Slide 1: Environmental Justice Analysis

Sergio Ritacco

Transportation Planner

TPB’s Access for All Advisory Committee

February 27, 2023

Slide 2: Environmental Justice (EJ) Analysis Requirements

* What is the federal requirement? Analyze the impact of the LRTP (Visualize 2045) on “minority” populations and “low-income” populations (EJ population) to identify and address adverse ‘disparate impact’
* What is a ‘disparate impact’? An adverse plan impact that will be predominately borne or suffered by EJ populations and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-EJ population
* How does this fit with the TPB’s policy priorities? “…The TPB affirms that equity, as a foundational principle, will be woven throughout TPB’s analyses, operations, procurement, programs, and priorities…”

Slide 3: How does the TPB comply with its Environmental Justice requirements?

* Phase 1
	+ Identify small geographic areas in the region with high concentration of EJ populations called
	Equity Emphasis Areas (EEAs)
	+ Methodology adopted in 2017
	+ Latest mapping update July 2022
* Phase 2
	+ Use TPB’s model to examine changes between today and 2045 in mobility and accessibility within EEA and non-EEA areas
	+ Determine if Visualize 2045 imposes a disparate impact on EEAs in comparison to Non-EEAs

Slide 4: EJ Analysis Phase II Methodology

* Use land use changes and transportation projects from our current LRTP (Visualize 2045 approved in July 2022)
* Analyze 35 accessibility and mobility measures to examine the impact of those land use changes and transportation projects
* Analysis assumes static location of EEAs, Medical facilities, and Higher-Ed institutions through 2045
* Analysis is limited to regional-level findings (EEAs as a whole vs non-EEAs) and not to any individual/subset of EEAs
* Typical uncertainties associated with forecast-like analyses

Slide 5: EJ Analysis Phase II Measures

* 35 measures in total examining the impact of land use changes and transportation projects in various ways:
	+ Access to All Jobs, Retail Jobs, Medical Facilities, & Higher Education institutions using various modal options and times of day
	+ Commute times to work and travel times to Medical Facilities and Higher Education institutions using various modal options and times of day
	+ Percent of Population with access to High-Capacity Transit and access to Bus service

Slide 6: Environmental Justice Determination Visualize 2045 (2022 LRTP update)

* Determination: The 2022 LRTP, Visualize 2045, does not have an adverse disparate impact on “low-income” and “minority” populations
* The planned transportation projects of Visualize 2045 will have a positive impact on mobility and accessibility that would otherwise not take place
* Depending on the measure, the magnitude of change in burden or benefit are different between EEAs and Non-EEAs

Slide 7: LRTP Elements and EJ Analysis

Figure showing the interrelationship of Growth and Land Use, Transportation Investments, and Mobility and Accessibility

Slide 8: Land Use and Growth in LRTP

* Present: 5.7M people, 3.4M jobs, and 141 Regional Activity Centers (RAC)
* By 2045: Additional 1.3M people and 0.9M jobs
* By 2045: 67% of all jobs and only 35% of the population will be in RACs
* By 2045: 50% of all jobs and only 25% of people will be within ½ mile of a High-Capacity Transit stations
* Additionally, the distribution of this growth is uneven between the eastern and western parts of this region.

Slide 9 and 10: Environmental Justice Analysis Results, Growth Impact, Accessibility

* Growth Impact Only
	+ Burdens across all Auto measures
	+ Transit measures see benefits as jobs & people are added close to existing transit

Slide 11: Environmental Justice Analysis Results Transportation Investments

* In Visualize 2045, only 19% of expenditures are available for system expansion and enhancement, providing a 5% and 27% increase in roadway and high-capacity transit miles, respectively

Slide 12: Environmental Justice Analysis Results Transportation Investments

* Two maps presenting the distribution of transportation projects and the location of EEAs in the Washington, DC region.

Slide 13 and 14: Environmental Justice Analysis Results, Projects Impact, Accessibility and Mobility

* Project Impact Only
	+ Benefits across all Auto and Transit measures
	+ Improved accessibility to jobs, medical care facilities, and post-secondary education

Slide 15 and 16: Environmental Justice Analysis Results, Visualize 2045 Impact, Accessibility and Mobility

* Visualize 2045 Impact
	+ Congestion and delay negatively impact auto-based measures
	+ EEAs and Non-EEAs track similarly though EEAs often benefit slightly less and burden slightly more

Slide 17: Environmental Justice Analysis Summary

* Visualize 2045 complies with the federal EJ requirement for disparate impact on “minority” and “low-income” populations and
the impact of its transportation projects are positive
* For auto-based travel, more people and jobs increases congestion and delay impacting EEAs ability to access and travel to where jobs are increasing
* For transit-based travel, accessibility and mobility are improving as the region maximizes the use of the existing system as well as adding more transit projects
* The interrelationship between land use changes and the transportation projects it aims to serve can lead to implicit regional equity challenges
* Assumptions used to conduct this analysis (future location of EEAs and confidence levels of model results) provide important context to results.

Slide 18: Contact

Sergio Ritacco

Transportation Planner

(202) 962-3232

sritacco@mwcog.org