

# HB4077 Oregon Environmental Justice Mapping Tool Project Plan

*This is a working document and will be updated throughout the project as needed.*

**Date:** 11 October 2023

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## 1. CONTEXT

### Oregon's Environmental Justice Mapping Tool

In 2022, the Oregon Legislature passed [House Bill \(HB\) 4077](#), which directs the [Environmental Justice Council \(EJC\)](#), with staff support from the Department of Environmental Quality (DEQ) and the Oregon Health Authority (OHA), to develop an environmental justice mapping tool. **The purpose of the mapping tool is to provide geospatial information about Environmental Justice (EJ) impacts and to develop guidance for state agencies when adopting rules and policies.** The act further requires the EJC to follow an inclusive community engagement process to develop the mapping tool, and directs the EJC to establish technical collaboration with the Department of Administrative Services Office of Enterprise Information Services (DAS EIS); the Institute for Natural Resources at Oregon State University (OSU INR); and the Population Research Center at Portland State University (PSU PRC) to develop, maintain, and make the tool publicly available.

### Defining Environmental Justice

Under HB 4077, **environmental justice communities** are defined to broadly include communities of color, communities experiencing lower incomes, communities experiencing health inequities, tribal communities, rural communities, remote communities, coastal communities, communities with limited infrastructure and other communities traditionally underrepresented in public processes and adversely harmed by environmental and health hazards, including seniors, youth, and persons with disabilities. **Environmental justice** is defined as “equal protection from environmental and health risks, fair treatment and meaningful involvement in decision making of all people regardless of race, color, national origin, immigration status, income or other identities with respect to the development, implementation and enforcement of environmental laws, regulations and policies that affect the environment in which people live, work, learn, and practice spirituality and culture.”

## 2. ROLES AND RESPONSIBILITIES

The below table includes responsibilities *explicitly named in HB4077*, as well as those identified by the respective teams.

Team/Role	Responsibilities
EJC	1) Provide oversight and guidance; serve as decision-makers in each step of mapping tool development 2) <i>Review the mapping tool at least once every four years using the inclusive community engagement process [12(6)]</i>
EJC Coordinator	1) Facilitate communications between EJ mapping tool leadership team and EJC 2) Organize and schedule EJC meetings, including subcommittee meetings on EJ mapping tool development 3) Lead community engagement aspects of project, including planning and coordination of community listening sessions 4) Coordinate collaboration with natural resource agency EJC liaisons
DEQ	1) Build off identified set of environmental burden data layers and define priority data layers 2) Establish criteria for environmental burden data review and gap identification 3) Develop set of recommendations to support data review and update processes 4) Establish alignment with DEQ's data governance policy 5) Collaborate in quarterly meetings with West Coast EJ Tool group, additional as needed
Project Manager/ DEQ Tech. Lead	<u>Project Management</u> 1) Develop project plan in collaboration with leadership team 2) Organize project meetings, including scheduling, developing agendas, sharing notes/action items 3) Coordinate project communications and internal resources 4) Monitor project scope and progress toward deliverable deadlines; anticipate and respond to project delays 5) Create and maintain project documentation 6) Reports out project progress to EJC <u>Data Management &amp; Assessment</u> 1) Lead DEQ environmental burden data collection and assessment 2) Provide technical and research support in development of mapping tool methodological approach and index creation
OHA	1) Build off identified set of human health burden data layers and define priority data layers 2) Establish criteria for human health data review and gap identification 3) Develop set of recommendations to support human health data review and update processes 4) Collaborate in quarterly meetings with West Coast EJ Tool group, additional as needed 5) Provide additional technical and analytical support, particularly as it pertains to human health-related matters
OHA EJ Mapping Lead	1) Lead OHA human health data collection and assessment 2) Provide technical and research support in development of mapping tool methodological approach and index creation

	<p>3) Establish and maintain cross-agency and cross-state partnerships on related mapping and/or index tool development efforts; document and report back to leadership team</p>
<b>DAS</b>	<p>1) <i>Recommend data quality standards and methodologies for the development and maintenance of the mapping tool</i> [12(4)]</p> <p>2) Identify data layers and information needed for equity mapping; inventory existing datasets &amp; identify needed data development</p> <p>3) Make recommendations on data prioritization</p> <p>4) Assess the quality and availability of priority data and identify appropriate stewards for each dataset</p> <p>5) Use the Oregon Framework Program governance structure to validate and QA/QC data for submission to OSU INR for inclusion in the mapping tool</p> <p>6) Incorporate new datasets into the Oregon Framework Program for ongoing maintenance and stewardship</p>
Geospatial Data Governance Coordinator	<p>1) Lead cross-agency EJ data inventory, including communications, meeting coordination, timeline planning, and progress tracking</p> <p>2) Coordinate collaboration with cross-agency mapping contacts and Oregon Framework representatives</p> <p>3) Reports out data collection progress to EJC</p>
<b>OSU INR</b>	<p>1) Participate in stakeholder meetings to scope functionality of tool, including data &amp; information needs</p> <p>2) Develop alpha tool, a map viewer that displays draft EJ index and input data layers statewide</p> <p>3) Gather critical datasets identified, as needed &amp; as capacity allows</p> <p>4) Create beta version of mapping tool</p> <p>5) Beta test tool with key stakeholders, agency partners</p> <p>6) Revise and refine based on user feedback</p> <p>7) Test revised mapping tool and reporting tool functionality with key stakeholders, agency partners</p> <p>8) <i>Host and maintain the tool in a publicly available and electronic form through Oregon Explorer</i> [12(5)]</p>
<b>PSU PRC</b>	<p>1) Research and compare existing Social Vulnerability Index (SVI) methods and tools, including <a href="#">PSU SVI tool</a></p> <p>2) Support development of EJ index methodological approach and functionality</p> <p>3) Identify and fill data gaps by providing (new) analysis (e.g., developing additional indicators, projecting agency data to different units of aggregation, etc.)</p> <p>4) Provide expertise on translation of raw data into meaningful indicators; Support data preparation for input into OSU INR beta tool and revised tool</p> <p>5) Develop set of recommended demographic and socioeconomic data layers</p>

### 3. DELIVERABLES

The below table includes major deliverables and deadlines as outlined in HB4077.

Deliverable	Description	Due	Staff Lead
<b>Community Engagement</b>	<p>12(2): <i>The EJC shall hold at least 6 meetings in different regions of the state, including at least one meeting in a remote community, to:</i></p> <p><i>a) Present a work plan and proposals for the environmental justice mapping tool; and</i></p> <p><i>b) Receive input and feedback from communities throughout this state about:</i></p> <p><i>i) Environmental, health, socioeconomic, and other factors that should be considered in the development of the mapping tool;</i></p> <p><i>ii) How the mapping tool should be used to help distribute resources to communities that have experienced underinvestment;</i></p> <p><i>iii) How socioeconomic benefits and burdens could be mapped and considered in addition to environmental, health and other data;</i></p> <p><i>iv) Other uses for the mapping tool that can provide community benefits and diminish community burdens;</i></p> <p><i>v) Geospatial layers to further define environmental justice communities based on the prevalence of specific factors; and</i></p> <p><i>vi) Community-generated data that may be included in the mapping tool</i></p>	Ongoing	EJC Coordinator
<b>Data Inventory</b>	<p>The development of a comprehensive data inventory is not explicitly named in HB 4077, but is a critical element of the mapping tool development process. HB 4077 indicates that [12(3)]: <i>The mapping tool must: ...c) Include data from natural resource agencies or be compatible with other mapping tools developed by other state agencies.</i></p> <p>The data inventory will compile a comprehensive list of environmental justice-related data sets across Oregon natural resource agencies. The final inventory will serve as a reference for the EJC and Oregon communities in determining the geospatial data layers to include in the mapping tool.</p>	Mid-2024	DAS
<b>Progress Report</b>	<p>18(3): <i>The EJC shall provide a progress report to the Governor regarding the development of the EJ mapping tool and community input received</i></p>	9/15/24	Project Manager
<b>Environmental Justice Index</b>	<p>The development of a statewide EJ index is not explicitly named in HB 4077, but is an implicit element of the EJ mapping tool.</p> <p>An EJ index will support the proposed mapping tool use cases included in HB 4077 Section 14:</p>	Mid-2024	DEQ, OHA, PSU

	<p>14(2): A natural resource agency may use the environmental justice mapping tool to:</p> <ul style="list-style-type: none"> <li>a) Identify environmental justice communities affected by agency programs;</li> <li>b) Conduct outreach and engagement activities with environmental justice communities to inform the development, adoption, implementation or enforcement of environmental laws, administrative rules or agency policies;</li> <li>c) Establish measurable goals for reducing environmental health disparities within agency programs; and</li> <li>d) Prioritize agency funding to help address identified impacts on environmental justice communities.</li> </ul>		
<b>Online EJ Mapping Tool</b>	<p>12(3): The mapping tool must:</p> <ul style="list-style-type: none"> <li>a) Be based on factors that are derived from direct input through the inclusive community engagement process</li> <li>b) Be sufficiently detailed to allow the assessment of environmental justice benefits and burdens</li> <li>c) Include geospatial data layers that may be used to help better understand the nature of environmental justice communities</li> <li>d) Include data from natural resource agencies or be compatible with other mapping tools developed by other state agencies</li> <li>e) Be accessible to the public</li> </ul>	9/15/25	OSU INR
<b>Implementation Report</b>	<p>13(1): The EJC, in consultation with natural resource agencies, shall identify in a report to the Governor:</p> <ul style="list-style-type: none"> <li>a) Guidance for state agencies regarding how to use the EJ mapping tool</li> <li>b) Best practices for increasing public participation and engagement in policy decisions by providing meaningful involvement</li> <li>c) Recommendations on how to best meaningfully consult environmental justice communities</li> <li>d) Recommendations for establishing measurable goals for reducing environmental disparities across Oregon and ways in which state agencies may focus their work toward meeting those goals</li> <li>e) Guidelines for identifying EJ communities, including guidelines for further defining EJ communities developed from inclusive community engagement process</li> <li>f) Guidelines for evaluating socioeconomic benefits and burdens to EJ communities</li> </ul> <p>13(2): Report may also include:</p> <ul style="list-style-type: none"> <li>a) Recommendations for approaches to integrate an analysis of the distribution of environmental burdens</li> </ul>	9/15/25	EJC Coordinator & Project Manager

	<p><i>and benefits across population groups into evaluations performed under state environmental laws</i></p> <p><i>b) Equity analysis methods that may include a process for describing potential risks to, benefits to and opportunities for investments and mitigations</i></p> <p><i>c) Best practices for cataloging and collecting data on programs within natural resource agencies related to health and environmental factors</i></p> <p><i>d) Recommendations for criteria for identifying and addressing gaps in current research and data collection to inform state agency actions, to refine the EJ mapping tool and to identify factors that may impede the achievement of EJ</i></p> <p><i>EJC to review and update report at least once every five years</i></p>		
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#### 4. ESTIMATED TIMELINE

The below table outlines major project tasks, provides an estimate of start and end dates, and indicates which tasks are dependent upon the completion of others. Dates indicated are flexible and subject to change.

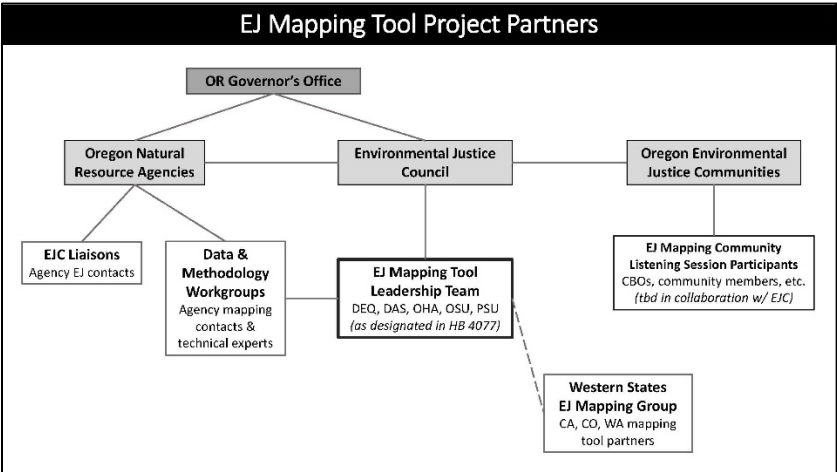
Task	Start	End	Lead	Dependencies (If applicable)
<b>Workplan Development</b>	<b>Sep 2023</b>	<b>Nov 2023</b>	<b>Project Manager</b>	
Develop workplan	9/1/23	10/12/23	Project Manager	
Workplan shared with EJC	10/17/23		EJC Coordinator	
Reevaluate progress on deliverables	Monthly	Monthly	Project Manager	
<b>Intent Clarification &amp; Listening Session Planning</b>	<b>Sep 2023</b>	<b>Late 2023</b>	<b>EJC Coordinator</b>	
Deliberate and determine intent & use cases in EJC meetings	Sep 2023	Nov 2023	EJC	
Develop listening session plan	Sep 2023	Dec 2023	EJC Coordinator	
EJC votes to approve listening session regions	10/17/2023			
EJC votes to approve intent	11/7/2023			
EJC votes to approve listening session plan	12/5/2023			
Listening sessions	Early 2024 (tbc)	Late 2024 (tbc)	EJC Coordinator	EJC approval of listening session plan
Develop tribal engagement strategy	Oct 2023	Nov 2023	EJC Coordinator	
<b>Data Assessment (Inventory)</b>	<b>Sep 2023</b>	<b>May 2024</b>	<b>DAS</b>	
Agencies submit inventories	9/13/23		DAS	
Compile & resolve discrepancies	9/14/23	10/26/23	DAS	
Gap and reliability analysis	10/26/23	11/30/23	DAS & Workgroup	
Review of draft inventory	12/1/23	3/15/24	DAS & Agencies	
Finalize and share inventory w/ EJC	3/16/24	5/17/24	DAS	

<b>Data Prioritization / Indicator Selection</b>	<b>Early 2024</b>	<b>Mid 2024</b>	<b>DEQ/OHA/PSU</b>	<b>Intent clarification, data assessment, listening sessions</b>
Assess and compare indicators in similar tools	Sep 2023	Dec 2023	DEQ/OHA/PSU	
Deliberate in EJC subcommittee	Dec 2023	Feb 2024	EJC	Intent clarification, data assessment
Develop list of selected data/indicators	March 2024	Apr 2024	DEQ/OHA/PSU	Intent clarification, listening sessions, data assessment
EJC votes to approve final indicators	May 2024		EJC	
<b>Data Collection</b>	<b>Sep 2023</b>	<b>June 2024</b>	<b>DAS</b>	<b>Data assessment, intent clarification, listening sessions</b>
Identify agency data stewards	Sep 2023	Oct 2023	DAS	
Develop data collection & maintenance strategy	Oct 2023	Nov 2023	Project Manager /DAS/OSU	
Collect data for mapping tool	Apr 2024	June 2024	DAS	Data assessment, intent clarification
Provide data to OSU	June 2024	Jul 2025	DAS	
<b>Methodology &amp; Index Development / Data Translation</b>	<b>Oct 2023</b>	<b>May 2024</b>	<b>DEQ/OHA/PSU</b>	<b>Intent clarification, indicator selection, listening sessions</b>
Determine process and timeline for methodology/index development	Oct 2023	Nov 2023	DEQ/OHA/PSU	
Develop methodology and EJ mapping index	Nov 2023	May 2024	DEQ/OHA/PSU	Intent clarification, indicator selection
EJC votes to approve methodological approach throughout development process	Nov 2023	May 2024	EJC	
<b>Progress Report</b>	<b>May 2024</b>	<b>Sep 2024</b>	<b>Project Manager /EJC Coordinator</b>	
Develop progress report outline	May 2024	June 2024	Project Manager & EJC Coordinator	
EJC votes to approve progress report outline	June 2024		EJC	
Develop progress report draft	June 2024	Sep 2024	Project Manager & EJC Coordinator	
EJC votes to approve progress report	Sep 2024		EJC	
Progress report submitted to Governor's Office	9/15/2024			
<b>Build Mapping Tool</b>	<b>Mid 2024</b>	<b>Sep 2024</b>	<b>OSU INR</b>	<b>Listening sessions, intent clarification, data assessment &amp; collection, index development</b>
Identify joint application and design requirements	Sep 2023	June 2024	EJC	Listening sessions, subcommittee deliberations
Develop and demonstrate Alpha version	June 2024	Sep 2024	OSU INR	Intent clarification, data assessment & collection

Develop and test Beta version	Sep 2024	May 2025	OSU INR	Data assessment & collection, index development
Project team & EJC review	Jun 2025	Sep 2025	EJC & leadership team	
Develop maintenance plan	Jul 2025	Sep 2025	OSU, Project Manager	
Launch tool	Sep 2025			
<b>Implementation Plan</b>	<b>Jan 2025</b>	<b>Sep 2025</b>	<b>Project Manager /EJC Coordinator</b>	<b>Mapping Tool</b>
Develop implementation strategy	Jan 2025	Apr 2025	Project Manager & EJC Coordinator	
EJC votes to approve implementation strategy	Apr 2025		EJC	
Develop agency user guide	Jan 2025	Apr 2025	Project Manager & EJC Coordinator	
EJC votes to approve user guide	Apr 2025		EJC	
Develop EJ and methodology terminology lists	Sep 2023	Jul 2025	DEQ/OHA/PSU	
<b>Implementation Report</b>	<b>Mar 2025</b>	<b>Sep 2025</b>	<b>Project Manager /EJC Coordinator</b>	<b>Mapping Tool</b>
Develop implementation report outline	Mar 2025	Apr 2025	Project Manager	
EJC votes to approve outline	Apr 2025		EJC	
Develop implementation report	Apr 2025	Sep 2025	Project Manager & EJC Coordinator	
EJC votes to approve implementation report; submit to Governor	Sep 2025		EJC	

**5. PROJECT PARTNER COORDINATION AND EJC ENGAGEMENT**

**a. EJ Mapping Tool Project Partner Coordination**



Note: Participants in the data and methodology workgroups are not limited to the [16 natural resources agencies](#) outlined in HB 4077. Additional participation includes local and regional agencies, such as TriMet and Oregon Metro.



Partner / Group	Purpose/Scope	Participants
<b>EJ Mapping Tool Leadership Team</b>	Cross-agency and -academic partner group leading the development of the EJ mapping tool under the EJC, as designated by HB 4077. Roles and responsibilities are outlined in Section 2.	DEQ, OHA, DAS, OSU INR, PSU PRC
<b>EJC Liaisons</b>	Group of representatives designated by respective agencies to share information regarding environmental justice best practices, coordinate EJC requests for agency engagement, collaborate on the EJ mapping tool as relevant, and develop annual agency EJC reports as required by HB 4077.	Oregon natural resource agencies <a href="#">outlined in HB 4077</a> .
<b>Data Inventory Workgroup</b>	Supports DAS in assessing and refining the compiled data inventory submissions from NR agencies, including by conducting reliability and gaps analyses.	Agency mapping contacts and technical experts, including those involved in similar mapping projects.
<b>Methodology Workgroup</b>	Assesses and discusses best practices for how data should be aggregated and translated in the development of the EJ mapping tool and index.	Agency mapping contacts and technical experts, including those involved in similar mapping projects.
<b>Western States EJ Mapping Group</b>	Provides opportunity for experience and knowledge sharing in the development of environmental justice mapping tools and indices, including best practices related to community engagement, data assessment, and methodological approach.	CA, CO, WA mapping tool partners (in addition to members of OR mapping tool leadership team)
<b>Community Listening Session Participants</b>	At least 6 community listening sessions will be held across Oregon to facilitate input from communities on mapping tool intent and use cases, indicator selection, design and functionality, etc.	<i>Specifics tbd in collaboration with the EJC.</i> Will include community members, CBOs, EJC members, agency staff (as needed/relevant), etc.

## b. EJC Engagement and Communications

### Communications Methods

Comms Method	Coordinator	Purpose/Scope	Audience	Frequency
<b>Staff Report / Monthly Project Update</b>	EJC Coordinator and Project Manager	Provides an update on ongoing project tasks and conversations within the leadership team and across agency partners.	EJC members, agency partners, general public	Monthly (uploaded to EJC website)
<b>EJC Meeting</b>	EJC Coordinator	Convenes all council members to discuss EJ issues in Oregon, including approving EJ mapping tool project tasks, documents, and decisions.	EJC members and relevant members of leadership team; open to public as observers	Every other month in 2024 4-hour meeting
<b>EJC EJ Mapping Subcommittee Meeting</b>	EJC Coordinator	Convenes self-selected council members to discuss the EJ mapping tool in further detail,	Self-identified EJC members and relevant	Monthly in 2024

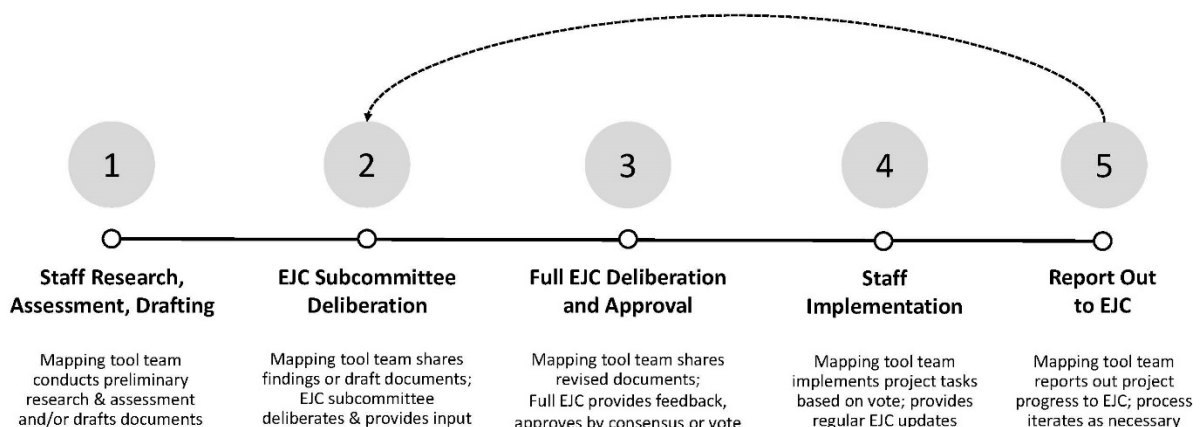
		including to deliberate key project tasks, documents, and decisions prior to full EJC approval.	members of leadership team; open to public as observers	2-hour meeting
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EJC Engagement in Mapping Tool Development Process

The below table provides a rough outline of the role of the EJC throughout the general stages of the tool development process.

Project Stage	Timeframe	Role of EJC
<b>Define audience, establish listening sessions</b>	Sept.-Dec. 2023	Deliberates and votes on listening session proposal, including selecting listening session locations, and determining questions and other facilitation details
<b>Define intent</b>	Sept. 2023 – Early 2024	Deliberates users and use cases; hosts listening sessions with Oregon communities; deliberates results and votes on intent
<b>Assess data (data inventory)</b>	Aug 2023 – May 2024	Reviews monthly updates; deliberates results of gap analysis and data limitations to inform indicator selection process
<b>Prioritize and select indicators, define methodological approach, develop EJ index</b>	Early-Mid 2024	Deliberates indicator selection based on listening session feedback and data inventory results; reviews and approves proposed methodological approach to develop EJ index
<b>Submit progress report</b>	Sept. 15 <sup>th</sup> , 2024	Reviews outlines and drafts and approves final progress report
<b>Create mapping tool</b>	Mid 2024 – Sept. 2025	Reviews/approves alpha, beta, and final versions of tool; hosts focus group community listening sessions
<b>Develop implementation plan</b>	Mid 2025	Reviews monthly updates and provides feedback; deliberates and approves final implementation plan
<b>Submit implementation report</b>	Sept. 15 <sup>th</sup> 2025	Reviews outlines and drafts and approves final implementation report

EJC Approval Process



## 1. Staff Research, Assessment, and/or Drafting

Based on the EJ mapping requirements outlined in HB 4077, and on the project plan approved by the EJC, the mapping tool team will initiate project tasks in collaboration with agency and other relevant project partners (see Section 5a). Depending on the task, this first stage of the process may involve conducting research, assessing best practices, and/or drafting initial documents for subsequent EJC deliberation and approval.

Specific example scenarios are outlined below:

- Example A – Community Engagement: In the early stages of the project, the Council will be tasked with making several decisions related to planning and carrying out community listening sessions as described in HB 4077 Section 12(2), including determining a set of questions to guide community discussions. To initiate this process, the mapping tool team will draft an initial set of questions based on the requirements of HB 4077, previous EJC deliberations and input, and consultation with agency and other relevant project partners.
- Example B – Methodological Approach: One decision that the Council will need to make related to the methodological approach for developing the mapping tool is determining geographic scale, i.e., should EJ communities be mapped at the census tract, census block group, etc., scale. To provide the EJC with the necessary information to make this decision, the mapping tool team will conduct research to assess the strengths and other considerations of each option, and will consult with agency partners to identify how different geographic scales of analysis will impact the ways in which their data sets are represented in the mapping tool.
- Example C – Progress Report: Under HB 4077, the EJC is required to submit a progress report to the Governor’s Office by September 15, 2024. To initiate the progress report, the mapping tool team will develop an initial outline, and after approval, and initial draft report.

## 2. EJC Subcommittee Deliberation

The mapping tool team will share findings, proposals, and/or draft documents with EJC members for review ahead of the following subcommittee meeting. Meeting time will be used to field questions and to deliberate on a way forward. If relevant, the mapping tool team will incorporate input from the meeting to revise proposals or documents. EJC subcommittee discussions will be documented and shared with the entire EJC for subsequent deliberation and approval.

- Example A – Community Engagement: The mapping tool team will share a draft set of listening session questions with the EJC for review. During the EJC subcommittee meeting, Councilmembers will deliberate and provide input on the draft questions, after which the mapping tool team will incorporate feedback into a revised draft.
- Example B – Methodological Approach: The mapping tool team will present the EJC subcommittee with the information learned through research and consultation with project partners, as well as, as needed, a proposed way forward based on the assessment of geographic scale options. Councilmembers will deliberate the strengths and considerations associated with determining the geographic scale of analysis for the mapping tool. The mapping tool team will document the subcommittee discussion and prepare a summary to share in preparation for the following full EJC meeting.
- Example C – Progress Report: The mapping tool team will share the initial progress report outline/draft for EJC review. During the following subcommittee meeting, Councilmembers will have the opportunity to ask questions and provide feedback, after which the mapping tool team will incorporate feedback into a revised draft for subsequent EJC approval.

### **3. Full EJC Deliberation and Approval**

Following subcommittee deliberation, the mapping tool team will present the revised information/proposal/document to the full EJC for review and approval. Materials will be shared ahead of the following EJC meeting, during which Councilmembers will approve a way forward, either by consensus, or if necessary, by vote. Voting will be initiated by the Chair if quorum is present, and a majority vote will carry each individual motion to approve.

- Example A – Community Engagement: The revised draft of listening session questions will be shared with the EJC and presented during the subsequent EJC meeting. The EJC will approve the final draft.
- Example B – Methodological Approach: The mapping tool team will present the EJC with a summary of the subcommittee deliberations on geographic scale of analysis, as well as clearly outlined options to approve. The EJC meeting will be used to answer any remaining questions and to select the geographic scale to be implemented in the mapping tool.
- Example C – Progress Report: The mapping tool team will present the EJC with a revised draft of the progress report based on Councilmember feedback. The EJC will approve the final draft.

### **4. Staff Implementation**

Following the EJC vote, the mapping tool team will implement resulting tasks in collaboration with agency and other relevant project partners.

- Example A – Community Engagement: The listening session questions will be customized for each event location and audience and will be shared with relevant community partners. Questions and associated materials will be translated as needed.
- Example B – Methodological Approach: The mapping tool team will move forward with tool development based on the geographic scale of analysis decided upon by the EJC.
- Example C – Progress Report: The mapping tool team will finalize the progress report, including incorporating any remaining EJC feedback, and will submit the report to the Governor’s Office on behalf of the EJC.

## 5. Report Out to EJC

The mapping tool team will share regular updates with the EJC on progress toward completing project deliverables. If the need arises based on the results of the implementation stage, the process will be iterative, and tasks/discussions will move again to EJC subcommittee deliberation (step 2) and subsequent full EJC approval (step 3).

## 6. RISK ANALYSIS

The below risk table is intended to proactively identify and assess factors that may jeopardize the success of the project; define preventative measures that mitigate negative effects and reduce the probability of these factors from occurring, and; enhance positive risks.

Risk	Probability	Impact	Consequences (Negative and/or Positive)	How can we mitigate, avoid, or accept the risk?
Lack of EJC involvement/interest	L	H	<ul style="list-style-type: none"> <li>• Few EJC members participate in subcommittee meetings.</li> <li>• Diverse perspectives are not accounted for in EJC deliberations. Delays in schedule.</li> </ul>	<ul style="list-style-type: none"> <li>• Clearly communicate purpose of each subcommittee meeting and importance of EJC engagement.</li> </ul>
Changeover in EJC members	H	L	<ul style="list-style-type: none"> <li>• New members lack interest in mapping tool development.</li> </ul>	<ul style="list-style-type: none"> <li>• Clearly document tool development process and share updates to EJC website.</li> </ul>

Risk	Probability	Impact	Consequences (Negative and/or Positive)	How can we mitigate, avoid, or accept the risk?
			<ul style="list-style-type: none"> <li>• New members lack knowledge of mapping tool development process.</li> <li>• Delays in schedule.</li> <li>• New members bring new views to project, change trajectory.</li> </ul>	<ul style="list-style-type: none"> <li>• Set up orientation meeting and/or documents to get new members up to speed.</li> <li>• Accept opportunity for ‘fresh eyes’ and new opinions.</li> </ul>
<b>Lack of meaningful engagement with tribal communities</b>	M	H	<ul style="list-style-type: none"> <li>• Tribal values are not adequately considered in tool development.</li> <li>• Tribal communities are harmed (e.g., privacy concerns, lack adequate representation).</li> <li>• Loss of trust with tribal communities.</li> </ul>	<ul style="list-style-type: none"> <li>• Work with EJC to fill vacant Council seat.</li> <li>• Build relationships with tribal communities from outset of project.</li> <li>• Leverage natural resource agencies’ tribal relations capacity to conduct meaningful engagement with tribes.</li> </ul>
<b>Lack of meaningful engagement with rural communities</b>	L	H	<ul style="list-style-type: none"> <li>• Rural values are not adequately considered in mapping tool development.</li> <li>• Rural communities are harmed and/or lose trust.</li> </ul>	<ul style="list-style-type: none"> <li>• Work with EJC members to engage with their rural community contacts.</li> <li>• Build relationships with rural communities.</li> </ul>
<b>Conflicting perspectives and values impact critical decision points</b>	H	M	<ul style="list-style-type: none"> <li>• Project is delayed due to decision-making bottleneck.</li> <li>• EJC (and communities they represent) unhappy with outcome.</li> </ul>	<ul style="list-style-type: none"> <li>• Clarify decision-making processes early in project.</li> </ul>
<b>Final mapping tool has unforeseen consequences (Political, economic, environmental, etc.); Tool is not used as intended</b>	L	H	<ul style="list-style-type: none"> <li>• Credibility of tool questioned.</li> <li>• Intended purpose/use of mapping tool overshadowed by controversy.</li> <li>• Tool further harms or stresses disadvantaged communities.</li> <li>• Relationships harmed and trust lost with CBOs, tribal communities,</li> </ul>	<ul style="list-style-type: none"> <li>• Document decision-making process with clear rationale for methodological approach (e.g., choices in aggregation, weighting, etc.).</li> <li>• Develop clear guidance on how to use tool and how not to use tool.</li> </ul>

Risk	Probability	Impact	Consequences (Negative and/or Positive)	How can we mitigate, avoid, or accept the risk?
			disadvantaged communities, and other Oregonians.	<ul style="list-style-type: none"> <li>Carefully consult with communities at various stages of the tool development process.</li> </ul>
<b>Agencies lack capacity to provide and/or maintain data sets</b>	M	H	<ul style="list-style-type: none"> <li>Priority indicators are not able to be included or maintained in tool.</li> <li>Tool does not meet certain user needs.</li> </ul>	<ul style="list-style-type: none"> <li>Clearly communicate asks and data quality standards to agency partners as early as possible.</li> <li>Work with agency partners to understand capacity and/or resource gaps.</li> <li>Accept that some selected indicators may instead be built into later iterations of the tool.</li> </ul>
<b>Scope creep</b>	L	H	<ul style="list-style-type: none"> <li>Deliverables are not complete by deadline.</li> <li>Delayed or ambiguous decision-making from EJC.</li> </ul>	<ul style="list-style-type: none"> <li>Establish clear scope from outset of project.</li> <li>Avoid changing scope.</li> </ul>