Miami Valley Regional Planning Commission
TRAC Project Evaluation System
Roadway Project

REGIONAL CONTEXT/COOPERATION
1. Regional Scope: Is the project a "regionally significant project?" ***See Attachment A.***
___ Yes (3 points) ___ No (0 point)
2. Regional Cooperation: Is the project based on multi-jurisdictional cooperation efforts such as joint application or funding?
___ Yes, 2 or more jurisdictions/organizations (3 points) ___ No (0 point)
3. Enhance Transportation System: Points are awarded based on the facility's functional classification. If the project is new construction, please score according to the proposed functional classification. ***See Attachment B.***
___ Interstate/Expressway (6 points) ___ Arterial (3 points) ___ Local (1 point)
___ NHS Arterial (5 points) ___ Collector (2 points) ___ NA
If needed, please provide additional project information that supports points awarded under REGIONAL CONTEXT/COOPERATION

TRANSPORTATION CHOICES

4. Complete Streets: Does the project help complete the transportation network by improving access for people with disabilities, transit users, pedestrians, or cyclists? (Fill all that apply, Maximum total is 2 points and explanation is required to receive points) ***See Attachment A.***

For the purpose of scoring projects for TRAC, all projects will be awarded 2 points under the Complete Streets criterion. If a project is also partially funded with regionally controlled STP or CMAQ funds, the project would need to comply with the MVRPC Complete Streets Policy.

_X_ NA (2 points)

5. Inter-modal Connectivity: Does the project create, improve, or enhance connectivity among different transportation modes? ***See Attachment A and B.***

___ Yes - Multiple Modes (4 points) ___ Yes – One Mode (2 point) ___ No (0 point)

If needed, please provide additional project information that supports points awarded under TRANSPORTATION CHOICES

TRANSPORTATION SYSTEM MANAGEMENT

6. Safety/Security: Is the project addressing a safety issue in an area that has been identified as a priority location by MVRPC or does the project address a documented design or security deficiency? (Maximum total is 7 points and explanation is required to receive points)

Intersection/Segment Crash Priority Ranking ***See Attachment B.***

___ High (5 points) ___ Low (1 point)

___ Medium (3 points) ___ NA (0 points)

Address Design or Security Deficiency ***See Attachment A and B.***

___ Yes (1-2 points) based on number or severity of deficiencies addressed

___ No (0 points) ___ NA (0 points)

7. Congestion: Is the project addressing a recurring congestion problem as identified by the facility's Level of Service (LOS)? *See Attachment B or provide copies of capacity analysis.*

___ LOS F (5 points) ___ LOS E (4 points) ___ LOS D (3 points) ___ LOS C, B, or A (0 point) ___ NA

8. Intelligent Transportation System (ITS) Smart Technology: Does the project include ITS or smart technology components? (Maximum total is 2 points). *See Attachment A.*

___ Yes ITS (1 point) ___ Yes Smart Technology (1 point) ___ No (0 points)

9. Maintain the Existing Transportation System: Points will be awarded based on the condition of the transportation asset being addressed by the project; Pavement Condition Rating (PCR) for roadway projects or General Appraisal (GA) for bridge projects (Maximum total is 6 points) *See Attachment B.*

Roadway PCR

___ PCR < 66 (6 points)

___ PCR 66-80 (4 points)

___ PCR 81-90 (2 points)

___ PCR >90 (0 points)

Bridge GA

___ GA 0-4 (6 points)

___ Percent Legal Load < 100 (4 points)

___ GA 5 (2 points)

___ GA 6-9 (0 points)

If needed, please provide additional project information that supports points awarded under TRANSPORTATION SYSTEM MANAGEMENT

LAND USE

10. Minimize Sprawl: Is all or part of the project within an existing urbanized area? *Attachment A and B.*

___ In Census defined Urbanized Area (3 points) ___ In Census defined Urban Cluster (1 point)

___ In FHWA Federal-Aid Urbanized Area but outside Census defined Urbanized Area (2 points) ___ Outside Urbanized Area (0 point)

11. Urban Revitalization/Preservation: How much impact does the project have in revitalizing/preserving a given jurisdiction's urban core, community center, or neighborhood? (Explanation is required to receive points) *See Attachment A.*

___ High (5 points) ___ Medium (3 points) ___ Low (1 points) ___ No Impact (0 point)

12. Environmental Justice: Is the project located within a concentrated minority and/or poverty area? (Maximum total is 2 points and projects will receive points if the project does not have a disproportionally high and adverse impact on a concentrated poverty and/or minority area.) *See Attachment A and B.*

___ Yes - Minority (1 point) ___ Yes - Poverty (1 point) ___ No (0 points)

13. Equity: Points will be awarded based on a community's median household income. For county-wide or multi-county agencies, points will be awarded based on the median household income of the county that the project is located in. *See Attachment B.*

___ < 80% Ohio median income (3 points) ___ 81-120% Ohio median income (1 point) ___ >121% Ohio median income (0 points)

If needed, please provide additional project information that supports points awarded under LAND USE

ECONOMIC DEVELOPMENT

14. Public-Private Partnership: Does the project include a public-private partnership such as joint funding, right-of-way donations, or a working relationship? (Written documentation is required to receive points)

___ Yes (2 points) ___ Potential (1 point) ___ No (0 Point)

15. Economic Impact: How much of an economic impact does the project have? Does the project contribute directly to the economic benefits such as creation of new jobs, retention of existing jobs, or improve access to employment centers? Please select all that apply. (Maximum total is 8 points and explanation is required to receive points) ***See Attachment A.***

___ Improves access to/from regional business and employment centers (0 – 2 points)
___ Improves access in areas with high concentrations of freight dependent business (0 – 2 points)
___ Contributes to business growth/retention in community revitalization areas (0 – 2 points)
___ Improves value of the surrounding public space (0 – 2 points)
___ NA

If needed, please provide additional project information that supports points awarded under ECONOMIC DEVELOPMENT

ENVIRONMENT

16. Air Quality: Does the project improve air quality? Project will receive points if addressing a problem at a location with a Level of Service (LOS) of D-F and/or based on eligibility for CMAQ funding. (Maximum total is 5 points)

Level of Service ***See Attachment B or provide copies of capacity analysis.***

___ LOS F (3 points)
___ LOS E (2 points)
___ LOS D (1 point)
___ LOS C, B, or A (0 point)
___ NA

CMAQ Eligibility ***See Attachment A.***

___ Yes (2 points)
___ No (0 point)
___ NA

17. Sustainability: Does the project address an environmental issue, employ sustainable construction practices, or improve the resilience of the transportation system? (Explanation is required to receive points) *See Attachment A.*

___ Yes (1-2 points) ___ No (0 points) ___ NA

18. Attractiveness: Does the project include beautification or aesthetic improvement components? (Explanation is required to receive points)

___ Yes (2 points) ___ No (0 point)

If needed, please provide additional project information that supports points awarded under ENVIRONMENT

PROJECT READINESS

19. Preliminary/Feasibility Study Status

___ Preliminary/Feasibility study is completed/Not needed (2 points)

___ Preliminary/Feasibility study is underway (1 point)

20. Major Investment Study (MIS) Status

___ MIS is completed/Not needed (2 points)

___ MIS is underway (1 point)

21. Environmental Study Status

___ Environmental study is completed/Not needed (3 points)

___ Environmental study is underway (1 point)

22. Funding Plan: Does the project have a formal funding plan at this time? Please select all that apply. (Maximum total is 2 points)

___ Environmental study is funded (1 point)

___ Design cost is funded (1 point)

23. Detailed Design Status

___ Detailed Design is completed (4 points)

___ Detailed design is underway (2 point)

24. Right-of-Way Status

___ Right-of-Way is fully acquired/Not needed (2 points)

___ More than 50% but less than 100% of the acquisition cost is currently committed (1 point)

___ 100% of the acquisition cost is currently committed (2 points)

___ Less than 50% of the acquisition cost is currently committed (0 point)

25. Construction Funding: Has the construction cost been supplemented by the project sponsor?

___ 41.00% and greater (5 points)

___ 10.01% to 25.00% (1 point)

___ 25.01% to 40.99% (3 points)

___ 00.01% to 10.00% (0 point)

If needed, please provide additional project information that supports points awarded under PROJECT READINESS

PROJECT EVALUATION SYSTEM SCORE SUMMARY

Total Score from Questions 1 – 18..... _____

Total Score from Questions 19 –25..... _____ x 1.5 = _____

GRAND TOTAL ..... _____

Attachment A – Roadway Evaluation Form

General

When a project falls between 2 scoring categories, projects scores are awarded based on the maximum possible points. For example if a project is widening a segment of road that is classified as both a minor arterial and a collector, points are awarded based on the arterial designation only.

Question 1 - Regionally Significant Project

A regionally significant project means a transportation project, other than an exempt project, that is on a facility which serves regional transportation needs (such as access to and from the area outside the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network. A regionally significant project serves regional transportation needs that include access to and from the area outside the region, major planned developments such as new retail malls, sports complexes, etc, or transportation terminals, as well as most terminals themselves, but which shall include, at a minimum: (a) all principal arterial highways, (b) all fixed guideway transit facilities that offer an alternative to regional highway travel, and (c) any project that Ohio EPA identifies as having the potential to affect air quality on a regional basis.

NOTE: Roadway projects generally score points in this category if they significantly increase the capacity of the transportation system including through lane additions, new roadways, new interchanges, or new movements being added to an existing interchange. **Only these types of projects will be awarded points.**

Question 4 – Complete Streets

All MVRPC-funded STP/CMAQ projects will consider complete streets principles and possible treatments at the time of the initial application for funding. If the project sponsor determines that additional complete streets treatments are not warranted, they may request an exception for one or more of the reasons listed below. Sponsors can score 2 points in the application process by addressing the needs of all users, qualifying for exceptions or a combination of both.

1. **Where bicyclists and pedestrians are prohibited by law from using the roadway**. Bicycles and pedestrians are legally permitted to travel on or along all streets and roads in Ohio with the exception of limited access highways.

2. **Where the street or road is already adequately designed to accommodate all users, and thus is complete without further enhancement**s. To qualify for this exception, the project sponsor must document how this street or road currently addresses the needs of all users.

3. **Where the cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use**. In accordance with federal guidelines, excessively disproportionate is defined as exceeding twenty percent of the cost of the total transportation project (including right of way acquisition costs). This exception must consider probable use through the life of the project, a minimum of 20 years.

4. **Where the project consists of maintenance**, **repair or resurfacing of an existing cross-section only**. However, resurfacing projects often offer a low-cost opportunity to adjust lane width or add a bike lane simply by changing the pavement markings on a road, and therefore resurfacing projects should, at the discretion of the project sponsor, be considered an opportunity to make a street or road more complete. Projects that include adding lanes, shoulders or involve replacement of the full pavement structure are <u>not</u> considered maintenance or repair and do not qualify for this exception.

5. **Where the project consists primarily of the installation of traffic control or safety devices** and little or no additional right-of-way is to be acquired. However whenever new traffic control detection devices are installed they must be capable of detecting bicycles. All new pedestrian crossing devices must also meet the most current accessibility standards for controls, signals and placement.

6. **Where the Average Daily Traffic count (ADT) is projected to be less than 1,000 vehicles** per day over the life of the project and there is sufficient opportunity for a vehicle to change lanes to pass a cyclist or pedestrian.

7. **Where scarcity of population or other factors indicate an absence of need for current and future conditions.** This exception must take the long view and consider probable use through the life of the project, a minimum of 20 years.

8. **Where roadway standards or bicycle and pedestrian standards cannot be met**. There are times bicycle and pedestrian facility standards cannot be met due to roadway topographic constraints or if a project sponsor believes it is impractical to make the street safe for shared use. For example, roads with a combination of extremely high traffic volume (18,000+ cars a day), constrained and fixed right-of-way, and posted speeds of 45 mph or more may need special consideration.

<u>Question 5 – Inter-modal Connectivity</u>

Examples of projects that enhance inter-modal connectivity include but are not limited to:

- Linking existing sidewalks or bikeways
- Adding sidewalks that connect to transit routes
- Park and ride lots
- Enhanced bus stops
- Projects that improve corridors with higher than average truck volumes (See Map in Attachment B)

- Projects that support multi-modal passenger (e.g. airport) or freight facilities (e.g. pipe terminal)
- Other relevant attributes identified by the project sponsor

Question 6 – Safety/Security

Project types that represent a proven countermeasure for improving a documented crash related issue will receive points under this criterion. The Federal Highway Administration (FHWA) maintains a clearing house of Crash Modification Factors for specific safety improvements and their impact on certain crash types http://www.cmfclearinghouse.org/ as well as a list of 20 Proven Safety Countermeasures with significant safety benefits https://safety.fhwa.dot.gov/provencountermeasures/.

Examples of projects that address a design deficiency include but are not limited to:

- New traffic signal/signal upgrades
- Access Management
- Road Diets
- Grade separation
- Signal coordination to improve traffic flow
- Geometric improvements to correct design deficiencies (weaving, merging, sight distances, skewed intersections)
- Widen lanes or shoulders
- Replacement of structurally deficient bridges
- Improvements that support Safe Routes to Schools
- Other relevant attributes identified by the project sponsor

Examples of projects that address a security deficiency include but are not limited to:

- Projects that improve primary or secondary evacuation routes (See Map in Attachment B)
- Surveillance and monitoring systems
- Emergency Vehicle Preemption
- Improved access to emergency management operation centers (police/fire/emergency rooms)

Question 8 - Intelligent Transportation Systems (ITS)/Smart Technology

ITS projects focus on making the transportation system more efficient and responsive to drivers by using technological improvements instead of adding roadway capacity. Examples of ITS improvements/strategies include but are not limited to:

- Closed Circuit TV (CCTV) cameras
- Dynamic Message Signs (DMS)
- Highway Advisory Radio (HAR)
- Incident management and detection systems

- Incident Response Vehicles
- Ramp metering
- Traffic signal systems
- Fiber optic interconnect
- Other relevant attributes identified by the project sponsor

Smart technology software and infrastructure to advance connected and autonomous vehicles including: Dedicated Short Range Communications (DSRC), freight delivery systems, vehicle to infrastructure safety applications, intermodal connectivity improvements, or other relevant items identified by the project sponsor. Improvements must be compatible with IEEE connected and smart technology standards and the Miami Valley Regional ITS Architecture.

Question 10 – Minimize Sprawl

Projects are awarded points based on the **2000 Urbanized Area Map** in Attachment B with the exception of projects in the Piqua Urban Area which are also awarded 5 points.

All other scores are awarded based on the maximum possible points. For example if a project is widening a segment of road that spans from the transportation urban area to a rural area, points are awarded based on the transportation urban area designation only.

Question 11 – Urban Revitalization/Preservation

High: Projects that enhance a jurisdiction's core such as downtown or help create an activity/community center for a jurisdiction that does not have one as evidenced by a plan that specifically calls for the project.

Medium: Projects that enhance a jurisdiction's existing neighborhood or community centers, significant impact in areas with medium to high concentration of services.

Low: Projects that enhance a jurisdiction's existing neighborhood or community centers, minor impact in areas with low concentration of services

Question 12 – Environmental Justice

In determining if a project has a disproportionally high and adverse impact on an environmental justice population, MVRPC will use the definitions provided under FHWA Order: 6640.23A; *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* as described below. The full document is available at https://www.fhwa.dot.gov/legsregs/directives/orders/664023a.pdf

Adverse Effects: The totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness or death; air, noise, and water pollution and soil contamination; destruction or disruption of human-made or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of, benefits of FHWA programs, policies, or activities.

Disproportionately High and Adverse Effect on Minority and Low-Income Populations: An adverse effect that:

(1) is predominately borne by a minority population and/or a low income population; or
(2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the nonminority population and/or non-low-income population.

Question 15 – Economic Impact

Projects are awarded between 1-2 points if they have a positive impact in the categories described below. How many points will depend on the project scale or the relative concentration of employment, businesses, etc. Community redevelopment areas can include previously developed industrial or retail sites.

- Improves access to/from regional business and employment centers
- Improves access in areas with high concentrations of freight dependent business
- Contributes to business growth/retention in community revitalization areas
- Improves value of the surrounding public space. Projects that complement, improve access, and enhance neighborhoods and community services such libraries, recreation centers, and parks.

Question 16 - Eligible CMAQ activities

The purpose of the CMAQ program is to fund transportation projects or programs that will contribute to attainment or maintenance of clean air standards. The primary eligibility requirement is that they will demonstrably contribute to attainment or maintenance of clean air standards.

- transportation activities in an approved State Implementation Plan,
- transportation control measures to assist areas designated as nonattainment under the Clean Air Act Amendments (CAAA) of 1990,
- pedestrian/bicycle facilities,
- traffic management/monitoring/congestion relief strategies,
- transit (new system/service expansion or operations),
- alternative fuel projects (including vehicle refueling infrastructure, clean fuel fleet programs and conversions),
- vehicle inspection and maintenance (I/M) programs,
- intermodal freight,
- telework/telecommuting programs,
- travel demand management,
- development activities in support of eligible projects (e.g. NEPA studies),
- public education and outreach activities,
- rideshare programs,
- establishing/contracting with transportation management associations (TMAs),
- fare/fee subsidy programs (operating subsidies have a 3-year limit),
- HOV programs, including HOT lanes,
- diesel retrofits,
- truck-stop electrification,
- experimental pilot projects, and
- other transportation projects with air quality benefits.

NOTE: Ineligible CMAQ projects include construction of projects which add new capacity for single-occupancy vehicles.

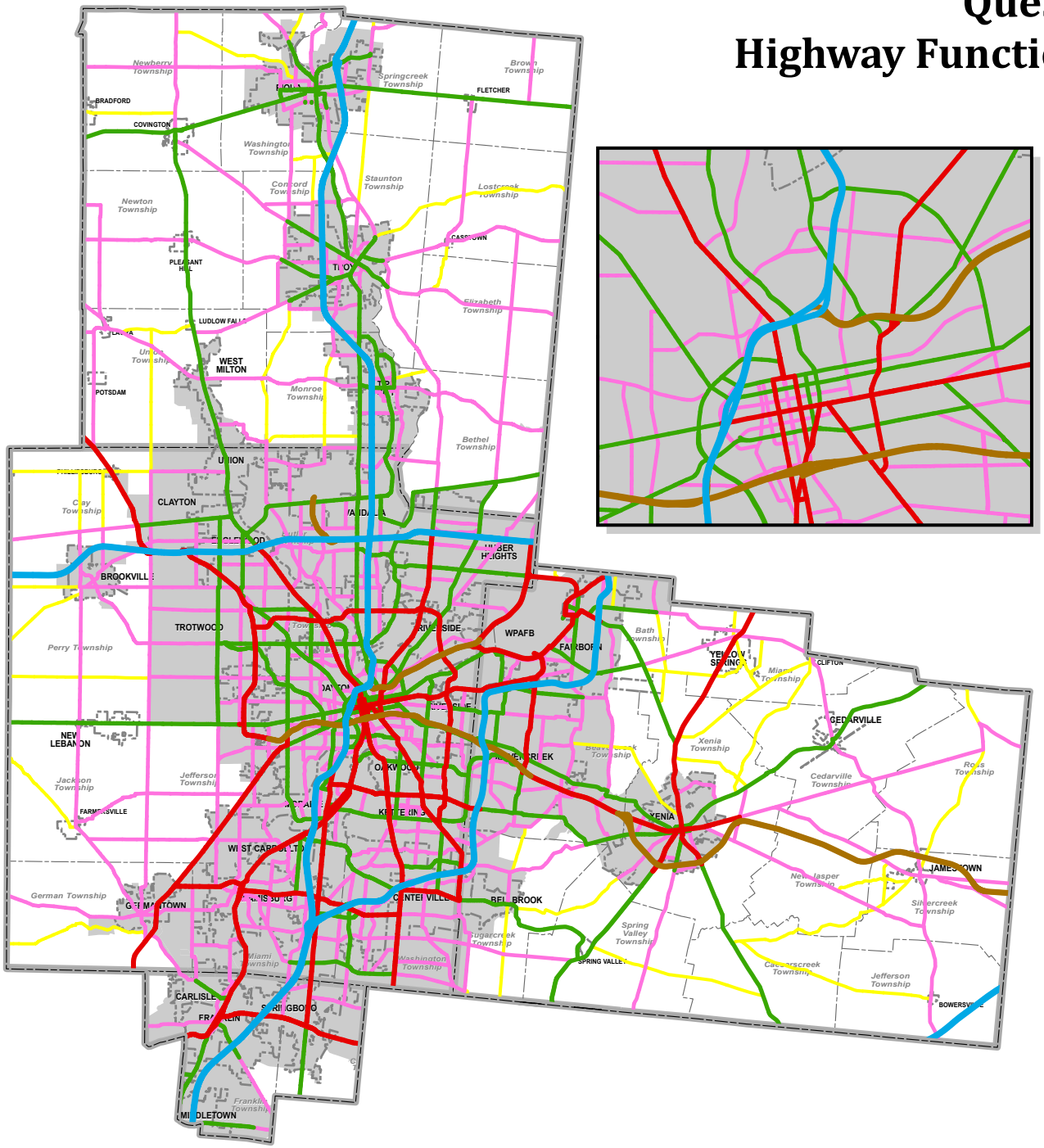
Question 17 – Sustainability/Environmental Enhancement

By mid-century, average temperatures in south-west Ohio are expected to rise by about 4 degrees as well as the frequency of heavy storm events. Under this criterion, projects that address an environmental issue, employ sustainable construction practices, or improve the resilience of the transportation system will receive additional points. Examples of categories that could receive points under this question include increased energy efficiency; use of recycled aggregates, sustainable storm water systems, more resilient designs, porous pavements, and reclamation of demolition materials. Only projects that go beyond the NEPA requirements will receive points under this question. Due to the relatively new nature of sustainable infrastructure practices a determination of merit will be based on an individual project basis.

Attachment B – Maps – Roadway Evaluation Form

Maps included in Attachment B are available in greater detail at: http://www.mvrpc.org/pes/

Question 3
Highway Functional Classification



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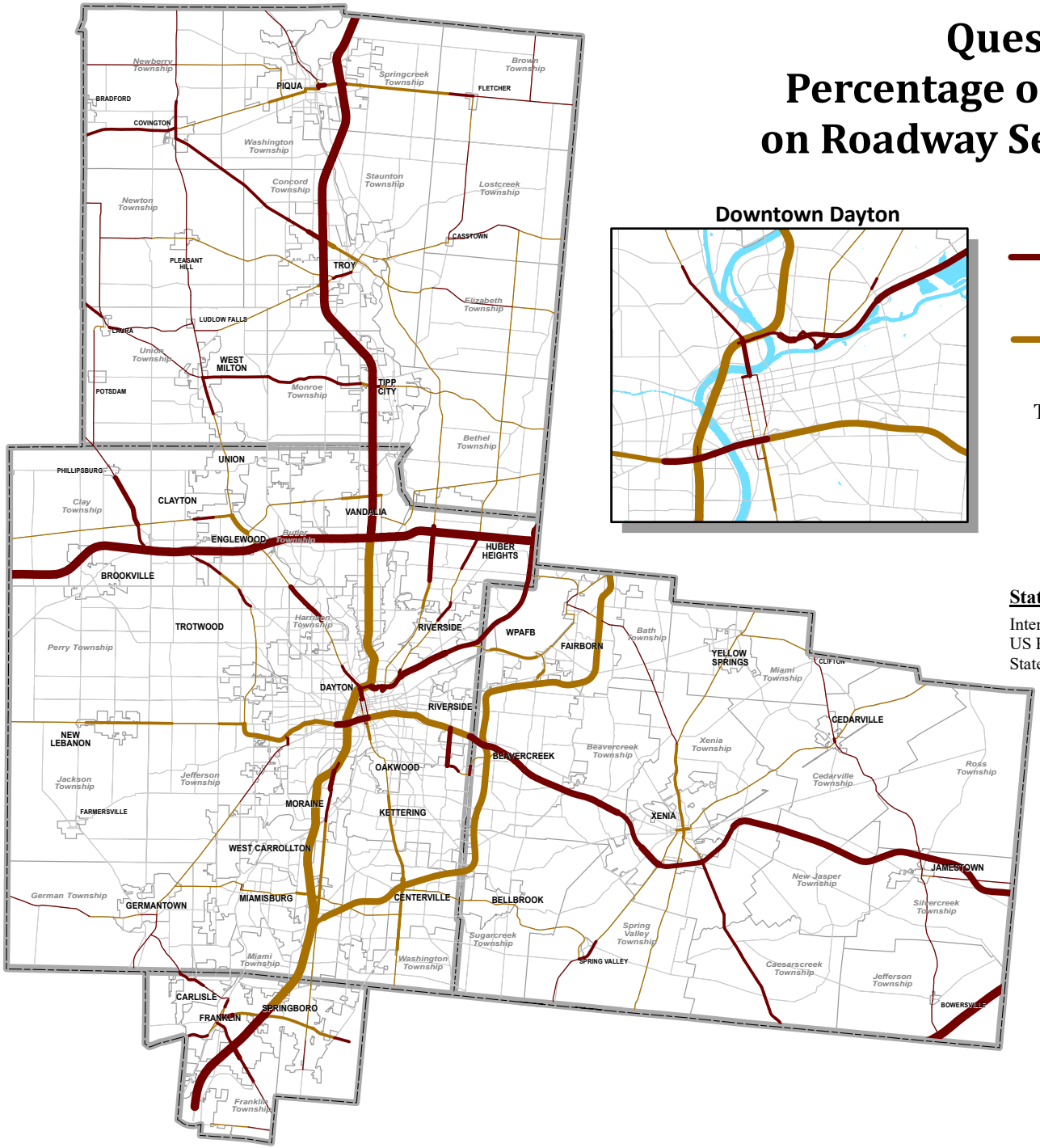
Question 5
Percentage of Truck Traffic on Roadway Segments (2017)



Downtown Dayton

Roadway segments with above average state truck volume percentage, by road type

Roadway segments with below average state truck volume percentage, by road type

Truck Volume on Road Segments

- 0 - 500
- 500 - 1,000
- 1,000 - 2,500
- 2,500 - 7,500
- 7,500 - 26,000

State Averages - Percent Truck Volume

Interstates:	17.81%
US Routes:	7.00%
State Routes:	4.18%

Sources: ODOT and MVRPC

January 2020

N

0 2 4 6 8 Miles

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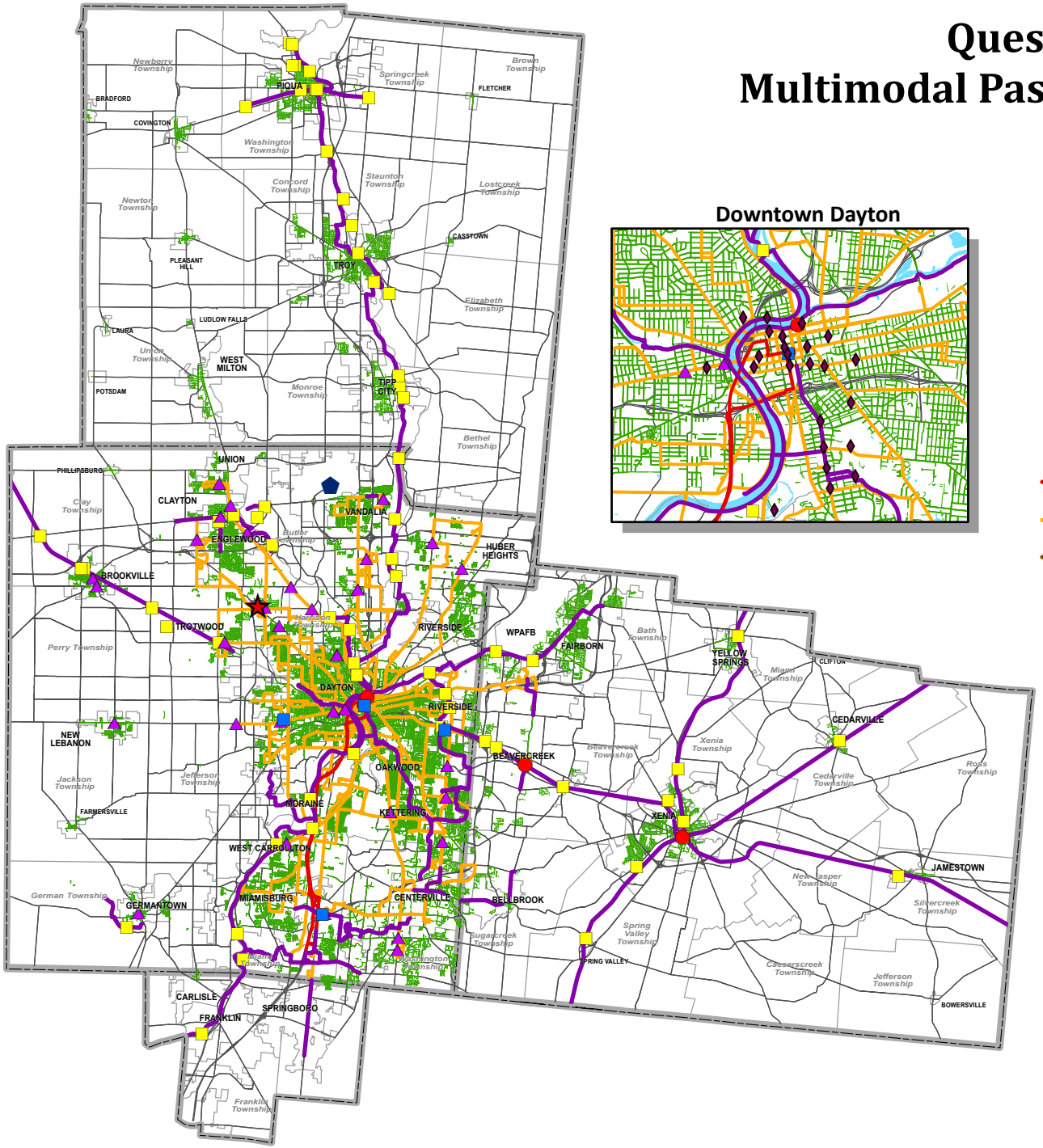
Question 5
Multimodal Passenger Facilities



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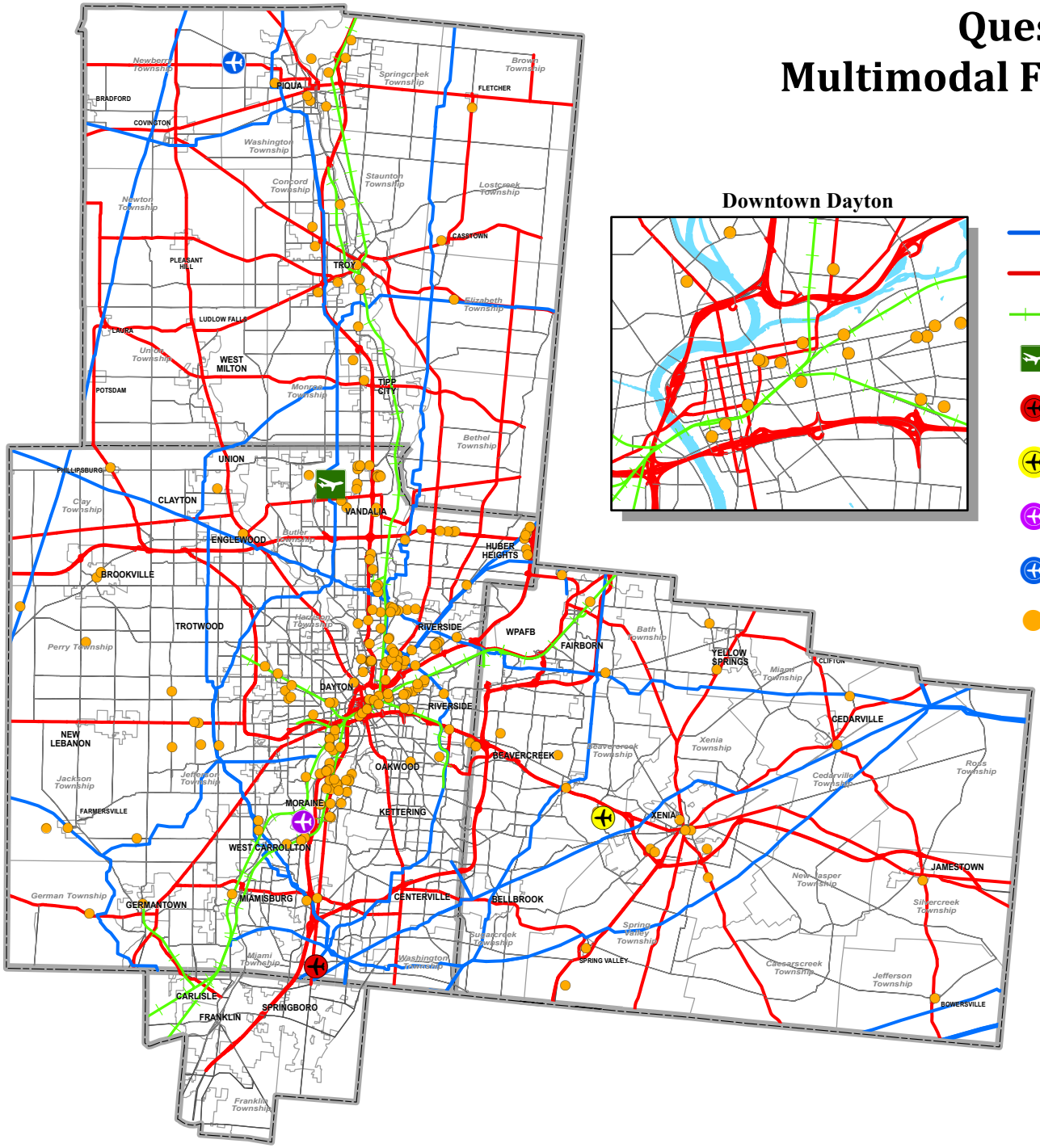
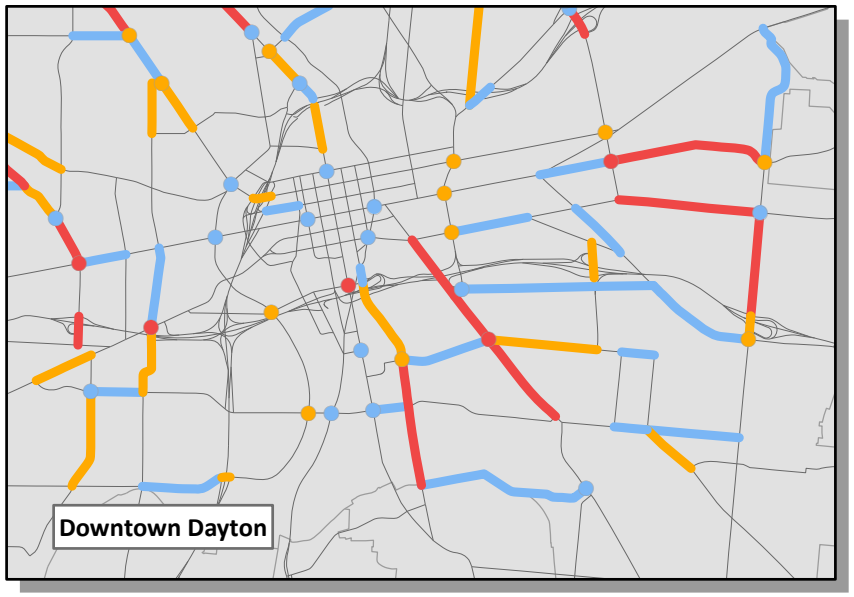
Question 5
Multimodal Freight Facilities



MVRPC

Question 6
2017-2019 High Crash Locations by Network Intersection/Segment



Locations on the Regional Roadway Network were analyzed and ranked based on the severity, frequency, and rate of crashes from 2017 to 2019.

Intersections

- High
- Medium
- Low

Segments

- High
- Medium
- Low
- Roads
- Urbanized Areas

Sources: ODOT, ODPS, MVRPC
March 2021

N

0 2 4 6 8 Miles

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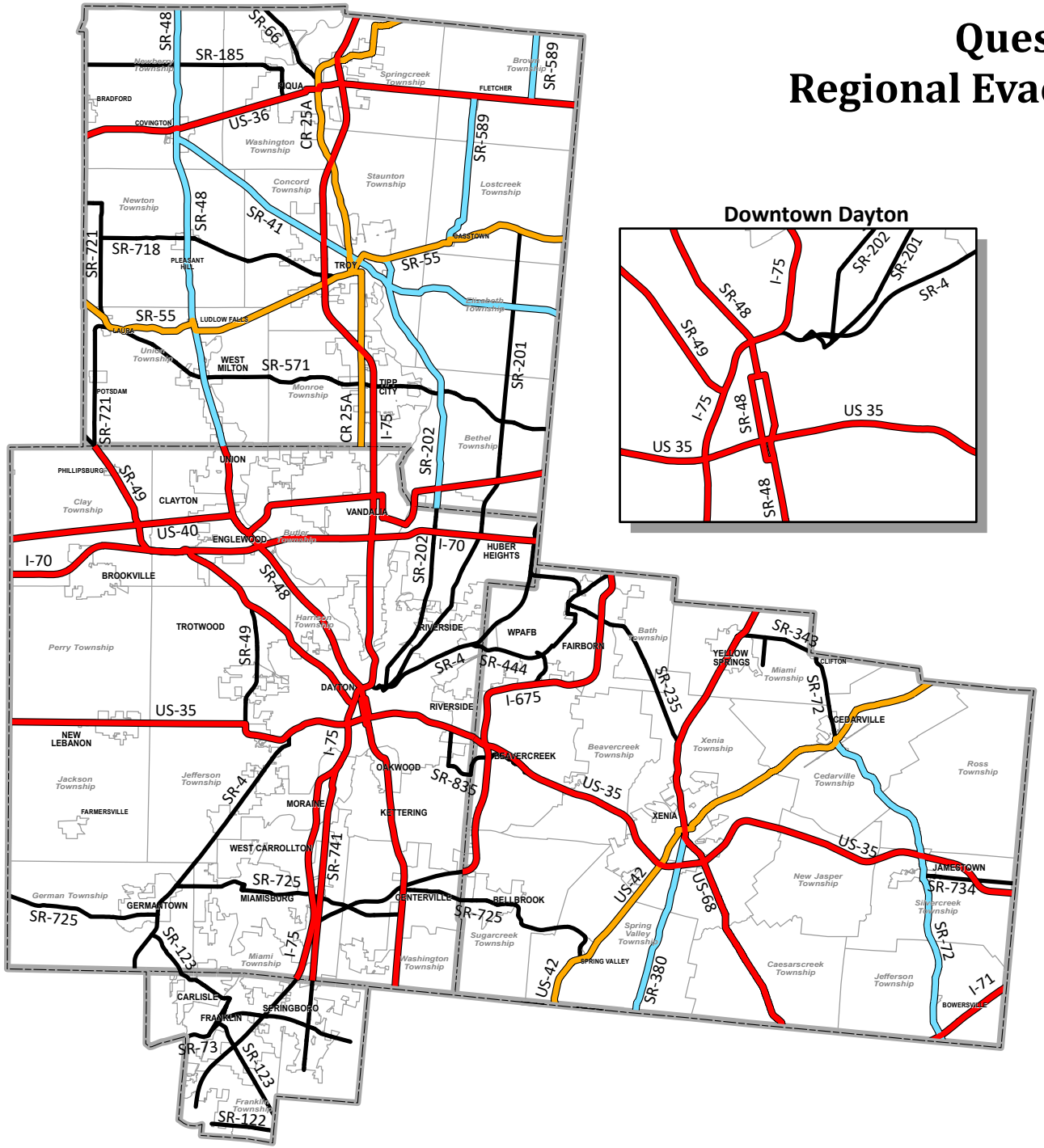
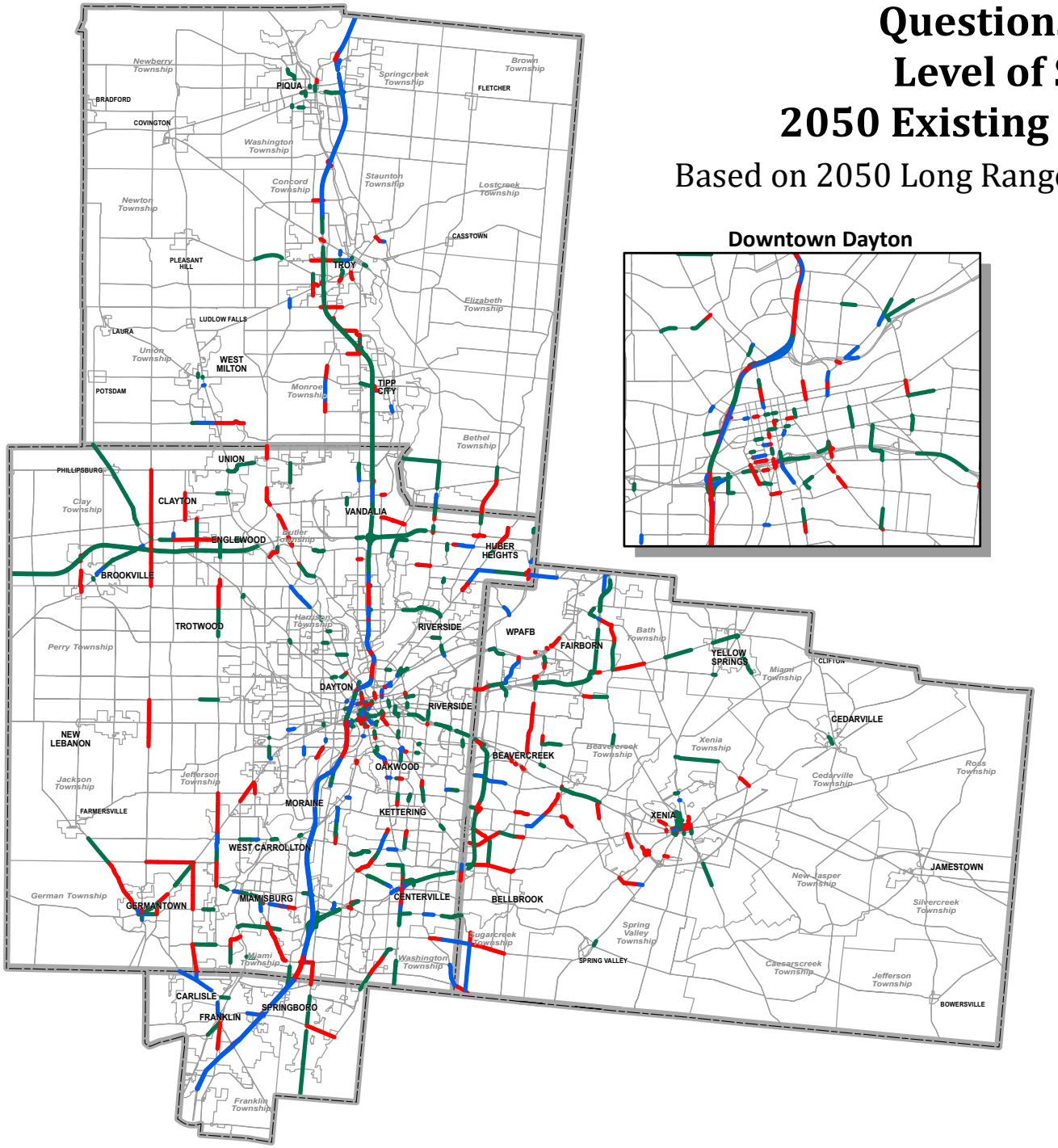
Question 6
Regional Evacuation Routes



MVRPC

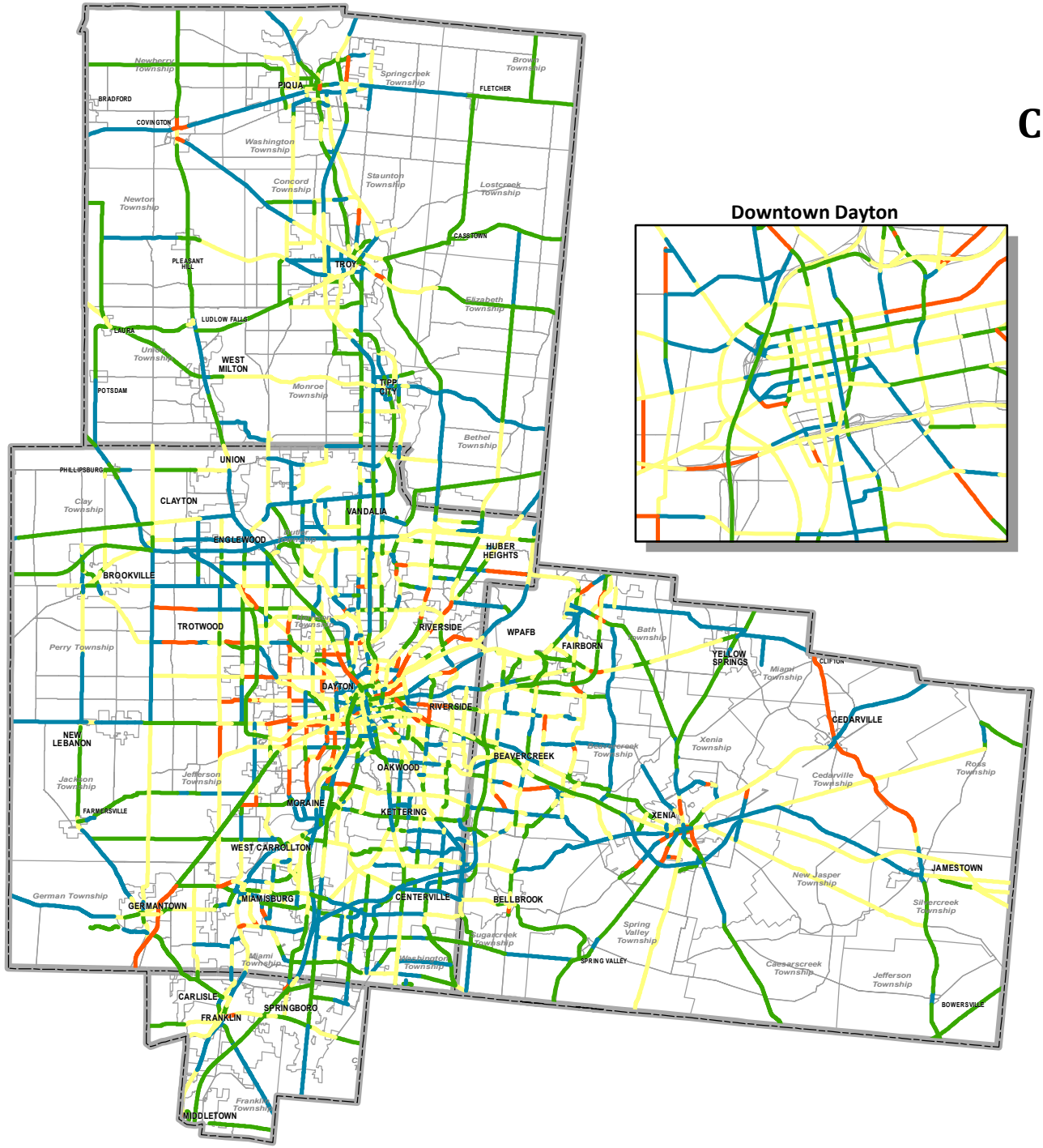
Questions 7 & 16
Level of Service
2050 Existing + Committed

Based on 2050 Long Range Transportation Plan



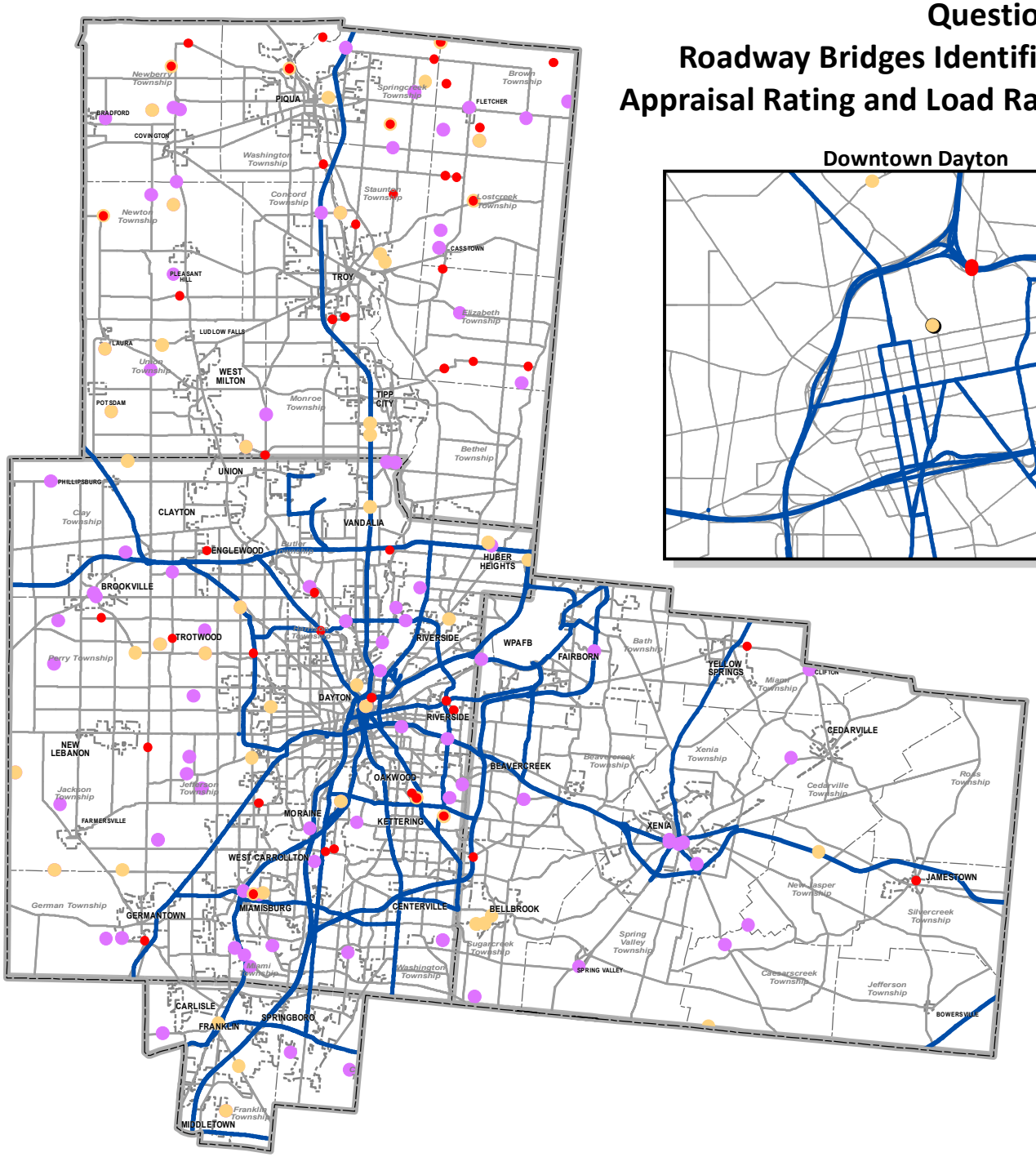
MVRPC

Question 9 Pavement Condition Rating



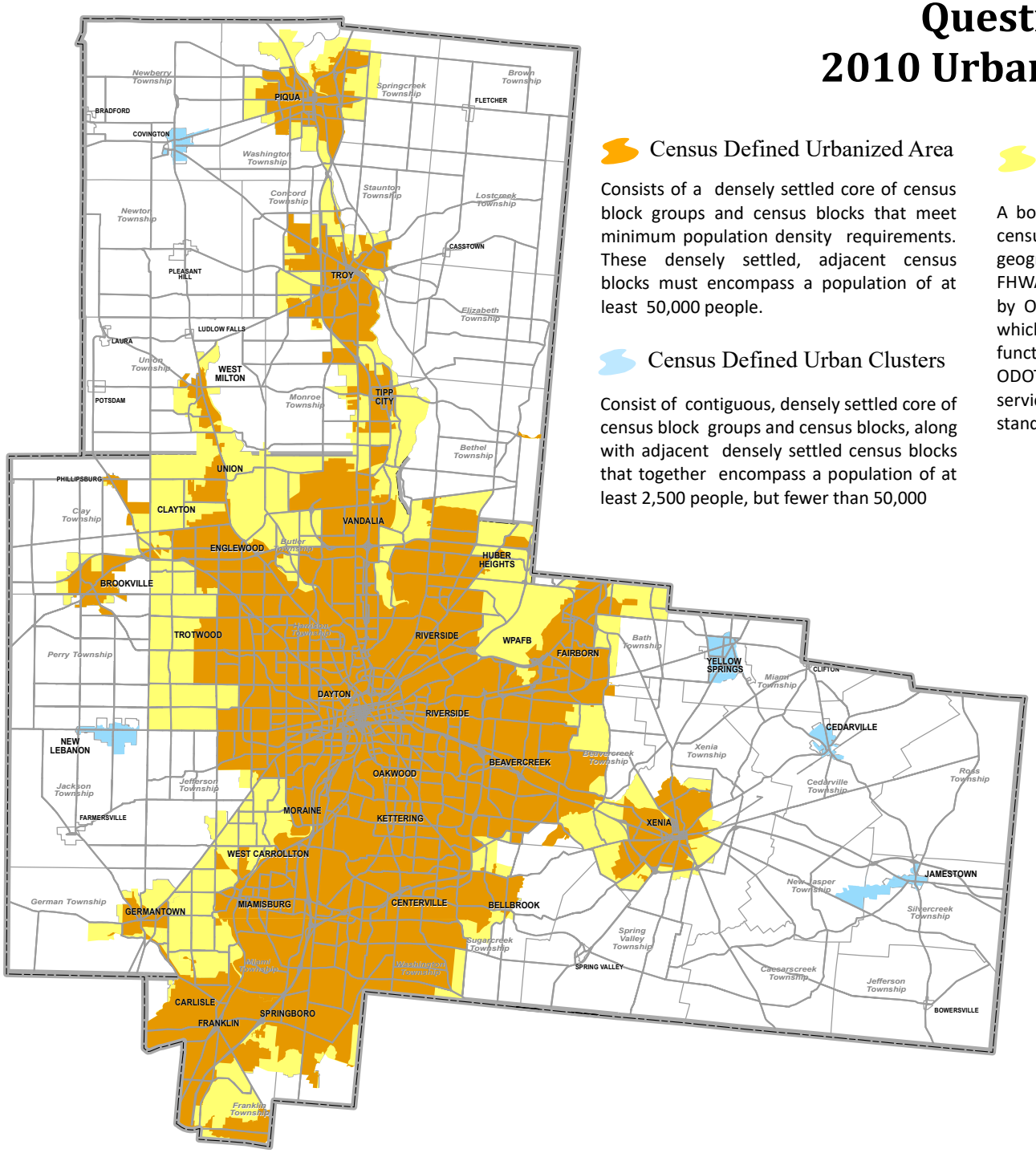
MVRPC

Question 9
Roadway Bridges Identified Based on General Appraisal Rating and Load Rating Percent (2021-2022)



MVRPC

Question 10
2010 Urbanized Areas



Census Defined Urbanized Area

Consists of a densely settled core of census block groups and census blocks that meet minimum population density requirements. These densely settled, adjacent census blocks must encompass a population of at least 50,000 people.

Census Defined Urban Clusters

Consist of contiguous, densely settled core of census block groups and census blocks, along with adjacent densely settled census blocks that together encompass a population of at least 2,500 people, but fewer than 50,000

Federal-Aid Urbanized Area

A boundary which encompasses the entire census urbanized area as well as surrounding geographic area as agreed upon by ODOT, FHWA and the MPO. This boundary is used by ODOT and FHWA to delimit an area in which highways are designated by federal functional classification. It is also used by ODOT in determining highway levels of service, and numerous highway design standards.

Source: MVRPC

January 2020

N

0 2 4 6 8 Miles

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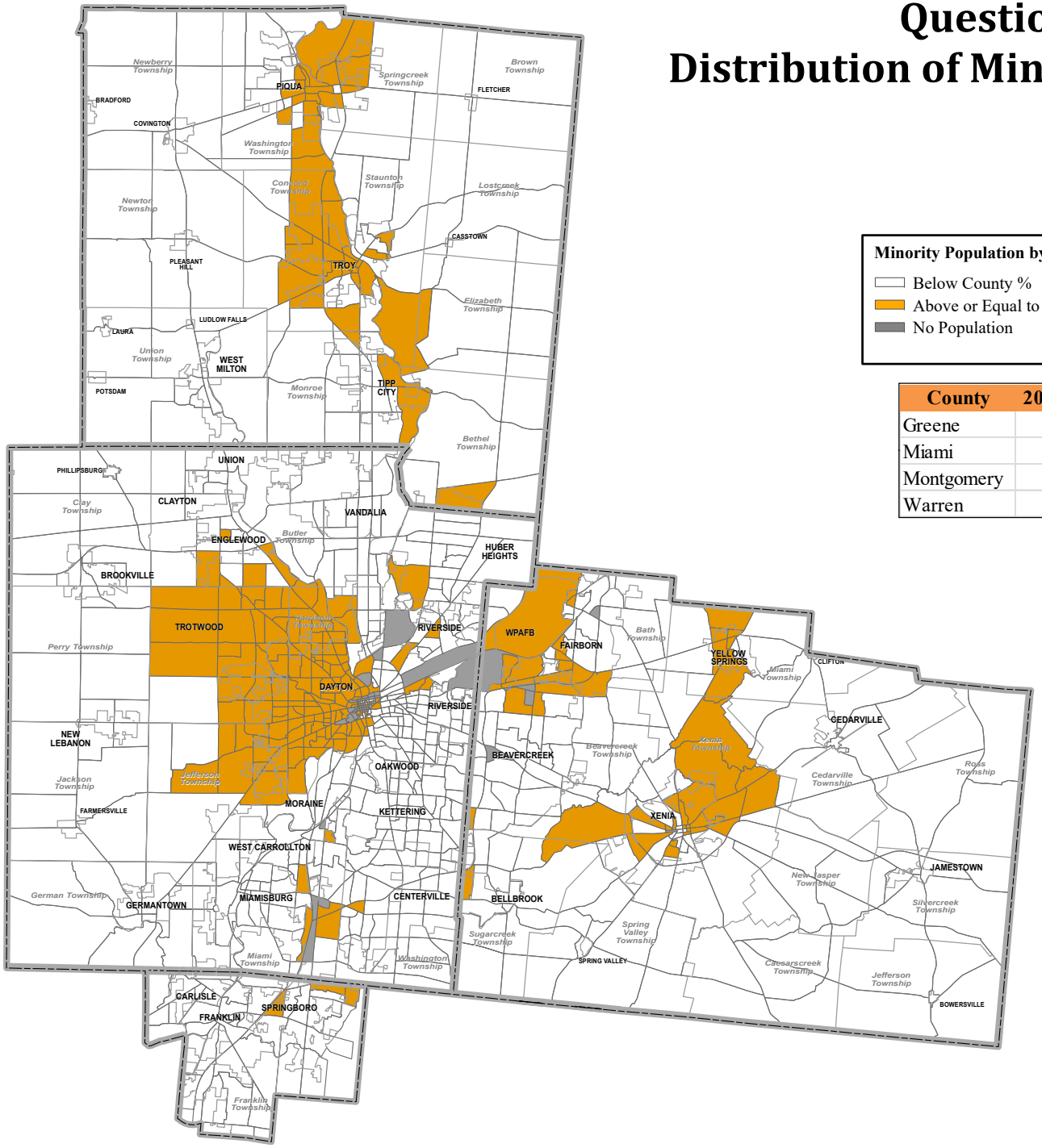
Question 12
Distribution of Minority Population



Minority Population by TAZ

- Below County %
- Above or Equal to County %
- No Population

Boundaries

- City
- Township
- County
- TAZ

County	2010 County Average
Greene	13.56%
Miami	5.64%
Montgomery	26.14%
Warren	9.53%

Source: Census 2010

January 2020

N

0 2 4 6 8 Miles

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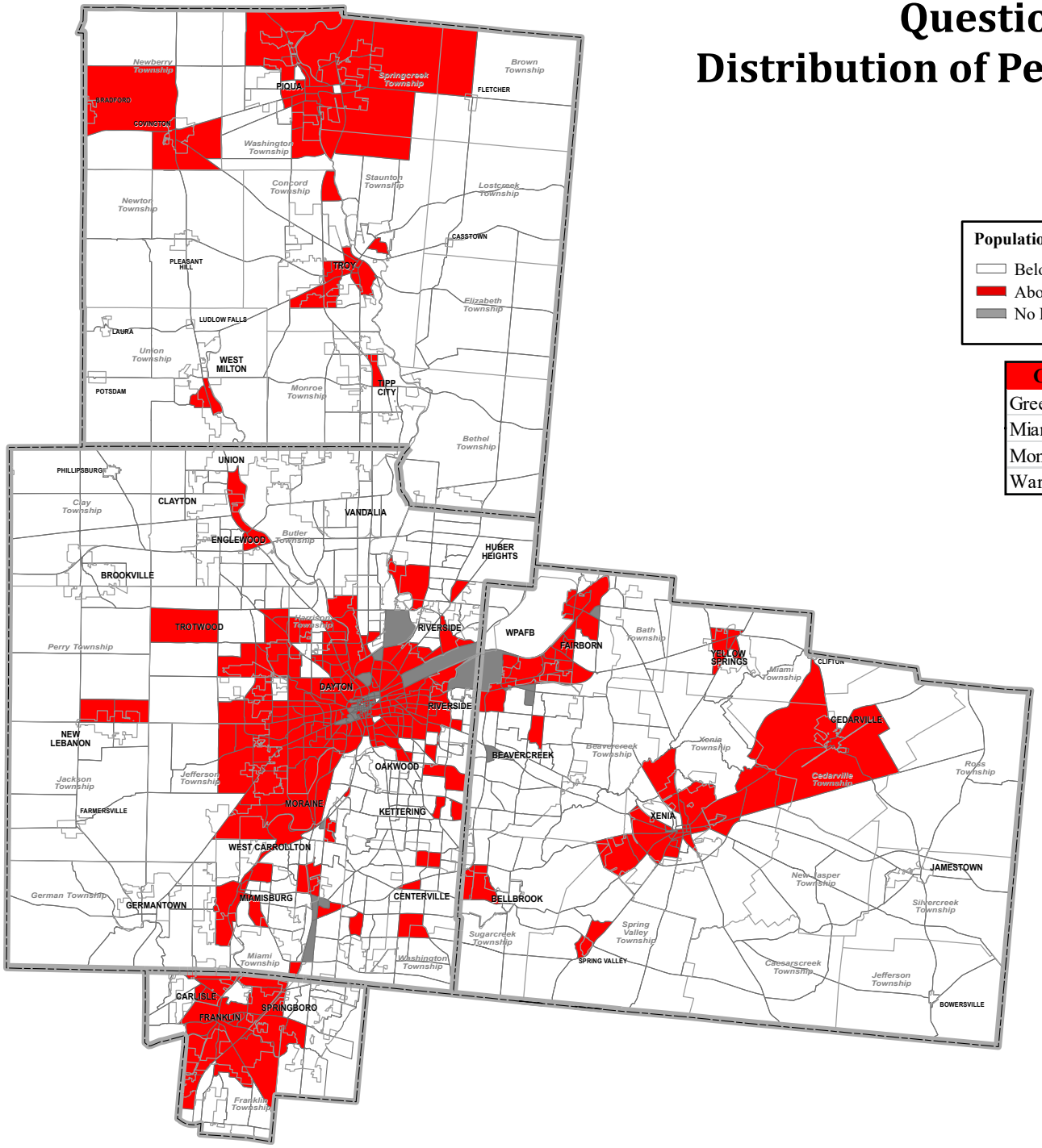
MVRPC

Question 12
Distribution of People in Poverty



Population in Poverty by TAZ

- Below County %
- Above or Equal to County %
- No Population/No CTPP Data

Boundaries

- City
- Township
- County
- TAZ

County	2012 County Average
Greene	13.53%
Miami	12.16%
Montgomery	16.73%
Warren	6.33%

Source: Census 2010

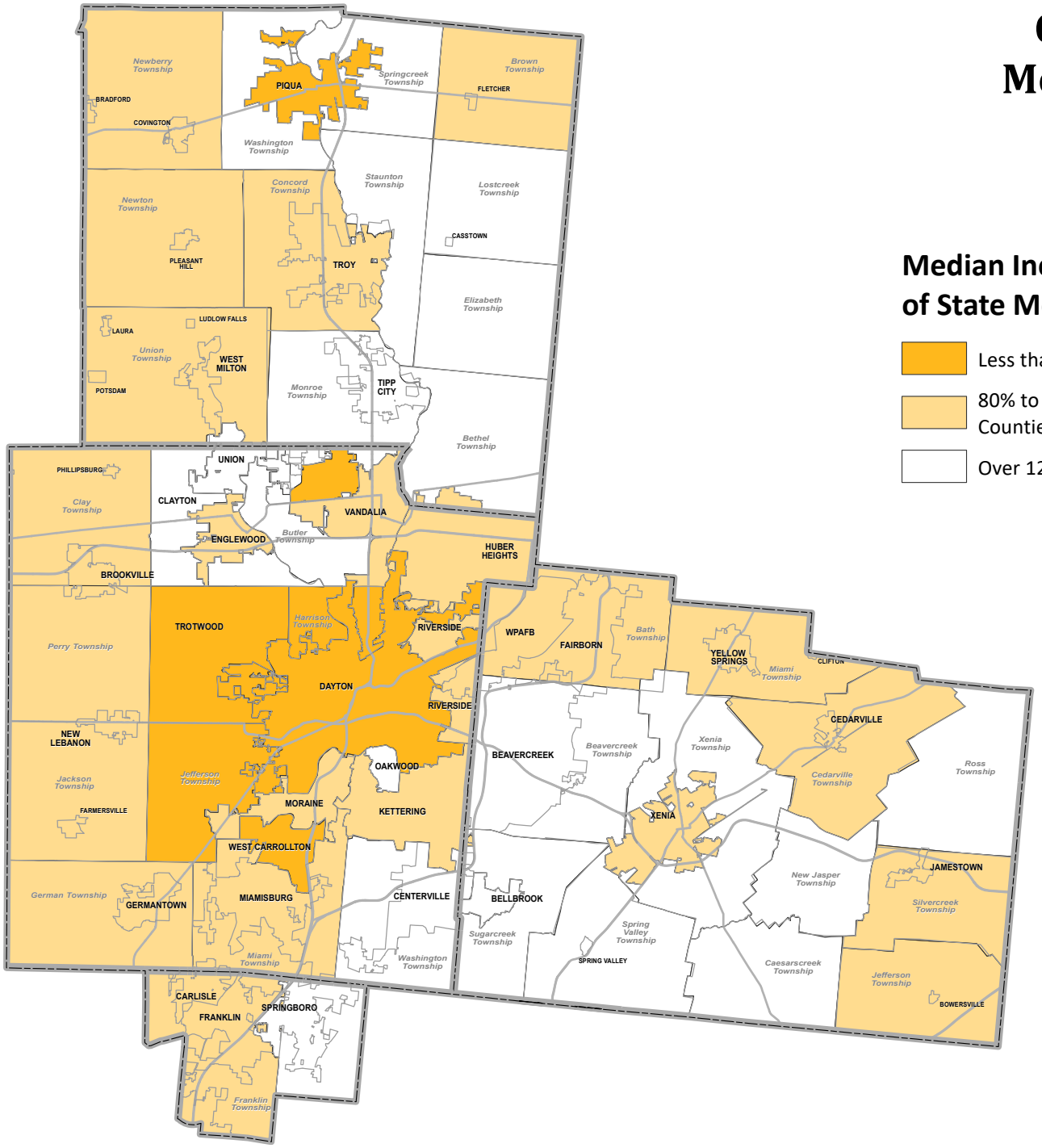
January 2020

N

0 2 4 6 8 Miles

MVRPC

Question 13
Median Income



Median Income as Percentage of State Median ($56,602)

- Less than 80%
- 80% to 120% (Miami & Montgomery Counties)
- Over 120% (Greene & Warren Counties)

Source: ACS 5-year 2015-2019

March 2021

N

0 2 4 6 8 Miles