



MEMORANDUM

To: STP Project Selection Committee

From: CMAP Staff

Date: July 11, 2024

Subject: STP Shared Fund Methodology – Transportation Impact: Jobs + Households

Action Requested: Discussion

The jobs + households (jobs + hh) score is a component of a project's Transportation Impact score, along with Need and Improvement. As stated in the Shared Fund Application Booklet, "The benefits of a transportation project often cross municipal and county borders and can provide significant improvements to people who are not located in the project's immediate vicinity. For each project, CMAP uses the regional travel model to generate a travel shed of the places people come from and go to using the facility. The score in this category is calculated by adding up the total number of jobs and households within each project's travel shed and converting the total to a score out of 10, indexed to the other submitted projects." This methodology leads to higher jobs + hh scores for transit projects that inherently have a larger "reach" than roadway or bike/ped projects and for projects within the region's most densely populated areas. While these results are not unexpected, concerns have been raised that there are projects that have scored very high in the need and/or improvement categories that are not able to rise to the level of funding consideration due to a perceived disparity in jobs + hh points.

In 2022, staff examined scoring from prior calls for projects as well as the characteristics of the counties and City of Chicago to inform project selection committee discussion regarding the jobs + hh score. As a result of this examination, staff recommended a slight adjustment to the methodology to acknowledge the proportion of households served by a project, relative to the total households within the project area, rather than just the raw number of households within the project's travel shed. This change could improve the equity of the scoring, while maintaining an appropriate spread of points across projects and would continue emphasizing projects that encourage transit use and discourage sprawl.

Past scoring

Staff reviewed the range and average jobs + hh scores by project location from the 2019, 2021, and 2023 calls for projects (CFPs). As shown in the table below, the average jobs + hh score among all applications is 4.9. The average in the collar counties is below the regional average, while the average in Chicago is well above the regional average. Although the collar counties'

averages are low, the maximum scores in some counties are competitive with the maximums in Chicago and Suburban Cook.

Project Location	# of apps	Maximum jobs + hh	Minimum jobs + hh	Max pts	Min pts	Ave pts
Cook	72	2,167,927	44,461	9	0.3	5.9
Transit (all councils)	8	2,167,927	61,748	9	0.4	6.6
Highways (all councils)	64	1,873,929	44,461	8.8	0.3	5.8
Chicago	21	4,469,926	753,552	9.9	4.6	8.5
CDOT	11	4,469,926	968,092	9.9	7.4	8.3
Transit	10	3,222,989	753,552	9.9	4.6	8.7
Collar Counties	90	2,102,412	17,617	8.9	0.1	3.4
Transit (all counties)	3	388,883	89,397	0	0	0.9
DuPage	2	388,883	89,397	1.6	0.1	0.9
McHenry	1	288,806	288,806	1.0	1.0	1.0
Highways (all counties)	87	2,102,412	17,617	8.9	0.1	3.7
DuPage	16	1,338,408	134,152	8.0	1.3	4.6
Kane	28	1,189,489	17,617	7.3	0.1	3.1
Kendall	4	1,211,030	329,853	7.4	2.0	4.5
Lake	17	838,203	32,598	6.9	0.6	3.2
McHenry	7	596,285	43,641	5.7	0.8	2.2
Will	15	2,102,412	151,685	8.9	0.4	4.5
All Applications	127	3,222,989	17,617	9.9	0.1	4.9

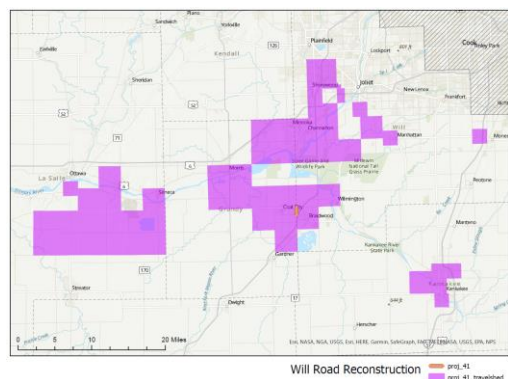
Households served

In the CMAP region in 2021, there were a total of 3,266,741 households. Considering the intention of the shared fund to direct funding to projects that are more regional in nature, staff compared the number of households served by individual projects from the 2021 call for projects cycle to the total number of households within the county where each project is located. On average projects in less dense counties may serve a significantly larger number of households than the total households within the county, and projects in more dense counties may serve a significantly smaller number of households than the total households within the county, as illustrated in the table below.

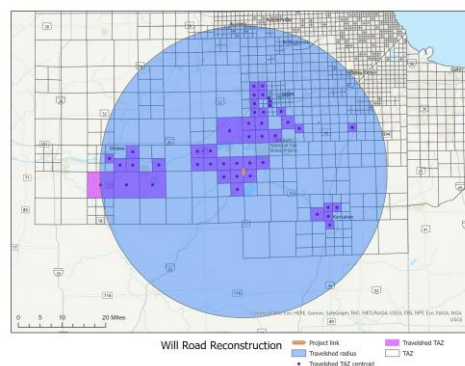
Area	Total hh within area	Average hh in project travel sheds	% of total hh in area
Chicago	1,142,725	391,102	34.2%
Suburban Cook	944,215	148,652	15.7%
DuPage	348,216	149,478	42.9%
Kane	180,374	141,468	78.4%
Kendall	45,534	143,546	315.3%
Lake	244,523	73,625	30.1%
McHenry	114,282	67,781	59.3%
Will	240,009	117,262	48.9%
All Projects	3,266,741	149,859	42.8%

Recognizing that counties are large and irregularly shaped and that the actual service reach of projects is more concentrated, staff proposed defining a “project area” based on the project’s modeled travel shed. This would be determined by measuring the distance from the center of the project to the centroid of farthest zone within the travel shed, then using that distance as a radius to define all zones that make up the project area, as illustrated below.

Project travel shed



Project area



Staff further proposed splitting the jobs + hh (sum) scoring into two equally weighted (5 points each) components: total jobs and proportion of households served. The total jobs component would be unchanged from past cycles, with the score calculated by adding up the total number of jobs within each project’s travel shed and converting the total to a score out of 5, indexed to the other submitted projects. The proportion of households served component would calculate the ratio of households within each project’s travel shed to the total households within the project area and convert that ratio to a score out of 5, indexed to the other submitted projects.

Conclusion and next steps

Some disparity in the jobs + households scoring does exist between Chicago, Suburban Cook, and the Collar Counties. While this disparity is partially by design – to direct funding to projects that encourage transit use, serve in a regional capacity, and discourage sprawl – a small change to the scoring methodology could result in a more equitable process that elevates projects within less dense areas that are more regional relative to more locally-oriented projects. Staff is reintroducing this research and recommendation from 2022 for STP Project Selection Committee consideration for the FFY 2026 – 2030 call for projects cycle.