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SUBJECT: Addressing Food Systems in the City of Ithaca's Green New Deal

This memo discusses further incorporation of food systems (including local agriculture support and food security) into the City of Ithaca's and Town of Ithaca's Green New Deal efforts. This memo was written for the graduate course CRP 5830: Land Use Planning Methods at Cornell University.

Ithaca is an urban environment; therefore, its climate goals naturally tend to focus heavily on those sustainability issues that face the built environment, including energy use in existing building stock, new construction, and transportation. However, even urban-based sustainability efforts must acknowledge the critical role of agriculture and food systems in achieving climate goals, particularly if these goals are going to be accomplished in an equitable manner. Indeed, the federal Green New Deal resolution includes food systems in its aim to meet "100 percent of the power demand in the United States through clean, renewable, and zero-emission energy sources" by prioritizing "working collaboratively with farmers and ranchers in the United States to remove pollution and greenhouse gas emissions from the agricultural sector as much as is technologically feasible, including— (i) by supporting family farming; (ii) by investing in sustainable farming and land use practices that increase soil health; and (iii) by building a more sustainable food system that ensures universal access to healthy food" (H.Res. 109, 2019).

Many other municipalities who, like the City and Town of Ithaca, have adopted local Green New Deal resolutions, have incorporated food systems into their efforts to meet climate goals. Many such local resolutions focus on collaborating with farmers to green and upscale local agriculture (i.e., increasing local production and consumption of local foods), as well as ensuring everyone has equitable access to fresh, healthy food. Local climate resolutions stress the importance of consulting with local farmworkers, as their livelihoods are highly at-risk to the impacts of climate change and as local climate efforts based around adjustment of our food systems will greatly impact their work (HEAL Food Alliance, 2019). Therefore, any food and agriculture-system based climate efforts developed by the City or Town of Ithaca should be done in close consultation with farmworkers and farming communities. However, based on federal Green New Deal goals, and based on precedents from other local Green New Deal resolutions, Ithaca's local governments should broadly focus on the following three equity metrics when incorporating food systems into its sustainability process: climate-smart local agriculture practices, support for local farmers and ranchers, and green food security efforts.

There is no question that the modern agriculture industry is highly polluting and heavily dependent on fossil fuels. However, while the food system as it stands is a major issue contributing to the climate crisis, “food and farming can also be a central part of the solution” (Archer, n.d.). Innovations in regenerative and organic farming are producing new farming practices that are not only less energy intensive but that sequester more carbon in the soil and are more resilient in the face of climate-based threats. While Ithaca does not have a large portion of its economy engaged in the agricultural sector, there are ways that the City and Town can support other local farming communities in the surrounding county. Critics of the vague food-based goals outlined in the federal Green New Deal legislation have suggested setting up research teams in order to develop more specific action items towards the development of “climate-friendly farming techniques” (Philpott, 2019). Ithaca, advantaged by its robust academic sector, could enact this on a local level by supporting such research to strengthen local food output, thus providing jobs and supporting the use of sustainable production methods that will complement the City’s climate goals. In particular, the City might facilitate partnerships with local research teams, groups such as the Tompkins County Food Policy Council, and surrounding farms and farmworkers in order to ensure that climate-friendly practices are developed equitably through collaboration. If such a program were implemented, progress could be tracked by obtaining qualitative data from farm workers about the method development process as well as obtain quantitative data about the scale of changes to climate-friendly methods.

The same agricultural system that negatively contributes in such a way to the climate crisis must also be recognized as responsible for generating enormous economic and health setbacks for those who work within the system. Farmworkers and surrounding farming communities often “live in or near poverty, and face serious health issues” due to “exposure to toxic agrochemicals linked to cancer, infertility, and numerous other serious health concerns” (Archer, n.d.). Further, farmworkers and farming communities have long suffered “economically from policies that are increasing consolidation and inequity in the food sector” (Archer, n.d.). These issues of inequity have been ingrained in our food systems as the agricultural sector has become carelessly and destructively industrialized: the same reason that our food systems have become so harmful for our climate. Therefore, as the City and Town provide resource-based support for local, climate-friendly farming efforts, it is simultaneously strengthening the health and wellbeing of local farming communities. The City and Town can support nearby agriculture by supporting opportunities to sell locally, perhaps by acting as a link between local farms and food outlets within Ithaca. Support for local agriculture as well as smaller-scale, community-based farming efforts must occur in order for Ithaca’s local governments to equitably advance climate goals through the betterment of its food systems. It would be useful to track which local farms outside of municipal boundaries are doing business within the City, and which businesses within the City are selling products from local farms. The U.S. Department of Agriculture has data sets available with information pertaining to the farm economy as well as farm markets and prices in order to better understand how to link local agriculture into the City’s economy (source below).

Both the City and the Town of Ithaca are, unfortunately, no stranger to food insecurity - according to 2017 data, the overall food insecurity rate in Tompkins County

is 13.4% (Appendix I). Children are impacted by food insecurity at a higher rate: one in five children in Tompkins County are considered “at risk of hunger” (Feeding Tompkins, 2018). Further, hunger on college campuses is an issue that heavily impacts Ithaca’s large student population (Reid, 2018).

For temporarily and long-term food insecure populations, food pantries and meal programs are in place to attempt to meet some gaps (Appendix II). Although such charity organizations fall short of fully addressing the need, they can be strengthened in a manner that would work towards meeting both climate and equity goals. First, in addition to support for banks and pantries, an equitable Green New Deal must consider support for supplier programs such as Friendship Donations Network. Friendship Donations Network intercepts potential food waste from stores, restaurants, farms, and colleges for donation back to food banks, thereby protecting perishable food waste from ending up in a landfill and strengthening food banks’ food supplies with fresher, healthier food than is typically donated.

Second, the City and Town of Ithaca can support existing transportation-based meal and shopping programs through use of its developing green vehicle fleet in order to strengthen these efforts in a manner which does not contribute as much to transportation-based emissions. They may also support such programs by investigating gaps in aid provision to hard-to-reach, vulnerable populations. The Economic Research Service of the U.S. Department of Agriculture has created a Food Access Research Atlas, including a layer available through the scenario planning tool Urban Footprint. The layer “maps food access indicators for census tracts using ½-mile and 1-mile demarcations to the nearest supermarket for urban areas, 10-mile and 20-mile demarcations to the nearest supermarket for rural areas, and vehicle availability for all tracts” using updated estimates from 2015 data (Appendix III). The City and Town could also map similar information manually by identifying or creating a geographic information systems (GIS) layer showing “locations of businesses tagged by public contributors as 'supermarket' or 'greengrocer’” (OSM Supermarkets) to layers showing, for example, a Social Vulnerability Index, which ranks Census tracts “on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes” (Appendix IV) or to Opportunity Zones, characterized as “an economically-distressed community where new investments, under certain conditions, may be eligible for preferential tax treatment” (Appendix V).

Resources

Recognizing the duty of the Federal Government to create a Green New Deal, H.Res. 109, 116th Cong., 1st Sess. (2019).

HEAL Food Alliance. (2019, July 18). *100,000+ people demand a Green New Deal that transforms our food system* [Press release]. Retrieved from <https://healfoodalliance.org/100000-people-demand-a-green-new-deal-that-transforms-our-food-system-to-combat-the-climate-crisis/>

Archer, L. (n.d.) *Green New Deal must transform our food system to save our climate*. Friends of the Earth. <https://foe.org/green-new-deal-must-transform-food-system-save-climate/>

Philpott, T. (2019). *Why the Green New Deal is so vague about food and farming*. Mother Jones. <https://www.motherjones.com/food/2019/02/why-the-green-new-deal-is-so-vague-about-food-and-farming/>

Feeding Tompkins, Health & Human Services (2018). *Feeding Tompkins: Food insecurity is anything but simple*. The Ithaca Voice. <https://docs.google.com/document/d/1vwIARbZbMLtd6FpnPjRevncv4IYYo3igQN9XOXzo2k8/edit>

Tompkins County Food Policy Council. Community page, Facebook. <https://www.facebook.com/TCFoodPolicyCouncil/>

Reid, A. (2018). *IC Students to swipe out hunger*. IC News. <https://www.ithaca.edu/news/ic-students-swipe-out-hunger>

United States Department of Agriculture Economic Resource Service. *Data Products*. USDA ERS. <https://www.ers.usda.gov/data-products/>

Appendix I

Table One: Map the Meal Gap 2019: Overall and Child Food Insecurity by County in 2017, Tompkins County, New York. Sourced from https://public.tableau.com/profile/feeding.america.research#!/vizhome/2017StateWorkbook-Public_15568266651950/CountyDetailDataPublic

Map the Meal Gap 2019:
Overall and Child Food Insecurity by County in 2017

Select State
New York

Select a View
Overall

Low Threshold in state (2017 State)	200%
High Threshold in state (2017 State)	200%

County, State	Total Population (13-17 ACS)	Food Insecurity Rate (2017)	# of Food Insecure Persons (2017)	% FI ≤ Low Threshold	% FI Btwn Thresholds	% FI > High Threshold
Tompkins County, New York	104,415	13.4%	13,980	58%		42%

State (2017 State)	Total Population (aggregate of Congressional Districts)	Food Insecurity Rate (2017 aggregate of Congressional Districts)	# of Food Insecure Persons (2017 aggregate of Congressional Districts)	% FI ≤ Low Threshold (2017 State)	% FI Btwn Thresholds (2017 State)	% FI > High Threshold (2017 State)
New York	19,849,399	11.4%	2,261,250	75%		25%

For additional data and maps by county, state, and congressional district, please visit map.feedingamerica.org.

Gundersen, C., A. Dewey, M. Kato, A. Crumbaugh & M. Strayer. *Map the Meal Gap 2019: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2017*. Feeding America, 2019. This research is generously supported by The Howard G. Buffett Foundation and Nielsen.

Map the Meal Gap's food insecurity rates are determined using data from the 2001-2017 Current Population Survey on individuals in food insecure households; data from the 2017 American Community Survey on median household incomes, poverty rates, homeownership, and race and ethnic demographics; and 2017 data from the Bureau of Labor Statistics on unemployment rates.

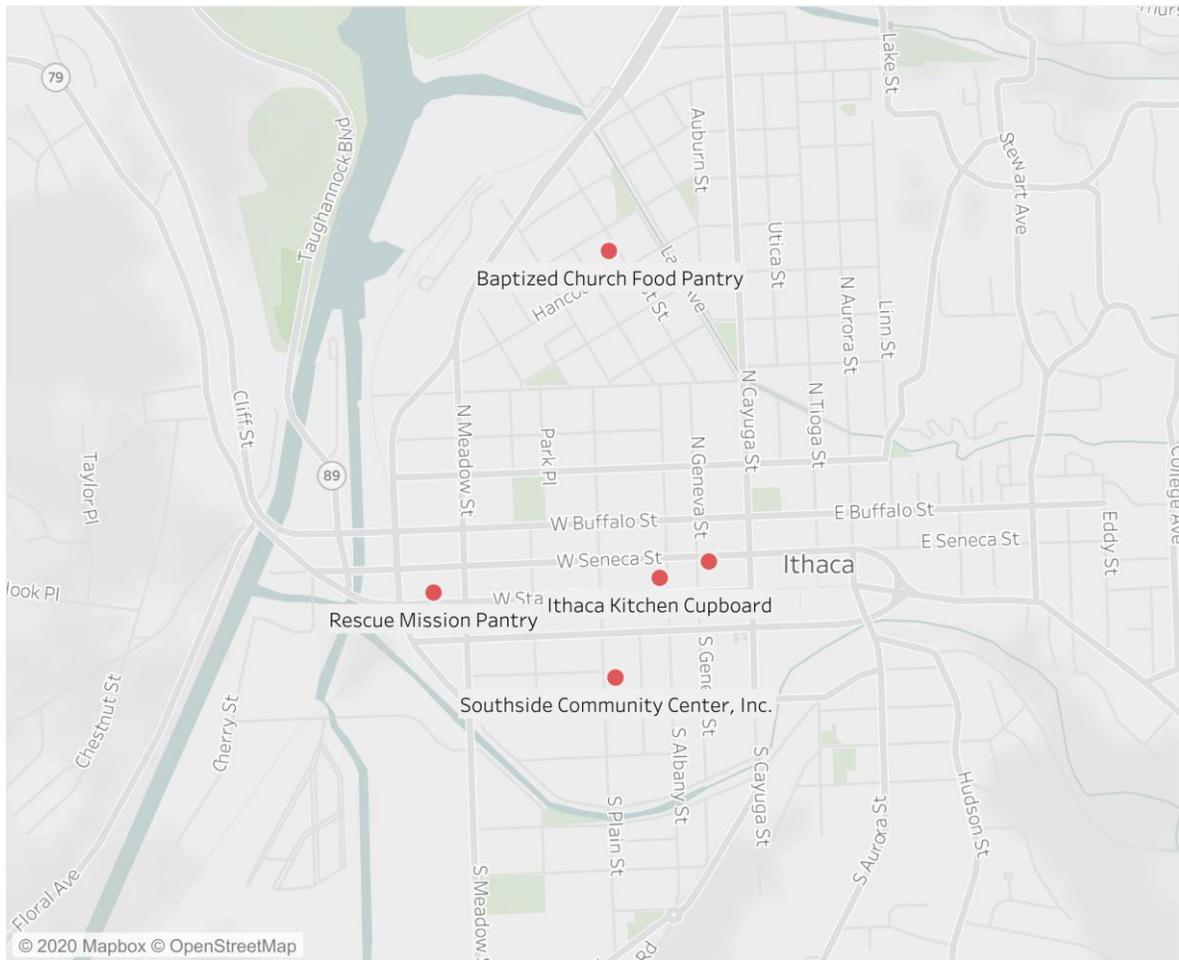
Threshold numbers reflect percentage of food insecure individuals living in households with incomes within the income bands indicated. Eligibility for federal nutrition programs is determined in part by these income thresholds which can vary by state.

Population and food insecurity data in the state totals row do not reflect the sum of all counties in that state. The state totals are aggregated from the congressional districts data in that state. All data in the state totals row pertaining to the cost of food or the "Meal Gap" reflect state-level data and are not aggregations of either counties or congressional districts.

Appendix II

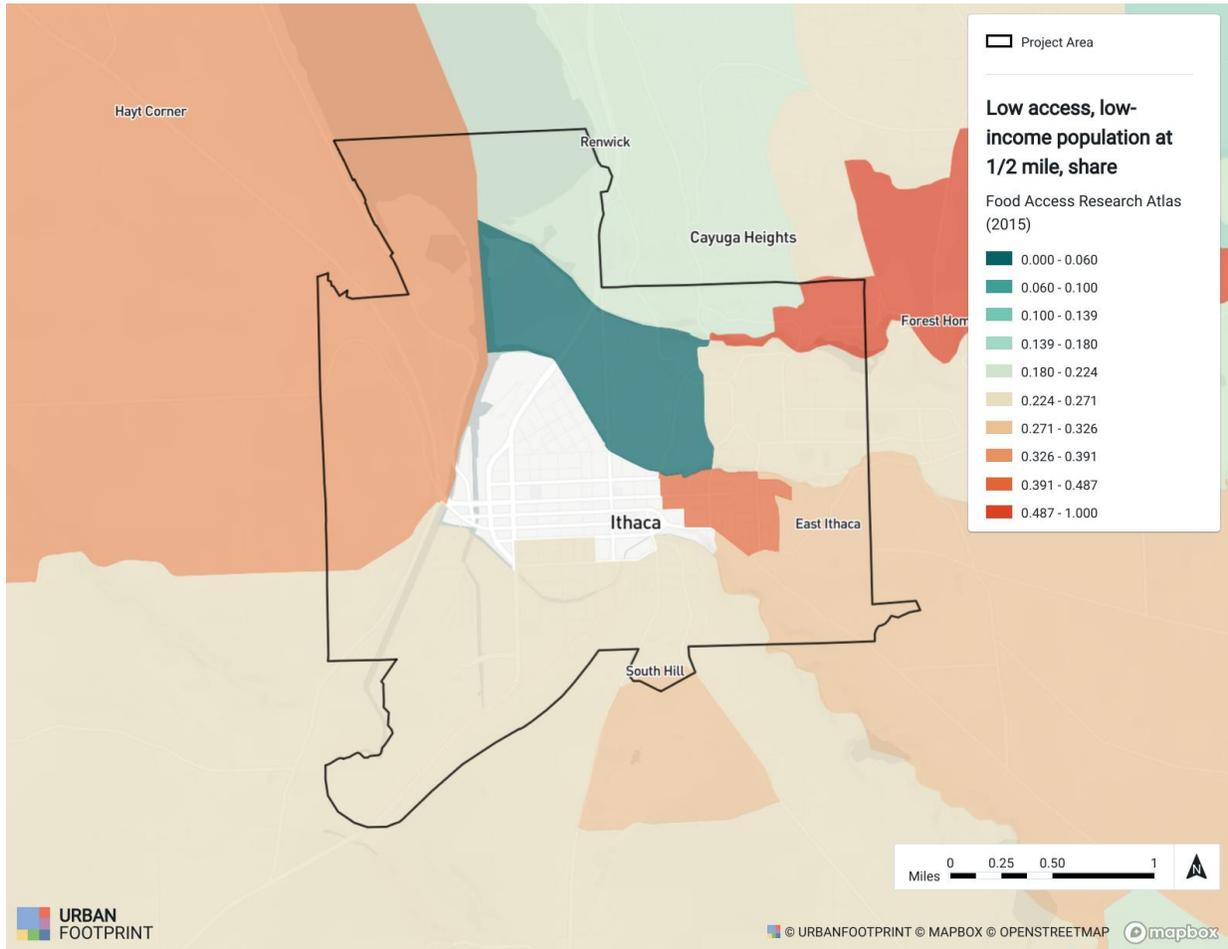
Map One: Tompkins County Food Pantries. Retrieved from <https://ithacavoice.com/2018/03/feeding-tompkins-food-insecurity-is-anything-but-simple/>

Tompkins County Food Pantries



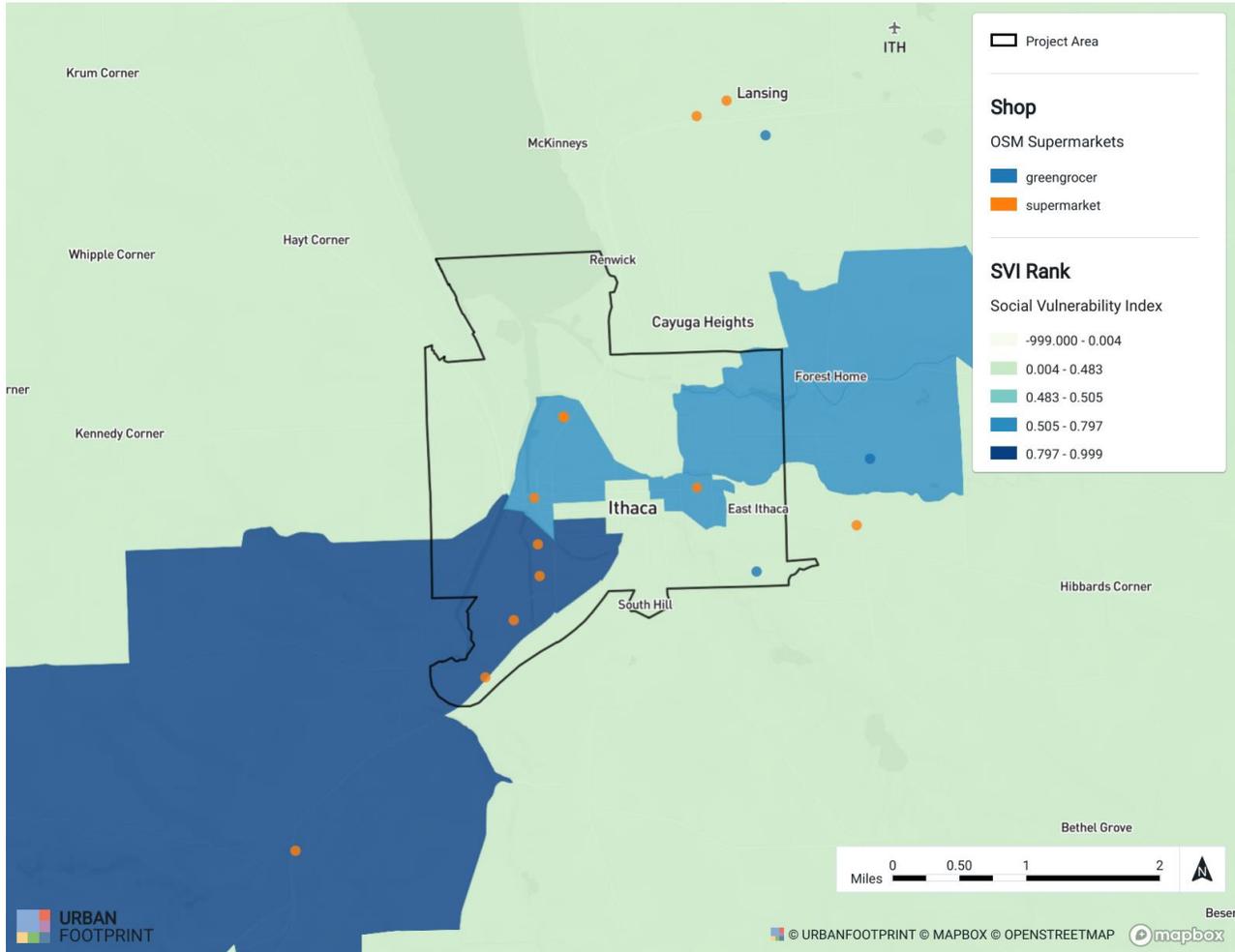
Appendix III

Map Two: Food Access Research Atlas. Map created on Urban Footprint. Data set sourced from <https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx>



Appendix IV

Map Three: OSM Supermarkets and Social Vulnerability Index. Map created on Urban Footprint. OSM Supermarkets data set sourced from <https://www.openstreetmap.org/> and Social Vulnerability Index data set sourced from <https://svi.cdc.gov/index.html>



Appendix V

Map Four: OSM Supermarkets and Opportunity Zones. Map created on Urban Footprint. OSM Supermarkets data set sourced from <https://www.openstreetmap.org/> and Opportunity Zones data set sourced from <https://www.cdfifund.gov/Pages/Opportunity-Zones.aspx>

