

System and Stakeholder Network Mapping

by Taylor Hartson and Neil Carlson, Calvin University Center for Social Research
January 2020

From road map to network web



When KConnect was in development, the founding task force created a “Road Map” that listed a “system map” as a key early deliverable for the staff of the backbone organization.

As the new staff began their work, however, they found that a great deal of trust-building would have to precede the system mapping task, as key stakeholders were initially reluctant to share information necessary to mapping the system.

Later, it became clearer that the problem was not just the availability of the information, it was the very existence of a system; in effect, by pursuing its mission and building its network, KConnect was bringing “system-ness” into being and making it visible. That realization led to the further recognition that a map of the KConnect stakeholder network itself would provide a good approximation of the system map concept.

Developing the network map infrastructure

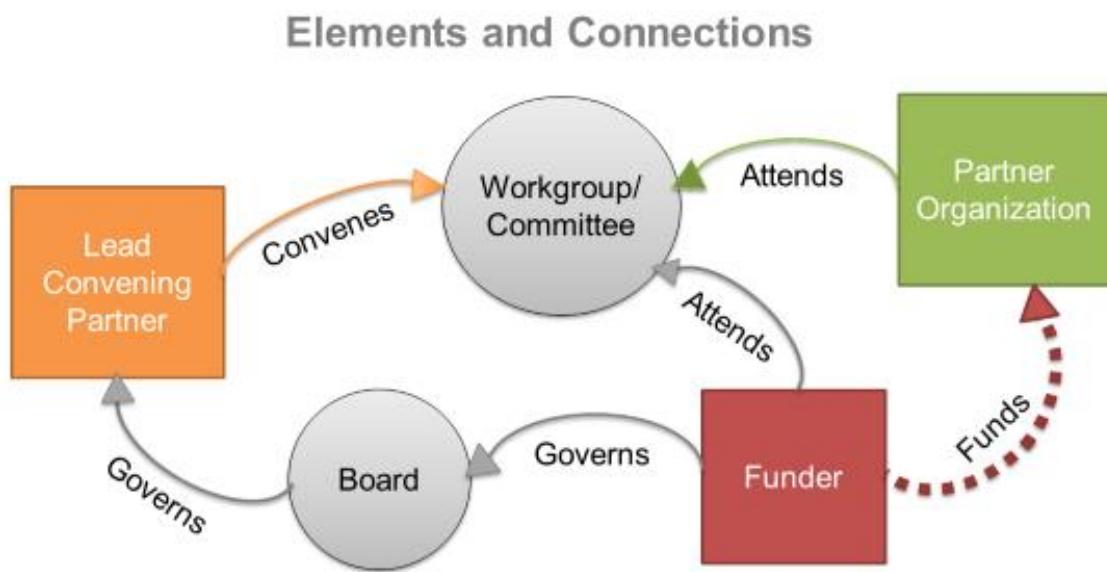
The KConnect team identified Kumu.io online network mapping software as a promising platform and contracted with the Calvin University Center for Social Research to create a stakeholder network map using Kumu.

Kumu displays networks with two primary components, each a spreadsheet-style list: elements (shapes) and connections (lines linking the shapes).

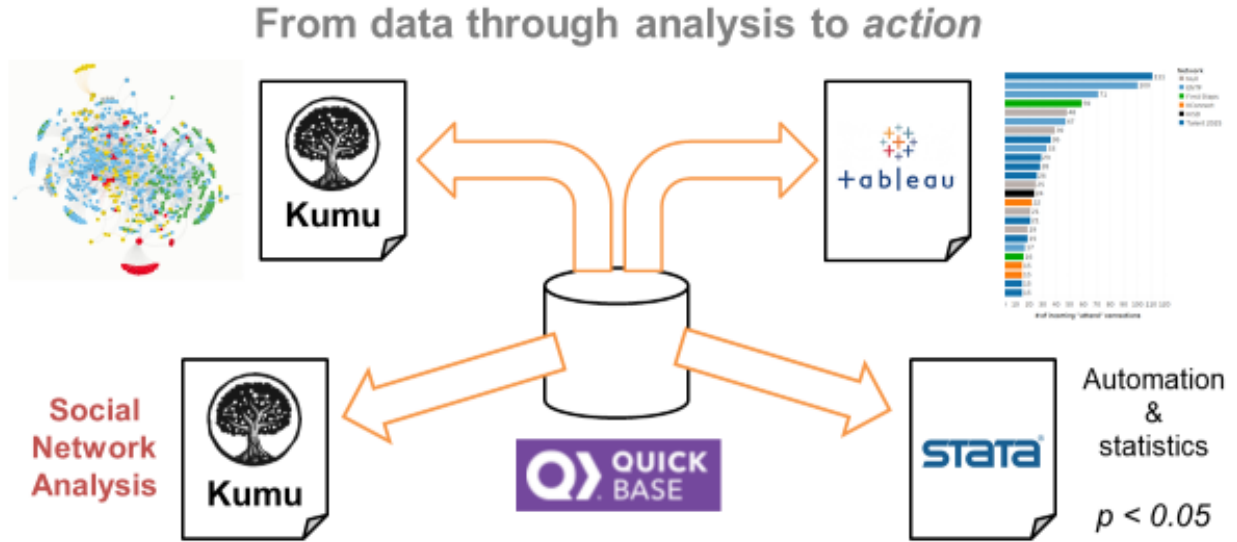
We implemented a stakeholder network map that applies the following conventions:

- Square elements represent legal organizations, such as 501(c)(3) non-profits.
- Circular elements represent informal or subordinate groupings, such as workgroups, programs, boards, etc.
- Connections are typed with one-word verbs that describe the relationship between the “from” element and the “to” element.

For example, in the illustration below, the Funder at lower right Governs the Lead Convening Partner through a seat on its Board, Attends a Workgroup that the Lead Convening Partner Convenes, and Funds a Partner Organization, which also Attends the Workgroup.



The team built a flexible, multipurpose database infrastructure centered on Quick Base (see below) that supports Kumu and other tools, such as Tableau data visualizations and statistical models in Stata (or any other statistical package).



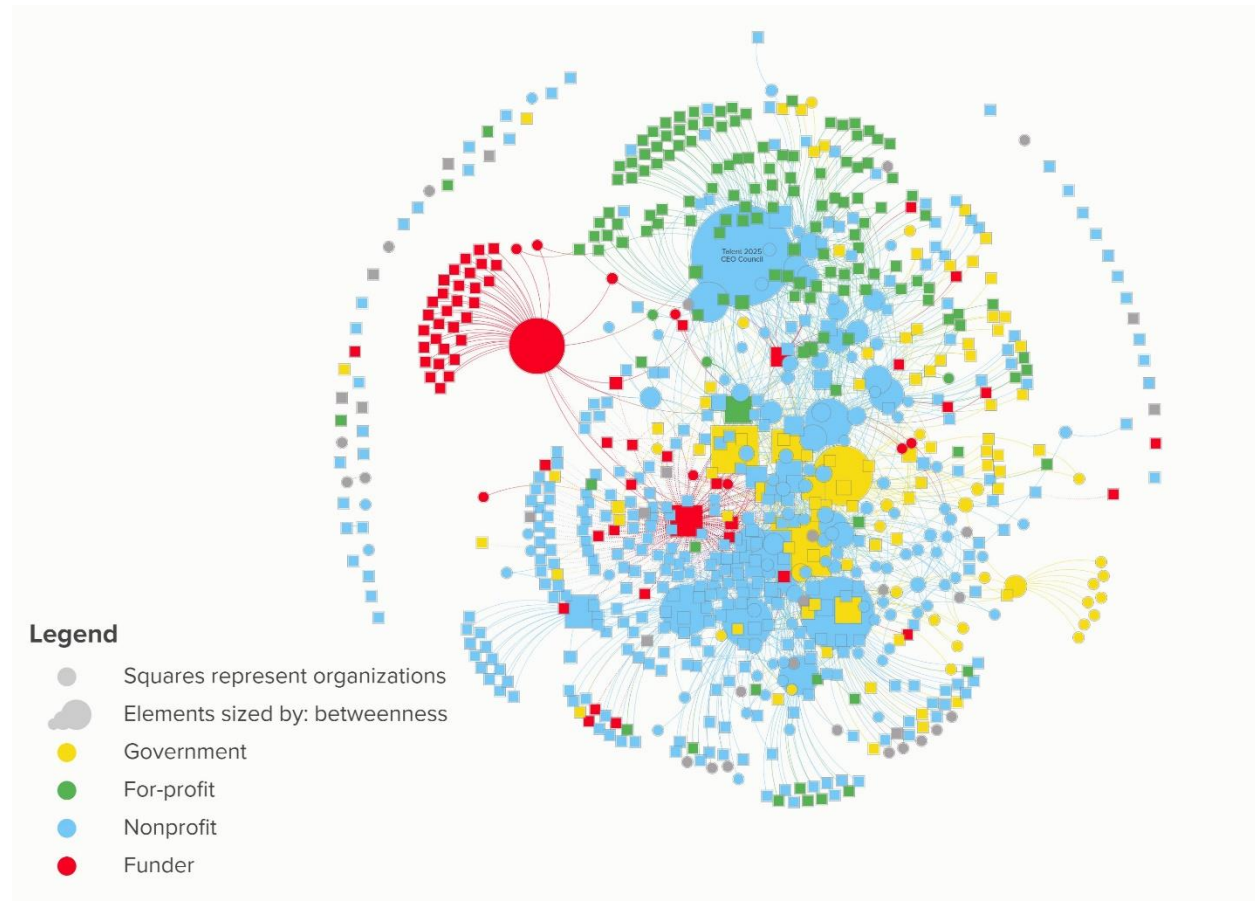
A bird's eye view of the entire network

The default public view of the entire 2017-18 network below ([view it “live” here](#) or by clicking the image) has 798 elements and 2,330 connections.

Elements are color-coded (or “decorated” in Kumu jargon) to show nonprofits and their affiliated units in light blue, governments and affiliated units in yellow, for-profit businesses and affiliated units in green, and funders in red (usually foundations, a class of nonprofit).

Elements are sized by “degree”—how many incoming and outgoing connections each element has. The largest single element is CEO Council of Talent 2025, surrounded by a cloud of the many for-profit organizations that attend its meetings. One quick takeaway from the map is that there is ample opportunity to distribute connectivity to for-profit representatives more widely through the network.

The “halo” of disconnected elements around the edges are organizations and groups that did not have a known current relationship to the network in 2017-18.



A “peacock’s tail”

If we hover over the large red element, Kumu highlights its name for us and reveals that this peacock-tail-like spray of funders are connected to the Council of Michigan Foundations. Shapes like this represent network resources that are loosely connected to the network and might be available for recruitment to support network workgroups and strategies.

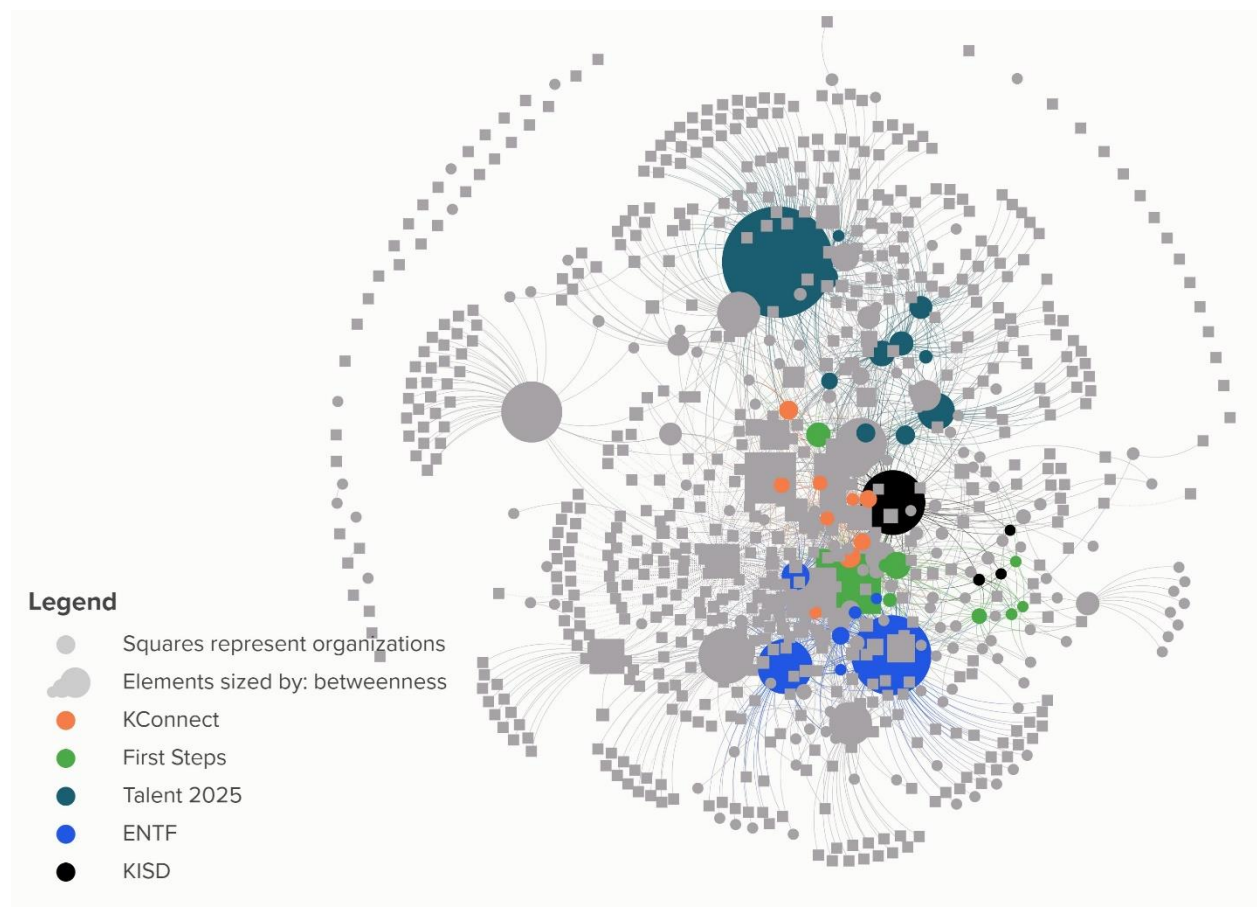


Intertwining networks

An alternate view of the entire network map called “[Color by network](#)” “redecorates” the same Kumu pattern by lead convening partner: orange for KConnect, green for First Steps Kent, bright blue for the Essential Needs Task Force (ENTF), dark blue for Talent 2025, and black for Kent Intermediate School District (KISD).

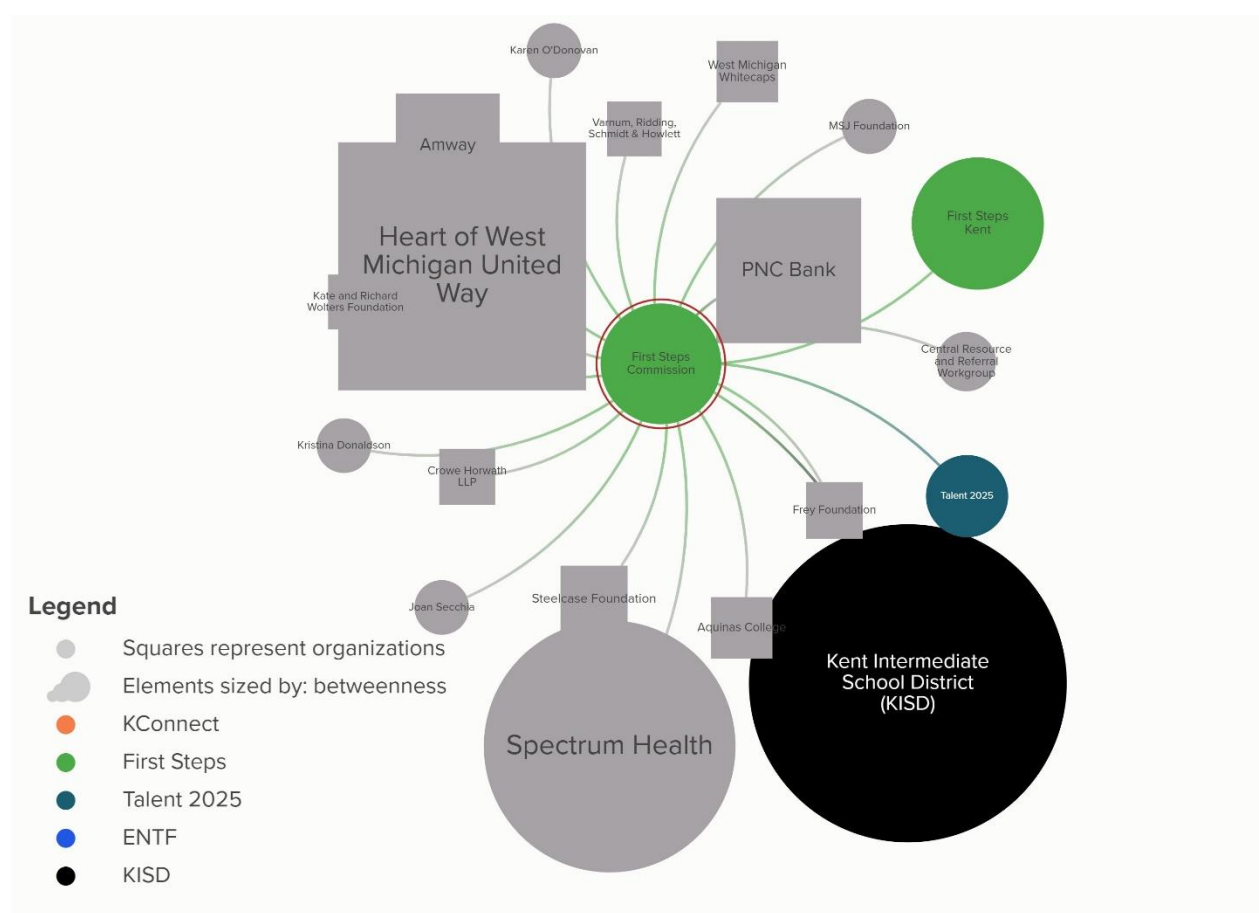
Kumu uses dynamic, simulated “physics” to draw this map a little differently every time. Since the map represents KConnect’s network, it’s not surprising that KConnect’s organization, board, and workgroups are central. The dynamics always place ENTF and Talent 2025 on opposite ends of the map, while First Steps Kent’s green dots tend to cluster near KConnect in the middle, but a little lower toward the non-profit and public-sector-dense end where ENTF is concentrated, indicating there is more connective “gravity” linking those elements together.

In the image below, the topmost green dot represents the First Steps Kent Commission. It’s pulled toward the upper part of the map because representatives of several for-profit organizations that are also involved in Talent 2025 sit on the Commission that governs First Steps. Similarly, the topmost orange element is KConnect’s Data & Capacity Workgroup, which includes a representatives of The Right Place, Inc., which itself is linked to many businesses.

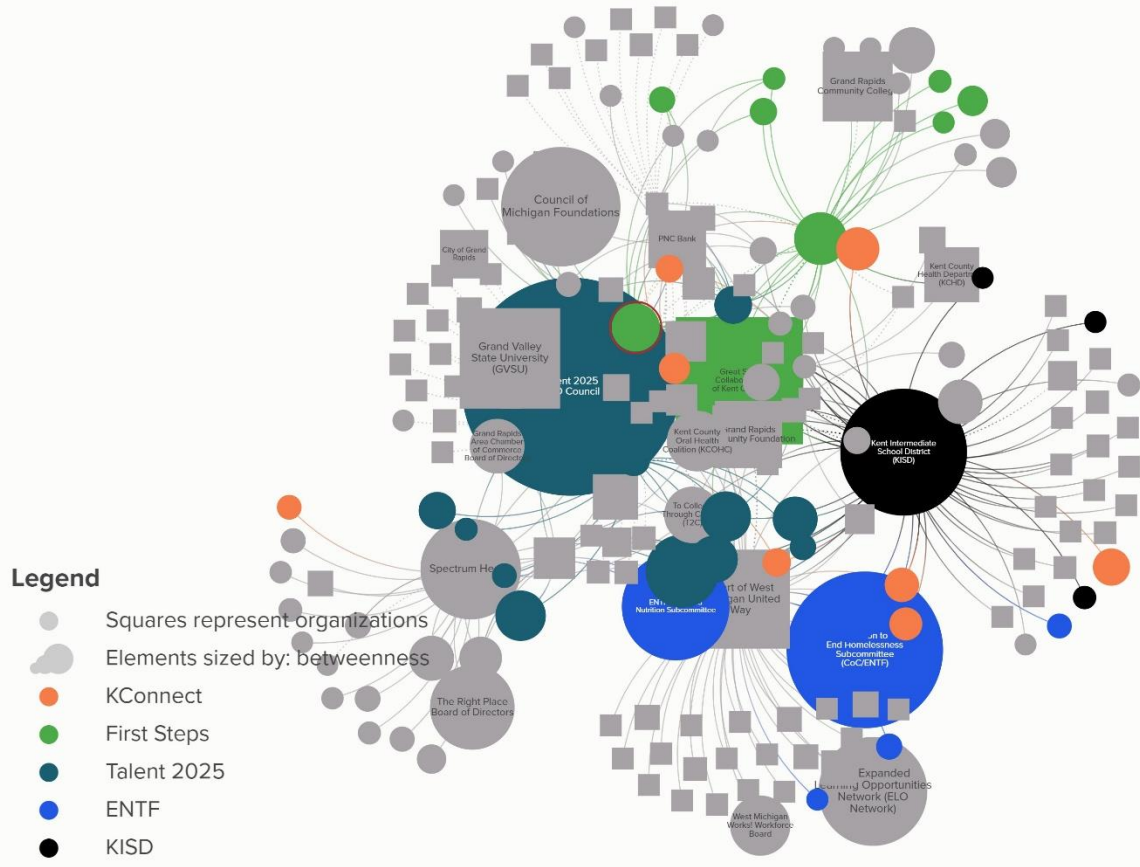


Focus on First Steps Commission

In the image below, we've selected the First Steps Commission and used the "focus" button to tell Kumu to [show us elements directly connected to the Commission by one degree](#):



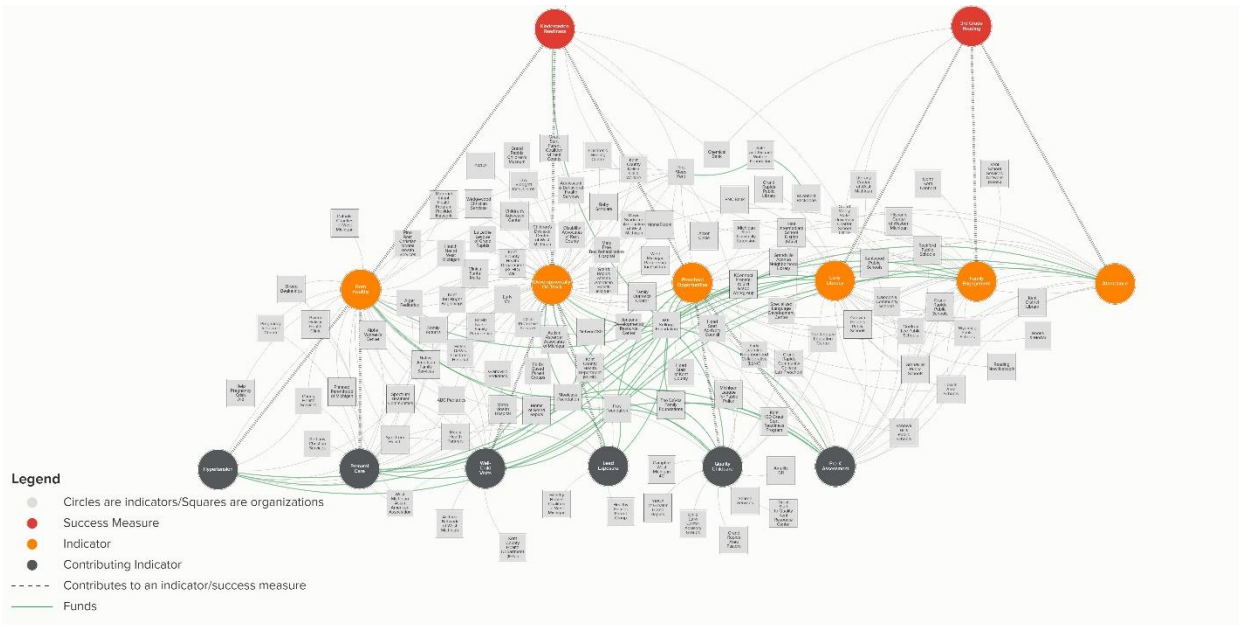
If we ask Kumu to [show us the next degree of focus](#)—elements connected to the elements above—we can see how widely information shared with Commission members might reach just through their direct relationships with other parts of the network:



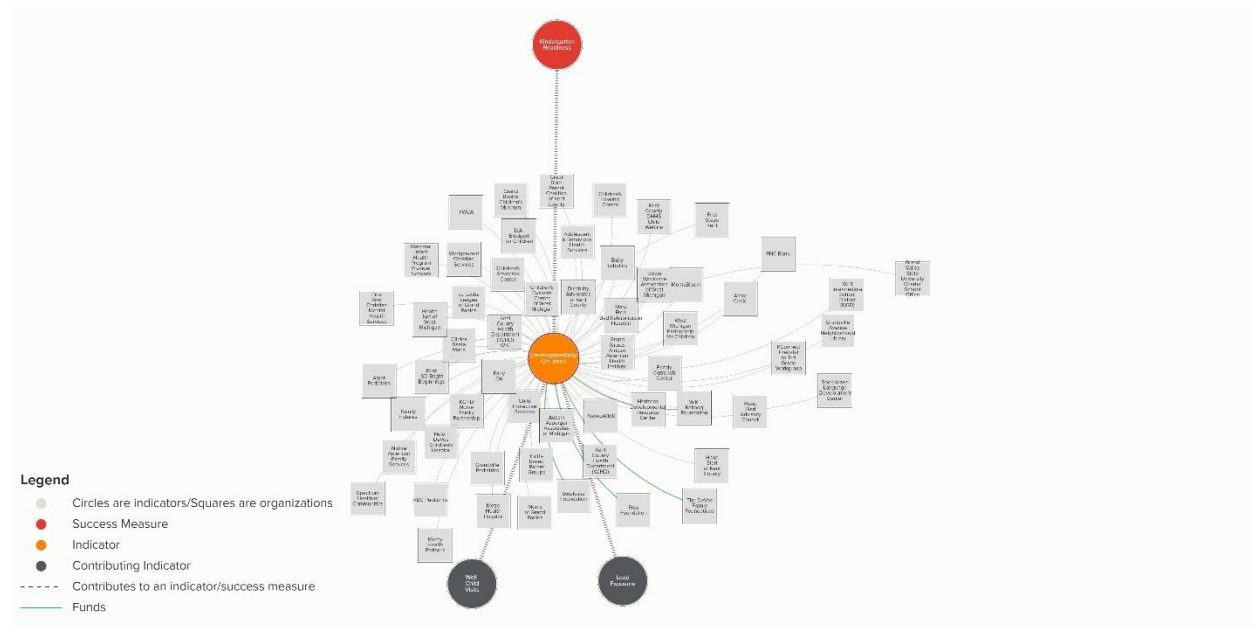
Early Childhood System static map

Over the last year, the KConnect and First Steps Kent team worked with CSR staff to develop some intentionally handcrafted, “static” views of the early childhood system, including elements that represent the success measures, indicators, and “contributing indicators” that have been selected to drive our community’s alignment strategy.

Here’s [a view of the early childhood system](#) (use “first steps kent” as your password if you click the link), with success measures in red, indicators in orange, and contributing indicators in dark gray along the bottom:



Here is a narrowed [view with a one-degree focus on the “Developmentally On-Track” indicator](#) (password “first steps kent”):



Contact us to suggest new or updated content

We'd like The team is actively working on a method to automate network feedback. In the meantime, please send your feedback to the Center for Social Research team at csr@calvin.edu with subject line “Kent County System Map feedback”. Many thanks!