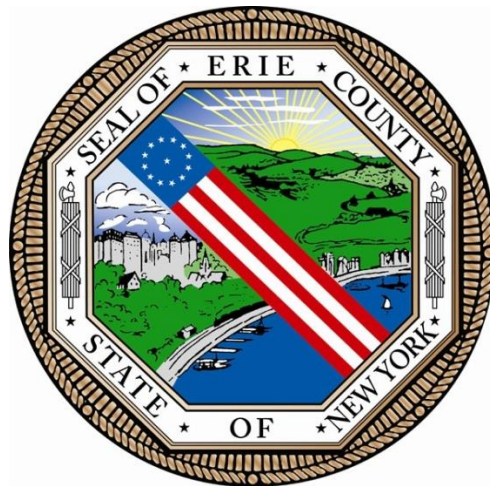


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A Report on Road Conditions in Erie County



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Erie County Legislature
92 Franklin Street 4th Floor
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Dear Honorable Members:

The Erie County Comptroller's Office has completed a report on road conditions along county roads

Our objectives were to:

- Identify trends in road conditions.
- Provide a resource prioritizing roadwork funding during the budget process.

To accomplish these objectives, we reviewed road ratings and visited several roads in Erie County.

As a result of our examination, we have made recommendations to increase funding to the county's infrastructure.

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Background

The Highway Division of the Department of Public Works is responsible for the construction, repair, maintenance and reconstruction of nearly 1,200 centerline miles of road in Erie County. The Division is responsible for inspecting and evaluating the condition of County roads and bridges, along with the planning and design of appropriate construction, reconstruction, repair and maintenance projects. The Highway Division is responsible for the administration of all operating and maintenance highway projects, as well as capital highway bridge projects. Emphasis should be placed on snow and ice control, road widening, and the strengthening, resurfacing and patching of existing County roads to ensure that maintenance is performed at required engineering standards and safety levels.

The Greater Buffalo Niagara Regional Transportation Council (GBNRTC) is the Metropolitan Planning Organization for Erie and Niagara Counties. The GBNRTC is tasked to devise solutions to regional transportation problems. It is focused on establishing a comprehensive, coordinated, and continuing transportation planning process for Erie and Niagara Counties' metropolitan areas.

The GBNRTC rates roads in various categories. The categories include:

- Drainage
- Roughness
- Long/Trans Cracking
- Alligator Cracking
- Edge Cracking
- Patching/Potholes
- Rutting
- Bleeding
- Shoulders/Bike Paths

From these categories, the GBNRTC arrives at an overall road score. The score is a ten point Likert scale, with one representing the lowest possible score and ten the highest.

In the course of examining road conditions, we visited a sampling of roads, based on observations from travels throughout the county. These roads included:

<u>Road</u>	<u>Town</u>
Abbott Road	Hamburg
Armor Duells Road	Orchard Park
Back Creek Road	Boston
Behm Road	Orchard Park/ Aurora
Blakeley Corners Road	Aurora
Bowen Road	Elma/Lancaster

Goodrich Road	Clarence
Grote Road	Concord
Irish Road	Colden
Kensington Avenue	Cheektowaga/Amherst
Knapp Road	Colden
Lake Avenue	Hamburg
Lake Shore Road	Evans
McKinley Parkway	Hamburg
Newton Road	Orchard Park
North Forest Road	Amherst
North French Road	Amherst
Partridge Road	Holland
Pleasant View Drive	Lancaster
Tonawanda Creek Road	Clarence
Trevett Road	Concord
Wehrle Drive	Cheektowaga/Amherst
William Street	Lancaster
Zoar Valley Road	Concord
Duerr Road	Orchard Park
Belscher Road	Concord

As a result of these visits, we observed roads in deteriorated condition. These observations included:

- Cracks in pavement
- Potholes
- Crumbling shoulders
- Poor drainage
- Deteriorated or missing pavement striping
- Bumpy conditions due to uneven patching
- Elevation differences
- Closed roads
- Lanes narrowed due to severely deteriorated conditions, rather than repair roadway

Road Scores

Every two years, the GBNRTC completes a survey of roads maintained by Erie County. This survey is done with the cooperation of the Erie County Department of Public Works. Surveys are typically released in August.

Depending on length and other factors, roads are broken down into sections. As such, multiple sections of the same road may be separately scored. Roads are assigned a score based on multiple factors. The highest score that a road can be rated is 10, and the lowest is 1. Road sections with a score of 9 or 10 are considered Excellent; road sections with a score of 7 or 8 are considered Good; road sections with a score of 6 are considered Fair; and road sections with a score of 1 through 5 are considered Poor. The following are verbal descriptions used by the GBNRTC for scores of 4 or less:

4 – Poor: Pavements have deteriorated to a point where resurfacing is required, showing occasional or frequent distress. Rideability, even at low speeds, is impaired. Surface defects on flexible pavements include severe (sic) rutting, cracking, scaling, raveling, and patching. Surface defects of rigid pavements include severe joint spalling, cracking, scaling and patching. Overlay pavements show evidence of severe surface delamination.

3 – Poor: Pavements have deteriorated to a point where resurfacing is required immediately. Flexible pavements show evidence of severe and frequent scaling, joint spalling, faulting cracking, and patching. Rigid pavements show signs of frequent and severe joint spalling, cracking and scaling.

2 – Poor: Pavements are in extremely deteriorated condition and may require complete reconstruction. Motorists experience discomfort and travel speeds will decrease.

1 – Poor: Pavements are in extremely deteriorated condition and are in need of immediate corrective action. There (sic) facilities are considered impassable at posted speeds.

Since the 2005 budget year, a budget popularly referred to as the “Red/Green Budget,” there have been 8 reports released. The number of roads scoring 4 or below is:

2019	54
2017	41
2015	30
2013	24
2011	98
2009	18
2007	22
2005	56

As such, the median number of road sections with a score of 4 or lower since 2005 is 35.5. The number of road sections scoring 4 or lower in 2019 is 54, which is 18.5 greater than the median and 2 less than in the “Red/Green Budget” year of 2005.

The road sections scoring 4 or lower in 2017 were:

<u>Road</u>	<u>Section</u>	<u>Town</u>	<u>Score</u>
ZOAR VALLEY RD	FOSTER RD TO GROTH RD	COLLINS	2
BACK CREEK RD	PFARNER RD TO HILLCROFT RD	BOSTON	3
DUTCHTOWN RD	RT 16 OLEAN RD TO S PROTECTION RD	SARDINIA	3
GOODRICH RD	WOLCOTT RD TO TONAWANDA CREEK RD	CLARENCE	3
LAKE ST	RT 5 LAKE SHORE RD TO N/S MAIN ST SHARP ST TO RT 240 GLENWOOD-EAST CONCORD RD	EVANS	3
MORSE RD	LAKEVIEW RD TO PLEASANT AV	CONCORD	3
VERSAILLES RD	HUNTERS CREEK RD TO WYOMING COUNTY LN	HAMBURG	3
WHITNEY RD	KONERT RD TO BECKER RD	HOLLAND	3
WILSON RD	RT 39 TO CONCORD RD	COLLINS	3
BELCHER RD	DARIEN RD TO FALLS RD	CONCORD	4
BOIES RD	KELKENBERG RD TO TONAWANDA CREEK RD TONAWANDA CREEK RD TO NIAGARA COUNTY LINE	COLDEN	4
BURDICK RD	BOIES RD TO CENTER RD	NEWSTEAD	4
BURDICK RD	CENTER RD TO LEWIS RD	NEWSTEAD	4
DARIEN RD	PARKVIEW DR TO ALDEN-CRITTENDEN RD HUNTERS CREEK RD TO WYOMING COUNTY LINE	COLDEN	4
DARIEN RD	WAGNER RD TO BROWN HILL RD TONAWANDA CREEK RD TO NIAGARA COUNTY LINE	NEWSTEAD	4
EAST AV	ZOAR VALLEY RD TO RT 39	HOLLAND	4
EAST HOLLAND RD	HOLLAND-GLENWOOD RD TO HEATH RD	CONCORD	4
EMERLING RD	HEATH RD TO PARTRIDGE RD	CLARENCE	4
GOODRICH RD	PARTRIDGE RD TO FALLS RD	CONCORD	4
GROTH RD	LAKEVIEW RD TO PLEASANT AV	COLDEN	4
HAYES HOLLOW RD	HAYES HOLLOW RD TO CENTER RD	HAMBURG	4
HAYES HOLLOW RD	CENTER RD TO CRUMP RD	COLDEN	4
HAYES HOLLOW RD	CRUMP RD TO PHILLIPS RD	COLDEN	4
HELTZ RD	WARNER GULF RD TO RT 16 OLEAN RD	COLDEN	4
HOLLAND- GLENWOOD RD	WARNER GULF RD TO RT 16 OLEAN RD	HOLLAND	4
HOLLAND- GLENWOOD RD	PRATHAM RD TO JOHNSON RD	HOLLAND	4
HOLLAND- GLENWOOD RD	RT 5 ERIE RD TO RT 20 SOUTHWESTERN BLVD	SARDINIA	4
HOLLAND- GLENWOOD RD	WEST HILL RD TO WEST TILLEN RD	HAMBURG	4
MIDDLE RD	GENESEE RD TO ALLEN RD	BOSTON	4
NORTH CREEK RD		SARDINIA	4
PFARNER RD			
SAVAGE RD			

SUMMIT RD	RT 219 SOUTHERN EXPWY TO DRAKE RD	CONCORD	4
TOWNSEND RD	SPRINGVILLE-BOSTON RD TO GENESEE RD	CONCORD	4
VERMONT ST	RT 16 OLEAN RD TO HILLSIDE TERR	HOLLAND	4
WAGNER RD	WYANDALE RD TO EMERLING RD	CONCORD	4
WAGNER RD	EMERLING RD TO TREVETT RD	CONCORD	4
WOODSIDE RD	OTTENBECKER RD TO NEW OREGON RD	COLLINS	4
ZIMMERMAN RD	SHERO RD TO MAYER RD	BOSTON	4
ZIMMERMAN RD	MAYER RD TO RT 391 BOSTON STATE RD	BOSTON	4
ZOAR VALLEY RD	GROTH RD TO TREVETT RD	CONCORD	4

These scores were assigned to 41 sections of 30 different roads throughout Erie County. 17 of the roads listed scored 4 or worse in the 2015 report as well, with 24 being added to the list since the 2015 report.

The 17 sections appearing on both the 2015 and 2017 lists scoring 4 or less are:

<u>Road</u>	<u>Section</u>	<u>Town</u>	<u>Score</u>
ZOAR VALLEY RD	FOSTER RD TO GROTH RD	COLLINS	2
LAKE ST	RT 5 LAKE SHORE RD TO N/S MAIN ST	EVANS	3
VERSAILLES RD	LAKEVIEW RD TO PLEASANT AV	HAMBURG	3
BURDICK RD	KELKENBERG RD TO TONAWANDA CREEK RD	NEWSTEAD	3
ZOAR VALLEY RD	GROTH RD TO TREVETT RD	CONCORD	3
DUTCHTOWN RD	RT 16 OLEAN RD TO S PROTECTION RD	SARDINIA	4
GOODRICH RD	WOLCOTT RD TO TONAWANDA CREEK RD	CLARENCE	4
WHITNEY RD	HUNTERS CREEK RD TO WYOMING COUNTY LN	HOLLAND	4
WILSON RD	KONERT RD TO BECKER RD	COLLINS	4
EAST AV	PARKVIEW DR TO ALDEN-CRITTENDEN RD	NEWSTEAD	4
EAST HOLLAND RD	HUNTERS CREEK RD TO WYOMING COUNTY LINE	HOLLAND	4
GOODRICH RD	TONAWANDA CREEK RD TO NIAGARA COUNTY LINE	CLARENCE	4
HOLLAND-GLENWOOD RD	CENTER RD TO CRUMP RD	COLDEN	4
HOLLAND-GLENWOOD RD	CRUMP RD TO PHILLIPS RD	COLDEN	4
PFARNER RD	WEST HILL RD TO WEST TILLEN RD	BOSTON	4
WOODSIDE RD	OTTENBECKER RD TO NEW OREGON RD	COLLINS	4
ZIMMERMAN RD	MAYER RD TO RT 391 BOSTON STATE RD	BOSTON	4

There were 5 road sections that scored 4 or worse in 2013 that were also on the 2015 and 2017 lists as scoring 4 or worse.

There were 10 roads which were on the 2011 list as scoring 4 or less, that were not on the 2013 list as scoring 4 or less, but which reappeared on the 2015 list as scoring 4 or less. This is a period of less than 4 years before the condition of a repaired road deteriorated to a point

warranting a score of 4 or less. This may be an indication of performing work that is not designed to serve as a long-term solution to deteriorating road conditions.

There were 14 sections of road that scored 4 or less in 2011 which were also on the 2017 list as scoring 4 or less. Only 3 of the 14 roads on the 2011 list appeared on the 2013 list. This would seem to indicate that when repairs were undertaken on these road sections, they lasted less than ten years.

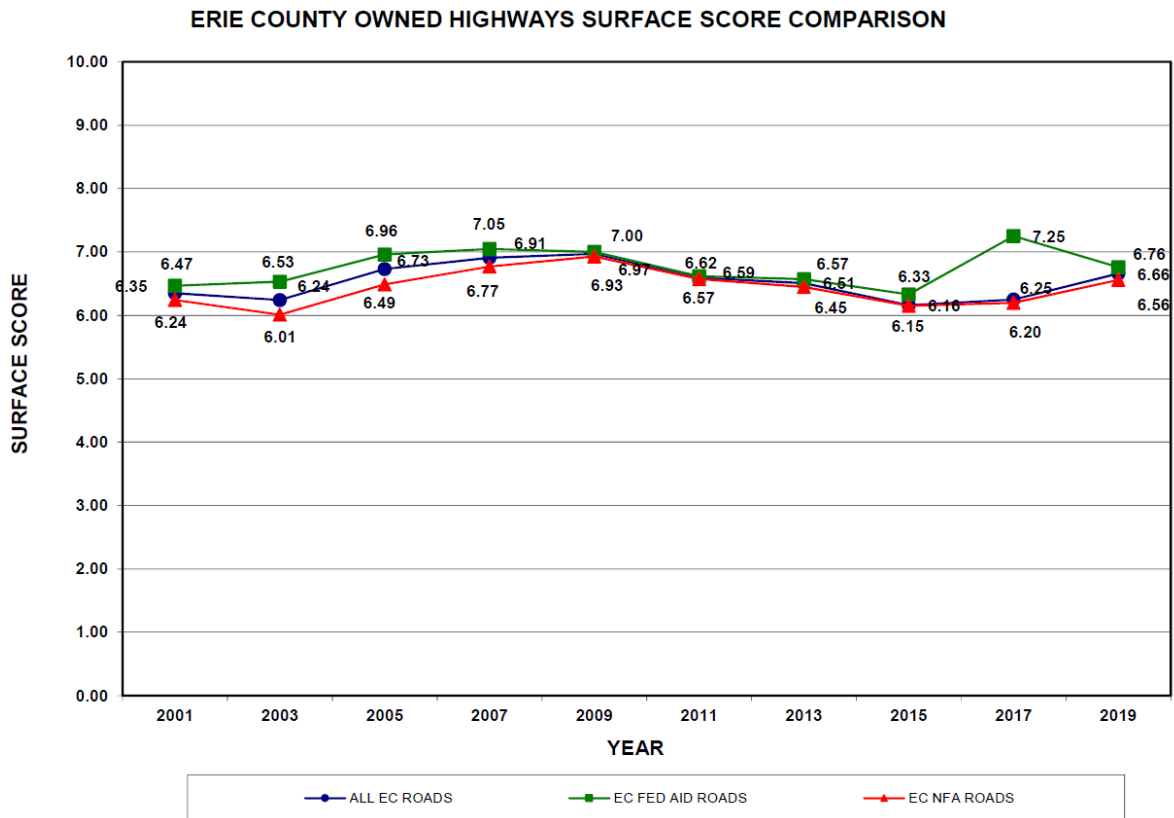
The road sections scoring 4 or lower in 2019 were:

<u>Road</u>	<u>Section</u>	<u>Town</u>	<u>Score</u>
ZOAR VALLEY RD	FOSTER RD TO GROTH RD	COLLINS	2
BACK CREEK RD	PFARNER RD TO HILLCROFT RD	BOSTON	3
BROWN HILL RD	ZIMMERMAN RD TO TREVETT RD	CONCORD	3
BURDICK RD	KELKENBERG RD TO TONAWANDA CREEK RD	NEWSTEAD	3
GROTH RD	ZOAR VALLEY RD TO RT 39	CONCORD	3
N MAIN ST	BEACH RD TO GOLD ST	EVANS	3
N MAIN ST	GOLD ST TO OLD EDEN EVANS CENTER RD	EVANS	3
N MAIN ST	OLD EDEN EVANS CENTER RD TO RT 5 ERIE RD	EVANS	3
ABBOTT RD	WEBSTER CORNERS RD TO RT 179 MILESTRIP RD	ORCHARD PARK	4
ANGLING RD	SHIRLEY RD TO KETCHUM RD	NORTH COLLINS	4
BACK CREEK RD	HILLCROFT RD TO PATCHIN RD	BOSTON	4
BELCHER RD	RT 39 TO CONCORD RD	CONCORD	4
BURDICK RD	TONAWANDA CREEK RD TO NIAGARA COUNTY LINE	NEWSTEAD	4
BUSH RD	W RIVER RD TO SOUTH STATE PKWY	GRAND ISLAND	4
COLVIN BLVD	RT 425 TWIN CITIES HWY TO COLVIN BLVD EXT	TONAWANDA	4
DARLING RD	LEWIS RD TO WALES TN LN	AURORA	4
DARLING RD	WALES TN LN TO RT 16 OLEAN RD	WALES	4
DAVIS RD	JEWETT-HOLMWOOD RD TO RT 20A QUAKER RD	AURORA	4
DINGENS ST	BUFFALO CITY LN TO RT 240 HARLEM RD	CHEEKTOWAGA	4
EAST AV	PARKVIEW DR TO ALDEN-CRITTENDEN RD	NEWSTEAD	4
EAST HOLLAND RD	HUNTERS CREEK RD TO WYOMING COUNTY LINE	HOLLAND	4
ELLICOTT CREEK RD	COLVIN BLVD TO PARKER BLVD	TONAWANDA	4
EMERLING RD	WAGNER RD TO BROWN HILL RD	CONCORD	4
FISH HILL RD	MAPLE HILL RD TO EAST CREEK RD	WALES	4
HOFFMAN RD	W HOFFMAN RD (CORNER) TO RT 39	CONCORD	4
HOPKINS RD	RT 263 MILLERSPORT HWY TO SCHOELLES RD	AMHERST	4
MIDDLE RD	PRATHAM RD TO JOHNSON RD	SARDINIA	4
MIDDLE RD	JOHNSON RD TO RT 39	SARDINIA	4
N MAIN ST	LAKE ST TO BEACH RD	EVANS	4

NEW OREGON RD	EDEN TN LN TO RT 75 SISSON HWY	EDEN	4
NEW RD	DODGE RD TO RT 263 MILLERSPORT HWY	AMHERST	4
NORTH CREEK RD	RT 5 ERIE RD TO RT 20 SOUTHWESTERN BLVD	HAMBURG	4
OLD LAKE SHORE RD	EVANS TOWN LN TO REEVES RD	EVANS	4
OLD LAKE SHORE RD	BENNETT RD TO DENNIS RD	EVANS	4
OLD LAKE SHORE RD	DENNIS RD TO STURGEON POINT RD	EVANS	4
OLD LAKE SHORE RD	STURGEON POINT RD TO SWEETLAND RD	EVANS	4
OLD LAKE SHORE RD	SWEETLAND RD TO PRESCOTT DR	EVANS	4
OLD LAKE SHORE RD	PRESCOTT DR TO 18 MILE CREEK BRIDGE	EVANS	4
PFARNER RD	WEST HILL RD TO WEST TILLEN RD	BOSTON	4
PINE RIDGE RD	WALDEN AV TO WILDY ST	CHEEKTOWAGA	4
PLEASANT VIEW DR	HARRIS HILL RD TO STONY RD	LANCASTER	4
S MAIN ST	HARDPAN RD TO LAKE ST	EVANS	4
SCHINTZIUS RD	RT 75 SISSON HWY TO E EDEN RD	EDEN	4
SHIMERVILLE RD	RT 5 MAIN ST TO RT 324 SHERIDAN DR	CLARENCE	4
SHISLER RD	BERGTOLD RD TO RT 5 MAIN ST	CLARENCE	4
SOUTH CREEK RD	OLD LAKE SHORE RD TO RT 5 ERIE RD	EVANS	4
SUMMIT RD	RT 219 SOUTHERN EXPWY TO DRAKE RD	CONCORD	4
TONAWANDA CREEK RD	OLD FALLS BLVD TO RT 62 NFB	AMHERST	4
TWO MILE CREEK RD	KENMORE AV TO RT 324 GRAND ISLAND BLVD	TONAWANDA	4
VERMONT ST	RT 16 OLEAN RD TO HILLSIDE TERR	HOLLAND	4
VERMONT ST	HILLSIDE TERR TO HUNTERS CREEK RD	HOLLAND	4
WEHRLE DR	YVONNE AVE TO BEACH RD	AMHERST	4
WEHRLE DR	HARRIS HILL RD TO GUNNVILLE RD	CLARENCE	4
ZIMMERMAN RD	RICE RD TO SHERO RD	BOSTON	4

Average Road Scores

The GBNRTC, in its 2019 report, published a graph depicting its biennial road scores from 2001-2019. The graph is as follows:



The average road scores from 2005-2019 were:

2019	6.66
2017	6.25
2015	6.16
2013	6.51
2011	6.59
2009	6.97
2007	6.91
2005	6.73

As such, the average road score in 2019 (6.66) is lower than the peak reached in 2009 (6.97) and the average score in the report published during the “Red/Green” budget year of 2005 (6.73).

In total, the GBNRTC found 533.72 lane miles, or 21.6% of all Erie County lane miles to be in poor condition.

Conclusions

The number of roads receiving a score of four or less is growing. It has grown from 24 in 2013 to 54 in 2019. In the 2017 and 2019 reports, the number of roads scoring 4 or less is higher than the median number of roads scoring as such since the “Red/Green Budget.”

A review of the data suggests that road repairs that do occur do not last without proper maintenance. It was noted that 11 sections of road appearing on the 2011 list were not on the 2013 list, but then reappeared on the 2017 list. As such, the repairs lasted less than six years.

Adopting a maintenance plan and prioritizing resources for road infrastructure could result in roads being in generally better condition. Such a plan may also allow for less costly maintenance to avoid more costly repairs in the future. We recommend implementing a plan to focus on maintenance efforts and repairs to pavement to achieve its design life, as well as to provide additional strength to improve serviceability while not degrading safety.