Penetration <7" H2 - Bituminous Penetration >7" I - Bituminous concrete, sheet asphalt J - Portland cement concrete road K - Brick Road L - Block Road
Surface width	SURFACE_WI	Number	Surface width in feet
Functional Classification	FUNCTIONAL	Character	01 - Rural, Interstate 02 - Rural, Principal Arterial 06 - Rural, Minor Collector 07 - Rural, Major Collector 08 - Rural, Minor collector 09 - Rural, Local 11 - Urban, Principal Arterial, Interstate 12 - Urban, Principal Arterial, Freeways/Expressways 14 - Urban, Principal Arterial, Other 16 - Urban, Minor Arterial 17 - Urban, Collector 19 - Urban, Local
Municipality	Municipali	Character	MCD Name
???????????	System_Loc	Character	???????????
Network Linear Feature Identification	NLFID	Character	1 - first character is jurisdiction (State, County, Township, Municipal, etc.) 2 - Next three characters represent county name abbreviation ex.(CUY = Cuyahoga) 3 - Next two characters represent route type ex.(IR, SR, CR, etc) 4 - next five numbers indicated route number. This may have leading zeros. 5 - next character is route number extension (State system is always *) 6 - last two characters show route suffix & Cardinal Direction
???????????	Priority_S	Character	???????????
Geometry_s	GEOMETRY_S	Character	Blank field no data ??????

Section: _____
 Log mile: _____ to _____
 Sta: _____ to _____

Date: _____
 Rated by: _____

COMPOSITE PAVEMENT

PAVEMENT CONDITION RATING FORM

Distress	Distress Weight	Severity Weight *			Extent Weight **			Deduct points***
		L	M	H	O	F	E	
Raveling	10	0.3	0.6	1	0.5	0.8	1	
Bleeding	5	0.8	0.8	1	0.6	0.9	1	
Patching	5	0.3	0.6	1	0.6	0.8	1	
Surface Disintegration or Debonding	5	0.3	0.6	1	0.6	0.8	1	
Rutting	10	0.3	0.7	1	0.6	0.8	1	
Pumping	15	0.7	0.7	1	0.3	0.7	1@	
Shattered Slab	10	0.6	0.8	1	0.7	0.9	1@	
Settlements	5	0.4	0.7	1	0.6	0.8	1	
Transverse Cracks, Unjointed Base	20	0.2	0.6	1	0.4	0.8	1@	
Joint Reflection Cracks, Jointed Base	12	0.2	0.6	1	0.4	0.8	1@	
Intermediate Transverse Cracks, Jointed Base	8	0.2	0.6	1	0.4	0.8	1@	
Longitudinal Cracking	5	0.2	0.6	1	0.4	0.8	1@	
Pressure Damage/Upheaval	5	0.4	0.6	1	0.5	0.8	1	
Crack Sealing Deficiency	5	1	1	1	0.5	0.8	1	
		120			Total Deductions =			
* L = Low		** O = Occasional			Sum of Structural Deductions (@) =			
M = Medium		F = Frequent			100 - Total Deductions = PCR =			
H = High		E = Extensive						

*** Deduct points = (Distress Weight) X (Severity Weight) X (Extent Weight)

Local Routes - PMS field descriptions

(description for form 5 - local)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
ODOT District	DISTRICT	Number	3 - ODOT District 3 12 - ODOT District 12
County Abbreviation	COUNTY	Character	CUY - Cuyahoga GEA - Geauga LAK - Lake LOR - Lorain MED - Medina
Jurisdiction	JURIS	Character	C - County
Route Number	ROUTE_NO	Number	Numeric Route Number
Route Suffix	ROUTE_SUFF	Character	Route Suffix
Direction	DIRECTION	Character	Up - Generally, West to East Down - Generally South to North
Beginning LOG pt.	BLOG	Number	Beginning Log Point of the segment being surveyed
Ending LOG pt.	ELOG	Number	Ending Log Point of the segment being surveyed
Segment Length	LENGTH	Number	Length of surveyed segment
Pavement Condition Rating	PCR	Number	Between 0 - 100 0 - 40 Very poor 40 - 55 Poor 55 - 65 Fair to Poor 65 - 75 Fair 75 - 90 Good 90 - 100 Very Good
Total Deductions	TOTAL_DEDU	Number	Total distress, point deductions
Structural Deductions	STRUCTURAL	Number	Structural point deductions
Rater who preformed inspection	RATER1	Character	Raters initials
Second Rater	RATER2	Number	2nd raters initials if any
Inspection Date	DATE	Number	Date of inspection MMDDYY
Inspection form Used	FORM_NO	Number	1 - CRCP - Continuous reinforced concrete pavement 2 - JTCP - Jointed concrete pavement 3 - FLEX - Flexible pavement 4 - COMP - Composite pavement 5 - LOCAL
Raveling	CODE1	Character	(see local pavement condition Rating form)
Bleeding	CODE2	Character	(see local pavement condition Rating form)
Patching (deterioration of patch)	CODE3	Character	(see local pavement condition Rating form)
Surface disintegration or debonding	CODE4	Character	(see local pavement condition Rating form)
Rutting	CODE5	Character	(see local pavement condition Rating form)
Corrugations	CODE6	Character	(see local pavement condition Rating form)
Base failure	CODE7	Character	(see local pavement condition Rating form)
Settlement	CODE8	Character	(see local pavement condition Rating form)
Transverse cracking	CODE9	Character	(see local pavement condition Rating form)
Wheel track cracking	CODE10	Character	(see local pavement condition Rating form)
Longitudinal joint cracking	CODE11	Character	(see local pavement condition Rating form)
Edge cracking	CODE12	Character	(see local pavement condition Rating form)
Pressure damage	CODE13	Character	(see local pavement condition Rating form)
Crack sealing deficiency	CODE14	Character	(see local pavement condition Rating form)
Corregations * (Not Displayed in the GQL table)	CODE15	Character	(see local pavement condition Rating form)

Local Routes - PMS field descriptions

(description for form 5 - local)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
Divided Undivided	DIVIDED_UN	Character	U - Undivided D - Divided
Curb rating	CURB_RATIN	Character	Rate the worse curb on either side of the roadway. Record the severity or the curb that occurs in more than 50% of the total curb present. G - Good -Curb is not cracked and in good shape. F - Fair - Curb has minimal cracking and minimal slumping, and is maintaining its function. P - Poor - Curb has multiple cracks with some loose or missing pieces and/or curb is even with the roadway. Functionality is impaired requiring immediate action. N - Not Applicable - Curb does not exist.
Sidewalk Rating	SIDEWALK_R	Character	Rate the worse sidewalk on either side of the roadway. Record the severity or the sidewalk that occurs in more than 50% of the total sidewalk present. Sidewalks need only to be present on one side of the roadway to be rated. G - Good - Sidewalk is not cracked and provides good, free pedestrian walk space. F - Fair - Sidewalk has some minimal cracking and separation facilitating pedestrians. P - Poor - Sidewalk has multiple cracks with spalling and loose or missing pieces requiring immediate maintenance or impeding pedestrian use. N - Not Applicable - Sidewalk does not exist.
Year of rating	YEAR	Number	Year of rating
Beginning LOG Point description	BEG_LOG_DE	Character	Description of the field BLOG above.
Div_undiv_ri	DIV_UNDIV_	Character	????????????
Street prefix	STREET_PRE	Character	street_prefix
Street name	STREET_NAM	Character	street_name
Street suffix	STREET_SUF	Character	street_suffix
Surface type	SURFACE_TY	Character	A - Primitive B - Unimproved Road C - Graded and Drained earth road E2 - Gravel Road F - Bituminous (surface treated) G1 - Mixed Bituminous road <7" G2 - Mixed Bituminous road >7" H1 - Bituminous Penetration <7" H2 - Bituminous Penetration >7" I - Bituminous concrete, sheet asphalt J - Portland cement concrete road K - Brick Road L - Block Road
Surface width	SURFACE_WI	Number	Surface width in feet

Local Routes - PMS field descriptions

(description for form 5 - local)

<i>Description</i>	<i>Column name</i>	<i>Data Type</i>	<i>Value Description</i>
Functional Classification	FUNCTIONAL	Number	01 - Rural, Interstate 02 - Rural, Principal Arterial 06 - Rural, Minor Collector 07 - Rural, Major Collector 08 - Rural, Minor collector 09 - Rural, Local 11 - Urban, Principal Arterial, Interstate 12 - Urban, Principal Arterial, Freeways/Expressways 14 - Urban, Principal Arterial, Other 16 - Urban, Minor Arterial 17 - Urban, Collector 19 - Urban, Local
Town name	TOWN_NAME	Character	MCD Name
Municipal Street Number Suffix	MUNI_STREE	Character	street number suffix from the municipal file
Mile Class	MILEAGE_CL	Number	The mile class will be blank for end, leave, and suspend type records (id points field), and for name records (n sequence) 1 - Rural (not in an incorporated area) 2 - Rural (subdivision street) 5 - Old Federal-Aid Urban System (proposed) 6 - Impassable (legally dedicated) 7 - Private (open to the public) 8 - Municipal (entirely within an incorporated area) 9 - Overlap
Network Linear Feature Identification	NLFID	Character	1 - first character is jurisdiction (State, County, Township, Municipal, etc.) 2 - Next three characters represent county name abbreviation ex.(CUI = Cuyahoga) 3 - Next two characters represent route type ex.(IR, SR, CR, etc) 4 - next five numbers indicated route number. This may have leading zeros. 5 - next character is route number extension (State system is always *) 6 - last two characters show route suffix & Cardinal Direction
Geometry_s	GEOMETRY_S	Character	Blank field no data ?????

Section: _____

Log mile: _____ to _____

Sta: _____ to _____

Date: _____

Rated by: _____

of utility cuts _____

ASPHALT SURFACE LOCAL

PAVEMENT CONDITION RATING FORM

Distress	Distress Weight	Severity Weight *			Extent Weight **			Deduct points***
		L	M	H	O	F	E	
Raveling	10	0.3	0.6	1	0.5	0.8	1	
Bleeding	5	0.8	0.8	1	0.6	0.9	1	
Patching	5	0.3	0.6	1	0.6	0.8	1	
Surface Disintegration or Debonding	5	0.3	0.6	1	0.6	0.8	1	
Rutting	10	0.3	0.7	1	0.6	0.8	1@	
Corrugations	5	0.4	0.8	1	0.5	0.8	1	
Base Failure	10	0.6	0.8	1	0.7	0.9	1@	
Settlements	5	0.4	0.7	1	0.6	0.8	1	
Transverse Cracks	10	0.3	0.6	1	0.4	0.8	1@	
Wheel/Alligator Cracking	15	0.2	0.6	1	0.4	0.8	1@	
Longitudinal Cracking	5	0.2	0.6	1	0.4	0.8	1@	
Edge Cracking	5	0.4	0.7	1	0.5	0.7	1@	
Pressure Damage/Upheaval	5	0.4	0.6	1	0.5	0.8	1	
Crack Sealing Deficiency	5	1	1	1	0.5	0.8	1	

Total Deductions = _____

Sum of Structural Deductions (@) = _____

100 - Total Deductions = **PCR** = _____

* L = Low

** O = Occasional

M = Medium

F = Frequent

H = High

E = Extensive

*** Deduct points = (Distress Weight) X (Severity Weight) X (Extent Weight)