



U.S. Department
of Transportation
**Federal Highway
Administration**

Kentucky Division

July 19, 2021

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In Reply Refer To:
HDA-KY

Danny Peake, Director
Division of Environmental Analysis
Kentucky Transportation Cabinet
200 Mero Street, 5th Floor
Frankfort, KY 40622

Subject: Concurrence on KYTC Environmental Justice Guidance

Dear Mr. Peake:

Thank you for the opportunity to develop the Environmental Justice (EJ) Guidance with you and your staff. We have reviewed the final Kentucky Transportation Cabinet (KYTC) EJ Guidance and find the guidance meets the intent of the Executive Order 12898 and FHWA EJ Guidance. Our office concurs with the KYTC EJ Guidance.

Should you have questions or concerns, please contact Eric Rothermel at (502) 223-6742.

Sincerely,

JOHN D
BALLANTYNE

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John Ballantyne,
System Performance Team Leader



COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
transportation.ky.gov

Andy Beshear
GOVERNOR

Jim Gray
SECRETARY

July 14, 2021

Mr. John Ballantyne
Environment, Planning and System Performance – Team Leader
Federal Highway Administration
John C. Watts Federal Building
330 West Broadway
Frankfort, KY 40601

Subject: New 2021 Guidance for Environmental Justice Analysis

Dear Mr. Ballantyne,

The KYTC Division of Environmental Analysis has worked closely with the FHWA Frankfort office to develop a more streamlined approach in identifying and addressing Environmental Justice populations that may be impacted by KYTC roadway projects. This new guidance expands upon the previously issued KYTC 2014 Environmental Justice Guidance. This new guidance will seek to refine the Environmental Justice process in order to achieve the following objectives:

- Improve consistency statewide for data collection and analyzation; and,
- Improve the decision-making process when making a determination of potential Environmental Justice populations that may be affected by KYTC roadway projects.

We respectfully request your acceptance of this improved Environmental Justice Analysis Guidance and Methodology.

If you have any questions concerning this matter, please contact me or Connor Ouellette at (859) 967-8221.

Sincerely,

A handwritten signature in black ink, appearing to read "Danny Peake".

Danny Peake, Director
KYTC Division of Environmental Analysis

Kentucky Transportation Cabinet
Environmental Justice Guidance and Methodologies



2021

PREFACE

This document is intended to assist the Kentucky Transportation Cabinet (KYTC), its consultants, and other potential users in the completion of project level Environmental Justice analyses in compliance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and applicable current federal and state requirements for Federal-aid transportation projects on behalf of the Federal Highway Administration. The procedures herein are not an adjudication or regulation. There is no intent on the part of KYTC to give the procedures in this guidance weight or deference. This document establishes the framework within which KYTC will exercise its administrative discretion in the future. KYTC reserves the discretion to deviate from this guidance if circumstances warrant. This guidance is for informational purposes only; it is not regulatory.

GLOSSARY OF KEY ENVIRONMENTAL JUSTICE TERMS

Source: USDOT Order 5610.2a and FHWA Order 6640.23A.

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 man-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 U.S. Department of Transportation 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 non-minority population and/or non-low-income population.

Environmental justice – the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Exposure pathway - the course a chemical or contaminant takes from its source to the person being contacted.

Health impact assessment – a systematic process that uses an array of data sources and analytic methods, and considers input from stakeholders to identify the potential effects of a proposed regulatory action, policy, or project on the health of a population and the distribution of those effects within the population.

Indigenous populations – Defined in the EPA Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous People (U.S. EPA, 2014b)¹ as: state-recognized tribes; indigenous and tribal community-based organizations; individual members of federally recognized tribes, including those living on a different reservation or living outside Indian country; individual members of state-recognized tribes; Native Hawaiians; Native Pacific Islanders; and individual Native Americans.

Low-income – A person whose median household income is at or below the Department of Health and Human Services poverty guidelines.

¹ See the EPA's *Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples* (U.S. EPA, 2014b) for information on defining indigenous populations.

Low-income population – Any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed U.S. Department of Transportation program, policy or activity.

Meaningful Involvement – “1) potentially affected populations have an appropriate opportunity to participate in decisions about a proposed activity [i.e., rulemaking] that will affect their environment and/ or health; 2) the population’s contribution can influence [the EPA’s] rulemaking decisions; 3) the concerns of all participants involved will be considered in the decision-making process; and 4) [the EPA will] seek out and facilitate the involvement of population’s potentially affected by EPA’s rulemaking process” (U.S. EPA, 2015a).²

Minority – A person who is:

- (1) Black: a person having origins in any of the black racial groups of Africa;
- (2) Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
- (3) Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent;
- (4) American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition; or
- (5) Native Hawaiian and Other Pacific Islander: people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Minority population – Any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed U.S. Department of Transportation program, policy or activity.

Risk management – in the context of human health, a decision-making process that accounts for political, social, economic and engineering implications together with risk-related information in order to develop, analyze and compare management options and select the appropriate managerial response to a potential chronic health hazard.

Subsistence populations – The need to analyze the human health risks associated with subsistence populations is found in the E.O. 12898. The definition for subsistence populations is “populations with differential patterns of subsistence consumption of fish and wildlife... whenever practical and appropriate.”³ Particular pathways of exposure identify these populations.

² See the EPA’s *Guidance on Considering Environmental Justice During the Development of Regulatory Actions* (U.S. EPA, 2015a) for information on EJ regulatory actions.

³ See Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations for information on federal actions concerning environmental justice.

Susceptibility – increased likelihood of an adverse effect, often discussed in terms of relationship to a factor that can be used to describe a population group (e.g., life stage, demographic feature, or genetic characteristic).

INTRODUCTION

The Kentucky Transportation Cabinet (KYTC), in cooperation with the Federal Highway Administration (FHWA-KY) has revised previously issued guidance (2011, 2014) to ensure consistency in meeting the requirements of the Title VI of the Civil Rights Act of 1964, Executive Order 12898 and FHWA Order 6640.23.

This guidance is developed in compliance with: Title VI of the Civil Rights Act of 1964, which prohibits discrimination based on race, color and national origin; and the Presidential Executive Order 12898 titled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (issued February 11, 1994), which states that:

“Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”⁴

Executive Order (E.O.) 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations - was issued by President William J. Clinton in 1994. Its purpose is to focus federal attention on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities.

E.O. 12898 directs federal agencies to:

- identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law.
- develop a strategy for implementing environmental justice.
- promote nondiscrimination in federal programs that affect human health and the environment, as well as provide minority and low-income communities access to public information and public participation.

These methods also follow the FHWA Order 6640.23A (June 14, 2012) entitled FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.⁵ Thus, the FHWA, as a federal agency, supports the following three fundamental principles of environmental justice:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

⁴ See Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations for information on federal actions concerning environmental justice.

⁵ See FHWA Order 6640.23A: FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

PROJECT LEVEL ANALYSIS

The following guidance and methodologies are to be followed across all levels of NEPA documentation, From CEL1, EA/FONSI to EIS/ROD.

[Categorical Exclusions for Minor Projects (CEMP) types as defined in the 2018 Categorical Exclusion Programmatic Agreement]⁶ **ARE EXEMPT FROM EJ ANALYSIS.** They include the following:

- (1) Activities which do not involve or lead directly to construction, such as planning and research activities; grants for training; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed; and Federal-aid system revisions which establish classes of highways on the Federal-aid highway system.
- (2) Approval of utility installations along or across a transportation facility.
- (3) Construction of bicycle and pedestrian lanes, paths, and facilities.
- (4) Activities included in the State's highway safety plan under 23 U.S.C. 402.
- (5) Transfer of Federal lands pursuant to 23 U.S.C. 107(d) and/or 23 U.S.C. 317 when the land transfer is in support of an action that is not otherwise subject to FHWA review under NEPA.
- (6) The installation of noise barriers or alterations to existing publicly owned buildings to provide for noise reduction.
- (7) Landscaping.
- (8) Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.
- (9) The following actions for transportation facilities damaged by an incident resulting in an emergency declared by the Governor of the State and concurred in by the Secretary, or a disaster or emergency declared by the President pursuant to the Robert T. Stafford Act (42 U.S.C. 5121):
 - (i) Emergency repairs under 23 U.S.C. 125; and
 - (ii) The repair, reconstruction, restoration, retrofitting, or replacement of any road, highway, bridge, tunnel, or transit facility (such as a ferry dock or bus transfer station), including ancillary transportation facilities (such as pedestrian/bicycle paths and bike lanes), that is in operation or under construction when damaged and the action:
 - (A) Occurs within the existing right-of-way and in a manner that substantially conforms to the preexisting design, function, and location as the original (which may include upgrades to meet existing codes and standards as well as upgrades warranted to address conditions that have changed since the original construction); and

⁶ See 2018 FHWA and KYTC Categorical Exclusion Programmatic Agreement

- (B) Is commenced within a 2-year period beginning on the date of the declaration.
- (10) Acquisition of scenic easements.
 - (11) Determination of payback under 23 U.S.C. 156 for property previously acquired with Federal-aid participation.
 - (12) Improvements to existing rest areas and truck weigh stations.
 - (13) Ridesharing activities.
 - (14) Bus and rail car rehabilitation.
 - (15) Alterations to facilities or vehicles in order to make them accessible for elderly and handicapped persons.
 - (16) Program administration, technical assistance activities, and operating assistance to transit authorities to continue existing service or increase service to meet routine changes in demand.
 - (17) The purchase of vehicles by the applicant where the use of these vehicles can be accommodated by existing facilities or by new facilities which themselves are within a CE.
 - (18) Track and railbed maintenance and improvements when carried out within the existing right-of-way.
 - (19) Purchase and installation of operating or maintenance equipment to be located within the transit facility and with no significant impacts off the site.
 - (20) Promulgation of rules, regulations, and directives.
 - (21) Deployment of electronics, photonics, communications, or information processing used singly or in combination, or as components of a fully integrated system, to improve the efficiency or safety of a surface transportation system or to enhance security or passenger convenience. Examples include, but are not limited to, traffic control and detector devices, lane management systems, electronic payment equipment, automatic vehicle locaters, automated passenger counters, computer-aided dispatching systems, radio communications systems, dynamic message signs, and security equipment including surveillance and detection cameras on roadways and in transit facilities and on buses.
 - (22) Projects, as defined in 23 U.S.C. 101, that would take place entirely within the existing operational right-of-way. Existing operational right-of-way refers to right-of-way that has been disturbed for an existing transportation facility or is maintained for a transportation purpose. This area includes the features associated with the physical footprint of the transportation facility (including the roadway, bridges, interchanges, culverts, drainage, fixed guideways, mitigation areas, etc.) and other areas maintained for transportation purposes such as clear zone, traffic control signage, landscaping, any rest areas with direct access to a controlled access highway, areas maintained for safety and security of a transportation facility, parking facilities

with direct access to an existing transportation facility, transit power substations, transit venting structures, and transit maintenance facilities. Portions of the right-of-way that have not been disturbed or that are not maintained for transportation purposes are not in the existing operational right-of-way.

These projects may also include those defined as follows, provided that all work is conducted within existing right of way:

- A. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes)
- B. Highway safety or traffic operations improvement projects, including the installation of ramp metering control devices and lighting
- C. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings
- D. Bridge scour and debris removal

(23) Federally funded projects:

- A. That receive less than \$5,000,000 of Federal funds; or
- B. With a total estimated cost of not more than \$30,000,000 and Federal funds comprising less than 15 percent of the total estimated project cost.

(24) Localized geotechnical and other investigation to provide information for preliminary design and for environmental analyses and permitting purposes, such as drilling test bores for soil sampling; archeological investigations for archeology resources assessment or similar survey; and wetland surveys.

(25) Environmental restoration and pollution abatement actions to minimize or mitigate the impacts of any existing transportation facility (including retrofitting and construction of stormwater treatment systems to meet Federal and State requirements under sections 401 and 402 of the Federal Water Pollution Control Act (33 U.S.C. 1341; 1342)) carried out to address water pollution or environmental degradation.

(26) Purchase, construction, replacement, or rehabilitation of ferry vessels (including improvements to ferry vessel safety, navigation, and security systems) that would not require a change in the function of the ferry terminals and can be accommodated by existing facilities or by new facilities which themselves are within a CE.

(27) Rehabilitation or reconstruction of existing ferry facilities that occupy substantially the same geographic footprint, do not result in a change in their functional use, and do not result in a substantial increase in the existing facility's capacity. Example actions include work on pedestrian and vehicle transfer structures and associated utilities, buildings, and terminals.

All project types as defined in [Appendix B of the 2018 Categorical Exclusion Programmatic Agreement]⁷ are **Non-Exempt from EJ Analysis**. They include the following:

- (1)-(3) Reserved numbering in federal regulation
- (4) Transportation corridor fringe parking facilities.
- (5) Construction of new truck weigh stations or rest areas.
- (6) Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.
- (7) Approvals for changes in access control.
- (8) Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.
- (9) Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.
- (10) Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.
- (11) Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community.
- (12) Acquisition of land for hardship or protective purposes. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.
 - A. Hardship acquisition is early acquisition of property by the applicant at the property owner's request to alleviate particular hardship to the owner, in contrast to others, because of an inability to sell his property. This is justified when the property owner can document on the basis of health, safety or

⁷ See 2018 FHWA and KYTC Categorical Exclusion Programmatic Agreement

financial reasons that remaining in the property poses an undue hardship compared to others.

- B. Protective acquisition is done to prevent imminent development of a parcel which may be needed for a proposed transportation corridor or site. Documentation must clearly demonstrate that development of the land would preclude future transportation use and that such development is imminent. Advance acquisition is not permitted for the sole purpose of reducing the cost of property for a proposed project.

- (13) Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes) with impacts beyond the existing operational right of way where there is no significant noise impact on the surrounding community.
- (14) Highway safety or traffic operations improvement projects, including the installation of ramp metering control devices and lighting with impacts beyond the existing operational right of way.
- (15) Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings with impacts beyond the existing operational right of way.
- (16) Modification of an existing interchange or the construction of an interchange or a grade separation to replace an existing at grade intersection (FHWA consultation required when the interstate system is involved).
- (17) Construction of realignments on new location, not to exceed two miles in realignment length.
- (18) Construction of a minor new highway facility, on new location and less than one mile in length. FHWA consultation required when the interstate system or interstate-like freeways are involved.

All non-exempt projects shall require a detailed analysis weighing potential impacts and benefits to underserved communities in the project area. The methodologies for this analysis include comparative US Census Block Groups in the project area and public engagement, dependent on the level of CE required for the project. Public involvement for these projects will follow the 2017 FHWA-KYTC Highway Design Manual, Section HD-601.⁸ CEL1-type projects will require the comparative data analysis only, which will be summarized in the CE and will not require public engagement, dependent upon the context and intensity of potential impacts. Projects requiring higher levels of documentation, including CEL2-3, EA/FONSI and EIS/ROD, shall include public involvement with a focus on meaningful engagement with underserved populations and communities in the project area.

Identifying EJ Populations Within Project Areas

⁸ See 2017 FHWA-KYTC Highway Design Manual: *Sec. HD-601, Public Involvement*.

Determining Proper Evaluation Area for EJ Populations

The entire proposed project area within which direct and indirect impacts may occur should be considered. Once an evaluation has been determined, identification of EJ populations should be based on field observations, demographic data, and/or coordination with persons or organizations with knowledge of the area. (Refer to Figure 1. In the attached Appendix A for the “Framework for Project Level Environmental Analysis”)

Field Observations

Field observations should be conducted with the intent to identify potential indicators of EJ populations in the project area. Some potential indicators of EJ populations include:

- Specialized ethnic cuisine grocery stores
- Retail stores specializing in ethnic goods and services
- Places of worship serving ethnic groups
- Identifiable public and elderly housing facilities
- Local government agencies providing needs to special minority or low-income populations
- Local non-governmental minority or low-income advocacy organizations
- Use of non-English language and writing

Understanding the presence and importance of these indicators will provide valuable context of the demographic data collected in order to better understand the potential effects on EJ populations.

Coordination with Knowledgeable Parties

Knowledgeable parties can help to assist identifying EJ populations as well as supplement available demographic characteristics and field observations. This will allow for a better understanding of potential effects to EJ populations. Some Knowledgeable parties may include:

- Local MPO/RPO representatives
- County planning agencies
- Local governments
- School district administrators
- Chambers of Commerce or other local business or industry associations

Project-level Data Analysis

EJ analysis reviews the basic socioeconomic characteristics about the people who live and work in the vicinity of the proposed project in order to determine the presence of minority and/or low-income populations. Projects requiring a detailed EJ analysis would require US. Census block-level demographic data to compare the project area with the surrounding block groups and the County. The most comprehensive source of demographic data comes from the U.S Census Bureau. This data can be accessed via the following tutorial using EPA’s EJScreen, epa.gov and ArcMap/GIS (see attached Appendix A). If information and data collected show EJ issues identified during planning, documentation should be entered in the “public and agency involvement” section of the NEPA document.

Comparative Analysis of Data

Once the required data has been assembled, the user will compare project-area data with the surrounding block groups and the County or Counties.

Are EJ populations impacted?

- If the answer is no, further EJ analysis is not required and will be documented as such in the environmental document.
- If EJ populations will be impacted, a determination of disproportionate high and adverse effects **shall** be made for the project.

Should the project area data be higher than the surrounding block groups and County, the project team will conduct enhanced public involvement targeting these underserved communities to identify potential adverse effects resulting from the proposed project. Project benefits to the area should be emphasized throughout the project development process.

In the event the project-area data is lower than both the surrounding area and County, further EJ analysis is not required and shall be documented as such in the environmental document.

Impacts to EJ Populations

Adverse and disproportionate impacts of proposed projects must be determined if EJ populations are present and impacted in order to meet the requirements of Executive Order 12898. Analysis of adverse impacts must include the total significance the project has on individual or cumulative natural, social, community, or health effects to human populations. Community context should be considered if impacts are possible.

If a project, based on the above definition of *Disproportionately High and Adverse Effects on Minority and Low-Income Populations*, has these impacts, then the FHWA and KYTC will review the project for the following:

1. Are there any other reasonable and feasible alternatives to accomplish the purpose and need of the project? If not,
2. FHWA and KYTC will conduct extensive outreach in the impacted minority and/or low-income population areas for mitigation opportunities.

A project that has a disproportionately high and adverse impact on minority and/or low-income populations can move forward after completing the above two steps with FHWA concurrence. These projects shall adequately document the alternatives that were considered to avoid or minimize impacts to minority and/or low-income populations and document the outreach completed.

Analysis of EJ populations should identify and discuss impacts a project may or may not have on these populations. Impacts are defined as: effects that the proposed action or alternatives has that are reasonably foreseeable and has a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives

Determine Disproportionate High and Adverse Effects

When making an evaluation for potential disproportionate impacts on EJ communities, the distribution of impacts borne between EJ and non-EJ populations is a crucial determination. Analysis of disproportionality must determine if:

- If EJ populations predominately bear the impact and/or
- The effects borne by EJ populations are greater or more severe than non-EJ populations.

Are the impacts adverse **AND** disproportionate?

- If the answer is no, further EJ analysis is not required and will be documented as such in the environmental document.

When addressing disproportionate high and adverse effects on EJ populations due to the proposed project, it is important to consider the following questions.

- Does a high or substantial impact exist which adversely affects an EJ population?
 - Does a potentially impacted property serve an especially important social, religious or cultural function for the EJ community?

- Does the project impact a resource that is especially important to an EJ community?
- Would the project require substantial displacements?
- Do effects on EJ populations exceed those of non-EJ populations?
 - Are minority or low-income populations impacted more than non-minority or non-low-income populations?
 - Is the percentage of minority or low-income populations greater than non-minority or non-low-income populations?
 - Will the EJ population carry an unfair share of the impact?
 - Will EJ communities receive the same potential benefits (i.e., improved access to employment opportunities, streetscape improvements, and safety benefits) as non-EJ populations?
- Will mitigation and enhancement measures occur?
 - Are there measures which could be taken to minimize adverse effects?

Public Outreach in Project Level EJ Analysis

If an EJ population has been identified and will likely be impacted by the proposed project, public outreach aimed at effectively engaging EJ populations should be developed, implemented and integrated into the Public Involvement Plan for the project. Effective public outreach provides minority and low-income populations greater access to information and opportunities for public participation in matters which may impact human health and/or the environment. Effective outreach may require a non-traditional approach or strategy, with public meetings, open houses, newsletters, websites, and etc.

Outreach strategies for public engagement of EJ populations should consider access, timing, location, language, literacy, and the availability of technology. Available time periods for outreach to EJ populations may be limited by employment shifts, childcare needs, or public transit schedules. Alternative language and/or oral communications might need to be used in place of traditional written information. EJ populations may also be limited in their ability to attend meetings due to lack of adequate transportation. Meetings may be conducted in places where the targeted EJ population frequently visits.

Evaluating Mitigation

If disproportionate effects are identified, the EJ analysis should seek to minimize effects to EJ populations through design modifications or implementation of mitigation measures. If mitigation measures are necessary, they should be developed in conjunction with the affected EJ community. Mitigation measures require approval from the Federal Highway Administration (FHWA) before being conducted. Once the approval has been received add the agreement from FHWA to the NEPA Document. Potential mitigation measures include:

- Visual screening
- Improved lighting
- Improved pedestrian infrastructure
- Available relocation opportunities within the community
- Enhanced community interaction and education
- Adjusted construction phasing
- Noise reduction measures

- Landscaping (aesthetic and environmental benefits)
- Multimodal transit amenities
- Rehabilitation of community amenities affected
- Reduced costs if tolls are a part of the project.

Documentation of EJ Analysis

Appropriate documentation of the NEPA decision-making process shall be included in the Environmental Impact Statement (EIS), Environmental Assessment (EA), Finding of No Significant Impact (FONSI), or Categorical Exclusions (CE's).

For projects where an EJ analysis has been conducted, a determination of one of the following shall be made:

1. No minority or low-income populations present in the project area;
2. No disproportionately high and adverse effects to minority or low-income populations; or
3. The project has a disproportionately high and adverse effect to minority or low-income populations.

If the project has no minority or low-income populations present in the project area OR does not have a disproportionately high and adverse effect to minority or low-income population, the following statement shall be included in the NEPA document: "No known minority or low-income populations have been identified that would be disproportionately high and adversely affected by this project. Therefore, this project has met the provisions of Executive Order 12898."⁹

Copies of all pertinent information concerning EJ populations, as well as data, analyses, and outreach activities shall be uploaded to the Socioeconomic folder.

Projects with disproportionately high and adverse effects to low-income or minority populations shall be documented, along with any mitigation measures in the appropriate sections of the NEPA Document. All public involvement that has occurred shall be documented in the correct section of the NEPA document. The supporting documentation shall be included as an appendix to the document.

Reevaluations

Reevaluations shall capture changes that occurred during the Right-of-Way and all subsequent project phases that altered previous findings of no disproportionately high and adverse impacts to EJ populations. Additional mitigation measures shall be captured in the reevaluation.

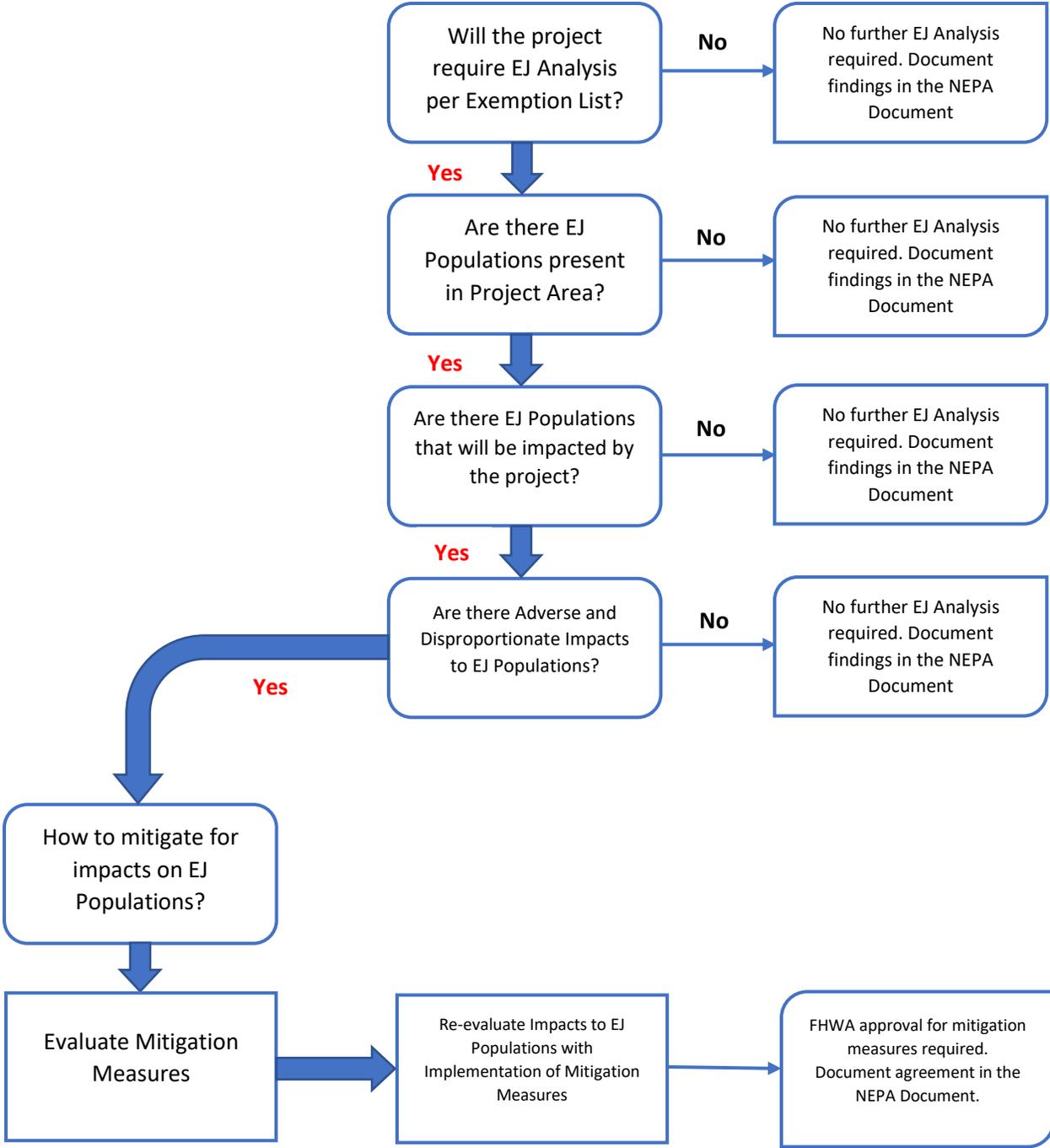
⁹ See Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations for information on federal actions concerning environmental justice.

References:

- 2017 FHWA-KYTC Highway Design Manual: *Sec. HD-601, Public Involvement*. KY: Transportation Cabinet. (27 March 2017). Retrieved from [Highway Design \(ky.gov\)](#)
- 2018 Categorical Exclusion Programmatic Agreement: *Programmatic Agreement Between the Federal Highway Administration, Kentucky Division and the Kentucky Transportation Cabinet Regarding the Processing of Actions Classified as Categorical Exclusion for Federal-Aid Highway Projects*. KY: Transportation Cabinet. (5 March 2018). Retrieved from [Kentucky Bizhub C554e Copier-20180308164011](#)
- 2019 Categorical Exclusion Guidance Manual. KYTC Division of Environmental Analysis. (Updated 15 October 2019). Retrieved from [Categorical Exclusion Guidance Manual.pdf \(ky.gov\)](#)
- Executive Order 12898: *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. *Federal Register* 59:32 (16 February 1994). Retrieved from [12898.pdf \(archives.gov\)](#)
- FHWA Order 6640.23A: *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. U.S. DOT. (14 June 2012). Retrieved from [FHWA Order 6640.23A - Resources | Federal Highway Administration \(dot.gov\)](#)
- U.S. EPA. 2014b. *Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples*. Washington, DC: U.S. EPA. (14 May 2014). Retrieved from [ej-indigenous-policy.pdf \(epa.gov\)](#)
- U.S. EPA. 2015a. *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*. May 2015. Retrieved from [Guidance on Considering Environmental Justice During the Development of Regulatory Actions \(epa.gov\)](#)

Appendix A

Figure 1: Framework for Project Level Environmental Justice Analysis



EJ GIS Tutorial

This tutorial is designed to give a graphic representation of EJ populations and project impacts on these populations. Because the impact of individual projects can vary in scale and design, it is important to identify not only what, but who is being affected by the project.

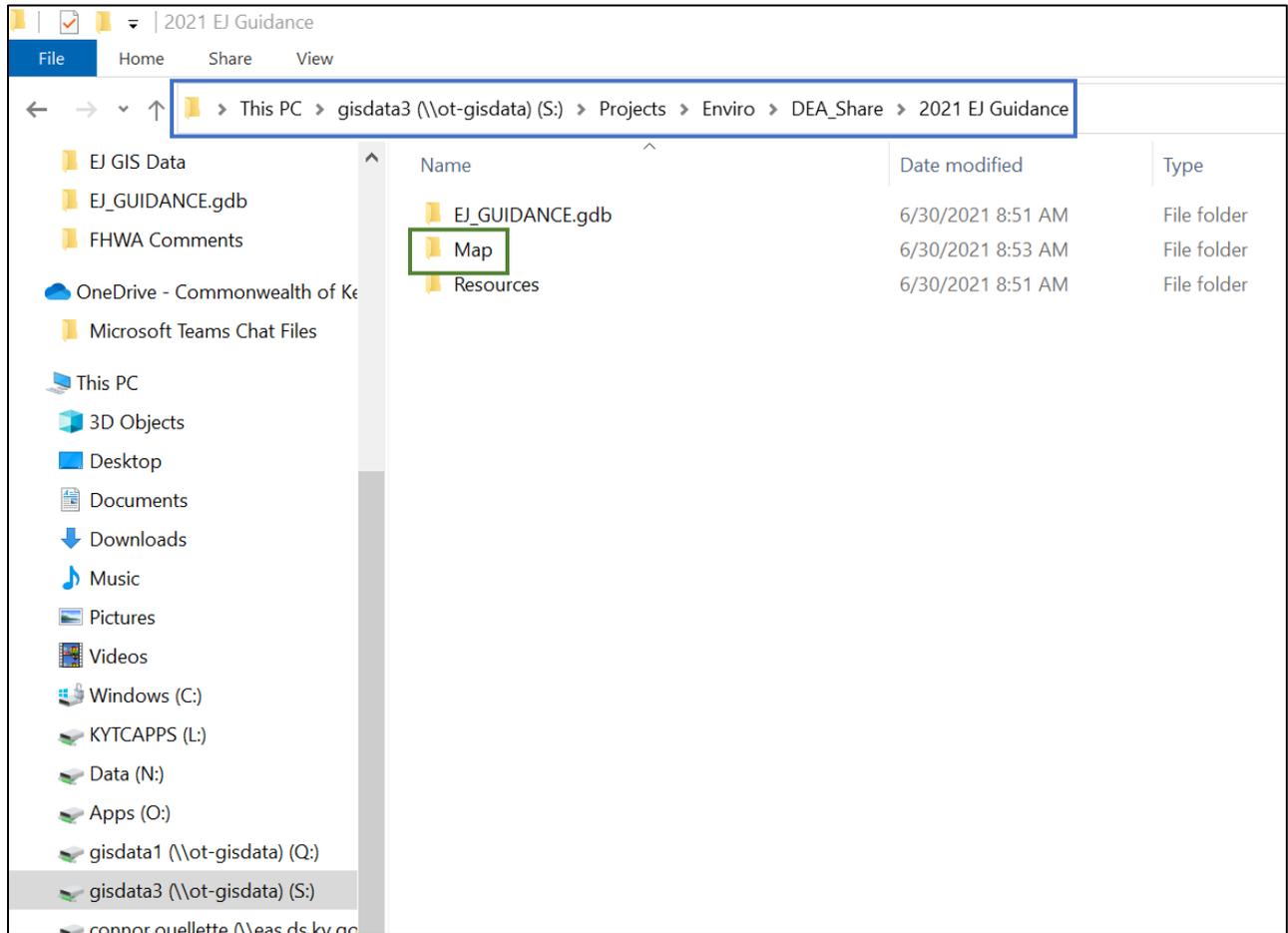
This tutorial teaches the user how to locate and open the KYTC EJ ArcGIS Template Map & Layout, locate the project area, the statistical data, interpret the statistical data, and insert the appropriate information into the map layout. Finally, this tutorial demonstrates how to export the final map layout into a format that is easier to distribute and interpret.

All of the data used in this tutorial was acquired from [Index of /EJSCREEN/2020 \(epa.gov\)](https://www.epa.gov/ej/index-of-ej-screen/2020) and the gisdata3 (\\ot-gisdata) (S:) KYTC shared drive.

Locating and Opening the KYTC EJ ArcGIS Blank Map & Layout

Guidance for KYTC Staff

Step 1: Locate and open the blank map document with pre-drawn maps and the pre-formatted map layout. Open file explorer and navigate to the (S:) drive. Follow the path **This PC > gisdata3 (\\ot-gisdata) (S:) > Projects > Enviro > DEA_Share > 2021 EJ Guidance**. Open the **Map Folder** and load the **KYTC EJ ArcGIS Blank Map and Layout** map document located in the Map folder. This ArcMAP document has predefined settings, which allows users to visualize and interpret EJ Population data.

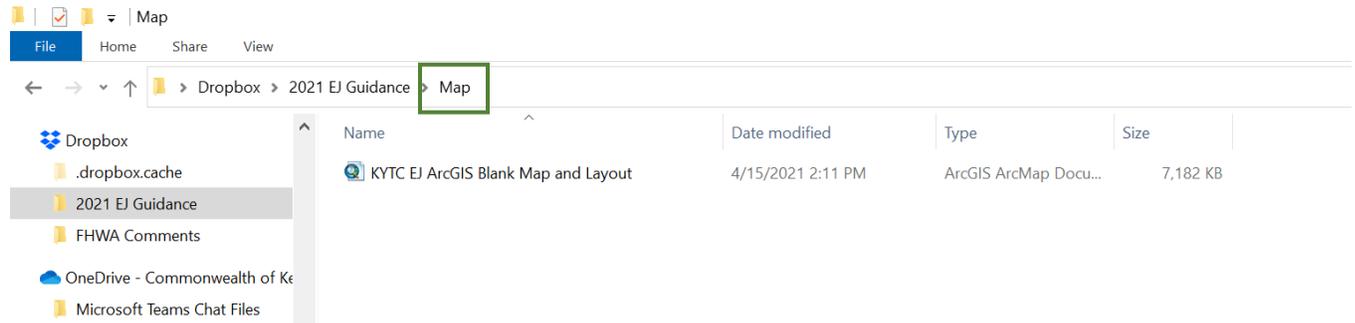


Alternate Guidance for Environmental Consultants

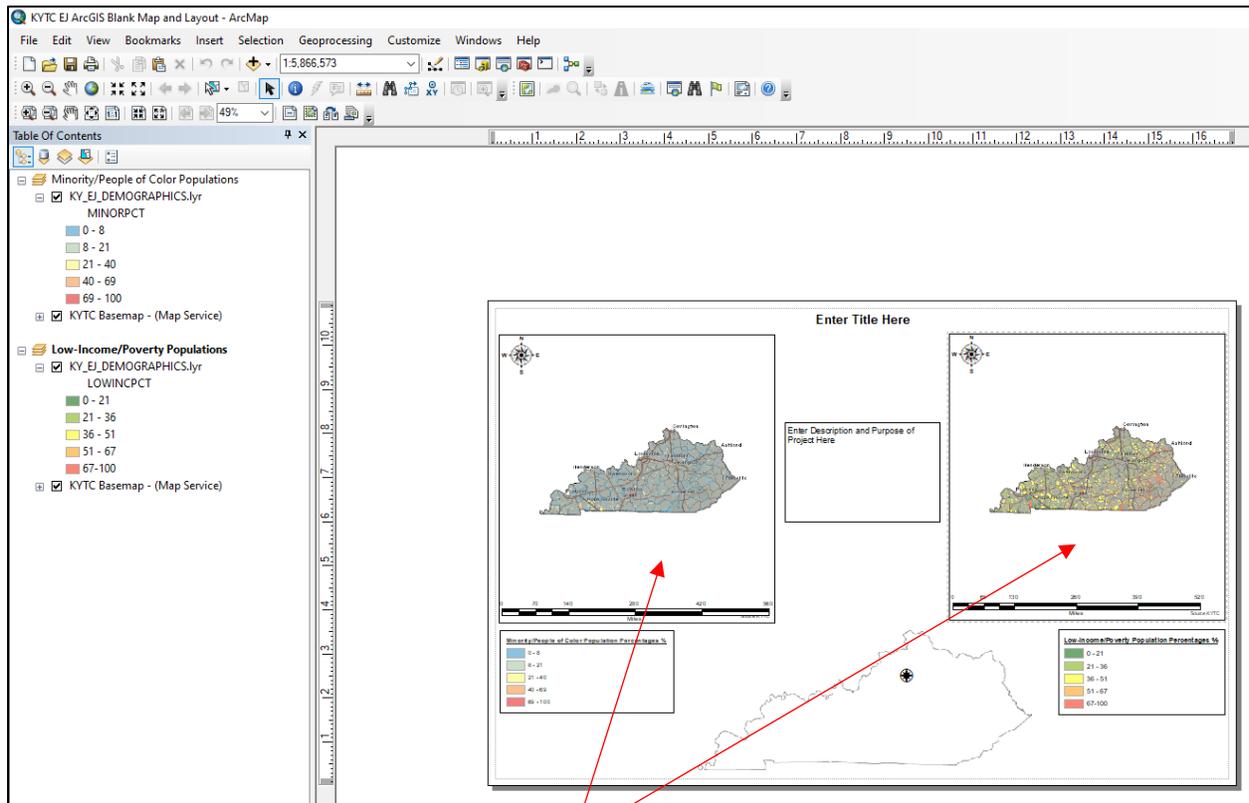
Step 1: Follow the Dropbox link below to access the 2021 EJ Guidance folder.

<https://www.dropbox.com/sh/tqv9m1rx5uetceg/AADs500eBZd8OHYsuXiA5jwZa?dl=0>

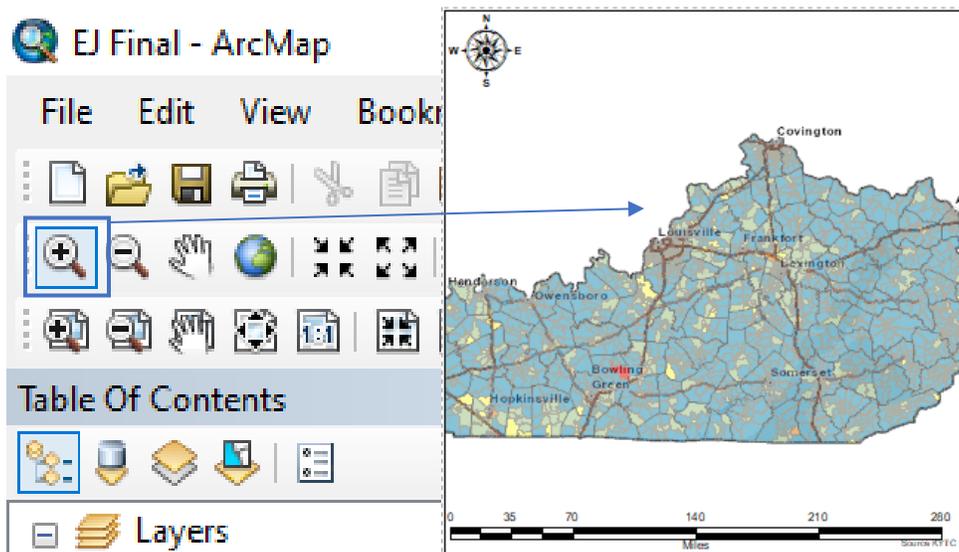
Open the **Map Folder** and load the *KYTC EJ ArcGIS Blank Map and Layout* map document located in the Map folder. This ArcMAP document has predefined settings, which allows users to visualize and interpret EJ Population data. Steps 2-4 are the same for consultants as KYTC staff.



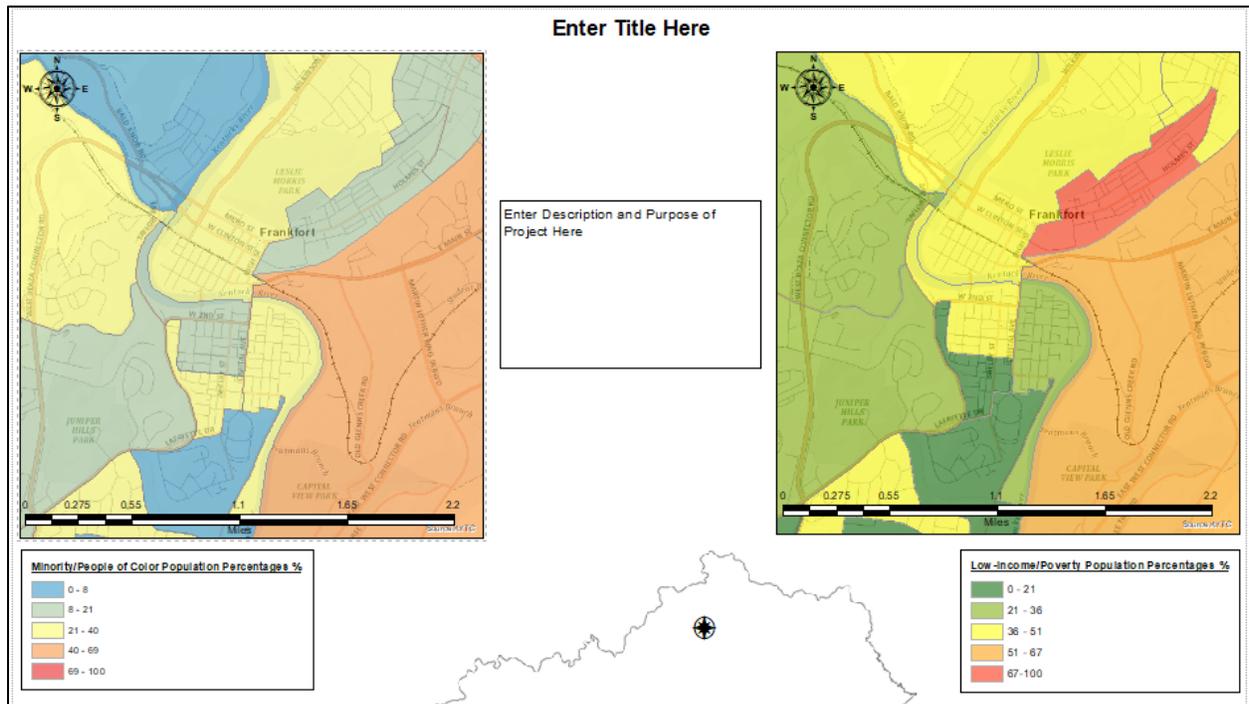
Once the document has loaded, the user should be defaulted to the map layout view seen below.



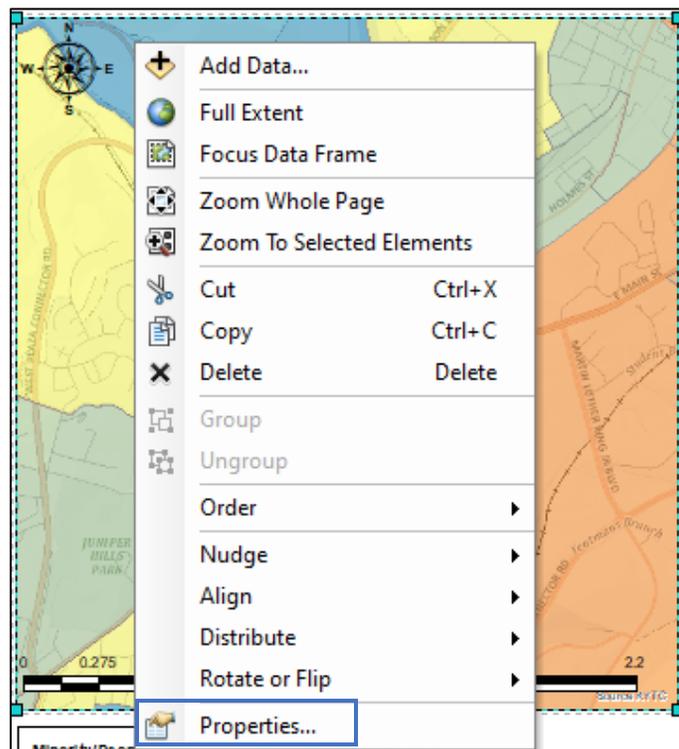
Step 2: Select one of the two embedded map frames within the map layout. Use the **Zoom In** tool to locate the proposed project area. Keep in mind that the map frame on the left will represent Minority distribution data in the proposed project area and the map frame on the right will represent Low-income data in the proposed project area. Repeat the same process for the second map, so that both data frame maps show the zoomed-in extent of the proposed project area.



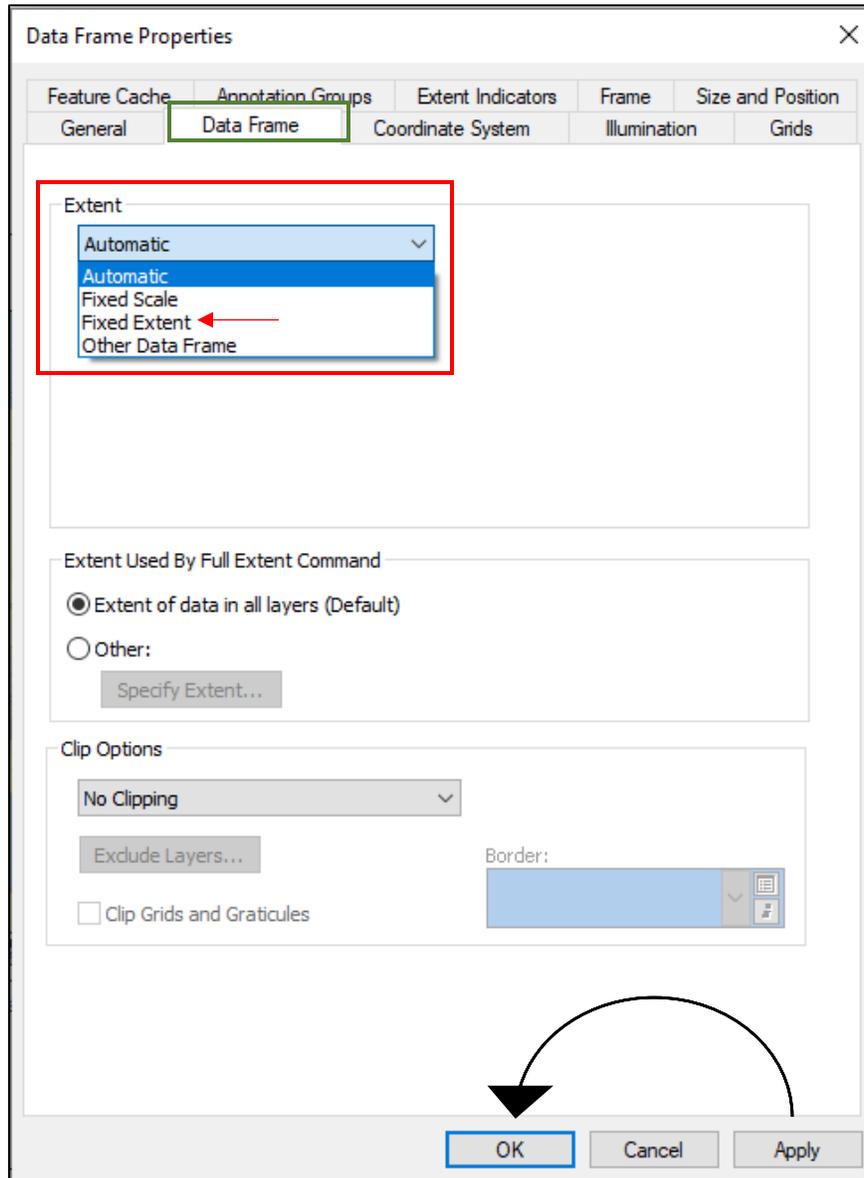
The map layout should appear similar to the figure below.



Step 3: The content of the maps should be locked, any editing to the map layout will not affect the map templates. Select one of the maps in the layout and right-click. Select **Properties...** from the pop-up window.

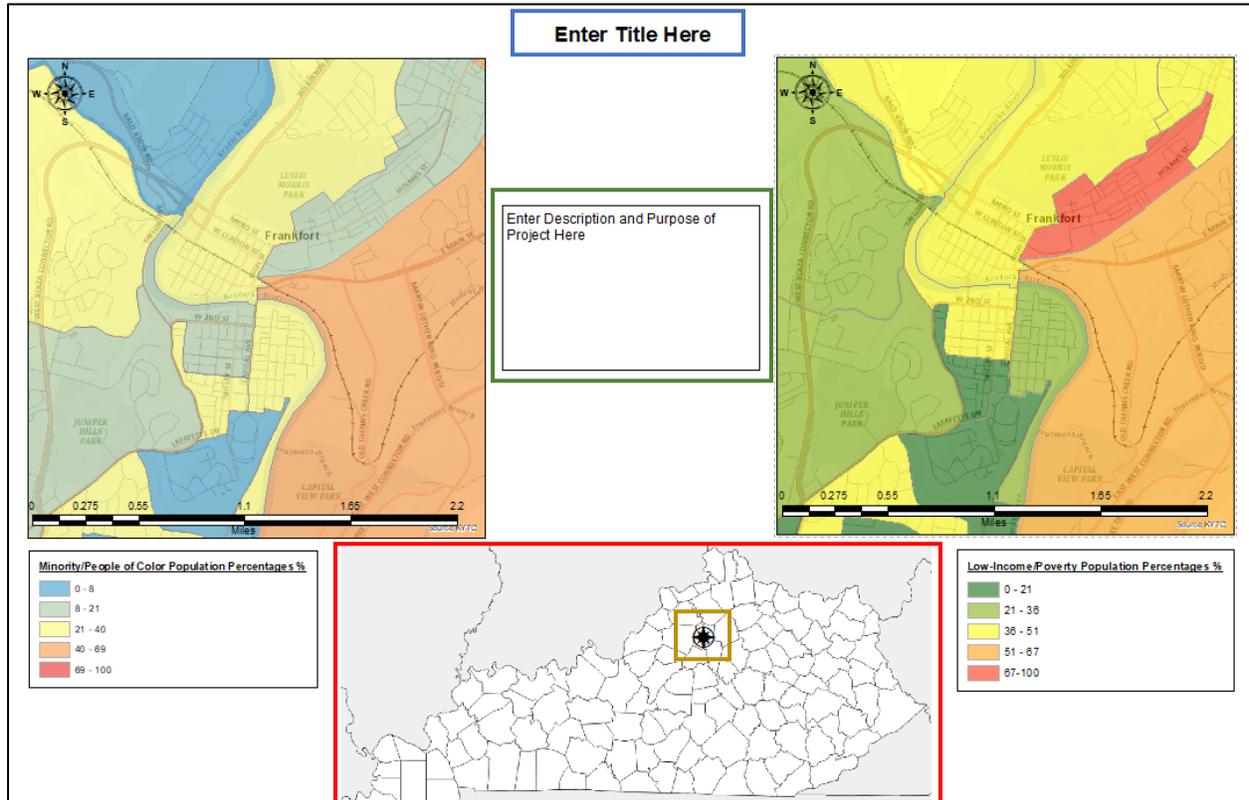


A pop-up window labeled **Data Frame Properties** will appear. Navigate to the **Data Frame** tab. Under **Extent**, click the drop list and select **Fixed Extent**., click Apply, then click OK. Repeat this step for the other map. Both maps should now be fixed to the proposed project area in question.



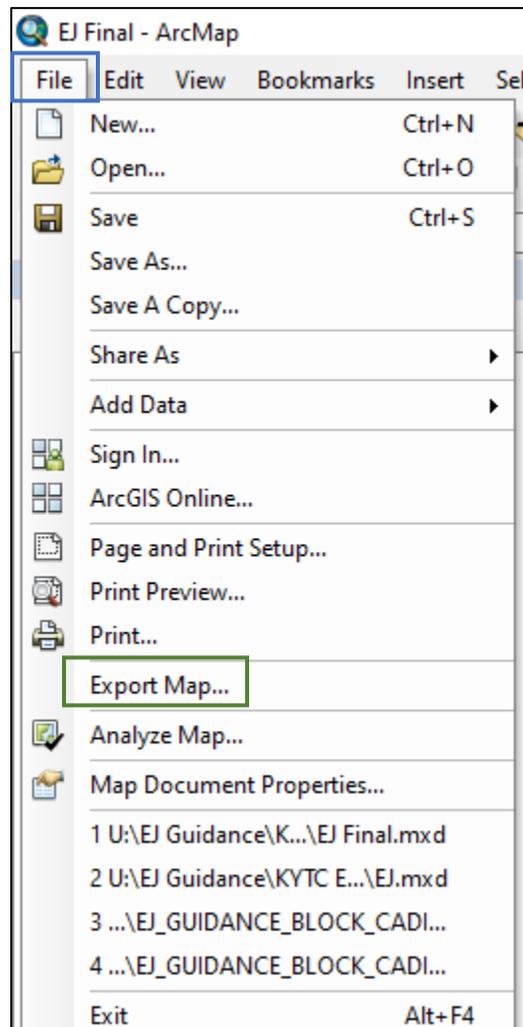
In this example the final layout has been produced, including the two maps for Minority/People of color populations and a map for Low-Income/Poverty populations, additional information must be entered into the map layout document.

Step 4: In this example, the final map layout has been produced **A Title**, a **description of the project**, and a **map showing the location of the proposed project** must also be included in the final layout. A blank map of Kentucky has been embedded into the layout with a place marker in the default location of Frankfort, KY. **Click/select the place marker** and navigate to your proposed project area. The project is now ready to be exported and distributed to the correct parties.

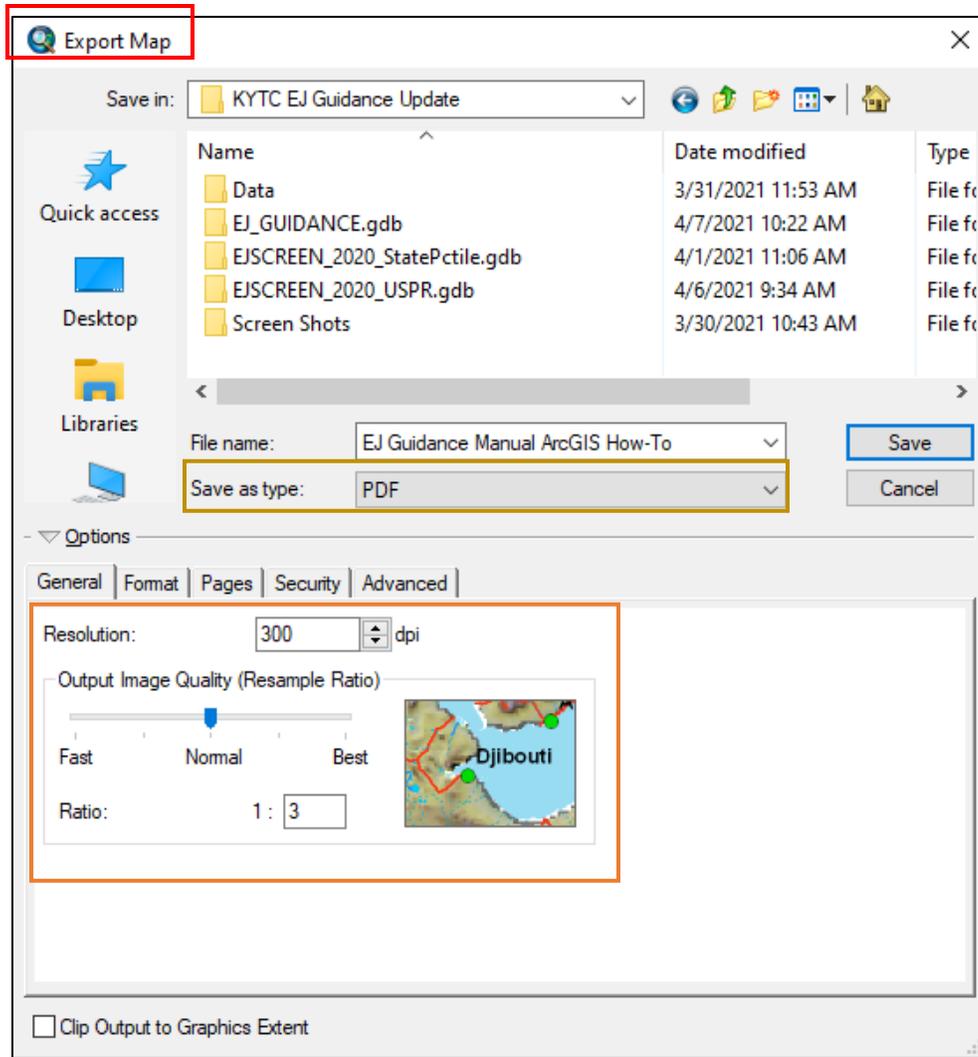


Exporting the Finished Maps and Layout

Step 1: To export the final map layout click **File** on the top tool bar and select **Export Map...** from the drop-down menu.



A pop-up window will appear labeled **Export Map**. Select a location and a name for the save file. Change the save type to PDF by clicking the drop-down list next to **(Save as type:)**. Change the **Output Image Quality (Resample Ratio)** to Normal. Fast or Best can also be selected for image quality, but keep in mind Fast will produce a pdf with low resolution and Best will take significant time to export.



Please contact the Division of Environmental Analysis for additional questions or guidance.