

TOWN OF CONWAY CULVERT ASSESSMENT

October 2020



Franklin Regional Council of Governments

Notice of Nondiscrimination Rights and Protections to Beneficiaries

Federal "Title VI/Nondiscrimination" Protections

The Franklin Regional Council of Governments (FRCOG) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, the Federal Transit Administration, or both prohibit discrimination on the basis of age, sex, and disability. These protected categories are contemplated within FRCOG's Title VI Programs consistent with federal interpretation and administration. Additionally, FRCOG provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

State Nondiscrimination Protections

FRCOG also complies with the Massachusetts Public Accommodation Law, M.G.L c 272 §§ 92a, 98, 98a, prohibiting making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, FRCOG complies with the Governor's Executive Order 526, section 4 requiring all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

If you need help understanding this document because you do not speak English or have a disability which impacts your ability to read the text, please contact FRCOG's Title VI Specialist at (413) 774-3167 (voice) (MA Relay System: 800-439-2370), 413-774-3169 (fax), or civilrights@frcog.org (e-mail).

If you believe that you or anyone in a specific class of persons has been subjected to discrimination prohibited by Title VI and other nondiscrimination laws based on race, color, national origin, sex, age, disability, or gender, you or your representative may file a complaint with the FRCOG, which we can help complete. A complaint must be filed no later than 180 days after the date of the alleged discrimination for Title VI complaints and no later than 300 days for state protected category complaints. If you require further information, please contact FRCOG's Title VI Specialist at (413) 774-3167 (voice) (MA Relay System: 800-439-2370), 413-774-3169 (fax), or civilrights@frcog.org (e-mail).

English: If this information is needed in another language, please contact the FRCOG Title VI Specialist at (413) 774-3167.

Spanish: Si necesita esta información en otro idioma, por favor contacte al especialista de FRCOG del Título VI al (413)774-3167.

Russian: Если Вам необходима данная информация на любом другом языке, пожалуйста, свяжитесь со специалистом по Титулу VI FRCOG по тел: (413) 774-3167.

Town of Conway Culvert Assessment

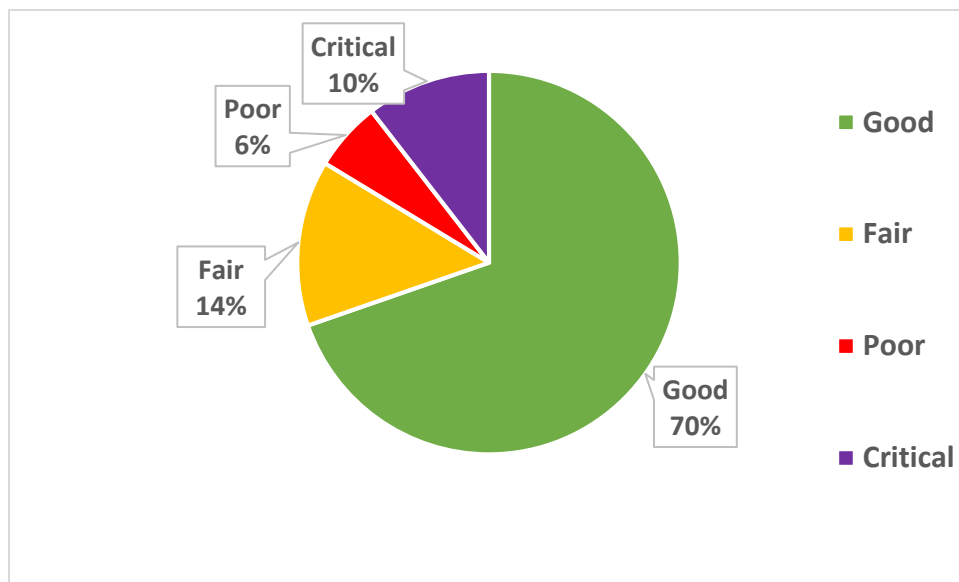
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Project Summary

In Summer/Fall of 2020, the Franklin Regional Council of Governments (FRCOG) conducted an inventory and assessment of the Town of Conway's culverts. The work included: 1) locating every culvert and marking each inlet and outlet with GPS; 2) evaluating the physical state of each inlet, outlet, and the interior of the culvert, if visible; and 3) providing an overall Condition grade of each culvert's inlet and outlet. This project is intended to be a rapid assessment for a town's Highway Department and Select Board so that they can have an understanding of the location and condition of the town's culverts in order to prioritize maintenance and capital improvement planning.

This assessment took place from August through October 2020. FRCOG identified a total of approximately 530 culvert and drainage structures on Conway's roadways. Of these, 70% were assessed as being in Good condition, while another 10% were identified as being in Critical condition needing immediate attention for either replacement or maintenance. Figure 1 below shows the condition breakdown of the condition of the Town's culverts.

Figure 1: Condition of Conway's Culverts as of October 2020



Culvert Assessment

The FRCOG staff assessed all culverts and drainage structures on the town-maintained roads that they could locate. The assessments were conducted using the standardized guidance from the Culvert Condition Assessment Manual (2017) developed by the North Atlantic Aquatic Connectivity Collaborative (NAACC). FRCOG Staff evaluated various aspects of the culverts;

took pictures documenting the conditions at the time of the assessment; and noted any particularly unique situations. The final product is a database with each culvert's inlet and outlet given a unique identifier along with the accompanying details about their conditions and a photograph. In addition to the database, the FRCOG created both a hardcopy map and an interactive online map for the Town to use. The hardcopy map shows each culvert with its ID number and is color-coded by its Condition. The hardcopy maps have been designed so that they can be used in the field by Highway Department staff as they conduct maintenance. The online version of the map is interactive and users can click on each culvert to see its picture and view all of the data that is included in the database. The online map can be found here:

<https://frcog.maps.arcgis.com/apps/instant/attachmentviewer/index.html?appid=033c5cfb31414b56b504cc88e4aba0eb>.

The FRCOG also added to the maps the location of the MassDOT-inspected bridges in Conway for additional information. Those bridges will have MassDOT inspection reports available that provide very detailed information on those structures. MassDOT inspects bridges at least once every two years. Towns are sent copies of these reports when completed and can also be requested from MassDOT District 2.

The following section provides definitions for each of the fields within the Culvert Database.

Culvert Assessment Definitions

Culvert Number

This is the number assigned to the culvert. i = inlet, o = outlet. Example, 22i and 22o are the inlet and outlet for culvert #22.

Date

Date that the FRCOG staff conducted the assessment.

Size

Approximate diameter of the pipe.

Material

What material is the culvert pipe made of? Choices include:

- Plastic
- Metal
- Cast Iron
- Clay
- Concrete
- Other

Appurtenance (APPURTEN)

This describes the structure (if any) surrounding the inlet/outlet of the pipes that give support to the culvert end. Choices include:

- Headwall/Wingwall
- Apron
- Cover
- Metal grate
- Other

Appurtenance Material (APPUR MAT)

The material that the appurtenance is constructed from. Choices include:

- Concrete
- Field stone
- Asphalt
- Other

Type of Crossing

This describes the type of the culvert. Choices include:

- Round
- Elliptical
- Open Bottom
- Box
- Drop Inlet

Percent Blockage

This describes how well water can enter or exit the pipe. What percentage is the inlet/outlet blocked? Choices include:

- 0%
- 25%
- 50%
- 75%
- 100%

Grade of Culvert

This describes how the inlets and outlets are situated relative to the stream grade. Is the inlet/outlet submerged? Can water flow easily into it? Is there a free fall of water from the outlet that could cause scour? Choices include:

- Submerged (pipe is below surface of ground/water level)

- At Grade (pipe is even with ground)
- Cascade (outlet is raised above the stream bottom such that water flows very steeply downward across rock or other hard material when flowing from the structure)
- Free Fall (outlet of the structure is above the stream bottom such that water drops vertically when flowing out of the structure)
- Free Fall to Cascade (outlet of the structure is raised above the stream bottom such that the water drops vertically onto a steep area of rock or other hard material, and then flows very steeply downward until it reaches the stream)

Free Fall/Submerged (FREEFALL SUB)

The distance of the free fall from the outlet to the stream bed or the distance the pipe is submerged under the ground (measured in inches).

Condition

This is the overall grade assigned to each inlet and outlet based on the following criteria.

GOOD = Culvert is in good condition with no apparent need of service.

FAIR = May have small issues that need to be addressed or has a large free fall (>10") that could lead to scour and erosion problems. If a culvert was blocked by 25% then it was assigned as Fair.

POOR = Has issues that should be addressed soon before they become critical. May have issues that are affecting performance of culvert and/or is 50% blocked.

CRITICAL = Has issues that are currently impacting performance and could lead to failure. May be blocked 75-100%. Immediate attention may be necessary for either replacement or simply maintenance.

For questions or updates to the culvert and bridge database and/or map, please contact:

Megan Rhodes, Senior Transportation Planner
at (413)774-3167 x132 or mrhodes@frcog.org

Ryan Clary, Senior GIS Planner at (413)774-3167 x 124 or rclary@frcog.org.

