

AUGUST
2024

ENVIRONMENTAL JUSTICE COUNCIL MEETING

Hosted by

Oregon Environmental Justice Council

This meeting will be recorded and available on the Environmental Justice Council website:
<https://www.oregon.gov/gov/policies/pages/environmental-justice-council.aspx>

Environmental Justice Council Members

- Chair Quinn Read
- Vice Chair Valentin Sanchez
- Youth Rep – Danny Cage
- OCAPIA Liaison – Aparna Rajagopal-Durbin
- OCBA Liaison – Ben Duncan
- OCHA Liaison – Gustavo Morales
- LCIS Liaison – Vacant
- Jim Kreider
- Tiffany Monroe
- Katie Murray
- Huy Ong
- Victoria (Vee) Paykar
- Amanda Sullivan-Astor



Today's Agenda

- Agenda Item #2: EJC Leadership Updates
- Agenda Item #3: Public Comment #1
- Agenda Item #4: Decision Point 4
- Agenda Item #5: Break Before Working Lunch
- Agenda Item #6: Project Timeline & Community Engagement Opportunities
- Agenda Item #7: EJ Mapping Tool Extension Request
- Agenda Item #8: Public Comment #2
- Agenda Item #9: Public Comment Council Discussion
- Agenda Item #10: Adjourn

August 7, 2024





AGENDA ITEM #2

EJC Leadership Updates

Leadership Updates



New Member

- Aparna Rajagopal-Durbin
- Liaison to Oregon Commission on Asian and Pacific Islander Affairs



LUBGWMA Letter

- EJC Review pending



Public Comment Consistency

- 2 public comment periods
 - 1st after leadership updates
 - 2nd at the end of the meeting
- 3 minutes per person
- Public comment may also be submitted in writing in advance

Leadership Updates - DEQ



Budget

- \$50,000 one-time appropriation
- Support listening session and community engagement activities
- Expires June 30, 2025



Research Analyst Vacancy

- Latest recruitment did not result in a hire
- DEQ evaluating alternative approaches to meeting EJ Mapping Tool needs

Leadership Updates – LCIS Engagements



LCIS Meeting

- February 20, 2024
- Briefed tribal government leaders on EJC LCIS liaison vacancy
- Provided Environmental Justice Mapping Tool orientation



LCIS Cultural Resources Cluster Meeting

- July 23, 2024
- Provided Environmental Justice Mapping Tool orientation
- Confirmed that government to government consultations will be initiated by EJC Chair
- Provided opportunities for tribal engagement
 - Tribal focused events
 - Government to Government Consultations
 - Cohosting listening sessions

Agency Annual Reports Status

DEQ

- Completed: Vee Paykar
- Pending: Quinn Read

DLCD

- Completed: Vee Paykar
- Completed: Aparna Rajagopal

DOGAMI

- Completed: Katie Murray

DSL

- Completed: Amanda Sullivan-Astor
- Pending: Danny Cage

ODA

- Completed: Katie Murray
- Pending: Ben Duncan

ODF

- Completed: Amanda Sullivan-Astor
- Completed: Katie Murray

ODFW

- Completed: Amanda Sullivan-Astor
- Pending: Quinn Read

ODOE

- Pending: Jim Kreider
- Pending: Huy Ong

ODOT

- Completed: Vee Paykar
- Pending: Huy Ong

OHA

- Pending: Jim Kreider
- Pending: Danny Cage

OPRD

- Pending: Ben Duncan

OPUC:

- Pending: Jim Kreider
- Pending: Danny Cage

OSFM

- Completed: Amanda Sullivan-Astor

OSMB

- Pending: Jim Kreider
- Pending: Ben Duncan

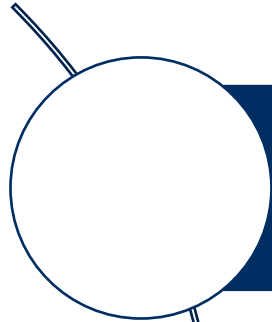
OWEB

- Completed: Aparna Rajagopal
- Completed: Amanda Sullivan-Astor

OWRD

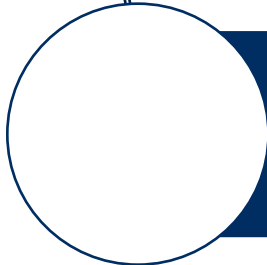
- Completed: Aparna Rajagopal
- Pending: Huy Ong

Annual Report Progress



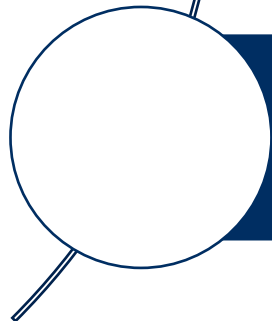
Initial Annual Report Assignments

- June 13, 2024



Initial Due Date

- July 12, 2024



New Due Date

- August 23, 2024



AGENDA ITEM #3

Public Comment



Agenda Item #4

Decision Point 4 Update

DECISION POINTS 1-10

#1

• Indicator domain selection: Completed April 2024

#2

• Geographic units (tracts, grids, etc.): Completed April 2024

#3

• Geographic designations: Completed June 2024
• Geographic comparisons: Completed June 2024

#4

• Domain/indicator weighting: Upcoming October 2024

#5

• Domain aggregation (multiplicative, additive, etc.): Upcoming October 2024

#6

• Data standardization (percentiles, z-scores, other): Upcoming October 2024

#7

• Indicator selection - community listening session priorities and data gaps: Initial Discussion Projected December 2024

#8

• Sensitivity analysis results - revisit indicator selection and data gaps

#9

• EJ community thresholds/flags

#10

• EJ mapping tool visualizations & reporting

DECISION POINT #4 – WEIGHTING METHODS

- No weighting – CDC Environmental Justice Index/Environmental Justice Screening Method
- Subdomain weighting – CalEnviroScreen/Washington Environmental Health Disparities Map/Colorado EnviroScreen
- Regression domain weighting – California Healthy Places Index
- Principal component analysis – EPA Environmental Quality Index
- Participatory methods – technical experts + community preference surveys + statistics

DECISION POINT #4 – Method Evaluation

Build a working dataset for Oregon Census tracts

- Select Indicators from the U.S. Climate Vulnerability Index
- Categorize indicators by subdomain – environmental exposures, environmental hazards, climate change risks, built environment, human health, social factors
- Standardize raw indicator values as percentiles
- Analyze weighting methods
- Compare results – tracts in the 80th percentile by community designation

DECISION POINT #4

Equal Weighting Method - CDC Environmental Justice Index

Environmental
Exposures

+

Environmental
Hazards

+

Climate
Change Risks

+

Built
Environment

+

Human
Health

+

Social
Factors

- All indicators and domains are weighted equally.
- Domains are only weighted the same if they have an equal number of indicators.

"Due to a lack of scientific evidence supporting a specific weighting scheme, all modules are weighted equally in calculating the Overall EJI Score."

DECISION POINT #4

Equal Weighting Method - Considerations

- The weighting method is easy to explain.
- The only way to balance domain weighting is by including an equal number of indicators in each domain.
- We will have no rationale for weighting indicators independently.
- Strategic indicator selection will be required to assure community concerns are prioritized.

DECISION POINT #4

Subdomain Weighting Method - Colorado EnviroScreen

PLACE
Environmental Exposures x 1.0
+
Environmental Hazards x 0.5
+
Climate Change Risks x 0.5
+
Built Environment x 0.5
÷ 2.5

X

PEOPLE
Human Health
+
Social Factors
÷ 2.0

DECISION POINT #4

Subdomain Weighting Method - Considerations

- The subdomain weighting method is slightly more difficult to explain than equal weighting.
- We do not currently have a rationale for weighting climate change risk and the built environment half as much as environmental exposures.
- As with equal weighting, we will not have a rationale for weighting indicators independently.
- Strategic indicator selection will be required to assure community concerns are prioritized.

DECISION POINT #4

Regression Weighting Method - California Healthy Places Index



- Domains are weighted by the strength of their relationship with life expectancy at birth.
- All domains are guaranteed a minimum of 5% weight.

DECISION POINT #4

Regression Weighting Method - Considerations

The Methodology Workgroup determined that a regression weighting method is not a good fit because:

- Life expectancy at birth has much stronger associations with human health and social factors than environmental indicators. Therefore, environmental concerns are undervalued in the model.
- The Oregon EJ Mapping Tool is directed to be an environmental justice tool, not a social determinants of health tool.

DECISION POINT #4

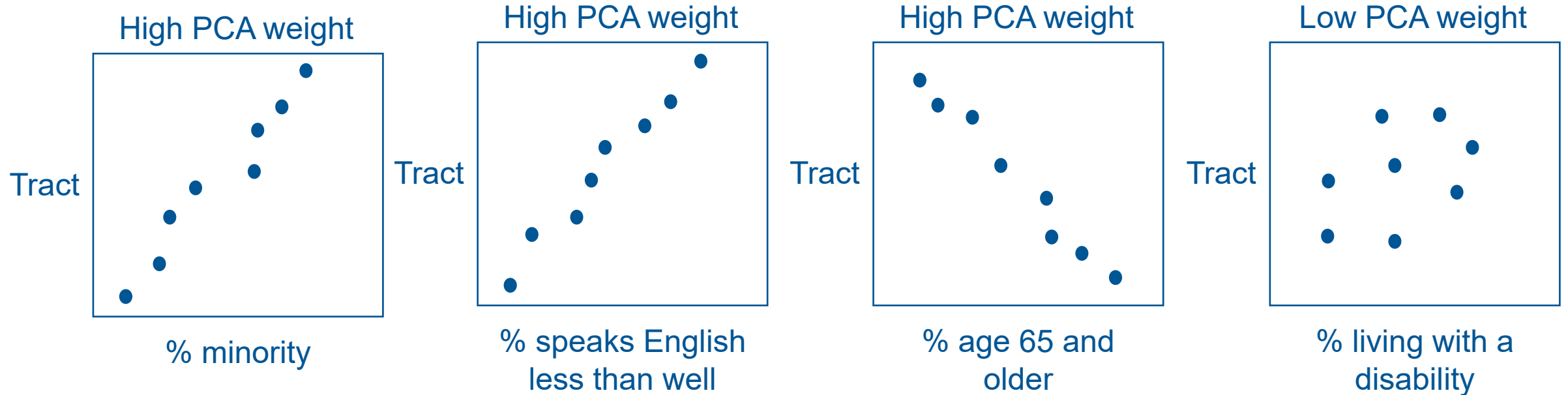
Principal Component Analysis – EPA Environmental Quality Index



- PCA is a technique used to simplify data and make it easier to analyze.
- Indicators are loaded into a variance matrix and the indicators are weighted based on their relationships with the other indicators inside the domain.
- Indicators with higher variation in their scores will receive higher weights. Indicators with lower variation in their scores will receive lower weights.

DECISION POINT #4

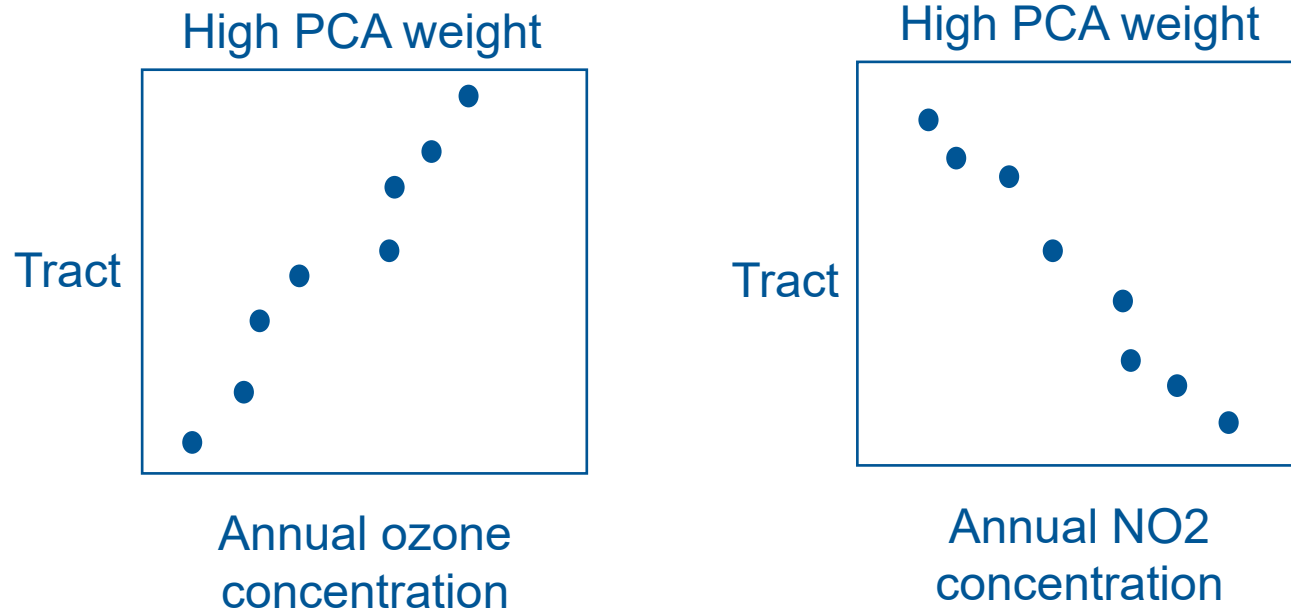
Principal Component Analysis Weighting



- There is a positive relationship between communities of color and people who speak English less than well with high variation in indicator scores.
- There is an inverse relationship with older populations, but similar variation in indicator scores.
- There is low variation in indicator scores for people living with a disability

DECISION POINT #4

Principal Component Analysis Weighting



$$\begin{aligned} &\text{Tract X:} \\ &\text{NO}_2 = 0.98 \\ &+ \\ &\text{Ozone} = 0.02 \\ &\text{AQ index score} = 0.5 \end{aligned}$$

- Tracts with high NO₂ concentrations tend to have low ozone levels.
- Some inverse relationships can cause indicators to cancel each other out.
- This means we will need to be very strategic with indicator selection.

DECISION POINT #4

Principal Component Analysis Weighting Method - Considerations

- Principal component analysis is complex and more difficult to explain than equal weighting and subdomain weighting.
- Indicator weighting is determined by variance in the data, not impact on human health or quality of life. Strategic indicator selection will be required to assure community concerns are prioritized.
- It is possible to develop a rationale for indicator weight adjustments.

DECISION POINT #4

Participatory Methods

Participatory methods incorporate input from various stakeholders like technical experts, citizens, and elected officials to help assign weights.

- Budget Allocation – a budget of N points is given to experts to allocate to a small number of indicators. Community surveys are helpful.
- Analytical Hierarchy Process - experts identify the problem to be solved, possible solutions, and the criteria used to judge the alternatives.
- Conjoint Analysis - survey-based statistical technique that incorporates the preferences of individuals (e.g., experts or the public).

DECISION POINT #4

Participatory Weighting Methods - Considerations

- Participatory methods can be used to combine community input with statistical analysis to create weighting schemes.
- Conjoint analysis is a good fit for developing community-driven indicator weighting because it relies heavily on community preference.
- Data collection for participatory weighting is time and labor-intensive requiring input from communities and technical experts.



Agenda Item #5

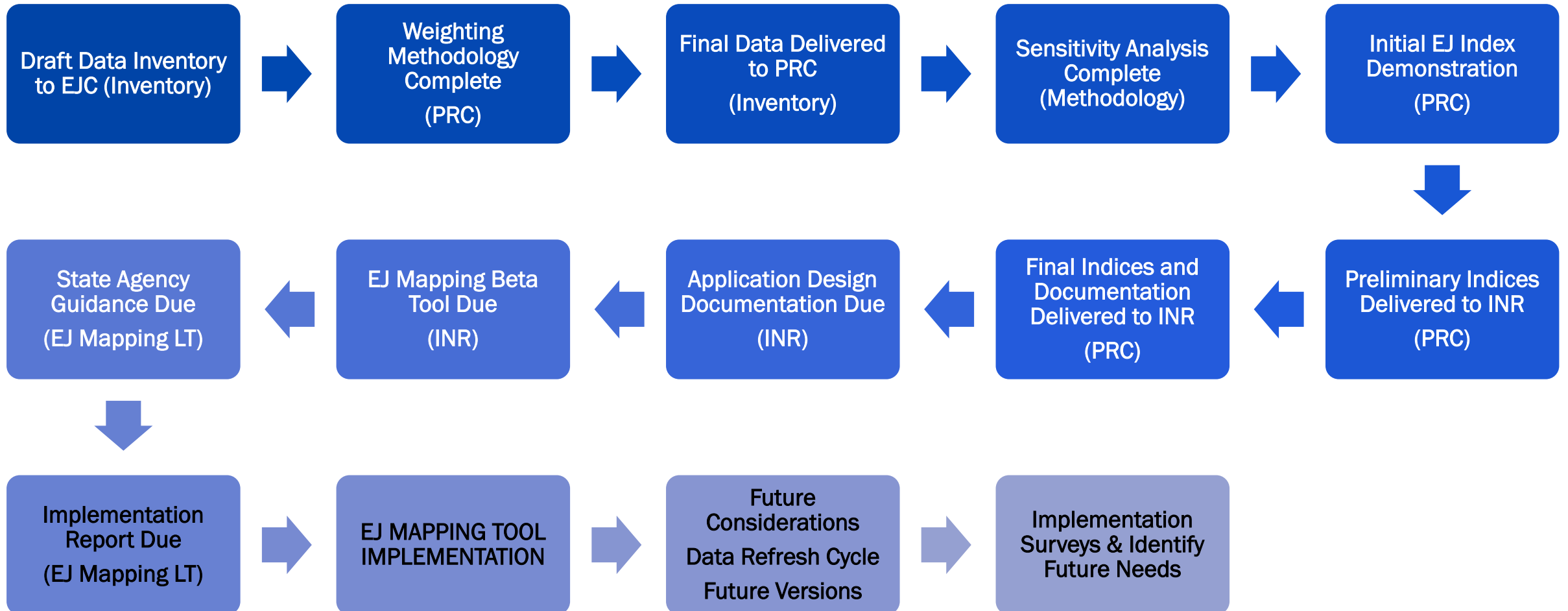
Break before Working Lunch (return at 12:00 pm)



Agenda Item #6

Project Timeline & Community Engagement Opportunities

Milestone Timeline



EJC Meetings Needed: Due Date 12/31/2026

August 2024	Decision Point 4 Orientation
October 2024	Decision Points 4, 5, & 6
December 2024	Decision Point 7 Orientation
February 2025	Decision Point 7 Deeper Dive
April 2025	Decision Point 7 Indicator Selection Determinations
June 2025	Decision Point 8 Sensitivity Analysis Part 1
July 2025	Decision Point 8 Sensitivity Analysis Part 2
August 2025	Decision Point 8 Sensitivity Analysis Part 3
September 2025	HB 4077 Deadline & Community Listening Session Analysis
October 2025	Local Government Feedback & Tribal Government/Community Feedback
November 2025	State Agency Focus Group Feedback
December 2025	Decision Point 9 Community Thresholds & 10 Application Design
February 2026	Decision Point 9 Community Thresholds & 10 Application Design
April 2026	Application Testing Part 1
June 2026	Application Testing Part 2
August 2026	Beta Testing & Guidance Development
October 2026	Beta Testing & Guidance Development
December 2026	EJ Mapping Tool Implementation Report

EJC Meetings Needed: Due Date 6/30/2027

August 2024	Decision Point 4 Orientation
October 2024	Decision Points 4, 5, & 6
December 2024	Decision Point 7 Orientation
February 2025	Decision Point 7 Deeper Dive
April 2025	Decision Point 7 Indicator Selection Determinations
June 2025	Decision Point 8 Sensitivity Analysis Part 1
August 2025	Decision Point 8 Sensitivity Analysis Part 2
September 2025	HB4077 Statutory Deadline
October 2025	Decision Point 8 Sensitivity Analysis Part 3
December 2025	Community Listening Session Analysis
February 2026	Local Government Feedback & Tribal Government/Community Feedback
April 2026	State Agency Focus Group Feedback
June 2026	Decision Point 9 Community Thresholds & 10 Application Design
August 2026	Decision Point 9 Community Thresholds & 10 Application Design
October 2026	Application Testing Part 1
December 2026	Application Testing Part 2
February 2027	Beta Testing & Guidance Development
April 2027	Beta Testing & Guidance Development
June 2027	EJ Mapping Tool Implementation Report

Opportunities for Community Feedback

Online Surveys

- Pros:
 - Accessible with internet connectivity
 - Scalable for engagement in all communities in Oregon
- Cons:
 - Requires internet access for primary data collection
 - Paper surveys require data entry
 - Surveys can look like spam
- Potential Requirements:
 - EJC scoping sessions
 - Facilitator/State agency partnership for survey design
 - Facilitator survey analysis and reporting
 - Raffles could be used to generate interest particularly if targeted based on location
 - Translation to multiple languages
 - Community organizing plan to ensure participation throughout Oregon for diverse demographics

Conferences

- Pros:
 - Ability to target tribal governments and communities as well as local governments
 - Conferences are where large concentration of desired stakeholders are already convening
 - Opportunity to provide educational and training content
- Cons:
 - Potential costs for registration and travel
 - May require early morning, evening, and weekend work
 - Raffles and giveaways may be necessary to generate interest
- Potential Requirements:
 - Conference exhibitor registration
 - Staff attendance
 - Presentation development
 - In person logistics such as tablecloths, project literature, giveaways, etc.
 - Request for follow-up interaction
 - Language support

Community Events

- Pros:
 - Ability to meet community members where they are already convening
 - Ability to increase visibility of EJC and EJ Mapping Tool work
 - Ability to learn about community needs and desires
- Cons:
 - May require early morning, evening, and weekend work
 - Interest in EJ Mapping Tool may be limited based on the type of event
 - Raffles and giveaways may be necessary to generate interest
- Potential Requirements
 - Event exhibitor registration
 - Staff attendance
 - In person logistics such as tablecloths, project literature, giveaways, etc.
 - Request for follow-up interaction
 - Language support

Community Engagement Facilitator



Initial Facilitator Solicitations

- May 2024 through DAS price agreements



Status Update

- June 13, 2024
- No facilitator interest



Potential Facilitator Interviews

- Two interviews



Potential Facilitator Questionnaire

- Sent to both interviewees
- One questionnaire received



Next Steps

- EJC leadership collaboration with DEQ
- DEQ enters contract with potential facilitator
- Facilitator hosts community engagement scoping and outcomes with the EJC as ad hoc meeting or during EJC meetings





Agenda Item #8

EJ Mapping Tool Extension Request

Project Extension Rationale

Project Initiation Delayed

Key staff not hired until a year after HB 4077 enrollment in March 2022

EJC not regularly meeting until June 2023

EJC was established at the same time of project initiation

Onboarding new EJC members

Community Input Delayed

Statutory listening sessions have not commenced

- Additional opportunities for stakeholder and public input being considered

EJC desires community input to contribute to decision making

Difficulty Hiring a Facilitator

Lack of participant compensation for listening sessions

Limited budget of \$40,000

Project Complexity

Participation from multiple state agencies required

Increased complexity

- Decision Point 1 introduced an additional subdomain: Built Environment
- Decision Point 3 introduced six indices rather than one statewide index

Tribal communities are environmental justice communities and tribal governments are sovereign

Executing listening sessions with technical development increases complexity

Proposals

- September 2025 Deliverable: Initial EJ Index Demonstration
- 2025 EJC Meetings: Potentially 10
- Potential funding from new biennium
- Ability to use \$50,000 from short session towards additional feedback
 - Surveys
 - Conferences
 - Community Events

Due Date

December 31,
2026



- September 2025 Deliverable: Weighting Methodology Complete
- 2025 EJC Meetings: Potentially 6
- Potential funding from new biennium
- Ability to use \$50,000 from short session towards additional feedback
 - Surveys
 - Conferences
 - Community Events

Due Date

June 30, 2027



EJ Mapping Team Testimony – Academic Partners



OSU Institute for Natural Resources
Janine Salwasser & Myrica McCune

The process to develop a final EJ Mapping tool interface is dependent on PRC delivering to INR the final indices and documentation which is dependent on the Inventory group delivering final data to PRC which is dependent on completion of all the listening sessions focused on index selection and all the agencies delivering their data in a form that can be used by PRC.

For development of the EJ Mapping tool interface, INR will require at least six months to develop a beta version of the tool, followed by a 2-month user evaluation process performed online (focus groups with users and/or community listening sessions, one-on-one beta testing with 4-5 users, EJC member tool testing), followed by one to two months to make any refinements to EJ Mapping tool interface before EJC signs off on the final tool at an EJC meeting.



PSU Population Research Center
Ethan Sharygin & Gilbert Moncho

At this stage PRC need to extend arise from dependencies in workflow with other agencies.

PRC Deliverables

PRC will deliver two main items:

1. **Dataset with Socio-Demographic Variables from**
2. **Online Dashboard to Showcase and Customize the Initial Index**

Input Requirements:

1. Dataset Production:

- **Variables Inventory:** To produce the dataset, PRC needs to receive the list of variables from the inventory teams.
- **Timeline:** Once PRC receives the inventory (set to be delivered by March 2025), we will need a period of 1 to 2 months to produce the dataset.
- **Integration Period:** After the dataset is ready, we will need an additional 2 to 3 months to integrate it into our tool.
- **Completion Date:** If Data Inventory is available by March 2025, PRC will need until July 2025 to collect and integrate the demographic dataset.

2. Initial EJ Index Mockup Creation:

- **Weighting and Methodology:** To create the Initial EJ Index Mockup, PRC requires the final weighting and methodology provided by the methodology workgroup.
- **Replication Period:** Once the weighting methodology work is complete (set to be finalized by July 2025), PRC will need about 3 months to replicate the method in our tool.
- **Customization Feature:** The purpose of this replication is to allow customization of the weights and constituent indicators.
- **Completion Date:** If methodology work is finalized by July 2025, PRC will deliver the Initial EJ Index Mockup by November 2025.

EJ Mapping Team Testimony – State Partners



Inventory Team
Melissa Foltz

The data collection process is dependent on the EJC council's initial (draft) selection of indicators for the EJ index. Following indicator selection, the data inventory workgroup will reach out to agencies to begin the data collection process. The data collection process is on the critical path prior to the sensitivity analysis to be performed by the methodology workgroup.

Data collection is expected to take a minimum of two months. Agencies will be asked to transform their data into census tract boundaries prior to delivering to methodology team. The Data Inventory workgroup will work with the Methodology workgroup to provide direction to agencies to successfully complete the transformation. Data submission is expected to take some agencies additional time to complete the process due to complex data sets or limited resources.



Methodology Team
Eric Main

Feedback during beta testing may require the Methodology Workgroup and Environmental Justice Council to revisit and revise 1 or more of the 10 decision points. Revisions to data and/or indicator weighting will require 1 to 2 months for data refinement and sensitivity analysis.



Liaison Team
Hoang-Van Nguyen

The liaison team will lead identify which personnel will be included in focus groups and guidance development.

Guidance development is contingent on the INR beta tool being available for focus group discussion.



Agenda Item #8

Public Comment

PUBLIC COMMENT

3 minutes each

- Identify your name, organization, and provide testimony.
- In person testimony will be taken first.
- Virtual testimony will be via Zoom webinar.



3 MINUTES

2

1

0

:45

:30

:15

:00

2 MINUTES

1

0

:45

:30

:15

:00



Agenda Item #9

Public Comment Council Discussion



Agenda Item #10

Council Adjourn

THANK YOU!

Oregon Environmental Justice Council

For more information, please contact:

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