



TO: Mayor and Council

FROM: Tom Crawford, Interim City Administrator

CC: Derek Delacourt, Community Services Area Administrator
Raymond Hess, Transportation Manager
Craig Hupy, Public Services Area Administrator
Nick Hutchinson, City Engineer
Earl Kenzie, Wastewater Treatment Plant Manager
Brett Lenart, Planning Manager
Jerry Markey, City Assessor
Marti Praschan, Chief of Staff, Public Services
Colin Smith, Parks & Recreation Manager
Brian Steglitz, Water Treatment Plant Manager
Missy Stults, Sustainability & Innovations Manager

SUBJECT: June 1, 2020 Council Agenda Responses

DATE: May 28, 2020

CA-3 – Resolution to Establish a Project Budget for the Gallup Vehicle Bridge Replacement Project and Appropriate Funds in the Amount of \$145,000.00 (8 Votes Required)

Question: Q1. Regarding CA-3, do we have a sense of the timeline for the project – start/end dates for design and for construction? Also, do we have a sense of approximately how much we expect the total project budget to be including construction? (Councilmember Lumm)

Response: Potential timeline:

- **2020:** Schematic design/planning with community engagement. Grant applications.
- **2021:** Additional grant applications, permit applications, consultant selection.
- **2022:** Detailed design and engineering, bidding.
- **2023:** Construction

As for total project budget, we will know more after schematic design. When the bridge was inspected a few years ago the engineering company provided an estimate of \$2.4 million for the bridge replacement & approach drives. That number does not include design fees for the structure or the costs related to the adjacent park road and trail improvements which could be done as part of the project or in subsequent phases. It should also be noted that the estimate of \$2.4 million will be about 5 years old by the time of construction.

Question: Q2. Also on CA-3, PAC approved allocating the \$145K of FY20 “Parks Fairness” proceeds in September (prior to COVID-19) – have there been any conversations w/PAC since about this project or other recommended allocations? (Councilmember Lumm)

Response: There have not been further conversations, although PAC has not met since the winter due to COVID-19. At their January meeting PAC did recommend approval of a contract for lighting at the skatepark and established an initial project budget of \$100k, utilizing FY20 “Parks Fairness” funds. On February 19 City Council approved the contract and project budget.

CA-4 – Resolution to Change the Date for the Mayor’s Green Fair to Friday, August 14, 2020 from 3:00 PM until 11:00 PM

Question: Regarding CA-4, if the Green Fair is being re-scheduled, is the city also now accepting applications for other previously approved, but cancelled, events? (Councilmember Lumm)

Response: The Green Fair and the Dexter-Ann Arbor Run have been the only previously Council approved events to request a date change. Any future requests for a date change would be submitted to Council with the same caveat that it could be subject to change or cancellation, based on Executive Orders.

CA-7 - Resolution to Approve an Interim Right-of-Way License Agreement with Spin, Inc., for the Operation of Electric Scooters in the City of Ann Arbor

Question: Regarding CA-7, are there any substantive changes in this interim agreement vis-à-vis the old agreement? Also, why are we doing another interim agreement rather than a permanent agreement? (Councilmember Lumm)

Response: The most notable change to the interim agreement is the increase in the number of scooters from 200 to 300. The interim agreement is still pursued for several reasons: a) it provides flexibility to the City and accountability of the operator since renewals occur quarterly; b) the Transportation Commission’s Micro-mobility Committee continues to provide guidance on e-scooter operation and regulation including feedback on a draft ordinance which could regulate e-scooters and other forms of micromobility; and c) there is still a need to synchronize the agreements between City/SPIN and the University/SPIN to ensure consistency.

CA-8 – Resolution Directing the City Administrator to Prepare Resolutions to Approve Ballot Language for a Street, Bridge, and Sidewalk Millage

Question: Q1. When you say the new 2.15 millage (renewal piece) would “take effect in 2022”, does that mean it starts with the Summer 2022 tax bill (FY23)? (Councilmember Lumm)

Response: Yes.

Question: Q2. If the new 0.2 mill sidewalk construction millage is passed, I’m assuming that would also take effect in 2022 and follow the same collection timing as the 2.15 renewal piece – correct? (Councilmember Lumm)

Response: Yes, that is how the Resolution is currently written. See also the response to Q6 below.

Question: Q4. If the new 0.2 mills passed in November, what would the plan be for sidewalk gap projects in the period between then and when the money is actually collected in two-years time - put them on hold or somehow “borrow” against the future anticipated revenue or something else? (Councilmember Lumm)

Response: Any projects already approved, or approved during the time until the new millage (if approved) takes effect, would proceed under the current system of special assessments. However, there is a possibility of bonding against the future millage to finance projects in the interim. This is currently being explored in more detail. See also the response to Q6 below.

Question: Q5. Are there any other sidewalk gap projects (other than Jackson Ave and the Boardwalk project on the June 1 agenda) that are being considered and/or conversations that have begun with residents? (Councilmember Lumm)

Response: Sidewalk gaps on Barton Drive, Fuller Court, and Nixon/Traver have already been approved by City Council and are awaiting construction. There is one additional location scheduled for construction this year, Stimson Street (R-19-510), for which engagement with property owners is just beginning.

Question: Q6. If the 0.2 mills sidewalk construction millage passed, would it then simply be combined with the 2.15 mill millage or would it be maintained separately with the funding amount available limited to the amount the 0.2 mill generates (the \$1.1M in the first year)? (Councilmember Lumm)

Response: This Resolution was written with the presumption that the 0.2 mills for new sidewalk construction would be added to the Street, Bridge, and Sidewalk Millage. In that

case, the “Use Resolution” that spells out how the millage would be used (which will be presented to Council on the same day as the ballot language), would include language about how this 0.2 mills could be used within the framework of the larger millage. However, another option is feasible where the 0.2 mills for new sidewalk construction would be a separate millage. In this case, a separate millage could be set up such that it went into effect in 2021 (collection starting in FY22). If it is Council’s desire to have this as a separate millage, then staff suggests that the current Resolution be amended to reflect this.

Question: Q7. Staff are recommending separating the two questions (1) “renewal” and (2) new tax for sidewalk construction, and I fully support that for transparency purposes as well as providing taxpayers the full range of choices. I also support conditioning the approval of (2) on the approval of (1). Beyond transparency and choice, are there other specific legal or legislative reasons the two questions should be kept separate? (Councilmember Lumm)

Response: No.

Question: Q8. Is there any precedent for conducting a millage renewal referendum this long before it would take effect? (Councilmember Lumm)

Response: Since at least 2006, the millage has been on the ballot in the year that the previous millage expired. Further research would need to be conducted to determine if the current situation ever occurred in the past. However, being that in the past there was an election in every year, it is unlikely that this situation has occurred before.

Question: Q9. What is envisioned in the “Public Communication Plan”? Also, can you please confirm the communication will be educational only with no advocacy? (Councilmember Lumm)

Response: The communication plan is still in the process of being developed. However, it will consist of education and information sharing only, not advocacy.

Question: Q10. If the 0.2 mills passes, does that mean all sidewalk gap assessments go away (including commercial, UM, AAPS as well as residents)? If not, who gets assessed and who doesn’t and is that legal? Also, does this make it more difficult to have developers pay for the assessments they fund as part of their projects? (Councilmember Lumm)

Response: The current intention is that the millage for new sidewalk construction would replace special assessments for sidewalk gaps for taxable parcels only. Non-taxable parcels would still be assessed for new sidewalk construction, or the City would enter into a separate agreement for payment (as is often done with U of M and Ann Arbor Public Schools currently), as appropriate. Language to this effect will also be included in the Use Resolution that will come to Council for approval in July. If City Council desires to only partially offset assessments with the proposed millage, an

amendment to the resolution would be appropriate. If this millage is approved, Chapter 13 of the City's Code will need to be amended to reflect these items. This millage would not affect how developers pay for new sidewalks.

Question: Please provide an update on how the 0.20 mils for sidewalk millage could impact the current three sidewalk projects that have nearly unanimous objection from the impacted residents (Barton, Nixon/Traver, Jackson). At the May 18 meeting, Council Member Bannister raised the issue and received general support from staff, for the concept of bringing back Barton and Nixon/Traver, to be included with Jackson in the ongoing work to create a better outcome. What are the options to "bring back" these issues and continue to work on them? Has any progress been made? (Councilmember Bannister)

Response: A future millage approved for sidewalk gap elimination could not be used to fund previously approved projects funded through SADs. The discussion during the May 18th Council meeting to "bring back" the Barton, Nixon and Traver SADs related to clarification of the due date of the first installment, which will be addressed through a separate resolution for Council consideration. Generally, a matter can be reconsidered at the next meeting as provided for in Council Rule 13. Reconsideration beyond the next meeting could be done under Rule 19 to suspend the rules, which requires a 2/3 vote of the members present; however, as to the SADs already approved, reconsideration may be restricted due to timing and other circumstances, such as the award of a contract and commencement of the project.

Question: What do residents need to be doing to meet the 30 day deadline for the State Tax Tribunal? (Councilmember Bannister)

Response: Please see below.

Deadline to file an appeal by the petitioner,
Petitioner has 30 days from day city council approved the SAD
May 4 council approval
Appeal deadline June 3

MTT appeal forms

There are two different appeal forms the petitioner would use depending on the value of the SAD charge to the resident.

Small Claims appeal Under \$20,000; MTT appeal form (PDF) attached

Full Tribunal appeal Over \$20,000; MTT appeal form (PDF) is attached

Filing Fee Small Claims

(d) The fee for filing a property tax appeal petition contesting a special assessment or a non-property tax appeal petition is \$100.00.

Filing Fee Full Tribunal

(c) The fee for filing a property tax appeal petition contesting a special assessment or a non-property tax appeal petition is \$250.00

Question: What happens if residents are reluctant to sign the grading easements? (Councilmember Bannister)

Response: This question is not related to the agenda item, and will be responded to separately.

CA-10 - Resolution Authorizing Membership in the Michigan Water/Wastewater Agency Response Network (MiWarn)

Question: Does membership in MiWarn have any membership fee or other cost? (Councilmember Eaton)

Response: There are no fees or costs associated with membership in MiWarn.

CA-13 – Resolution to Award a Contract to C.A. Hull Company, Inc. to construct the Wastewater Treatment Plant 2020 Access Bridge Repair Project (\$114,139.58) (8 Votes Required)

Question: Regarding CA-13, not a big deal, but I'm a bit confused on the funding. Since \$60K was included in the FY20 budget for this, why isn't the fund balance paying for the difference between the \$131K total cost (including contingency) and that \$60K, rather than paying the full amount? (Councilmember Lumm)

Response: Funds were originally intended to be spent in FY20, however, due to COVID delays, we will be expended in FY21. Since the operations and maintenance budgets are not multi-year, the FY20 appropriations will technically return to fund balance and be used from the FY21 Operations and Maintenance budget.

CA -14 - Resolution to Approve the Collective Bargaining Agreement between the City of Ann Arbor and Ann Arbor Police Officers Association effective January 1, 2020 - December 31, 2022

Question: Q1. Regarding CA-14, I understand a DROP program has not been evaluated, discussed or presented to the AAPOA and Council for consideration as part of this contract negotiation. Given that this is a proposed three year contract and we have a significant number of officers eligible for retirement, what would be the proper process and mechanism to advance consideration of a mutually beneficial, fiscally responsible DROP program for the AAPD? (Councilmember Lumm)

Response: Since this item was discussed in a closed session with the Budget & Labor committee, staff recommends including this item on the committee agenda at its next meeting.

Question: Q2. Also, on CA-14, I understand the negotiations preceded the City's current COVID-related financial challenges, but am interested in knowing if the negotiation team circled back to the AAPOA to discuss the City's financial outlook and possible adjustments to the contract? (Councilmember Lumm)

Response: Since this item was discussed in a closed session with the Budget & Labor committee, staff recommends including this item on the committee agenda at its next meeting.

C – 1 - An Ordinance to Amend Sections 5.29.6 and 5.29.7, and Add a New Section 5.29.8, of Chapter 55 (Unified Development Code) of Title V of the Code of the City of Ann Arbor (Code Requirements of Site Plans and Area Plans)

Question: Regarding C-1, thank you for taking the time to streamline and clarify these requirements for end users. The cover memo and the staff report both indicate that there are no changes in the code - is it also accurate that these changes will not result in any changes in our current practices? (Councilmember Lumm)

Response: Correct, the proposed changes are strictly intended to reorganize and improve communication of current practices.

Question: Q1. As long as a Site Plan for Administrative Approval still needs the same info submitted as is needed for City Planning Commission and City Council Approval, how does this improve the time and expense of this process for small projects? (Councilmember Bannister)

Response: Administrative Site Plans do require the same amount of information submitted, however the time and expense of the process is still beneficial for smaller projects. As time progresses, often property owners are balancing staff/consultant time (time to attend meetings, etc.), property entitlement (e.g. potential costs to maintain purchase options), or overall extended time for construction and operation (e.g. potential to miss a target rental season, inability to complete work which delays occupancy for business/revenue activities, etc.). For reference, over the past three years, the average site plan that was considered administratively went from application to approval in 117 days, 107 days for City Planning Commission, and 273 days for City Council approval.

Question: Q2. Is there an overall criteria for the review process, to be used by the various departments? How is it communicated to applicants? ? (Councilmember Bannister)

Response: Yes, the Unified Development Code communicates the standards required to applicants. The Unified Development Code outlines the expectations and requirements, through specific language or reference to other documents, of the requirements for approval. This is communicated to petitioners through reviews conducted by numerous departments in the City, based on the applicable sections of code requirements to their discipline. These reviews can range from a simple "approval" to a

memorandum that details specific aspects of a development proposal that require attention to meet City codes.

Question: Q3. Please explain why topographic contours are required at 5 feet apart on the site and 2 feet apart outside the site? (Councilmember Bannister)

Response: Thank you for this question, it points out an error that will be corrected with a revised Ordinance attached to this agenda item (i.e. clarifying the corresponding provisions of a site analysis when an ALTA survey is waived).

The UDC provides for variation depending on the type of plan being submitted for review. For Site Plans where an ALTA Survey is required, 2 feet topographic contours are required across the site and covering area 50 feet outside of property boundaries. This is required so that reviewers can have clear understanding of the existing and proposed grades of the site, and how these grades may impact natural features, pedestrian and vehicular movement, stormwater system design and function, as well as other measurements involving height as a development moves toward approval and subsequent construction.

For Site Plans where an ALTA Survey may be waived (e.g. Area Plans, Special Exception Use Permits, Administrative Amendments) this amendment applies the current Area Plan contour measurement (5 feet apart) to other waived ALTA survey plans.

Question: Q4. In order to group like subjects together, should the two new criteria for review sections be moved up to their associated sections of Traffic Analysis and Natural Features? (Councilmember Bannister)

Response: Staff prefers them as presented so that all of the content requirements and review criteria are together, but this could be adjusted as desired by Council. These criteria sections are not new, they are carried forward in their exact form as currently included in the UDC.

Question: Q5. Please define Plot Plan and Site Plan, and “Conceptual Dimensional Layout Plan” and “Dimensional Layout Plan.” ? (Councilmember Bannister)

Response: “Plot Plan” is not a defined term in the current or proposed amendments. It has been used as a general description of a document with minimal site information generally during the petition review process historically, but is not a specific product defined by the UDC.

“Conceptual Dimensional Layout Plan” is a component of required content for an Area Plan. It is defined as - For Area Plans only – Drawings and written description of the proposed Development, including the following: 1. Existing and proposed topography at five foot or best available contour intervals and Limits of Soil Disturbance; 2. Orientation and general location of all proposed improvements; 3. Vertical sections through the Site showing existing and proposed improvements will result in a significant change in a Steep

Slope; 4. Proposed pedestrian, vehicle, and service circulation patterns on the Site; 5. Proposed Lot lines and Required Setback Lines; 6. Areas of natural features which are proposed to be removed or distributed and a general description of mitigation plans; and 7. Natural Features General Descriptions: Woodlands, Wetlands, Landmark Trees, Watercourses, Steep Slopes, floodplains, Endangered Species Habitat.

“Dimensional Layout Plan” is a component of required content for all Site Plans. It is defined as - Drawings and written descriptions of the proposed Development must be provided on the plans, demonstrating compliance with all applicable Development standards such as building area, height and placement, off-street parking, streets and access, including the following: 1. Existing and proposed Lot lines; 2. Minimum and maximum Required Setback Lines, including Established Front Building Line and required increases to the normal minimum side and rear setbacks, if applicable; existing and proposed Front, Side and Rear Yards; 3. Existing and proposed Buildings; 4. Vehicle Parking Spaces, aisles and Driveways. Identify any “no parking” areas or fire lanes and indicate any proposed signage; 5. Bicycle parking, including detail of facilities; 6. Curb Cuts, drive Approaches and curb radii dimensions, including all Curb Cuts on the opposite side of the street from the Site. Dimension of all Fire Department access roads or lanes, if applicable, including width at hydrant, dead end lengths, turn-around location, turning radii, etc.; 7. Solid waste enclosure, including dimensioned detail; 8. Additional information required for Area Plans: Landscaping, fences and retaining walls; 9. Additional information required for Site Plans: Open Space and Active Open Space; 10. Additional information required for Site Plans: Natural features buffer; 11. Additional information required for Site Plans: Conflicting land use buffer; 12. Additional information required for Site Plans: Perspective sketch of building showing Streetwall Height and Offset, if applicable.

Question: Q6. Are small projects still subject to the costly engineering requirements of Storm Water Management, Transportation Impact Analysis, and Photometrics? (Councilmember Bannister)

Response: All Site Plans, regardless of level of review have to comply with Storm Water Management, Transportation Impact Analysis, and Photometrics for the proposed development.

Question: Q7. See attached redlined version. (Councilmember Bannister)

Response: This does not appear to be a question.

DS-1 - Resolution Adopting the Living A2Zero Ann Arbor Carbon Neutrality Plan

Question: Q1. The summary graph on page 8, shows greater community carbon reduction in the initial 5 years (2020-2025) than the similar table on page 89 of the March 30 OSI Powerpoint presentation. Is any of the difference in carbon reduction in the

first five years attributable to the City or is all of that difference from other entities?
(Councilmember Eaton)

Response: After the March 30 presentation, the University of Michigan shared their planned emission reduction actions for the next two years and their calculated impact. The updated graph includes (1) the University's participation in a voluntary green power purchase agreement and (2) scheduled upgrades to their natural gas plant. The second update was the inclusion of DTE's Integrated Resource Management Plan, which projects coal plants coming offline within the next five years. These are not actions within the City's scope.

Question: Q2. The summary graph on page 8 shows a “win scenario” that “assumes that the University of Michigan mirrors the actions of the city”. Are there any exclusions from that list of actions? Many of the proposed actions do not directly reduce carbon emissions (aimed at affordable housing, for example) and others do not seem relevant to the UM (Park and Ride, for example). Which of the strategies are included as a “mirror” by the UM? (Councilmember Eaton)

Response: The plan looked at reducing community-wide emissions to reach carbon neutrality, including the University of Michigan. While the University of Michigan has not released their plan, we modeled emission reductions potentials for actions that can also address the University of Michigan's use of electricity and fossil fuels. The actions that explicitly included the University of Michigan are: Community Choice Aggregation, Onsite Renewable Energy Generation with Batteries (i.e., bulk buy of renewable energy), Home and Business Electrification, Electrify All Buses, and the Transition to More Energy Efficient Homes and Businesses (i.e., bulk purchase of energy efficiency equipment). Except for buses, community vehicle miles traveled are not differentiated by employer so actions that address emissions from vehicles also address activities that relate to the University of Michigan.

Question: Q3. The summary graph and the text that follows indicate preliminary estimates for UM reductions but it does not indicate what the reductions solely due to the City of Ann Arbor actions would be. This needs to be indicated graphically as well. Assuming that all the strategies listed are carried out in full, what would be the reduction over the 10-year time period due to the City's efforts alone? (Councilmember Eaton)

Response: The emissions reductions model estimated emission reductions with the University of Michigan as well as without the University of Michigan's participation in A²Zero Plan. The without scenario has the City achieving a 55% greenhouse gas emissions reduction, with the rest needing to come through offsets.

Question: Q4. UM has locations that are outside the City, and the PCCN cited in the plan has sections that address UM-Flint and UM-Dearborn. Are those being excluded from our calculations? If we are going to lump UM in with Ann Arbor, we should be sure to exclude parts of their plan that do not include the City. Here is that site: <http://sustainability.umich.edu/media/files/U-M-Carbon-Neutrality-Fall-2019->

[Report.pdf](#) Please explain how the UM reductions have been calculated to exclude University operations outside of Ann Arbor. (Councilmember Eaton)

Response: UM Flint and UM Dearborn are not included in the emissions attributed to the University of Michigan in our greenhouse gas emissions inventory.

Question: Q5. On page 9, the Plan shows a chart with the expected reductions in carbon emission by the University. Please explain what assumptions were used to reach the projected reductions. (Councilmember Eaton)

Response: Assumptions used to show future emissions reductions at UM include: the Central Power Plant (CPP) turbine improvements will decrease annual electricity usage by 125,000,000 kWh beginning in 2022, CPP turbine improvements will increase annual natural gas usage by 4,500,000 CCF beginning in 2022, and the UM will purchase 200,000,000 kWh annually beginning in 2021. These figures were provided directly by the UM Office of Campus Sustainability.

Question: Q6. On page 9 is this declaration: “Models run as part of this analysis showed that a minimum staffing of 15 full time equivalent employees are needed, combined with a varying number of consultants, to fully implement this Plan.” Where are these models? Who generated them? Was this estimate based on an expert in organizational management or was it based on thumbnails of how many hours would be needed for each project? (Councilmember Eaton)

Response: The City, in partnership with Elevate Energy and Farr Associates, developed a greenhouse gas quantification model as well as a cost model as part of the A²Zero planning process. For staffing, the model looked at total number of hours needed to complete a given action, any different responsibilities needed over the life of an action (i.e., project design versus program management versus legal analysis versus enforcement), and year over year estimates of what skills would be needed, when. Combined, these variables led to the staffing estimates presented.

Question: Q7. On page 11, it says “A2Zero was designed to be ... failure-positive ...” In this context, what does failure-positive mean? (Councilmember Eaton)

Response: Also referred to as "failing forward," this concept means accepting all actions may not achieve their intended result but utilizing this learning to improve performance and likelihood of overall success.

Question: Q8. On page 16, the Plan notes that there were three public surveys. Were the survey questions written by someone with training in scientifically valid survey methods? Were the surveys scientifically valid? If so, by what criteria? (Councilmember Eaton)

Response: The survey questions were written by Dr. Stults who has training in survey methodology. The survey was not designed to be a scientific survey so results are not

from a representative sample. This means the results can provide directionality to planning but cannot tell us definitively what the entirety of Ann Arbor wants. The decision to not run a scientific survey was intentional. First, the thoroughness of a survey depends on the time allocated for it. A²Zero was completed in 82 working days with three surveys administered in that time, each survey only be live for 3-4 weeks. Scientific surveys can take months to design and administer. Second, the survey instrument was also used as a tool to understand who we were reaching with A²Zero outreach and engagement, thereby enabling targeted engagement for underrepresented groups. Third, the survey was part of a suite of engagement tools used for A²Zero as opposed to being the primary source of input.

A²Zero ran three surveys. The first garnered just under 400 respondents and the last two had approximately 1,000 respondents. According to Survey Monkey, a community the size of Ann Arbor needs 400 responses to have a statistically valid survey with a 95% confidence and a margin of error of 5%.¹

Question: Q9. On page 16, the Plan notes that the public engagement included 68 public events between November 13th, 2019 and March 12th, 2020. Do you know how many unique participants attended the events? (Councilmember Eaton)

Response: We did not collect personal identifiers at events so do not know the exact number of unique individuals engaged. We conducted engagement events in various areas of the city, during different days of the week and times of day, and using different methods of engagement to involve as many residents as possible. A list of the types of engagement conducted can be found in the appendix to the A²Zero Plan.

Question: Q10. On page 22-23, the Plan proposes Community Choice Aggregation (CCA) as a means to reduce carbon by 21%. It is my understanding that DTE has expressed strong reservations about CCA. Considering the how powerful the state's utility companies are in lobbying the state legislature, how likely is it that this can be accomplished? Has the City's lobbyist provided any advice on the likelihood of achieving this legislative change? (Councilmember Eaton)

Response: Staff cannot comment on the likelihood of any piece of legislation passing at the State Capitol. The utility has indicated opposition to more choice as well as other solutions that disrupt their business model. The utility's plan does not meet the aggressive timeline of local carbon neutrality set by Ann Arbor City Council and continues to push green pricing programs that staff believe are overpriced and out of lockstep with the market (see the City's IRP testimony for more details). Because of these factors, staff have been exploring options that provide more choice and local control to Ann Arbor businesses and residents.

Question: Q11. The Plan's goal of implementing a Community Choice Aggregation program may not be possible. What alternative methods of achieving the expected

¹ <https://www.surveymonkey.com/curiosity/how-many-people-do-i-need-to-take-my-survey/>

carbon reduction is available should the state legislature fail to pass the necessary legislation? (Councilmember Eaton)

Response: Other possible courses of action could include Renewable Power Purchase Agreements (PPA), Virtual PPAs, carbon offsets, municipalization, and negotiating some type of new renewable energy program directly with our utility.

Question: Q12. On page 24, to support on site energy generation, the Plan proposes establishing a bulk purchase program. What is the first year (2020) cost of this program's pilot program? (Councilmember Eaton)

Response: \$55,000 is estimated for 2020 to design, create, advertise, and operate the program.

Question: Q13. On page 27, a note on the cost of community solar says: "If the City becomes an anchor tenant, the costs would rise." Is the landfill solar project an example of the "anchor tenant" concept? (Councilmember Eaton)

Response: This refers to the possibility that the landfill solar project could be turned into a community solar project. More specifically, the City could open up the landfill solar project to residents, who could "buy-in" to the installation by purchasing panels that they effectively own. They would then pay the costs of those assets but would receive all the benefits of those assets (environmental and financial). Since the landfill solar site is sized to nearly match the City of Ann Arbor's municipal electricity usage, the City could serve as the anchor tenant, guaranteeing that any energy not purchased by the public, would be purchased by the City.²

Question: Q14. On page 34, Strategy 2, number 2, Electrify Buses, requires action by the AAATA and UM. At the March 30 OSI presentation, I asked whether the transit systems had been consulted about the viability of this expensive (\$80,575,000) and low impact (0.5%) proposal. Have either transit operation provided an analysis of this proposal since March 30? If so, please provide a copy of that analysis. (Councilmember Eaton)

Response: No additional analysis has been conducted since March 30th by the AAATA. UM has a working group through the carbon neutrality task force that is working on this issue. No documents are currently public from this group.

Question: Q15. The carbon reduction graph for implementing the electrification of buses shows a consistent reduction in carbon due to this strategy beginning in 2020, but the timeline shows that electric buses will not be purchased until 2021. What is the explanation for the carbon reduction in 2020? (Councilmember Eaton)

Response: Staff and the consultants modeled purchasing 8 new buses (largely through VW settlement funding) in 2020. As such, the timeline in the document is inconsistent.

² <https://www.elevateenergy.org/programs/solar-energy/community-solar/glossary/>

Question: Q16. The purchase of transit vehicles have a substantial wait time. When did the AAATA order the 9 electric buses mentioned in the timeline on page 34? What was the price differential between the electric buses and a conventionally powered bus? (Councilmember Eaton)

Response: The AAATA has not ordered any electric buses. City staff have identified funding sources to help cover the incremental costs of electric buses but, as of yet, the AAATA has not moved in this direction. In terms of price differential, here are the model inputs:

- The average diesel bus costs \$525,000 to purchase
- there are 87 buses currently in the fleet
- Assumes a 10% annual replacement rate for buses (meaning between 8-9 buses replaced each year, on average)
- A new electric bus is \$800,000
- Assumes costs of \$2,000,000 to retrofit TheRide's facilities to accommodate electric buses
- Fueling costs of existing fleet as being \$39,907,000, which gets to an operating cost of \$458,706 per bus
- Assumes electric costs will be \$34,762,699, which gets to annual operating costs per bus of \$399,571
- Does not integrate a public health benefit associated with switching from diesel to electric (see: https://cfpub.epa.gov/quantifier/assets/docs/diesel_emission_quantifer_deq_relese_notes.pdf)

Question: Q17. On page 48, the Plan says: "In Michigan, local municipalities are constrained by the State's building code, meaning that efforts to advance more energy efficient and ideally net zero energy buildings will need to be done through changes in the State's building code. This action focused on working with the state to pass the 2021 building code and the zero code appendix so that all new developments and major renovations in Ann Arbor can be net zero energy. This action is only estimated to remove 2.2% of the carbon load (48,300 metric tons). The graph on page 49 indicates that by 2021 there has already been a reduction of about 4,000 tons, but the program has not started yet. It is a straight-line graph leading to the desired figure of zero at the end. How was the calculation of carbon reduction due to building codes calculated and what actions happened or are expected in 2020 to accomplish the reduction in that year? (Councilmember Eaton)

Response: The figures in the plan are based on assumptions and methodology provided by the consultants and our team's understanding of actions required to achieve successful programs. They provide directional information for each strategy. The plan estimates the building code being adopted in 2021, which means some buildings in 2021 may comply with these standards, so there is a negative trend from 2020 to 2021.

Question: Q18. The Plan assumes that the State will adopt a new building code in 2021 and that it will apply to new buildings built in 2022 and thereafter. Considering the economic impact of the pandemic, is it accurate to assume that the annual growth rate in new buildings will be the same as before the current recession began? (Councilmember Eaton)

Response: The analysis uses the baseline assumption of the number of new units built in 2018 as a proxy for those built in future years. It's difficult to estimate how building construction will look two years from now and beyond, but this value provides a baseline for a "normal" year from which to build.

Question: Q19. On pages 58-59, the Plan proposes transitioning affordable housing sites to net zero. The cost to fund just one project (Broadway) cost \$200,000. Please explain how the \$800,000 figure was calculated (per unit? Per project?) and how many affordable housing sites will be involved. (Councilmember Eaton)

Response: The \$800,000 breaks down as follows: \$200,000 provided by OSI to support efficiency improvements and renewable energy at Housing Commission sites in 2020 and 2021 and \$100,000 provided annually by OSI in direct support to the Housing Commission from 2022 thru 2025. Staff in OSI and AAHC work collaboratively to identify the sites with the greatest need.

Question: Q20. On pages 72-73, the Plan proposes spending \$656,780,000 on improvements to local transit. Has the AAATA provided an analysis of this proposal? If so, please provide a copy of that analysis. (Councilmember Eaton)

Response: The AAATA was represented in the process on the technical advisory committee for mobility. Figures and assumptions have been shared. This specific action focuses on bus rapid transit as the mechanism to expand transit in the City and region. Other options may prove more viable (i.e., there was great interest in regional rail and express bus service) but using BRT as a foundation, the following cost estimates were used (and please see the 2009 Ann Arbor Transportation Plan for more details)³:

- It's a two-lane BRT
- 29 miles of BRT are installed throughout the community⁴
- Capital costs per mile, including the creation of new stations is \$20,000,000 / mile⁵
- Average annual maintenance for BRT routes is \$320,632/mile
- \$3,000,000 in engineering and design fees⁶

Question: Q21. The proposal to improve local transit represents almost 70% of the cost

³ https://www.a2gov.org/departments/systems-planning/planning-areas/transportation/Documents/2009_A2_Transportation_Plan_Update_Report.pdf

⁴ https://www.a2gov.org/departments/systems-planning/planning-areas/transportation/Documents/2009_A2_Transportation_Plan_Update_Report.pdf

⁵ <https://www.itdp.org/2019/10/04/faq-getting-to-brt-for-u-s-cities/>

⁶ <https://brtguide.itdp.org/branch/master/guide/funding-and-financing/a-strategic-overview-of-funding-and-financing#summarizing-the-costs>

of the entire plan but represents only 4.3% of the carbon reduction. If the transit improvements are not made to the extent proposed, what impact will that have on other recommendations in the plan other than the reduced carbon from individual vehicle use? (Councilmember Eaton)

Response: As noted above, much of the reason the transit item has such a large cost is that it includes infrastructure improvements, which are costly to execute. These improvements were included in order to create a safer, more accessible, and more connected mobility network. The improved network, in turn, “sets the stage” for other strategies to succeed; including creating the infrastructure to support a significant reduction in vehicle miles traveled (VMT) that are needed in order to meet our goal of carbon neutrality by improving walkability, bike-ability, and mass transit options. In short, these improvements have far more indirect carbon reductions than the indicated 4.3%. And removing them will leave more local emissions that need to be offset.

Question: Q22. On page 78, the Plan calls for 2,000 new units of housing. Does that mean 2,000 new buildings or 2,000 new units? If the Plan refers to the number of new units, how many of each kind of housing unit is intended – duplex, threeplex and fourplex – to accomplish the projected reduction in carbon? Please provide your calculations that demonstrate these reductions. (Councilmember Eaton)

Response: The plan used growth rates predicted by SEMCOG for new housing units in Ann Arbor by 2030. This action assumed that 85% of those would be in diverse and mixed use neighborhoods, with an average of 10% more units available than if those were only composed of single family housing. The model for this strategy was directional and conservative, and did not attempt to estimate the amount of each kind of housing built. The emissions reductions looked at avoided work commutes of roughly 18 miles round trip for folks having the option to live in the city where they work.

Question: Q23. Strategy 4, number 5 Increase The Diversity Of Housing Allowed By Right, includes a timeline that seems unrealistic. The Master Plan review process has been put on hold at least through fiscal year 2021 (ending June 30, 2022). What is the current time line for this item? (Councilmember Eaton)

Response: Staff are unable to answer this question as the Master Plan has been delayed and Council has yet to approve a contract to support the work.

Question: Q24. The Diversity of Housing Allowed by Right assumes the adoption of changes to the Master Plan before residents have had a chance to participate in the Master Plan review process. Considering the minor impact of this item (0.1%), could the Plan be revised to exclude this item until the Master Plan review has concluded? (Councilmember Eaton)

Response: Yes. It was included, however, because it came up frequently in public events and through the technical advisory committee work. It was always intended to be more fully considered through the Master Plan process.

Question: Q25. The Plan only addresses emissions that occur within the city’s borders, or emissions resulting from power production elsewhere that is used as energy here. If the Plan also addressed Scope 3 emissions, we would consider CO2 emitted because of air travel, for example, or in the course of producing building materials. And we would address the loss of sequestered carbon in using building materials. With the emphasis on changing zoning to allow additional density why doesn’t the Plan include the Scope 3 emissions from building materials, especially concrete? (Councilmember Eaton)

Response: We estimated emissions associated with the plan based on the data and methodologies current available to us,⁷ which we use to estimate our community-wide greenhouse gas inventory. As more data and methodologies become available, we will work to update our inventory and estimations to be more comprehensive, pursuant to the Governance Framework. For example, SEMCOG has recently shared information on commuting patterns for the Ann Arbor community. This data will be used to account for the full range of the commute. Discussions with ICLEI regarding accounting for embodied carbon in building materials in greenhouse gas inventories has revealed that this is not common practice, and feasible methodologies are not yet available. However, we are currently working with ICLEI to join a cohort of cities leading the effort to provide the most accurate and comprehensive picture of our greenhouse gas emissions that we can. At this point, the plan provides directional guidance on areas where we may not yet have the capability to provide estimates with a high degree of certainty, and is supported by a Governance Framework that describes how this plan will be updated in the future.

Question: Q26. I am unable to reconcile two items regarding the purchase of GHG offsets. Action number 7-4 shows the Purchase of GHG offsets as 992,000 metric tons - 45% of total GHG emissions (page 121). On the summary page, this item is shown as 298,000 (13.6% of total GHG emissions). (Councilmember Eaton)

Response: The plan modeled multiple scenarios of whether or not the University of Michigan participated in the actions. The first sentence of the GHG Emissions Reductions for offsets states the amount of offsets necessary to achieve carbon neutrality without participation from the University of Michigan. The next paragraph describes the scenario where the University does participate, siting the 298,000 MT CO₂e figure. The Executive Summary describes the scenario where the University of Michigan participates.

Question: Q27. Are the years as shown in the document “A2Zero Draft Investment Scenario” calendar year or FY? FY 2020 has only one month to go but shows expenditures for some categories. Have those amounts been expended and does that mean that certain parts of the plan are already being executed? (Councilmember Eaton)

Response: The Investment Plan looks at fiscal year timing so as to align with the City budget. And yes, some actions within the Plan have been initiated or are currently being planned. These include things such as: City vehicle fleet conversion; bulk purchase of renewables; resilience hubs engagement; LED lighting replacements; efficiency at City

⁷ <https://icleiusa.org/ghg-protocols/>

facilities; strategy development on EV infrastructure action; benchmarking; neighborhood and youth ambassadors program development; equity programs, Sustaining Ann Arbor Together grant program; exploration of landfill solar; energy concierge and community engagement; net zero energy affordable housing program; green rental housing program; aging in place efficiently work; and weatherization expansion.

Question: Q28. The Technical Advisory Committees have been shown as having major responsibility for preparing much of the plan, and their meeting dates are listed. But the names of individuals on these committees are not shown. This is critical information because we are expected to accept a certain level of expertise. In most project plans, significant contributors will be listed with qualifications. Some members of the committees could have possible conflicts or special interests and to avoid this question. Please provide a list of TAC participants. (Councilmember Eaton)

Response: See attached.

Question: Q29. The dates are difficult to follow on the performance graphs. Years are given, starting in 2020. Is that end of year? Calendar year? Fiscal year? So, is a performance shown as “2021” July 2020, January 2021, or December 2021? That is an 18-month difference and it should be better defined. (Councilmember Eaton)

Response: The markers indicate the end of a calendar year.

Question: Q30. It is possible to consider that Ann Arbor is attempting to limit the GHG production within the city to what is also offset by solar and other non-CO2 generating power sources. That might be considered "carbon neutrality". But it is not "climate neutrality". Climate is influenced by multiple factors, including carbon sequestration and release of sequestered carbon. For example, since trees are important in sequestering carbon dioxide, a "climate neutral" policy might greatly discourage removal of trees in any development or other change in land use. (The Plan does call for planting more trees but does not address removal.) Also, carbon sequestration is affected by earth-moving, demolition of existing buildings, etc. Please explain why these other climate factors have not been included. (Councilmember Eaton)

Response: We estimated emissions associated with the plan based on the data and methodologies current available to us,⁸ which we use to estimate our community-wide greenhouse gas inventory. As more data and methodologies become available, we will work to update our inventory and estimations to be more comprehensive, pursuant to the Governance Framework. Discussions with ICLEI regarding accounting for embodied carbon in building materials and with urban, community-wide carbon sequestration in greenhouse gas inventories has revealed that there are not standards for how to capture these sources and that feasible methodologies are not yet available. However, we are currently working with ICLEI to join a cohort of cities leading the effort to develop methodologies to capture some of the topics raised in this question. At this point, the plan provides directional guidance on areas where we may not yet have the capability to

⁸ <https://icleiusa.org/ghg-protocols/>

provide estimates with a high degree of certainty, and is supported by a Governance Framework that describes how this plan will be updated in the future.

Question: Q31. I have a general concern about the Plan's lack of program management. Typically, a plan as ambitious as this one would include a timeline with milestones, such as a Gantt chart, to show the steps in each endeavor and the predicate acts necessary to the next steps in a project. (Councilmember Eaton)

Response: Overall, the Governance Framework provides the overarching governance model to support implementation of the Plan.

Question: Q32. The plan does have some vague timelines included with each strategy, but it does not explain them or show what is necessary to accomplish them, how their progress can be monitored and therefore evaluated, what dependencies they have (what other activities must be successful in order for this one to succeed), or any of the other tools that most project managers use to predict a result from a plan. As complex as this plan is, it would seem that these are critical. What would it take to include project management timelines and milestones? (Councilmember Eaton)

Response: The Plan is a guiding document for the City's carbon neutrality work, it is not the work plan of staff. Staff have been developing work plans for actions delegated to them. These work plans include timelines, milestones, performance indicators, and deliverables, which City management will track and report, as outlined in the Governance Framework.

Question: Q1. Action 7-4 (p. 120) (Purchase of GHG offsets) is shown on that page (121) as 992,000 metric tons - 45% of total GHG emissions. On the summary page, this item is shown as 298,000 (13.6% of total GHG emissions). (Councilmember Bannister)

Response: The plan modeled multiple scenarios of whether or not the University of Michigan participated in the actions. The first sentence of the GHG Emissions Reductions for offsets states the amount of offsets necessary to achieve carbon neutrality without participation from the University of Michigan. The next paragraph describes the scenario where the University does participate, siting the 298,000 MT CO₂e figure. The Executive Summary describes the scenario where the University of Michigan participates.

Question: Q2. Strategy 2 and Strategy 3: why is the dollar amounts under Total Costs are identical for the first 6 items? The GHG reduction for those 6 items differ. But the % total emissions for the items is again identical, which resulted in the remarkable result of an item with 0 reductions being rated as 0.1% of the total. This means that we don't really know what percentage contributions each activity brings, without tracking down the figures from the long narrative and essentially recreating the table (attached). Why are 362,200 MT and 242,500 MT the same 16.5%. (Councilmember Bannister)

Response: This was an error when the document was transferred from word to its designed version. It has been corrected and the plan with the correct figures has replaced the old version on public sites.

Question: Q3. Please be more specific about the partner listed as "Michigan Department". (Councilmember Bannister)

Response: If this is in reference to page 74 of the document, it is the Michigan Department of Transportation. This has been corrected.

Question: Q4. What is the sum of all cost estimates, now corrected? (Councilmember Bannister)

Response: \$1,056,408,800

Question: Q5. Strategies 2, 3: How will equity be determined for the bulk purchases? By whom? Based on what standards? (Councilmember Bannister)

Response: Best practices from other cities who have led the implementation bulk purchase programs have been studied and will inform the implementation of this work. Targeted outreach and engagement will focus on working with low-income and traditionally underrepresented groups. The pairing of financing options, including no-interest or low-interest loans, grants, a loan-loss reserve, and group discounts are also being explored to help lower the upfront and operational costs.

Question: Q6. Strategy 3: What specific count of households is anticipated to be supported by energy efficiency actions? What standards will be applied? (Councilmember Bannister)

Response: Energy efficiency improvements offer the lowest cost of levelized energy and fast returns on investment. The plan assumes an aggressive participation of 85% of homeowners, 80% of rental buildings, and 80% of commercial buildings. The plan also includes extensive programs to provide support to multiple sectors, including low-income families, seniors, and owners and tenants in rental buildings. The strategy also incorporates programs to provide financial incentives and financing options. The plan provides direction, milestones, goals, and specific standards which will be further refined as programs get developed. Overall, all households will be eligible for support through this strategy.

Question: Q7. With a goal of 100% electrification, how will homeowners and businesses with new Energy Star rated appliances and heating/cooling manage with respect to their recent investments that were intended to support decreased emissions? (Councilmember Bannister)

Response: The plan does not model that 100% of buildings will be electrified within the next 10 years. As noted on page 32 of the Plan, in the assumptions section, home and business electrification estimates assume:

- 30% of single family homes are all electric by 2030, not including the 20% already using electric heat
- 25% of rentals are all electric by 2030
- City commits to and achieves 100% electrification of City buildings by 2030
- A 1:1 replacement of natural gas energy to electricity, with 1CCF gas transitioning to 30.36kWh electricity
- All new residential and commercial buildings are designed and built to operate without the use of natural gas, reducing the increased cost associated with retrofitting existing systems
- All additional electric consumption is powered by an associated increase in renewable energy sources

The A²Zero Plan does not propose mandating a conversion to all-electric. It does, however, look at ways to ensure new buildings are built all-electric; working with homeowners, businesses, and building managers to support the voluntary conversion to electric when appliances are being replaced; providing incentives to support the transition to electric; and bundling energy efficiency with electrification and/or solar installations.

Question: Q8. Strategy 3, Action 7: Transition of existing affordable units to net zero is great. What about to be built, new affordable units? (Councilmember Bannister)

Response: We are working with partners in AAHC to make new developments as close to net zero energy as possible.

Question: Q9. Strategy 4, Action 2: Explain the financial responsibility of Ann Arbor for the electrification of the AAATA, which is managed under a separate millage. (Councilmember Bannister)

Response: The City has a millage which passes the tax proceeds through to the AAATA, a separate legal Authority. The AAATA has the independent fiduciary discretion to spend as they determine appropriate. A2Zero is a community-wide challenge, and the City anticipates partnering with the AAATA in efforts to achieve carbon neutrality.

Question: Q10. Strategy 4, Action 3: Explain the financial responsibility of Ann Arbor for the Regional Transit Authority expenses. (Councilmember Bannister)

Response: At present Ann Arbor does not provide financial support to the RTA. Any future contributions would require Council approval.

Question: Q11. Strategy 3.2, p. 48. Timeline: The State legislature is in its last half year of the 2019-20 term. Is this item presently on a Committee agenda? Which committee? Does it have a sponsor? Does the date mean that the legislature will pass the item in the next term, or that it will be passed in this term and come into force in 2021? What does "years" mean the timeline, do you mean FY or calendar? Do you mean at start, midpoint, or end? If we say we will reduce emissions due to a particular source in 2025, would that be measured in January 2025, July 2025, December 2025, or even July 2024 (beginning of our FY 2025). Should we have a standards and agreed upon milestone, for Council to evaluate programs with a consistent marker? (Councilmember Bannister)

Response: Building code updates will be discussed in 2021. Partner organizations have started to engage with legislators around this discussion. In terms of "years" in the timeline, these are calendar years.

Question: Q12. Has DTE indicated whether they're willing to sell their streetlights? (Councilmember Bannister)

Response: Staff have not yet started direct engagement with DTE on this topic. This would happen after Plan adoption.

Question: Q13. Has the MPSC required mass gas line renewal and has \$10M already been spent in our community? Are they making plans to install 5 - 10 miles/year over the next 17 years? How does the City coordinate with them? (Councilmember Bannister)

Response: The first part of this question is not something staff are not able to answer. As to coordination with the MPSC, staff provided a presentation to them on the A²Zero Plan and opportunities for collaboration in mid-May.

Question: Q14. What new technology is needed to execute our carbon neutrality plans and how soon is it on the horizon? How are we preparing to adapt to future technology advancements? (Councilmember Bannister)

Response: Much of the technology is already available. A lot of projected carbon reductions will come from greening our electrical grid and transitioning away from natural gas, diesel, and gasoline to clean electric energy. Technologies to do this are already available and continue to become more efficient and affordable. Renewable energy, such as solar and wind, have come a long way in recent years and are continually getting better and cheaper (wind is the cheapest form of new energy to build, followed by solar⁹). One of the many ways we can adapt to the electrification of our homes and businesses is to improve the efficiency with which energy is consumed and transmitted. This is all part of the A²Zero Plan.

⁹ <https://www.edie.net/news/10/Onshore-wind-and-solar--cheapest--form-on-energy-for-two-thirds-of-global-population/>

Question: Q15. What state building codes need to be changed, and are other municipalities in Michigan ready and willing to make the changes? (Councilmember Bannister)

Response: All municipalities in Michigan must adhere to the codes set at the state level. By and large, the State of Michigan adopts the standards outlined by the International Energy Conservation Code (written by the U.S. Department of Energy) and the International Code Council. These codes are updated every three years, but not necessarily adopted by the state. The last time the state adopted them was in 2015. And yes, conversation with peers across the state indicate that many are “ready and willing” to support an updated building code that includes the adoption of the Zero Code appendix, which would make it possible for municipalities to require significantly more efficient new builds.

Question: Q16. How are we coordinating with <http://sustainability.umich.edu/carbonneutrality> and learning from their methodical process? See attached table of inputs from their institutional feeds, which shows "what UM can influence" and "ability to estimate," as a useful way to begin an additive attack on carbon load. (Councilmember Bannister)

Response: Dr. Stults sits on the UM Carbon Neutrality Task Force and has been coordinating on behalf of the City. This includes integrating promising practices from the University into the City’s work (which has already happened and will continue to happen), as well as sharing our promising practices with the University, which are helping that process be effective.

Question: Q17. What foundational elements will we tackle in the coming months? (Councilmember Bannister)

Response: Below are the activities which have been budgeted in the FY21 OSI budget along with estimated reduction potentials, where possible. Since many of these are new programs, the first few years will, by necessity, be focused on creating the new program

- Staff time to initiative the work around Community Choice Aggregation
- Staff time to initiative the bulk purchase of renewables
- Staff time to initiative a community solar program
- Staff time to advance the landfill solar project
- Staff time and program resources to initiate bulk buy of electric vehicles
- Staff time and program resources to initiate bulk purchase of energy efficiency equipment
- Resources to support some of City fleet to EV
- Support more aggressive building codes
- Resources to implement net zero energy affordable housing program
- Staff time and outreach materials to initiate green rental housing program
- Staff time and outreach materials to initiate aging in place efficiently program
- Staff time and resources to launch energy concierge and community education

- Financial resources to expand weatherization program in A2 to serve more families as well as educational and outreach materials
- Staffing support and outreach materials related to resilience hubs
- Staffing support, materials, and stipends for youth and neighborhood ambassador program
- Staffing support and training dollars related to expanding equity programs in the City and community
- Support for neighborhood grants through the Sustaining Ann Arbor Together grant program
- Staff time, resources, and technical platforms to launch benchmarking
- EV charging infrastructure
- Administrative tasks, community engagement, reporting, etc.

Question: Q18. Do we have an A2Zero budget in standard format that integrates with the overall city budget? (Councilmember Bannister)

Response: The Investment Plan was done to align with the City budget.

Question: Q1. In addition to the errors Ms. Armentrout pointed out in the Action Summary Tables on p. 10 and 11 of the May 16 version of the Plan, there was also a problem in that the costs of the first 4 actions in Strategy 4 were the same as the costs of the actions in Strategy 1. Have all the errors created in the May 16 conversion/update been corrected? If so, can you please share the corrected version and if not, when will the corrected version be available? Also, in the meantime, can I assume that all of the data that was shown in the table (p. 8) of the prior version of the Plan is still the correct data? (Councilmember Lumm)

Response: An error was made when transitioning the file from Word to their designed format. We've corrected these figures and replaced the older version of the Plan on all public sites. We've also developed a summary memorandum that identifies what changes took place from version 1, which was sent to Council on March 28th, and version 2, which is the most up to date version. This memorandum is or will be posted on our public site as soon as possible.

Question: Q2. Also, in the May 16 version, there's a chart on UM (p. 9) that's new and the overall GHG reduction graph (p. 8) is revised to now include UM. I'm confused, however, about what is reflected for UM in the new overall GHG reduction chart on p. 8. Is it the current UM GHG reduction shown on the p.9 graph or is it as noted in the text "assuming that the UM mirrors the actions of the city" or is it both, or something altogether different? Can you please clarify? (Councilmember Lumm)

Response: The plan looked at reducing community-wide emissions to reach carbon neutrality, including the University of Michigan. While the University of Michigan has not released their plan, we modeled emission reductions potentials for actions that can also address the University of Michigan's use of electricity and fossil fuels. The actions that explicitly included the University of Michigan are: Community Choice Aggregation, Onsite

Renewable Energy Generation with Batteries (i.e., bulk buy of renewable energy), Home and Business Electrification, Electrify All Buses, and the Transition to More Energy Efficient Homes and Businesses (i.e., bulk purchase of energy efficiency equipment). Except for buses, community vehicle miles traveled are not differentiated by employer so actions that address emissions from vehicles also address activities that relate to the University of Michigan.

Question: Q3. Also related to UM, the text for figure 2 indicates that UM “is currently developing recommendations to achieve carbon neutrality by an undetermined date.” Has UM actually committed to achieving carbon neutrality? (Councilmember Lumm)

Response: The President's Commission on Carbon Neutrality (PCCN) was convened in February 2019. Its purpose is to develop a path toward carbon neutrality for the University. A final recommendation report is to be submitted in the fall of 2020. A final report, however, does not mean plan adoption, which could come much later. And no, the University has not officially committed to achieving carbon neutrality.

Question: Q4. In reading through this again, I just noticed the comment that the \$170M cost for the Park and Ride action does not include the costs to acquire the land itself. Do we have a sense of how much that might be? (Councilmember Lumm)

Response: As it is specific to the location, staff do not have an estimate at this time.

Question: Q5. Several residents have mentioned that electrification of appliances, homes and businesses actually increases the carbon footprint in the near term. Assuming that's accurate, why would the plan call for electrification now rather than waiting until the grid changes to a more sustainable basis especially considering the costs for conversion? (Councilmember Lumm)

Response: If the goal is community-wide carbon neutrality, then fuel switching away from natural gas will need to be part of the solution since natural gas is a greenhouse gas and it is impossible to achieve local carbon neutrality while burning it.^{10,11,12} Electrification is only one step in getting to carbon neutrality, but paired with the greening of the electrical grid, it has the potential to make a significant dent in local greenhouse gas emissions. Moreover, many appliances have a lifetime far longer than 10 years, meaning that fuel switching as they are replaced is the most cost effective and likely time to make a transition away from natural gas.

Question: Q6. DTE estimated the average costs to convert a household to electric appliances is \$1,300 and business like restaurants would be much higher (\$17,000 a year at current energy prices for a 6,000 sq ft restaurant and excluding the costs of the

¹⁰ https://www.usdn.org/uploads/cms/documents/methane-math_natural-gas-report_final.pdf

¹¹ <https://rmi.org/insight/gas-stoves-pollution-health>

¹² <https://www.theguardian.com/environment/2020/may/05/gas-stoves-air-pollution-environment>

conversion itself). Do you agree with those directional estimates? (Councilmember Lumm)

Response: Staff can't speak to the exact numbers DTE provided without understanding their assumptions. The response does seem to negate conversations which have been taking place between the City and the utility about bundling energy efficiency with electrification so that upfront and operational costs are lowered, if not neutralized, for the customer. These figures also don't appear to take into consideration the details of the plan, which focus on voluntary fuel switching or the work we've been discussing with our utility and others about providing incentives that support electrification. In summary, these figures don't appear to focus on the A²Zero Plan's: 1) bundling of efficiency with electrification to lower upfront and operational costs; 2) investing in renewable energy at scale that is far cheaper than what our utility offers through their programs; 3) efforts to create incentives to help support electrification; and 4) the voluntary nature of electrification programs outlined in the Plan.

Modern electric heating equipment is not a new technology and has achieved high rates of adoption in multiple countries. Expanding demand for heat pumps in the Northeast has resulted in specified cold-climate technologies that maintain adequate efficiency to 5 degrees F. While all-electric solutions will only become more cost effective over time, combining electric heat pumps with natural gas equipment can reduce the amount of natural gas used while reducing any risks of increased electric bills, power outages, or extreme winter weather events, like the polar vortex of 2019. Right now, modern electric appliances do cost more to operate than natural gas, due to the low price of natural gas in Michigan. Natural gas prices are volatile however, and there is currently no long-term pathway to making natural gas carbon neutral. Also, this conversation doesn't look at the public health impacts associated with natural gas combustion,¹³ which was part of the effort to ban natural gas in Berkeley.

In addition, a partner shared this real world example: "I am working with the Ypsilanti Food Co-op on an expansion and we are looking at ventless all electric cooking equipment using induction. The kitchen equipment and installation is 22% less and we don't have the added cost of make-up air which has initial equipment cost and long term operational cost of bringing in large quantities of outside air. It is an historic building so this strategy is a perfect fit. There are specific pieces of equipment that are much more efficient with induction such as steam tables (50%) energy savings."

Question: Q7. Dr. Stults has acknowledged that natural gas is a bridging fuel, but not a long term solution. Given that, coupled with the conversion costs and lack of near term emissions benefit, why does the plan recommend residents and businesses invest in near-term electrification of appliances/homes/businesses rather than focus initially just on energy efficiency improvements that have benefit regardless of fuel source? (Councilmember Lumm)

¹³ [RMI recently released a report on natural gas' indoor air quality impacts](#)

Response: The plan does exactly that, and anticipates beginning the building electrification in 2024, with community choice aggregation being offered in 2027. Furnaces typically have service lives of around 15 years, meaning that heat pumps installed before 2027 would have an emission benefit over their lifetime. The plan also looks to leverage building fully electric new buildings, which have negligible upfront costs to be built to net zero energy standards, combining electrification with energy retrofits and solar installations, and replacing natural gas equipment that comes to the end of its service life. Because this equipment lasts a long time, it is important to provide education and support to fuel switch as these opportunities arise.

Question: Q8. Dr. Stults also has emphasized that electrification is voluntary and I certainly agree with that, but at the same time the GHG reduction amounts reflected in the Plan assume that “30% of single family homes” are all electric by 2030, not including the 20% already using electric heat” and assume that “85% of owner-occupied homes” are retro-fitted for energy efficiency. Do we really believe these assumptions are realistic in a “voluntary” program? (Councilmember Lumm)

Response: Achieving community-wide carbon neutrality will take a lot of work from the City, our residents, and our businesses. For each action included in the plan, our staff strives to create an effective and broad-reaching program to achieve the goals stated. This includes the building electrification strategy, looking to leverage opportunities to fuel switch when energy retrofits are completed, solar panels installed, or natural gas equipment reaches the end of its service life. This will require workforce development and education, public engagement and outreach, and financial incentives and financing options to be impactful.

Question: Q9. I am concerned that - while I recognize the plan does say this – it is not clear to residents that achieving the carbon neutrality goal in this Plan requires residents and business to make substantial investments in their homes and their businesses. How can we make that more clear in the Plan and in our communications? (Councilmember Lumm)

Response: Staff will continue to express this point through our public engagement and outreach. Staff will also continue to look for ways to lower the investment costs needed by residents and businesses, as discussed in previous responses. However, to this point, staff are open to other ideas for how to convey this point.

Question: Q10. In our conversations with DTE, they mentioned the MIGreenPower program. How could that program fit with (or complement) the A2Zero Plan? (Councilmember Lumm)

Response: DTE charges a premium to participate in their green pricing program for renewables. The city has intervened in DTE’s Integrated Resource Plan in part, because of the exceptionally high price DTE charges for their voluntary green pricing program. For this reason, the A²Zero plan does not promote asking residents to sign up for DTE’s voluntary green pricing program. Staff, however, remain open to discussions with DTE

should they present solutions that would allow for the deployment of new, renewable energy at prices that are competitive to that provided in the market.

Question: Q11. A couple of the email communications referred to “embodied carbon” and “Scope 3 carbon inputs” and suggested we should be considering those impacts as well but are not – can you please speak to that? (Councilmember Lumm)

Response: We estimated emissions associated with the plan based on the data and methodologies current available to us, which we use to estimate our community-wide greenhouse gas inventory. As more data and methodologies become available, we will work to update our inventory and estimations to be more comprehensive, pursuant to the Governance Framework. For example, SEMCOG has recently shared information on commuting patterns for the Ann Arbor community. This data will be used to account for the full range of the commute. Discussions with ICLEI regarding accounting for embodied carbon in building materials and with urban, community-wide carbon sequestration in greenhouse gas inventories has revealed that there are not standards for how to capture these sources and that feasible methodologies are not yet available. However, we are currently working with ICLEI to join a cohort of cities leading the effort to develop methodologies to capture some of the topics raised in this question. At this point, the plan provides directional guidance on areas where we may not yet have the capability to provide estimates with a high degree of certainty, and is supported by a Governance Framework that describes how this plan will be updated in the future.

Question: Q12. As I understand it, the new city “carbon tax” policy excludes enterprise funds. Assuming that’s accurate, can you please explain the rationale for the exclusion? (Councilmember Lumm)

Response: The initial proposal was for all funds. However, a decision was made to focus on the general fund for the first year to pilot the "carbon tax" and then roll the program into the 2-year budget process.



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
LANSING

ORLENE HAWKS
DIRECTOR

**PROPERTY TAX APPEAL PETITION FORM
SPECIAL ASSESSMENT**

Pursuant to Michigan Tax Tribunal Rule (TTR) 277(3), you **MUST** submit a copy of the notice giving rise to the appeal (e.g. a copy of the resolution confirming the special assessment roll) with this Small Claims Petition, if applicable. If you do not submit this document, you may be held in default.

Section 1: Petitioner's Contact Information

First Name	M.I.	Last Name/Company Name
Mailing Address (No., Street, P.O. Box or Rural Route)		
City or Town	State	ZIP Code
Telephone Number	Fax Number	
E-mail Address (do not enter unless you want MTT to send all correspondence via e-mail)		

Section 2: Petitioner's Attorney/Authorized Representative's Contact Information

First Name	M.I.	Last Name
Firm Name (if any)		
Address (No., Street, P.O. Box or Rural Route)		
City or Town	State	ZIP Code
Telephone Number	Fax Number	
E-mail Address (do not enter unless you want MTT to send all correspondence via e-mail)		



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
LANSING

ORLENE HAWKS
DIRECTOR

Section 3: Subject Property Information

How many parcels are you appealing?	If you are appealing more than one parcel, are they contiguous or adjoining? <input type="checkbox"/> Yes* <input type="checkbox"/> No** <input type="checkbox"/> N/A *If yes, use the attached multiple parcel form for information regarding any contiguous parcels. **If no, you must file separate appeals for each non-contiguous or non-adjoining parcel or you will be defaulted.
Property Address (No., Street, City, ST, ZIP) [If multiple, list first property's address]	
Parcel Identification Number(s):	
Taxing Authority (City or Township)	County

Section 4: Explain the Reason for this Appeal

Section 5: Jurisdictional Issues

Did you protest the special assessment at the hearing held to confirm the special assessment roll? <input type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, what was the date of the hearing held to confirm the special assessment roll?
If No, explain:

Fee Information:

A fee of \$100.00 is required for the filing of a Special Assessment Appeal.

Signature *Required

Petitioner or Attorney/Authorized Representative's Signature:

/s/



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
LANSING

ORLENE HAWKS
DIRECTOR

PAPER FILING INSTRUCTIONS FOR SPECIAL ASSESSMENT APPEAL

Please follow these instructions for filing a small claims petition. For questions that are not answered in these instructions, please refer to the Tribunal's website at www.michigan.gov/taxtrib or contact the Tribunal at 517-335-9760.

Mail the completed form and filing fee to: Michigan Tax Tribunal, P.O. Box 30232, Lansing, MI 48909.

Section 1: Petitioner's Contact Information: "Petitioner" is the person, business, or entity filing the appeal. If there is more than one Petitioner, use an additional sheet of paper to provide the name, address and daytime phone number for each Petitioner.

Section 2: Petitioner's Attorney/Authorized Representative's Contact Information: Petitioner does not have to be represented by an attorney or authorized representative to file an appeal with the Tribunal. If Petitioner is represented, provide all contact information for the attorney or authorized representative. If Petitioner elects to have an attorney or authorized representative, only the attorney or authorized representative will receive notices and documents from the Tribunal.

IMPORTANT: If the contact information for Petitioner or the attorney or authorized representative, if listed, includes an email address, the Tribunal will use that email address to electronically serve all future documents issued by the Tribunal. A request by Petitioner or Petitioner's attorney or authorized representative to opt out of electronic service once an email address is provided must be made in writing.

Section 3: Subject Property Information: Please use the *Multiple Parcel Form* for additional parcels, if necessary.

- **How many parcels are you appealing:** Please list the number of parcels under appeal.
- **Are they contiguous or adjoining:** If multiple parcels are being appealed, please indicate whether the parcels are adjoining. If multiple parcels are being appealed, a separate petition must be filed for each non-adjoining parcel being appealed.
- **Property Address:** Provide the address of all properties being appealed.
- **Parcel Identification Number(s):** The parcel number(s) being appealed must be listed.
- **Property Address:** Provide the address of the property being appealed.
- **Taxing Authority:** Provide the name of the city **OR** township (not both) where the property is located.
- **County:** Provide the name of the county where the property is located.

Section 4: Explain the Reason for this Appeal: Explain the reason(s) you are appealing.



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
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LANSING

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DIRECTOR

Section 5: Jurisdictional Issues:

- **Did you protest the assessment at the hearing held to confirm the special assessment roll:** Indicate whether you protested (either in person or in writing) at the hearing to confirm the special assessment roll.
- **If Yes, what was the date of the hearing held to confirm the special assessment roll:** If Petitioner protested the hearing, indicate the date the hearing was held.
- **If No, please explain:** If Petitioner did not protest at the hearing, explain the reason(s) why a protest was not made.

Fee Information: A filing fee of \$100.00 is required. Make the check payable to State of Michigan. If filing multiple petitions, please note that a separate payment (i.e., check, money order, or other draft payment) must be made for each individual petition.

Signature: A signature by Petitioner, if unrepresented, or Petitioner's attorney or authorized representative, if represented, is required.

REMINDERS:

Pursuant to TTR 277, Petitioner shall provide the Tribunal a copy of the resolution confirming attendance either in writing or in person at the hearing held to confirm the special assessment roll.

You must submit the *original, signed completed petition form* to the Tribunal. You should also keep a copy for yourself.

Multiple Parcel Attachment to Petition Form: Please only use this form if you are appealing multiple contiguous (adjoining) parcels in the same appeal. Additional copies of this form can be used, as needed. If you are appealing only one parcel, please disregard this form.

It is ***your responsibility*** to provide Respondent (i.e., unit of government) or Respondent's attorney or authorized representative, with a copy of any attachments submitted with the petition form. The Tribunal will not forward a copy of any attachments to the respondent (i.e., opposing party). **TTR 287 states that failure to provide the copies to the respondent at least 21 days in advance of the hearing may result in the exclusion of the attachments.**

Respondent will have an allotted period of time to respond, after which time the case will be ready for a hearing. The Tribunal will send a notice of hearing to the parties no less than 45 days in advance of the hearing. To check the status of your appeal, visit our website at www.michigan.gov/taxtrib and click on the "Docket Search" option.



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
LANSING

ORLENE HAWKS
DIRECTOR

_____,
Petitioner,

MICHIGAN TAX TRIBUNAL

v

MOAHR Docket No. _____

_____,
Respondent.

ENTIRE TRIBUNAL SPECIAL ASSESSMENT PETITION

1. Property Parcel No: _____
2. The property identified above is ___real ___personal.
3. The special assessment levied is for _____

4. The taxing authority levying the special assessment is

5. The action that prompted this appeal is _____

6. The hearing held to confirm the special assessment was held on

7. Petitioner _____ (did/did not) protest the special assessment at this hearing. If a protest was not made, list the separate and specific facts upon which Petitioner relies to invoke the Tribunal's authority over the special assessment at issue (attach additional page if necessary):

8. The special assessment is to be levied for _____ years.

9. The total amount levied against the subject parcel is \$_____

10. Petitioner contends that the total amount levied should be \$_____

11. The amount in dispute is \$_____

12. Petitioner requests the following relief (attach additional page if necessary):

13. List the separate and specific facts upon which Petitioner relies to support the relief requested (attach additional page if necessary):

Signature of Petitioner's Authorized Representative or, *if none*, Petitioner:

Email Address: _____

Mailing Address: _____

Telephone Number: _____

Date: _____

Technical Advisory Committee Participants

Energy Technical Advisory Committee

Name	Organization
Austin Glass	University of Michigan
Wayne Appleyard	Sunstructures Architects
Jan Culbertson	Ann Arbor 2030 District
Emile Lauzzana	Ann Arbor Public Schools
Josh MacDonald (moderator)	City of Ann Arbor
Chuck Hookham	Consumers Energy, Ann Arbor Energy Commissioner
Sharon Pfeuffer	DTE Energy
Robert Jackson	EGLE, State of Michigan
Hank Love	Elevate Energy
Susan Fancy	Global CO ₂ Initiative
Joe Vig	J.S. Vig Construction
Nate Lowery	Lex TM3
Doug Selby	Meadowlark Builders
Charlotte Jameson	Michigan Environmental Council
Julie Roth	Resident
John Mirsky	Resident, Environmental Commission Member
Sarah Mills	University of Michigan, Planning Commission Member
Ben Dueweke	Walker-Miller Energy Services

Mobility Technical Advisory Committee

Name	Organization
Craig Toepfer	Retired clean energy and transportation professional
Joe Grengs	University of Michigan
Ken Clark	Climate Mobilization
Lisa Snapp	U.S. EPA
Wayne Appleyard	Sunstructures Architects
Matt Carpenter	Ann Arbor Area Transportation Authority
Chris Simmons	Ann Arbor Area Transportation Authority
Alex Gossage	Ann Arbor Center for Independent Living
Will Purves	Ann Arbor Center for Independent Living
Susan Pollay	Ann Arbor Downtown Development Authority
Komal Doshi	Ann Arbor SPARK
Milt Baker	Automotive Communications Systems
Emily Drennen (Moderator)	City of Ann Arbor
Raymond Hess (Moderator)	City of Ann Arbor
Skylar Woodman	Community Action Network of Ann Arbor

Kelsey Peterson	DTE Energy
Charles Griffith	Ecology Center
Don Reek	E-Mobility Analytics
Carlene Colvin-Garcia	Energy Commission
Matt Stover	Ford Motor Company
Alex Keros	General Motors / Maven
Bruce Westlake	Michigan Electric Auto Association
Jay Zocher	Rivian
Tom Bruff	SEMCOG
Trevor Brydon	SEMCOG
Anna Stefanapolou	University of Michigan
Jonathan Levine	University of Michigan
John Williams	University of Michigan
Kim Hayes	University of Michigan
Stephen Dolen	University of Michigan
Ryan Buck	Washtenaw Area Transportation Study
Larry Deck	Washtenaw Biking and Walking Coalition

Resource Reduction Technical Advisory Committee

Name	Organization
Karen Prochnow	Environmental Consultant
David Clark	Amcort Ltd.
Earl Kenzie	City of Ann Arbor
Eileen Naples (Moderator)	City of Ann Arbor
Galen Hardy (Moderator)	City of Ann Arbor
Molly Maciejewski	City of Ann Arbor
Nancy Stone	Retired
Remy Long	City of Ann Arbor
Stephanie Willette	City of Ann Arbor
Michael Nicholson	Denali Water Solutions
Mike Garfield	Ecology Center
Rusty Brach	Food Gatherers
Jill Sweetman	Green Things Farm
Erica Kempter	Nature and Nurture, LLC
Todd Bukowski	PTIS LLC
Bryan Ukena	Recycle Ann Arbor
Steve Brown	Ann Arbor Environmental Commission
Jim Frey	Resources Recycling System
Matt Naud	Resources Recycling System
Kim Bayer	Slow Farm
Alex Bryan	University of Michigan
Andrew Jones	University of Michigan

Lesli Hoey	University of Michigan
Shannon Brines	University of Michigan
Tracey Artley	University of Michigan
Theo Eggermont	Washtenaw County

Adaptation Technical Advisory Committee

Name	Organization
Armando Falcon	American Red Cross
Beth Gibbons	American Society of Adaptation Professionals
Jen Lawson	City of Ann Arbor
Missy Stults (Moderator)	City of Ann Arbor
Rebecca Esselman	Huron River Watershed Council
Shannan Gibb-Randall	Insite Design Studio, Inc.
Katie Grantham	SEMCOG
Kelly Karll	SEMCOG
Branko Kerkez	University of Michigan
Damen Provost	University of Michigan
Maria Carmen Lemos	University of Michigan
Raymond DeYoung	University of Michigan