

FOOD SYSTEM RESILIENCE INDICATORS LIST

METHODOLOGY

RATIONALE

While multiple projects have produced food system indicator sets, those that focus explicitly on resilience often remain conceptual in nature, lacking clear pathways for operationalization—particularly at the scale of local jurisdictions in the U.S. In keeping with our commitment to align with and strengthen existing initiatives, we will collect and review established indicator sets across domains including food systems, food system resilience, sustainability, and urban or community resilience. We will then identify their utility for our needs (alignment with the resilience capacity attributes we have identified and with food system outcomes of interest, data availability across US jurisdictions, and frequency of data collection.) Using these indicators and adding new ones as appropriate, we will construct a list of indicators that can be tracked both in partner cities and for a larger list of U.S. cities. We will also identify some indicators for which publicly available data may be challenging to collect, but which could potentially be tracked by jurisdictions. We will share these lists and identify gaps with academic and governmental colleagues for review prior to finalization.

Methodology

This methodology employed a multi-stage approach to gather food system resilience indicators from peer-reviewed literature, reputable sources, and local government agencies across the United States. First, eligibility criteria were created to identify the sources and method of gathering them. Indicators were to meet all the following: appropriate to local governments within the United States, align with food system resilience attributes or food system functioning; and they were to meet one of the following: indicators with readily available data sources, or indicators ideal to gather if not readily available. Additionally, indicators were to be measurable and ideally quantitative, though qualitative indicators were not excluded. After eligibility criteria were determined, existing sources from the research team were collected. Then, sources were gathered from local governments and other entities using three separate listserv networks – Johns Hopkins Center for a Livable Future’s Food Policy Council Network, Food for Cities, and

American Planning Association Food Division. Peer-reviewed literature was gathered using the Dimensions database. Finally, an advanced Google search was conducted. 44 sources were gathered from these three methods and 1,106 indicators were analyzed. The diagram below shows the steps taken to achieve the final list of 493 indicators. Duplicates not removed to showcase the frequency of indicators used across various sources. Indicators were gathered between January 2024 and November 2024.

The list is separated by food system sector and subsector, qualitative vs quantitative, resilience attribute (primary and secondary), and source collected from. When applicable, indicator data source and frequency of data collection are also listed. Food system sectors and subsectors were determined using multiple food system frameworks (Nesheim, Oria, Tsai Yih, 2015; Fanzo et al, 2020) to ensure that all indicators were encompassed.