



TO: Mayor and Council

FROM: Tom Crawford, Interim City Administrator

CC: Michael Cox, Police Chief
Derek Delacourt, Community Services Area Administrator
John Fournier, Assistant City Administrator
Matthew V. Horning, Interim CFO
Craig Hupy, Public Services Area Administrator
Matt Kulhanek, Fleet & Facilities Manager
Brett Lenart, Planning Manager
Remy Long, Greenbelt Program Manager
Molly Maciejewski, Public Works Manager
Aimee Metzger, Deputy Police Chief

SUBJECT: October 1, 2020 Council Agenda Responses

DATE: October 5, 2020

CA-1 - Resolution to Approve an Agreement with Ann Arbor Public Schools for Cost Sharing

Question: I have seen crossings staffed by both AAPD and civilians. Typically, are most crossings staffed by AAPD officers or civilians? (Councilmember Nelson)

Response: Most crossing guard locations are staffed by civilians. They are only staffed by officers when a crossing guard is sick or otherwise unable to show up that day.

Question: How much training is required for a crossing guard? What is the hourly compensation? (Councilmember Nelson)

Response: All civilian crossing guards receive 4 hours of initial training when they on-board. All crossing guards then receive 4 hours of annual refresher training. The hourly compensation is \$12.

Question: How much time does AAPD spend either training others to do the job or directly acting as crossing guards? (Councilmember Nelson)

Response: AAPD spends approximately 20-25 hours a year training crossing guards (generally they are on-boarded as a group and receive group training). AAPD officers act as crossing guards less than 10 times a year.

Question: Is there any particular reason why/how the role of crossing guard is a partnership between AAPS and AAPD? (Councilmember Nelson)

Response: Pursuant to MCL 257.613c, crossing guards are the responsibility of the City's Police Department. Fortunately, AAPS has partnered with the PD to supplement funding (50%) for the crossing guards. The training and hiring of crossing guards is still the responsibility of the PD.

CA- 2 – Resolution Authorizing a Purchase Order with Bell Equipment Company through the Michigan Delivering Extended Agreements Locally (MiDEAL) for the Rental of Three Elgin Pelican Street Sweepers (\$60,540.00)

Question: Regarding CA-2, I'm sure you've analyzed the tradeoff, but \$10K per sweeper per month is a lot. At what point does it make sense for the city to consider purchasing the equipment? (Councilmember Lumm)

Response: A new sweeper is approximately \$225,000.00. These additional sweepers are rented for fall leaf season to supplement the City's current sweeper fleet in order to complete a fall sweep of all City streets. The sweepers, if purchased, would have limited use the remainder of the year yet would incur ongoing costs for preventative maintenance, depreciation and replacement. Renting is a cost-effective alternative to ownership of low use vehicles.

CA – 4 – Resolution to Approve a 2020 CARES Act Agreement with the Michigan Department of Transportation for Reimbursing Eligible Airport Operating Expenses at the Ann Arbor Municipal Airport (\$69,000.00) (8 Votes Required)

Question: Regarding CA-4, are there any other eligible CARES Act activities the City is eligible for beyond this and the Public safety-related activities? (Councilmember Lumm)

Response: CARES Act funding is allocated to Federal Agencies, which then determine how to award the funds. The vast majority of funding available to the City has been channeled through and administered by the State of Michigan, although some funds have been made available directly by agencies such as the Department of Justice. The City has applied for all eligible funding to staff's knowledge. However, staff will continue to monitor funding opportunities that present themselves under the CARES Act, or other similar relief legislation.

CA-5 – Resolution to Ratify an Emergency Purchase Order Request for ATC Group Services LLC for Environmental Consulting Services (\$32,893.00)

Question: When exactly did this event happen, when the City “recently removed two 15,000 gallon fuel underground tanks”? (Councilmember Nelson)

Response: The City removed the two, 15,000 gallon underground fuel storage tanks (UST) on June 29, 2020. In addition to the two USTs, the piping running from the USTs to the fuel dispensers, and the dispensers themselves, were also removed as part of the project. As required by the State, testing was done on the same day as part of the removal. Field results indicated no contamination from either UST or the piping, but there was an indication of contamination, a suspected release, at the fuel dispenser area. Notification of a suspected release was made to the State on June 29, 2020. Lab test results received on July 6, 2020 confirmed the field results of no leakage from either UST or the piping, but contamination in the fuel dispenser area. Notification upgrading the suspected release to a confirmed release was made to the State on July 6, 2020. The contaminated soil was removed on July 15, 2020 and additional samples were taken at that time. All samples resulted in “non-detect” for contamination on July 20, 2020.

Question: If the Initial Assessment Report is due January 2, 2021, for how long are we required to maintain these monitoring wells? (Councilmember Nelson)

Response: The groundwater monitoring wells will be in place at least until January 2021, but may remain in place longer depending on test results. If the final test results taken in December 2020 comeback clean, the City will file the IAR along with a Final Closure Report with the State and, once approved by the State, will remove the monitoring wells and the issue will be resolved. If the test results detect contamination, then the City will work with the State to identify the process to continue monitoring and trace the groundwater contamination back to a source, which may or may not be a City issue. At this point, the duration of the groundwater monitoring wells is unknown.

Question: I recall that this was one of the properties identified as a potential site for affordable housing— does this potential contamination have any impact on the viability of this site for affordable housing? (Councilmember Nelson)

Response: The City is not aware of any contamination at this site beyond what has been identified and remediated to date. Any determination of additional contamination at the site or its impact on affordable housing at that location would be premature and largely speculative.

CA – 8 - Resolution to Approve a Grant Proposal to the USDA-NRCS FY 2020/2021 Regional Conservation Partnership Program (up to \$3,145,000.00)

Question: Q1. Can you please provide the breakdown of the \$11.5M commitment among the participants listed in the cover memo (City, County, AA Township, Scio

Township, Webster Township and others)? Also, were Pittsfield and Northfield Townships asked to participate? (Councilmember Lumm)

Response: Below is a breakdown of the partner commitments to the RCPP proposal – both actual and anticipated. Some of these commitments are still in draft form and awaiting final approval from partner’s leadership.

<i>FY2017 Lake Erie Conservation Partnership</i>	
Partner	Partner Commitment
City of Ann Arbor Greenbelt Program	\$3,145,000
Legacy Land Conservancy	\$465,000
Six Rivers Land Conservancy	\$50,000
Washtenaw County Parks & Recreation Commission	\$5,130,000
Webster Township	\$215,000
Scio Township	\$1,045,000
Ann Arbor Township	\$1,045,000
Huron River Watershed Council	\$315,000
Washtenaw County Conservation District	\$227,000
USDA NRCS RCPP	\$10,000,000
TOTAL	\$21,637,000

Only townships with dedicated conservation millages were approached as partners to this proposal. If the RCPP funds are awarded, other townships will be approached for individual funding requests on a project by project basis.

Question: Q2. Would you also please provide the funding by source for the two prior RCPP transactions referenced in the cover memo (Huron River Initiative and AA Greenbelt: Saving Michigan farms)? (Councilmember Lumm)

Response:

<i>FY2017 Huron River Initiative</i>	
Partner	Partner Commitment
City of Ann Arbor Greenbelt Program	\$1,075,000
Legacy Land Conservancy	\$178,500
Six Rivers Land Conservancy	\$128,500
Washtenaw County Parks & Recreation Commission	\$449,999
Huron River Watershed Council	\$42,500
Ducks Unlimited	\$6,932
USDA NRCS RCPP	\$1,825,882
TOTAL	\$3,707,313

FY2018 Ann Arbor Greenbelt: Saving Michigan Farms	
Partner	Partner Commitment
City of Ann Arbor Greenbelt Program	\$326,132
The Conservation Fund	\$5,000
Legacy Land Conservancy	\$145,000
Washtenaw County Parks & Recreation Commission	\$180,000
Southeast Michigan Land Conservancy	\$2,575
Scio Township	\$130,000
Ann Arbor Township	\$280,000
Augusta Township	\$65,000
USDA NRCS RCPP	\$1,040,000
TOTAL	\$2,173,707

Question: Q3. The cover memo references “continued interest from landowners eager to participate”. Can you please elaborate on that and how many requests are currently in the Greenbelt queue? (Councilmember Lumm)

Response: All partner programs experience more demand from landowners seeking purchased conservation easements than staff and financial capacities can address. There are currently 21 active Greenbelt projects, 9 led by the City.

CA – 9 - Resolution to Approve City Administrator Recommendations regarding the 2020 Budget Priorities Citizen Survey, Approve the Contract and Purchase Order with the National Research Center/Polco to Conduct the 2020 Budget Priorities Citizen Survey and Appropriate Funding (\$13,000) (8 Votes Required)

Question: Regarding CA-9, my thanks to Ms. Buselmeier, Mr. Horning and Mr. Crawford for the prompt turnaround on the recommendations for the survey. I fully support the recommendations, and also appreciate the statement in the cover memo that “city staff will ensure that citizens are informed that the survey is available for them to take.” Can you please elaborate on how we’ll do that? (Councilmember Lumm)

Response: The Communication Office will promote the survey via all available city communication channels, including the city’s website, Gov Delivery email notification, social media, online resident newsletter and CTN.

B-2 – An Ordinance to Amend Sections 5.24, 5.29.2, 5.33.2, 5.35.2, 5.36.2 and 5.37 of Chapter 55 (Unified Development Code) Of Title V of The Code Of The City Of Ann Arbor - Sign Regulations (ORD-20-27)

Question: Q1. At first reading, I asked what were the most contentious items in the discussions and one of the items listed was the maximum number and sign area of temporary signs. The maximums for single-family districts were increased pretty

significantly (by 75% in sign area (from 12 sq ft to 20 sq ft) and by 50% in the number of signs (by 50% from 4 to 6). What was the rationale for those increases? (Councilmember Lumm)

Response: This was largely based on two factors, the typical convention and size of real estate signage for selling properties, and providing additional area and number of signs for political purposes (e.g. if a property owner wished to have signage in support of 6 candidates for an election rather than being limited to 4).

Question: Q2. Another contentious item identified in the response was establishing exceptions. What exceptions were considered? (Councilmember Lumm)

Response: Staff and the Planning Commission discussed exceptions for signage that would not need to comply with provisions of the proposed code due to some characteristic or attribute. Ultimately, this was not included as it was difficult to discern a definition that would be easy to determine and existing mechanisms are already provided (e.g. Historic District signage and the Zoning Board of Appeals) in such unique circumstances.

Question: Q3. Have any comments or objections been received by staff since first reading September 8th? (Councilmember Lumm)

Response: No.

Question: Q4. At first reading, it was suggested there may be mistakes in the ordinance in terms of calculating the maximum square footage (eg counting one side rather than both) – is that correct, and if so, what needs to be changed? (Councilmember Lumm)

Response: Councilmember Hayner discussed a reference to a 6 square foot maximum sign, presumably the unlimited temporary sign option, and questioned whether that dimension should be larger to accommodate a larger sign. This isn't a technical mistake in how the code measures sign area, but would rather be a policy/ordinance decision whether to amend it. As it stands, it would provide for a one-sided sign up to six square feet or a double sided sign up to three square feet in dimension.

DC-1 – Resolution to Approve Amendment No 2 to the Recycling Plant Tours and School Recycling Education Contracts, with the Ecology Center (\$8,022.25 and \$106,859.00)

Question: Q1. For the September 8th meeting when this item was postponed, I asked for the rationale behind why the School education contract was increasing by 6.3% annually and the response simply indicated that's what is in the contract. I'm interested in why the price is increasing by that 6.3%? What was the justification for an escalator so much higher than inflation (what underlying Ecology Center costs were increasing at that pace and/or what scope additions were made)? Also, has the 6.3% escalator been in

place since the original 2015 contract and what was the price escalator in the previous School Education contract? (Councilmember Lumm)

Response: Upon further contract review, City staff found an error in the escalator calculations. The actual contract escalator is 3% rather than 6% as listed in the resolution. Staff discussed with the Ecology Center the possibility of a reduction beyond 3%, but the Ecology Center stated the 3% increase is a necessary increase, as explained in their memo providing clarifications about proposed solid waste education contract renewals (attached).

Question: Q2. For the September 8 meeting, I also asked what other contracts the city has with the Ecology Center (directly or indirectly through RAA) and the response was that the city does not have any others. Does that mean there are no RAA contracts with the Ecology Center related to city business where RAA is the primary vendor and Ecology Center a secondary supplier? (Councilmember Lumm)

Response: The statement is correct.

Question: Q3. The cover memo indicates that as a result of COVID, performance of the School Education contract has been revised from in-person presentations to pre-recorded on-line presentations. Were there adjustments made to the contract amount at that point and do we have any data on how effective the on-line presentations are (number of views etc.)? (Councilmember Lumm)

Response: The contract amount did not change during the COVID time period. The Ecology Center has provided the attached accumulative FY21 contract data, the Ecology Center Final Report 2019-2020, Survey Responses for In School and Virtual Programs.

Question: Q4. The two contracts expired June 30, 2020 and I'm assuming we're just continuing operating on the expired contracts. Is that correct, and has the Ecology Center been paid anything for FY21? (Councilmember Lumm)

Response: Yes, this is a continuation of this contracted work. The Ecology Center has not been paid for any work for FY21, and work is not currently scheduled.

Question: Q5. Can you please remind me if AAPS pays the City or shares in these costs at all? (Councilmember Lumm)

Response: The costs for the contract are fully funded by the City, AAPS does not share in the cost.

DC-2 Resolution to Accept the Revised Solid Waste Resources Management Plan (SWRMP)

Question: Have any changes been made to the SWRMP? (Councilmember Eaton)

Response: No changes have been made to the SWRMP since it was brought to City Council on January 6, 2020, but items have occurred or changed in the solid waste program area as noted in the memo and resolution.

Question: Is it appropriate for a Councilmember to offer amendments to the SWRMP, or is this a question of accepting or rejecting the plan? (Councilmember Eaton)

Response: City Council has the authority to take any action related to the SWRMP, however the plan's twenty-four recommendations are inter-related and were arrived at through a robust community engagement effort as noted in the memo and resolution. As such, changing one recommendation or singularly advancing one recommendation may have impacts on the others such as financial or operational impacts.

Question: If all forms of residential solid waste collection (trash, recycle and compost) were bundled for a unified contract bid, what current companies have the capacity to provide all of those services? (Councilmember Eaton)

Response: The following companies listed in the most recent (2017) Washtenaw County Solid Waste Plan as being active collection service providers in the County provide trash, recycling and compost collection services according to their websites: Advanced Disposal, Granger Disposal, Green for Life (GFL), Republic Services, Stevens Disposal and Waste Management. In addition, there are likely companies in the greater regional area in addition to those listed that perform all these collection services.

Question: Is it possible to implement a downtown solid waste collection plan without adopting the SWRMP? If so, why hasn't a downtown plan been proposed? (Councilmember Eaton)

Response: The recommendations in the SWRMP regarding the downtown are related to other recommendations in the plan, particularly those related to commercial collections (C.2. *Commercial Organics Collection*, and C.6. *Consolidated Commercial Collection*), so without direction from City Council regarding the SWRMP as a whole it is difficult for staff to advance a separate, stand-alone "downtown plan."

Question: Regarding DC-2, the cover memo indicates that "In the intervening months since the tabling of the initial resolution to accept the SWRMP, we continue to experience downtown level-of-service issues and ongoing equipment failures that cause service-related issues." As the purpose of bringing this resolution back to council for consideration is to address these level of service issues downtown, can you please (for the benefit of council members and the public) elaborate on why passing the SWRMP at this point is necessary/appropriate to proceed in that regard? (Councilmember Lumm)

Response: The recommendations in the SWRMP regarding the downtown are related to other recommendations in the plan, particularly those related to commercial collections (C.2. *Commercial Organics Collection*, and C.6. *Consolidated Commercial Collection*), so

without direction from City Council regarding the SWRMP as a whole it is difficult for staff to advance a separate, stand-alone “downtown plan.”

Question: Also on DC-2, the cover memo provides updated information on the current context for the SWRMP including the statement that, “Staff is gathering information for development of steps for collection services in the downtown area, and for commercial (non-residential) and multi-family sites outside of the downtown following the expiration of existing collection service contracts.” Again for the benefit of council members and the public, can you please elaborate on the specific next steps if council were to approve the SWRMP? (Councilmember Lumm)

Response: If City Council approves the SWRMP, staff will work with the DDA, downtown merchant associations and their members to implement the plan recommendations for the downtown including: establishing normal Saturday and Sunday collections in the downtown, including any necessary amendments to existing contracts and City ordinances/regulations; planning and designing for larger containers wherever possible to serve multiple customers; establishing a cost-distribution formula to apportion the costs of consolidated container services based on property type, size, usage, hours of operation and/or other characteristics affecting service needs; and, establishing a management structure for the downtown services separate from the other areas of the City. Also, staff will develop and initiate a procurement process to replace the current Commercial Franchise Collection contract that will expire on 6/30/2021, which would include: consolidated collections, including the addition of commercial organics collections for service subscribers; separate pricing for collection services in the downtown if it is decided that the consolidated collection services provider in the downtown should be contracted rather than performed by the City; pricing for increased collection services during student move-in/move-out periods if it is decided to contract these services.

Resolution to Direct the City Attorney to File a Written Public Opinion on Dissolution of the DDA

Resolution to Direct the City Administrator and City Attorney to Conduct Due Diligence and Prepare and Ordinance for Dissolution of the DDA

Question: Q1. The FY21 budgeted TIF revenue for the DDA is \$7.2M. What are the specific restrictions placed on how that money can be spent by (1) the state’s enabling DDA legislation (2) the DDA’s 2003 Development Plan approved by city council and (3) the DDA’s internal governance documents? (Councilmember Lumm)

Response: DDA’s in Michigan were enabled and are directed by State Statute, most recently the Recodified Tax Increment Financing Act (Act 57) of 2018. [http://www.legislature.mi.gov/\(S\(qfopm2f4hog3wonotjkokqre\)\)/mileg.aspx?page=getObject&objectName=mcl-57-2018-2](http://www.legislature.mi.gov/(S(qfopm2f4hog3wonotjkokqre))/mileg.aspx?page=getObject&objectName=mcl-57-2018-2) This Act sets forward a number of State guidelines for how a DDA Tax Increment Financing (TIF) is to be directed toward fulfilling the purposes of the Act, including prescribing the duties and powers of the DDA to correct and prevent

deterioration in the DDA District. The DDA's 2003 Development Plan approved by City Council sets forward several strategies for how the DDA pursues its mission and the State purpose using its TIF. https://www.a2dda.org/wp-content/uploads/2020/01/RENEWAL_PLAN_2003-33-FINAL-091503-1.pdf. The DDA is also guided by its bylaws which delineates the process of putting forward and approving spending resolutions, as well as other administrative policies such as selecting board officers and forming DDA committees.

Question: Q2. If the DDA were dissolved, re-establishing it would provide the underlying taxing entities the opportunity to opt out. Can you please provide the detailed amounts for the \$7.2M TIF capture by taxing entity? Also, what would the DDA TIF capture be in FY21 if the cap had not been put in place? (Councilmember Lumm)

Response: Attached is a schedule breaking out the details of the DDA's TIF by taxing entity. In FY21 the cap is redirecting \$2.3M away from the DDA to the taxing authorities. A schedule detailing DDA District tax revenue amounts received by taxing entity is attached.

Question: Q3. Can you please provide a list of the DDA-related outstanding debt obligations including principal amount, annual payment, maturity, type of debt (bonds; bank loan etc.), and form/issuer (DDA direct; City- issued; City- backed; Parking revenue-related etc.)? (Councilmember Lumm)

Response: See attached.

Question: Q4. As I understand it, the DDA has two parking funds, a housing fund, a bond fund, and a general fund. Is that correct, and what are the current undesignated fund balances in those funds? (Councilmember Lumm)

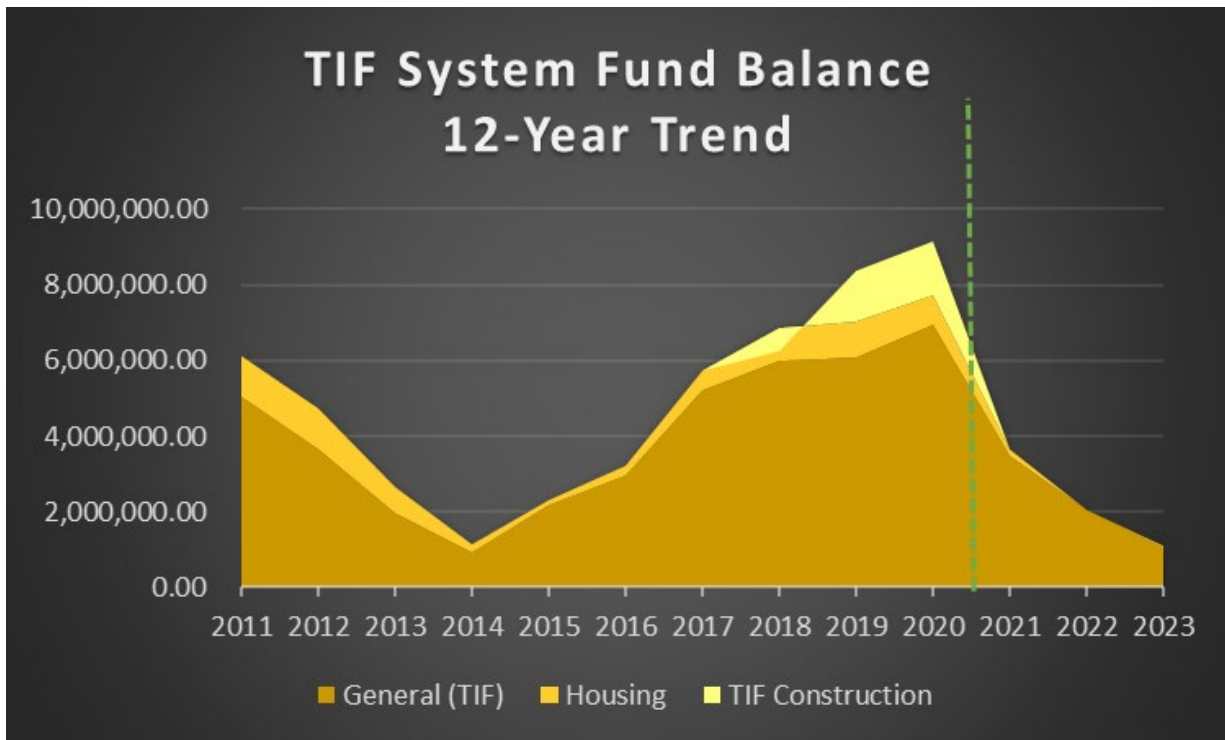
Response: The DDA has two revenues sources (TIF and Parking) and operates with five funds: TIF, TIF Construction (Bond funded capital construction fund), Housing, Parking, and Parking CIP. Fund balances as of August 31, 2020 are shown below (not reduced for restrictions).

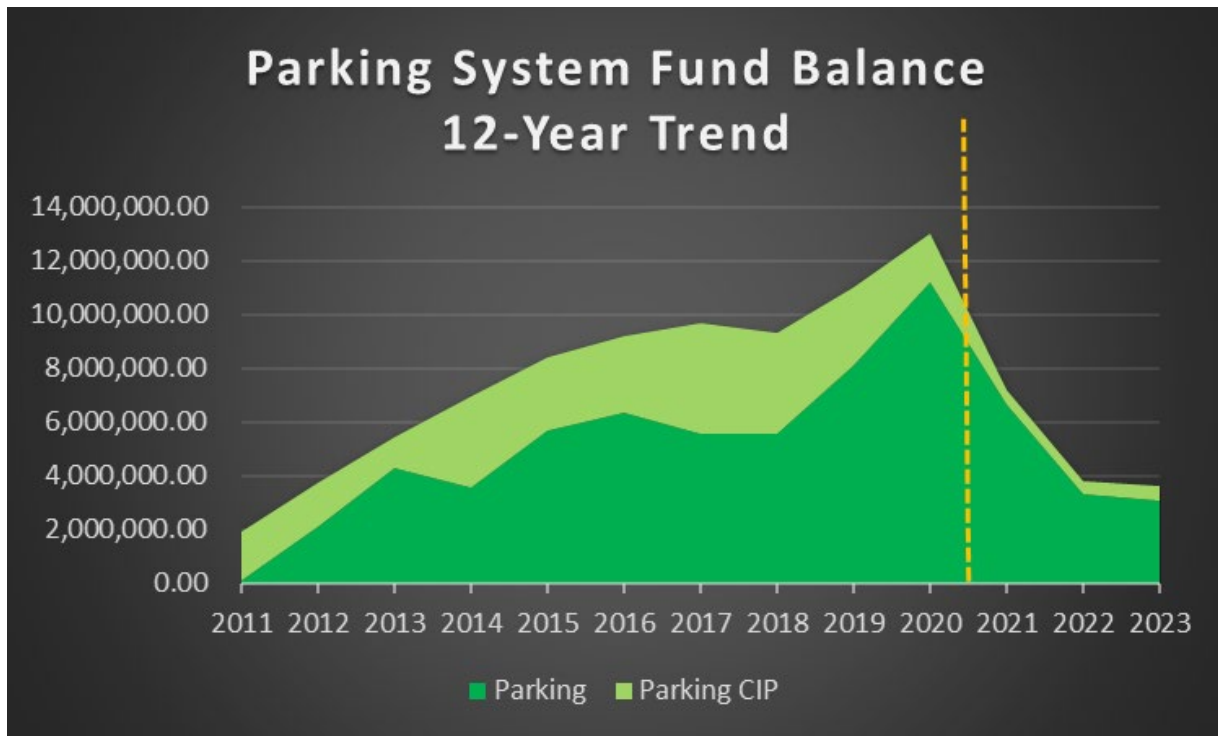
As reported to City Council in May, the COVID pandemic is having a great deal of impact on parking revenues, and it is very difficult to predict revenues when so much about the pandemic and pandemic responses is unclear, but it is very likely revenues may be less than the "optimistic" prediction made in the spring. Efforts are underway to contain costs, but it is expected that expenses will exceed revenues and the fund balances reported in August will be drawn down this fiscal year and next.

It is also worth noting that the DDA receives most of its TIF revenues in the early months of the year. At 8/31 the DDA had received \$5.5M of its \$7.2M budgeted tax revenues. An increase in fund balance is typical for us in the General (TIF) fund due to the timing of these receipts. The only formal restriction on these funds is on \$2.5M of the Parking Fund Balance for new construction. This restriction was in place pre-COVID, and we anticipate

that the DDA Board may wish to release this restriction in lieu of recent events and their projected impact on parking system revenues.

Fund	Balance at 8/31/20
General (TIF) Fund	12,214,871.00
Housing Fund	535,624.51
TIF Construction Fund	1,038,006.35
Parking Fund	12,759,667.89
Parking CIP Fund	1,253,933.47





Question: Q5. Approximately how much staff time would be spent in meeting the requirements of these two resolutions? (Councilmember Lumm)

Response: There isn't sufficient time to be able to formulate a response to this question. The amount of time it would take researching this question would certainly be material.

Question: Q6. Of the 10-15 largest cities in Michigan, do all of them have a DDA? Have any DDA's been dissolved? (Councilmember Lumm)

Response: While not every major city in Michigan has a DDA, of the 10-15 largest, Detroit, Grand Rapids, Warren, Ann Arbor, Flint, Clinton Township, Canton Township, Westland, Troy, Macomb Township, Shelby Township and Lansing (called Lansing Development Incorporated) each have a DDA. Dearborn has 2 DDAs, East Dearborn and West Dearborn. Livonia does not have a DDA, but has an economic development authority. Sterling Heights does not have a DDA per se, but has a LDFA. In short, of the 15 largest cities/townships in Michigan by population, 13 have a DDA, and the other 2 have something similar.

Closer to home, in Washtenaw County Ypsilanti, Milan, Chelsea, Manchester, Ann Arbor and Dexter have DDAs; Saline has an Economic Development Corporation that accomplishes the same thing.

The only city that I am aware of that dissolved its DDA is Utica, MI (city population 4,700).

Question: Q7. Do DDA employees have the same benefit programs as City employees? (Councilmember Lumm)

Response: Yes, DDA employees have the same benefits as City employees.



MEMORANDUM

TO: City of Ann Arbor Mayor and City Council

FROM: Molly Maciejewski, Public Works Unit Manager

DATE: September 30, 2020

SUBJECT: **Clarification Regarding Amendment No. 2 to the Recycling Plan Tours and School Recycling Education Contracts with the Ecology Center**

Following City Council's postponement on September 8, 2020 of the *Resolution to Approve Amendment No. 2 to the Recycling Plan Tours and School Recycling Education Contracts with the Ecology Center*, staff met with representatives of the Ecology Center and pass on City Council's questions and concerns regarding this item. In particular, staff noted that City Council raised:

- Why is the contract escalator 6%?
- Isn't it less expensive to put together a video and have students/classes run it when desired (new approach) than doing in-person sessions (previous approach)?
- Is this the right way to spend this solid waste fund money right now, or should we be spending it on something else in the solid waste program area?

The Ecology Center has provided the attached memorandum adding more background to their adjusted scope of work and to provide their responses to the concerns raised by City Council.

Upon further contract review, City staff found an error in the escalator calculations. The actual contract escalator is 3% rather than 6% as listed in the resolution. Staff discussed with the Ecology Center the possibility of a reduction beyond 3%, but the Ecology Center stated the 3% increase is a necessary increase, as explained in their memo.

Attachments: Ecology Center Memo, Clarifications about Proposed Solid Waste Education Contract Renewals

CC: Tom Crawford, City Administrator
Craig Hupy, Public Services Area Administrator

September 29, 2020

To: Molly Maciejewski, Christina Gomes, Cresson Slotten
From: Katy Adams, Ecology Center
RE: Clarifications about Proposed Solid Waste Education Contract Renewals

Thank you for inviting additional clarification about the Ecology Center's solid waste and environmental education services. It has been our great pleasure to provide these services in partnership with the City of Ann Arbor for a number of years, and we have taken extensive measures to adapt these services to the current extraordinary circumstances.

1. The value of K-12 education to advancing the goals of the City of Ann Arbor's solid waste programs is as great as ever.

For over 35 years, the City of Ann Arbor has invested in K-12 environmental education to support its solid waste and stormwater management services. We understand that it is easy to lose sight of the purpose and value of services when they're provided consistently for many years. But while the cost of K-12 solid waste education has never exceeded 1% of the City's total solid waste budget, that commitment to education has provided the generational foundation for Ann Arbor's high-quality recycling, composting, and solid waste programs.

There is a substantial body of research which demonstrates the impact of K-12 education on environmental behaviors, such as recycling, composting, water conservation, energy conservation. Introducing recycling education to other school districts in Southeast Michigan has shown 61-78% increases in recycling knowledge within school communities after participating in Ecology Center education. Our partnership with eight other school districts in Washtenaw County revealed school recycling rates averaging 71% in schools that participated in recycling education. Schools that did not request recycling programming had school recycle rates averaging 38%.

Our 2016-2018 partnership with the City of Dearborn to provide recycling education in schools led to a documented 35% reduction in contamination in the City's residential curbside recycling and a 56% increase in recycling knowledge among residents. This evidence confirms the anecdotal understanding that "students bring what they learned in school home to their parents," and influence the household's actions. This is as important as ever today, since recycling end-markets are demanding new levels of "quality control" in the preparation of materials.

Year after year, the Ecology Center programs are given the highest possible ratings by AAPS teachers and students. The majority of contracted programs are typically booked within weeks of the moment they're made available for scheduling. In spring 2020, during the COVID-19 school closures, teachers continued to request environmental education for their students and appreciated our ability to offer online alternatives to a classroom visit. Here are sample comments:

"This video and activity will be so wonderful for our students! Take care and we will miss your presentation this year!" -1st grade teacher, Allen Elementary

“This is amazing! We will use it this week. We still are teaching our composting unit.” - 1st grade teacher, St. Francis of Assisi

“Thank you! We are loving it! Such a great idea!” - 4th grade teacher, Lawton Elementary

In addition to being well received by schools, the virtual programs provided great evidence of positive impact. Interactive features within each lesson allowed us to gather detailed data on how students were learning, and showed significant improvement in pro-environmental knowledge and attitudes. For example:

Fourth and fifth grade students were able to identify recyclables with average accuracy of 86%.

97% of kindergarten students named paper, plastic, metal, and glass as recyclable materials. The remaining 3% named one of these four items but not all of them.

96% of first grade students were able to identify appropriate ingredients for compost.

In response to a question about how to reduce plastic packaging waste, 37% of middle school students said recycle plastic/paper, 23% suggested using reusable containers instead of disposable packaging, and 40% said eating more fresh, unpackaged foods or gardening.

2. It takes more labor and resources to provide “remote learning” education services than conventional in-class programs.

As all school officials (and households with K-12 students) are now aware, the delivery of virtual classroom programs is labor intensive and complex. This is equally true for education programs brought “into the classroom” by a third party like the Ecology Center. “In-class” time is a relatively small portion of a teacher’s workday, as it is for a third-party program.

Comparison of Labor and Resources of Original Service to Virtual Program

Original programming cost was calculated based on the following:	Adapted virtual programming cost is calculated based on the following:
<ul style="list-style-type: none"> ● Use of classroom-ready lessons, with staff time for minor edits based on teacher feedback or changes to Michigan Academic Standards ● Staff time for in-person delivery of programs ● Staff time to advertise programming ● Staff time to schedule with teachers and schools ● Staff time to collect and report data ● Restocking lesson materials ● Printing costs ● Overhead costs 	<ul style="list-style-type: none"> ● Staff time to design lessons & workshops ● Staff training on software and equipment used to create virtual lessons ● Staff time to research best practices for virtual education and online teaching ● Staff time to host live online lessons ● Staff time to advertise programming ● Staff time to coordinate with teachers ● Staff time to provide ongoing support for schools and families using online resources ● Staff time to collect and report data, which is far more extensive because of recorded student responses ● Purchasing materials for new lessons ● Film production equipment

	<ul style="list-style-type: none"> • Monthly charge for subscription to online service that allows lessons to be interactive • Monthly charge for online storage of large online lesson files • Overhead costs
--	---

Under the original contract, all costs were rolled into one per-program fee, which included not only staff time to prepare and deliver lessons, but also the administrative, material, and overhead costs. We would be happy to provide the City with the line item breakdown of our expenses, upon request. The original program hired us to deliver pre-prepared programs, so the bulk of the per-program fee was tied to staff time going into schools to deliver lessons and doing administrative work associated with scheduling programs.

The work that was done in March-May 2020 (redesigning lessons and coordinating 110 delivered programs) required a total of 576 staff hours. These staff hours included new lesson planning, creation of new education materials, and staff training and practice with new skills and tools required to produce professional online lessons. Under the 2020-2021 contract, additional training is to be pursued in the skills and tools to create exceptional lessons. Hours per program are budgeted for uploading, managing teacher and student access, and responding to technical issues with each program, adding to the hours under personnel costs for lesson redesign and delivery.

3. These education contracts are cost-effective for the City of Ann Arbor.

The annual cost escalator for services is 3% for both contracts. Our total price for the School Education program, if all programs were to get billed, is \$103,520.

In May-June 2020, the Ecology Center spent far more to convert the solid waste education programs to a remote learning application than the contracts provided in compensation. We absorbed those costs to help cope with the extraordinary circumstances of the pandemic. In the proposed renewal contract, we have held costs at the contract’s existing level plus the 3% increase, despite increased remote learning expenses.

We would also note that, during the last three years, the Ecology Center has not billed for the entire value of the contract in any year. While classroom programs are in extremely high demand and get scheduled rapidly, the staff trainings have not been fully scheduled. Through the per-program billing structure of the contract, the City only pays for programs rendered.

Thank you again for inviting this clarification of the proposed renewal contract for solid waste education. We are very grateful for the opportunity to provide these services for the City of Ann Arbor, and for teachers and students in the community.

Recycling Education

In-School and Community Programs

July 2019 – June 2020

Year-end report on services
contracted to the Ecology Center
by the City of Ann Arbor

Prepared by Katy Adams, education@ecocenter.org



SCOPE OF SERVICES

This report provides a year-end summary of work completed by Ecology Center to fulfill terms of our 2019-2020 educational contracts with the City of Ann Arbor.

In-School Recycling Education contract stipulates the promotion, scheduling, and delivery of up to 250 in-classroom preK-12 student programs and up to 35 school staff recycling workshops in Ann Arbor area schools. The contract also compensates Ecology Center staff for participation in three local community events. Quarterly reports and written feedback from teachers provide City with timely information on the quality of services provided.

The contract for **Public Recycling Craft Events** hires Ecology Center to plan and facilitate 10 monthly Saturday recycling crafts in Ann Arbor which are free and open to the public. During the 2019-2020 year, these events were delivered in coordination with planned Ann Arbor Parks Department activities at a variety of locations, including city parks, pools, and community centers.

Due to COVID-19 school closures March-June 2020, negotiations resulted in approval for Ecology Center to meet contractual duties by adapting six student workshops and four craft activities into virtual format. The redesigned programs provided teachers and public with educational resources while satisfying all public health requirements.

SUMMARY In-School Recycling Education

Between July 2019 and June 2020, the Ecology Center provided classroom presentations covering a wide range of waste-reduction topics appropriate for all age levels, from preschool to adult students. A total of 249 student workshops were delivered during this fiscal year, and they are broken down as follows:

- 139 in-person solid waste workshops in Ann Arbor Schools
- 110 on-line solid waste workshops
- 13 storm water workshops in Ann Arbor Schools
- 7 storm water workshops in Dexter Schools



Thirty schools in the Ann Arbor area scheduled and received at least one presentation, and two schools in Dexter, Beacon and Anchor Elementary, received stormwater workshops. A total of 5,638 students participated in the workshops provided for by this contract. Approximately 250 adults observed the student programs.

All Ann Arbor schools were contacted via email and phone to offer staff recycling workshops, and 4 schools requested adult recycling programs, with a total attendance of 116 school staff.

The Ecology Center provided educational activities at one community event, the City Public Works Department Open House, and interacted directly with approximately 70 people at the exhibit booth.

STATISTICS

Totals

- 30 schools had lessons, including at least one workshop in all Ann Arbor public elementary schools
- 139 classrooms visited, 110 programs delivered virtually
- 5,638 students directly participated, approximately 250 adults observed student programs
- 4 staff recycling workshops were delivered, attended by a total of 116 school staff

Student Programs by Quarter

- First (July-September 2019): 0
- Second (October-December 2019): 71
- Third (January-March 2020): 68
- Fourth (April-June 2020) 110



Student Programs by Month

- | | | | |
|------------------|----|-----------------|----|
| • July 2019 | 0 | • January 2020 | 39 |
| • August 2019 | 0 | • February 2020 | 17 |
| • September 2019 | 0 | • March 2020 | 12 |
| • October 2019 | 17 | • April 2020 | 34 |
| • November 2019 | 17 | • May 2020 | 48 |
| • December 2019 | 37 | • June 2020 | 28 |

Number of Programs Delivered

- | | | | |
|----------------------------|----|-----------------------------|----|
| • Recrafting | 2 | • Carbon, Compost, Climate | 11 |
| • Wee Recycle | 26 | • Our Material World | 17 |
| • Compostability | 32 | • Hungry Planet | 26 |
| • Grow, Eat, Throw | 23 | • Zero Waste Party | 16 |
| • Stormwater Mystery | 20 | • Engineering Safe Systems | 0 |
| • Time for Waste | 17 | • Project Recycle | 57 |
| • Mapping Material Markets | 2 | • Staff Recycling Trainings | 4 |



Programs by Age Group

	Programs	Students
• Early 5's & Kindergarten	28	616
• Lower Elementary (1-2)	75	1,650
• Upper Elementary (3-5)	80	1,920
• Middle School (6-8)	50	1,100
• High School (9-12)	16	352
• Special Education	0	0
• Adults	4	116

PROGRAM EDITS



In response to the COVID-19 school closings and transition to virtual learning in mid-March, the Ecology Center education team adapted six lessons to share with schools on-line in April-June 2020. Adapted lessons included: Wee Recycle, Compostability, Grow Eat Throw, Stormwater Mystery, Project Recycle, and Hungry Planet. Programs were redesigned for engaging on-line format while meeting same learning objectives and content as original in-classroom lesson. Hands-on activities were modified to an on-screen interactive task or able to be done at home, with common household items, and in alignment with all social distancing requirements. Programs were shared with teachers who had scheduled in-person programs that had to be canceled in March-June. Programs were also shared with all grade-level teachers who had not yet received an Ecology Center program during the 2019-2020 school year.

STAFF TRAININGS

Ecology Center educators provided a presentation on recycling at four regularly-scheduled staff meetings in Ann Arbor schools. The presentation lasted between 20-40 minutes depending on the number of questions from the audience. Presentation included:

- Presenter introduction, basic statistics and case for recycling, and goals of presentation
- Soliciting information from audience about their current recycling practices at school
- Overview of waste system structure in Ann Arbor, including City services, characteristics of single-stream recycling, and materials recovery facility's role
- Review of recycling rules with visuals and demonstration props

The audience generally expressed a strong positive attitude toward recycling, gratitude for the training, and desire to improve their school's recycling. Schools that received trainings were: Allen Elementary, Angell Elementary, Bryant Elementary, and Dicken Elementary.

ADMINISTRATION

Promotional material development, outreach, and scheduling were performed by Ecology Center staff with input from City staff. In September, a district wide email went to all public schools and Ecology Center staff sent individual emails to private Ann Arbor area schools. The teachers registered using a Google online form. The majority of scheduling was completed in October 2019. Pre and Post-visit informational pages were provided to teachers. At the end of the in-class visits, each student received a recycled newspaper pencil, imprinted with City Solid Waste information. Education staff completed a classroom report following the delivery of programs at a school. The reports provided written record of date of delivery, number of programs delivered, number of students present, and comments on special circumstances that may have occurred during program.

In March, the schools closed for rest of school year because of COVID-19. The Ecology Center contacted teachers, who indicated programs offered virtually would be a welcome substitute to the in-class offerings, as schools transitioned to on-line education. The Ecology Center shared six new virtual programs with teachers in April-June 2020. Using Mindstamp software, the Ecology Center recorded the number of students who participated in each program, each student's school, each student's teacher, and student responses to multiple interactive features within each program.

The Ecology Center Education Director met with City staff quarterly to report on status of education services and discuss any issues. The Ecology Center provided written summary at each meeting.

TEACHER FEEDBACK

Detailed feedback is shared in spreadsheet submitted with this report.

Teachers provided feedback on the quality of an educational program either by completing evaluation during program delivery or with follow-up email link. The number of teachers providing feedback was lower than in previous years. One reason was that one of our temporary educators did not collect teacher feedback early in the school year (this teacher did not remain with us.) Another reason was the larger proportion of middle and high grade programs, where a single teacher would invite us to present in up to 8 classes and provide only one survey. In fact, only 12 middle and high school teachers accounted for 66 of the programs delivered in Fall/Winter 2019. If we adjust our calculation of feedback rate to account for this, then we had a response rate of 71% for the in-classroom presentations completed through March 2020. The third reason the number of teacher surveys is low is because only 15 teachers responded to the email request for feedback on our virtual programs. A total of 110 virtual programs were delivered, giving us a response rate of 11%. If on-line programs continue to be offered, we will need to develop a more robust method for soliciting teacher feedback.

Overall, feedback is overwhelmingly positive. Teachers strongly agreed or agreed with statements about the program's appropriateness, enjoyment, and facilitator quality or clarity. Teachers welcomed the virtual lesson option during spring 2020, expressing their gratitude by sending spontaneous emails, choosing to include the program as part of their curriculum during the COVID-19 school closing, and responding to Google Form survey with favorable reviews of the lessons.

Example quotes from unsolicited teacher emails:

"Thank you so much for providing this for us! We were bummed that school was canceled for the rest of the year and that we wouldn't have a chance to have you visit. We will be sure to share this with our students. We will let you know how it goes! Thank you so much and hope to see you next year!" -Kindergarten teacher, Lakewood Elementary

"This is amazing! We will use it this week, we still are teaching our composting unit. Thank you so much!" -1st grade teacher, St. Francis of Assisi

"Thank you! We are loving it! Such a great idea!" - 4th grade teacher, Lawton Elementary

Thank you also for the lesson to share with our students. This video and activity will be so wonderful for our students! Take care and we will miss your presentation this year!" -1st grade teacher, Allen Elementary

LEARNING OUTCOMES

Student responses to items embedded in virtual lessons allowed us to gather new data on learning outcomes. Highlights from each lesson's data are summarized below:

<u>PROGRAM</u>	<u>PROMPT</u>	<u>STUDENT RESPONSES</u>
Project Recycle	Why do you think we should recycle?	63% of students responded: to protect the environment, keep earth clean, or avoid polluting water and air. 25% responded: so we don't waste useful things or so we can use it again, and 12% said: to save space in the landfill or to make fewer landfills.
Project Recycle	After reviewing recycling rules, which poster image has only correct recycling information?	68% of students selected the correct poster, 28% misidentified a poster with paper towels and paper cup, and only 4% misidentified poster with plastic bags and wrappers.
Project Recycle	Examining images and names of individual items, complete checklist to identify which items are and are not recyclable.	Students performed with average accuracy of 86% and were particularly good at spotting those items that are not recyclable curbside, including batteries, string, Styrofoam cup, plastic spoon, banana peel, wet wipe. Mistakes revealed students often thought recyclable items were not recyclable, including: aluminum foil, paper bag, empty juice carton, and magazine.

LEARNING OUTCOMES

<u>PROGRAM</u>	<u>PROMPT</u>	<u>STUDENT RESPONSES</u>
Wee Recycle	What are the four materials that can be recycled?	97% of students named paper, plastic, metal, and glass. The remaining 3% named one of these four items but not all of them.
Wee Recycle	Which of the following plastic items is NOT recyclable?	99% of students correctly identified plastic grocery, sandwich, and chip bags.
Wee Recycle	Which of the following paper items is NOT recyclable?	90% of students correctly identified paper towel and tissue.
Wee Recycle	Which of the following metal items is NOT recyclable?	92% of students correctly identified dirty containers as not recyclable. Incorrect answers either misidentified foil as plastic or soil was not recyclable.
Compostability	Which do you think are good ingredients for making compost?	96% of students were able to correctly identify appropriate wet and dry ingredients for compost.
Compostability	What is something you could do to reduce the amount of waste you create?	Student responses fell into five main categories: 1. recycle, 2. reuse, 3. buy unpackaged, 4. grow/cook your own food, 5. avoid plastic
Grow Eat Throw	Arrange cards into correct product life cycle sequence.	94% of students sequenced cards correctly
Grow Eat Throw	After reviewing life cycle of potato chips, what other way to eat potatoes without landfill waste?	Majority described changing how they would eat potatoes. One quarter described changing how potato chips are packaged at factory.
Grow Eat Throw	How to avoid plastic wrapping in your kitchen?	Student responses fell into one of four types: 1. change diet to avoid plastic, 2. buy direct from farmers to bypass processing, 3. redesign packaging to be recyclable, 4. recycle or reuse packaging.
Stormwater Mystery	Put a circle around the pictured activities that help keep storm drains clean.	89-96% of students recognized picking up litter, picking up dog waste, and raking leaves to bag or compost them, and 82% of students identified sweeping driveway as positive. 40% thought keeping car clean was helpful, but another 50% identified it as a harmful act when dirty water ran into street.
Hungry Planet	What can you do to reduce packaging waste?	37% of students said recycle plastic/paper, 23% suggested using reusable containers instead of disposable packaging, and 40% said eating more fresh, unpackaged foods or growing a garden.

SUMMARY Recycling Craft Events

Ten recycling craft events were held between the months of September 2018 and June 2019. Each monthly Saturday event focused on a distinct recyclable or recycling topic. Schedule of topics is provided in attached promotional materials.

Attendance was higher than in recent years, indicating that the partnership with City Parks Department increased awareness and/or interest in seeking out the event. Views on the YouTube video craft presentations varied considerably, from 15-82 views per program. Total attendance at all events reached 353 people, which averages to 35 people per program. Parents with their children were most common type of participants, but we did see adults without children as well. The majority of visitors were Ann Arbor residents.



STATISTICS

Six Recycle Parks & Crafts events were held at Ann Arbor facilities, including:

- August 10, 2019 2-4 pm Fuller Park Pool, Fish Kites from recycled paper. Attendance: 35
 - September 14, 2019 10am-1pm Farmer's Market, Recycled T-Shirt Produce Bags. Attendance: 32
 - October 12, 2019, 10am-12pm, Gallup Park, Glass Lanterns. Attendance 43
 - November 9, 2019, 1-3pm, Veteran's Memorial Park, Recycled Bird Feeders, Attendance 49
 - December 7, 2019, 1-3pm Ann Arbor Senior Center, Ornaments / Mosaic Tiles, Attendance 2
- Note: Space was double-booked, Parks canceled their portion of the event and did not advertise.
- January 25, 2020, 10am-12pm, Mack Pool, Embossed Art on Metal, Attendance: 29

Four Craft & Chat information segments were recorded and shared publicly on YouTube as a replacement for in-person events because of COVID-19 restrictions, including:

- **Episode 1: Composting** reviews benefits of composting, walks through the steps to make compostable seed-starter pots, and demonstrates how to set-up an indoor worm bin. Viewers: 40
- **Episode 2: Paper Remanufacturing** reviews the process of remaking paper, walks through steps to make homemade recycled paper, and demonstrates how paper pulp can become compostable seed bombs to grow native flowers in your backyard. Viewers: 82
- **Episode 3: Home Waste Audit** reviews the curbside recycling rules for Ann Arbor by walking viewer through a craft to make their own recycling reminder magnet, and demonstrates how to do a home waste audit safely with kids. Viewers: 26
- **Episode 4: Healthy Summer Parties** discusses how to make summer picnics sustainable by reviewing alternatives to common disposable party supplies, a craft to make compostable pom-pom decorations, and how to do a pond dip with kids to look at the health of waterways in our neighborhoods. Viewers: 15

ADMINISTRATION

Parks Department staff designed and printed brochures to advertise recycling craft events in Ann Arbor. A press release and social media posts were submitted to Ecology Center communications on a monthly basis to be circulated to on-line networks and local media outlets. City staff reviewed and approved all promotional materials before distribution.

Thank you emails and a request for feedback on program quality were sent to all craft event participants who signed-in and provided contact information. We did not receive any follow-up feedback from visitors to Saturday craft events or from viewers of public craft videos.

Teach Feedback for In-Classroom Programs presented October 2019 - February 2020

Timestamp	Teacher Name:	School:	Grade:	Number of Students:	Date of Program:	Workshop:	Please rate how strongly y	Please rate how strongly y	Please rate how strongly y	Please rate how strongly y	What did you like best about this workshop?	Would you recommend any changes to this workshop?	Additional questions, comments, or suggestions:	
10/28/2019 10:45:04	Gina Maksimchuk	Abbot Elementary	Kindergarten	19	10/24/2019	Wee Recycle (Y5/K)	Agree	Agree	Agree	Strongly Agree	They are teaching the kiddos about the 3 R's	I think it is great!	Thank you!	
10/30/2019 15:21:28	Anne Ward	Angell		3	25	10/30/2019	Project Recycle (All Grade	Strongly Agree	Strongly Agree	Neutral	Hands-on activity	No	None	
11/8/2019 8:28:59	Anne Ward	Angell		3	25	10/30/2019	Project Recycle (All Grade	Strongly Agree	Strongly Agree	Neutral	Hands-on activity	No	None	
11/8/2019 9:58:04	Schneider for Mrs Allan	Steam		7	3 @ 65	11/8/2019	Hungry Planet (7th)	Agree	Agree	Neutral	Strongly Agree	Student participation and game	Student accountability, notes, knowledge assessment Our curriculum in AAPS includes Ecology in the 8th grade now. If anything in the workshop could include some tie to Eating for Energy, Cycling of Matter or Abiotic Impacts on Ecosystems that would be great.	Gabi did a fabulous job. Middle schoolers are hard to engage and she did a fabulous job.
11/13/2019 14:35:12	Gwen Cowhy	Slauson Middle School	6th grade	4	@ 72	11/13/2019	Our Material World (6th)	Strongly Agree	Strongly Agree	Agree	Strongly Agree	The workshop kept my students engaged with a variety of slides to view, games and pictures.	Our guest educator is energetic and very knowledgeable. It was a pleasure to have the workshop today!	Just so happy you folks come each year and it fits perfectly with our curriculum
11/20/2019 11:26:56	JL Fleming	Clague Middle School		7	3 @ 84	11/20/2019	Hungry Planet (7th)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Activity for students, great chance for them to participate	More time for student interaction with pairs or small groups - more time for student talk	This program is great because it directly relates to our Sharing the Planet IB Exhibition
11/21/2019 11:49:58	Alexander Popkey	Mitchell		5	24	11/21/2019	The 3 Cs: Compost, Carb	Strongly Agree	Agree	Strongly Agree	Strongly Agree	The pair/group discussion between the students -the visuals: illustrations and video	More time for student interaction with pairs or small groups - more time for student talk	This program is great because it directly relates to our Sharing the Planet IB Exhibition
11/21/2019 13:47:11	Alexander Popkey	Mitchell		5	24	11/21/2019	The 3 Cs: Compost, Carb	Strongly Agree	Agree	Strongly Agree	Strongly Agree	The kids get to experience a scientific conversation with a professional that informs their research.	Not at this time	Thank you!
11/21/2019 13:49:48	Padgen	Mitchell		5	22	11/21/2019	The 3 Cs: Compost, Carb	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	It connects with our current science unit on food chains and energy transfer.	No	No
12/3/2019 13:34:52	Erin Wright	Eberwhite	5th		23	12/3/2019	The 3 Cs: Compost, Carb	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	The game	A bit more active participation - hands on learning	Excellent program! It was seamless. Presenters were very well-informed.
12/5/2019 14:18:42	Karma Nordstrom	Clague Middle School		7	4 @ 115	12/5/2019	Hungry Planet (7th)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Very organized. Informative	More time for questions ☺	Need to stop if you feel the students are not engaged
12/6/2019 14:45:03	Vivian Lee	Slauson MS	7 and 8		5 @ 125	12/6/2019	Hungry Planet (7th)	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Hands on activities	Engaging the students	No
12/10/2019 10:26:49	Carol Clyde	Allen Elementary		5	28	12/10/2019	Project Recycle (All Grade	Strongly Agree	Agree	Agree	Agree	How relevant the activities were to our curriculum	A built in exit activity to determine how well they understood the ideas of the lesson	Tell us to have kids grouped in day before email.
12/10/2019 15:23:57	Hane	Dicken	5th		26	12/10/2019	The 3 Cs: Compost, Carb	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Organization and visual tools for learning.		NA
12/13/2019 14:28:03	Aaron Wiens	Clague Middle School		7	5 @ 150	12/13/2019	Our Material World (6th)	Strongly Agree	Agree	Strongly Agree	Strongly Agree	I love the activity and then tying it to real world, powerful	The interaction with the students and data analysis/trends.	No, I thought it was great!
12/17/2019 14:14:03	McKillen	Lakewood		3	32	12/17/2019	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree			
12/18/2019 13:23:08	Amie snapke	Forsythe Middle School		6	5 @ 95	12/18/2019	Our Material World (6th)	Strongly Agree	Strongly Agree	Neutral	Strongly Agree			
12/18/2019 13:39:59	Karen Gould	Forsythe Middle		6	5 @ 97	12/18/2019	Our Material World (6th)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree			
12/19/2019 12:08:18	Mark Kelly	Angell	3/4		20	12/19/2019	Project Recycle (All Grade	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree			
1/7/2020 15:02:13	Karen Gould	Forsythe Middle		7	29	1/7/2020	Hungry Planet (7th)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Interaction with students	Yes perhaps more student activities.	I'm glad to have had the Ecology Center here - the kids were already thinking about the content outside of the presentation.
1/12/2020 16:33:11	Buckwalter	Forsythe Middle		7	6 @ 110	1/7/2020	Hungry Planet (7th)	Strongly Agree	Agree	Strongly Agree	Strongly Agree	The game was engaging.		
1/13/2020 9:38:12	Jessica Sawin	Angell	4th		25	1/10/2020	Mapping Material Markets	Strongly Agree	Agree	Strongly Agree	Strongly Agree	I liked that it had connections across the curriculum—including math, science and social studies.	I think it is great as it is!	Our presenters were fantastic even when our students were not practicing their best listening skills. I'm sorry that we weren't better behaved for you! Thanks for everything!

1/14/2020 9:53:56	Liz Pierce	Ann Arbor STEAM	1st		20	1/14/2020	Project Recycle (All Grade	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Hands on work with collaborative discussion The video and photo of the landfill gave a great visual for students.	Some kind of movement break in the first part before sorting	Thanks!
1/14/2020 11:05:38	Semrau	A2Steam at Northside	1st		22	1/14/2020	Project Recycle (All Grade	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Students had a chance to sort items as a hands on activity.	No recommendations at the time. It was a good use of time and students had a chance to ask a lot of questions.	Good use of time. The pacing was well done and the workshop was very meaningful for what we are learning.
1/14/2020 14:41:36	Beth Lafferty	A2 steam		1	22	1/14/2020	Project Recycle (All Grade	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Hands on activity	No	Thank you Great job with redirecting students
1/16/2020 11:23:31	Mrs. Cheladyn	Pattengill		4	20	1/16/2020	Mapping Material Markets	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	The hands on component	No	Thank you
1/17/2020 14:18:10	Heather moon	Thurston	Y5		16	1/17/2020	Wee Recycle (Y5/K)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Great for little kids	No	Thank you for sharing this important work with my students!
1/21/2020 10:16:08	Depasquale	Lawton		3	24	1/21/2020	Storm Water Mystery (2nd	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Hands on!	??	Thank you for sharing this important work with my students!
1/21/2020 11:09:53	Carrie Aquino	Lawton		3	22	1/21/2020	Storm Water Mystery (2nd	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	They can apply this to real life. The students were engaged and excited about solving the mystery	No	
1/21/2020 14:16:44	Nicole Pike	Lawton		3	23	1/21/2020	Storm Water Mystery (2nd	Agree	Agree	Agree	Agree	Hands on	No	Thank you so much
1/21/2020 15:20:22	Julia Gold	Lawton		3	22	1/21/2020	Storm Water Mystery (2nd	Strongly Agree	Agree	Agree	Strongly Agree	The hands-on activity	Maybe small group work for the mystery part where students are given the clues then they can submit their ideas to the larger group. They were on the floor listening for a bit too long, you lost engagement of several students after about 15 min.	Thank you for coming, it's always a pleasure.
1/24/2020 10:02:16	David Blumer	Allen Elementary		3	23	1/24/2020	Project Recycle (All Grade	Agree	Agree	Neutral	Strongly Agree	Hands on	Different visual for landfill (slideshow maybe)	Thanks!
1/24/2020 10:52:55	Melissa DeJesus	Allen Elementary		3	22	1/24/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Hands on activities	No	Great job
1/24/2020 11:35:20	Cole	Allen		3	23	1/24/2020	Project Recycle (All Grade	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Mixing working in teams with the video and instruction	No	Thank you for coming and offering this free workshop to schools!
1/24/2020 19:53:56	Linda Baskey	Clague Middle School		7	90	1/23/2020	Project Recycle (All Grade	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Great timing and flow - some instruction, a short video, and then lots of hands-on.	This age group might be interested in a short info sheet comparing recycling rates around the country or around the world. A few key stats could also be included (like number of water bottles purchased per minute, etc.)	The workshop was fantastic - I was truly impressed and grateful. Thanks.
1/28/2020 9:59:36	Angie christiansen	Haisley	2nd		22	1/28/2020	Grow, Eat, Throw (2nd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	It connects to our life cycle unit and our social studies economics unit	No	
1/28/2020 11:11:52	Paula Everett	Haisley		2	23	1/27/2020	Grow, Eat, Throw (2nd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Students received a lot of information.	No	
1/28/2020 12:05:30	Alicia Murrell	Haisley	2nd		24	1/28/2020	Grow, Eat, Throw (2nd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Hands on and relevant	None	Great job, management of class, friendly and engaging.
1/31/2020 9:58:48	Shanteau	Eberwhite	2nd		26	1/31/2020	Grow, Eat, Throw (2nd)	Agree	Agree	Agree	Agree	Group activities	No	N/a
1/31/2020 10:53:26	Tracy singer	Eberwhite		2	24	1/31/2020	Grow, Eat, Throw (2nd)	Strongly Agree	Agree	Strongly Agree	Strongly Agree	Compliments the curriculum well	No	
2/5/2020 9:15:45	Tracey Metry	Ann Arbor Open	3/4		23	2/5/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Excellent explanation of concepts and instructions for activity and engaging activity.	Labels on artifacts took away from kids thinking	Great overall!
2/5/2020 10:20:11	Bette Diem	Ann Arbor Open School	3&4		22	2/5/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Good discussion followed by hands on activity	Not really. I think it's great!	
2/5/2020 11:29:45	Chad Downs	Ann Arbor Open	3/4		25	2/5/2020	Time for Waste (3rd)	Agree	Strongly Agree	Agree	Agree	The hands-on part.	No	No
2/6/2020 10:17:07	Laurie moore	Lawton		2	22	2/6/2020	Storm Water Mystery (2nd	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	I liked all the visuals- this helped the students focus and made the situation relevant	No I felt it was very well done	Detective Frog did an excellent job. She was prepared and organized! Maybe if you can add or bring more tubing in for students to challenge their designs? Perhaps a recording page for students to draw and explain their models?
2/6/2020 11:26:26	Veronica Nowicki	Lawton Elementary	Second grade		19	2/6/2020	Storm Water Mystery (2nd	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	The hands on project	No. The students liked the visuals and the opportunity to design more than one model.	Thank you. It was awesome!
2/7/2020 11:20:53	Lori Moizio	Pattengill		3	15	2/6/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Hands on activities	No	
2/7/2020 12:31:45	Lisa Bankey	Patting III Elementary	Third		24	2/7/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	I liked how it likes without social studies history curriculum	Yes!	

2/7/2020 14:32:51	Andy frankel	Pattengill	3rd	21	2/7/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Student engagement and clear directions/expectations	Not really, students really enjoyed and benefited	Ms. Gabby was very prepared and did a great job. Thank you!
2/13/2020 9:58:56	Conte	Burns Park	3	26	2/13/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Hands on opportunities	None	
2/13/2020 11:23:58	Megan Kierce	Burns Park	2/3	21	2/13/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Well organized and engaging and cross curriculums	No	
2/13/2020 13:38:32	Molly Crankshaw	Burns Park	3	24	2/13/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	The hands on digging for artifacts. The closing discussion and analysis of completed graphs.	Definitely	Thank you so much for offering this opportunity.
2/13/2020 14:49:27	Jessica hane	Burns Park	3	26	2/13/2020	Time for Waste (3rd)	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	The graphing activity	Kids want to wash hands, could be done while groups are working to prevent a big line to wash hands at the end.	

Feedback from Teachers who used Online Lessons: April-June 2020

Timestamp	What is your name?	What is the name of your school?	Which virtual lesson did you share with your students?	How long did you list workshop on virtual platform (i.e. seesaw, etc.)?	How would you rate the clarity of the lesson?	How would you rate the appropriateness of the lesson?	How would you rate the quality of the lesson?	How would you rate ease of use for the virtual lesson platform?	If online learning continues, would you be interested in sharing the virtual lesson with your students for the 2020/21 school year?	Did you have a favorite part or any positive feedback to share?	Do you have any suggestions for improvement?	Anything else you would like to share?	
6/14/2020 18:40:47	Sarah kairis	Ann Arbor open At Mack	Compostability (1st)	1 week	4	5	4	5	Yes, definitely!			Thanks!	
6/14/2020 21:28:24	Rachel Marie Johnson	St Francis of Assisi Cathol	Compostability (1st)	1 week	5	5	5	5	Yes, definitely!	My students (and parents) absolutely loved the lesson. It was a good change of pace for them.			
6/14/2020 22:11:48	Barbara Killewald	Pittsfield	Compostability (1st)	2 weeks	4	4	4	4	Yes, definitely!			My students enjoyed the video.	
6/14/2020 22:58:19	Trisha Bahr	Dicken	Grow, Eat, Throw (2nd)	1 week	4	5	5	5	Yes, definitely!	My students loved it!			
6/14/2020 23:07:01	Shelley Brower	Carpenter	Compostability (1st)	Less than 1 week	5	5	5	5	Yes, definitely!	I appreciated the hard work and effort that went into creating the virtual lesson so that students would not miss out on this wonderful resource and opportunity, seeing our session was canceled.		Thank you again for your hard work and dedication to teaching our students.	
6/14/2020 23:37:35	Carol Tarchinski	Bach	Project Recycle (4th)	2 weeks	4	4	4	4	Yes, definitely!	I liked it all	no		
6/15/2020 8:13:45	Philip A Huyck	King Elementary	Stormwater Mystery (3rd)	1 week	4	4	4	4	Yes, definitely!	Most of my students' responses were consistent and similar, which tells me that those that were focused and participated in the whole activity were able to receive the information and reach the goal.	Thank you for providing the activity. It was unique and the timing was perfect, as we were towards the end of the year. It provided us a fresh activity to send to our students.	We would like more activities if we continued online in the fall.	
6/15/2020 8:19:40	Sara Wheat	Allen	Project Recycle (4th)	2 weeks	5	5	5	5	Yes, definitely!	I loved that it was interactive and that students answered questions throughout	I had a few students who complained that "It kicked them out" or it "glitched." I am not sure where in the video this happened because it did not happen for me. The majority of the students did not mention it so I assume it worked fine for them.		
6/15/2020 8:24:51	Tricia Guest	King Elementary	Stormwater Mystery (3rd)	1 week	4	5	4	4	Yes, definitely!	Thanks!	Adding a part where that can do something offline, like use easy to find items to design something, was fun.	I'm so grateful that our Ann Arbor community reached out to help us. Contact the curriculum director for science in AAPS/Ypsilant/Saline to let them know you have resources so more teachers can access. Science is really hard to teach online.	
6/15/2020 10:11:17	Sally	Burns Park Elementary	Wee Recycle Part 1&2	1 week	5	5	5	5	Yes, definitely!	It was very well done and a wonderful and timely way to share the info with young children during quarantine. They could practice what they learned in their home environment, immediately!	Maybe an introduction on the first lesson by a person so it feels more like "synonymous" (or a live lesson) with a person.	Thank you soooo much for producing a digital lesson so quickly with us! We truly appreciate all of your effort and kindness to continue instructing young children about ecology.	
6/15/2020 10:39:11	Chris Thomas	Scarlett MS	Hungry Planet (MS)	1 week	4	4	4	4	Yes, definitely!			Thank you for creating this lesson for us to share with Ss. Appreciate the opportunity!	
6/15/2020 15:41:06	Kimberly Gardiner	Kimberly Gardiner	Compostability (1st)	1 week	5	5	5	5	Yes, definitely!	My favorite part is the poem with the graphics.	Nothing at this time.	I am very appreciative of being able to have my students participate in a virtual lesson about compostability.	
6/16/2020 22:25:48	Marissa Kauckeck	Lakewood Elementary Sch	Wee Recycle Part 1&2	1 week	4	4	4	4	Yes with improvements.	Part 1 was awesome! It included an interesting read aloud, the pace was consistent and there was a lot of good information.	We didn't use part 2 because we felt it was a bit long and that the kids would lose interest. The content/sort was interesting, but I wonder if there might be a way to make this video a bit shorter.	Thank you!	
6/29/2020 10:08:07	Sarah Aherne	Carpenter	Compostability (1st)	2 weeks	5	5	5	5	Yes, definitely!	Great flow and use of videos, movement, vocab.			

Approved by DDA: 01/10/84
Approved by City Council: 02/06/84 (R-56-2-84)
Revised by DDA: 12/01/86
Approved by City Council: 12/15/86 (R-673-12-86)
Revised by DDA: 07/14/88
Approved by City Council: 08/01/88 (R-448-8-88)
Revised by DDA: 04/13/89; 04/09/92; 10/14/93
Approved by City Council: 01/21/93 (D-2-87-93)
Revised by DDA: 06/04/03
Approved by City Council: 07/07/03 (CA20-07-03)
Revised by DDA: 02/03/10
Approved by City Council: 050310 (R-10-133)

BY-LAWS

OF THE DOWNTOWN DEVELOPMENT AUTHORITY

OF THE CITY OF ANN ARBOR

Article I - Name

The name of this authority is the Downtown Development Authority (DDA) of the City of Ann Arbor.

Article II - Purpose

The purpose of the Downtown Development Authority is to act in accordance with the provisions of Act 197 of the Public Acts of 1975 as amended. The Authority shall have all the powers which now or hereafter may be conferred by law on authorities organized under this Act. The overall goal of the Authority is to undertake public improvements and other activities that have greatest impact in strengthening the downtown area and attracting new private investments to the DDA area.

Article III - Officers

Section 1. The officers of the Board shall be a Chair, a vice Chair, a treasurer, and a recording secretary. All officers shall be members of the Board, with the exception of the recording secretary who need not be a member of the Board.

Section 2 - Removal of Officers. An officer may be removed by the Board whenever in its judgment the best interest of the Board will be served.

Section 3 - Chair. The Chair shall preside at all meetings of the Board and shall discharge the duties as a presiding officer.

Section 4 - Vice Chair. In the absence of the Chair or in the event of inability to serve as Chair, the vice Chair shall perform the duties of the Chair and when so acting, shall be subject to all the restrictions of the Chair.

Section 5 - Treasurer. The treasurer or a designee shall prepare, with the assistance of appropriate City officials, an annual financial report covering the fiscal year of the Authority. The fiscal year of the Authority shall be the same as that of the City, July 1 to June 30. An annual audit will be made each year as part of the regular City audit.

Section 6 - Recording Secretary. The recording secretary or a designee shall attend all meetings of the Board and record all votes and the minutes of all proceedings in a book to be kept for that purpose. The recording secretary shall give, or cause to be given, notice of all meetings of the Board of Directors and shall perform such other duties as may be prescribed by the Board. The recording secretary shall, when authorized by the Board, attest by signature to actions of the Board.

Section 7 - Delegation of Duties of Officers. In the absence of any officer of the corporation, the Authority may delegate the duties of any officer to any director provided a majority of the Authority then in office concurs therein.

Section 8 - Election of Officers. Nominations shall be made from the floor at the annual meeting in July. The term of office shall be for one year and begin at the close of the annual meeting at which they are elected. No member shall hold more than one office at a time.

Section 9 – DDA Executive Director. The Executive Director shall be responsible for the day-to-day operations of the Authority, including the hiring and conditions of employment of staff; the creation and oversight of financial systems; relations with other governmental entities and the public; and the overall substantive work of the Authority. The Executive Director shall report regularly to the Board on these issues. The Board of Directors shall provide policy direction to the Executive Director and shall review and approve major expenditures. The Executive Director shall serve through a contract approved by the Board. The Executive Director acts on the authority of the Board of Directors as set forward in this document.

Article IV - Meetings

Section 1 - Annual Meeting. An annual meeting shall be held the first regular meeting in July at a time and place to be set by the Board. Election of officers shall occur at the annual meeting. If the election of officers does not occur at the annual meeting, the Board shall cause the election to be held at a regular or special meeting of the Board within 90 days of the Annual Meeting.

Section 2 - Regular Meetings. Regular meetings of the Board shall be held at a time and place to be set by the Board. At least six regular meetings per year shall be held. The Board records shall be open to the public. It is expected that each Board member will attend a minimum of 70% of regular meetings per year as a condition of serving on the DDA Board.

Section 3 - Special Meetings. Special meetings of the Board may be called by the Chair, the vice Chair in the absence of the Chair, or by any three Authority members by giving 24 hours notice of the meeting, stating the purpose of the meeting and by posting a notice 18 hours prior to the meeting in the lobby of City Hall.

Section 4 - Notice of Meetings. All meetings shall be preceded by public notice posted 18 hours prior to the meeting in accordance with Act 267 of the Public Acts of 1976 as amended.

Section 5 - Agenda. The recording secretary shall prepare the agendas for all meetings and send them to the Board members at least 24 hours prior to the meeting. Any member of the Board may request any item to be placed on the agenda.

Section 6 - Quorum and Voting. A majority of the members of the Board in office shall constitute a quorum for the transaction of business. A vote of seven members shall constitute the action of the Board unless the vote of a larger number is required by stature, or elsewhere in these rules. In the event that effective membership is reduced because of a conflict of interest, a majority of the remaining members eligible to vote shall constitute the action of the Board. In no event shall less than five affirmative votes constitute action of the Board.

Section 7 - Rules of Order. Robert's Rules of Order will govern the conduct of all meetings.

Section 8 - Open and Closed Meetings. All regular and special meetings of the Board shall be open to the public. Closed meetings of the Board may be called for purposes listed in the Open Meetings Act 267 of the Public Acts of 1976 as amended if approved by the Authority.

Section 9 - Conflict of Interest. A director who has a conflict of interest in any manner before the Board shall disclose that interest prior to the corporation taking any action with respect to the matter. This disclosure shall become part of the record of the Board's official proceedings. Any member making such disclosure shall then refrain from participating in the Board's decision-making process relative to such matters.

Section 10 - Requests for Funding. The Board may not act upon a request for funding unless the request has been referred to a committee of the Board for review and recommendation. In the event that a committee has not made a recommendation to the Board within 60 days from the time that the request was first presented to the Board, the Board may, by majority vote, bring the proposal to the Board for consideration without benefit of the committee recommendation.

Article V - Executive Committee

The officers of the Board, including Chair, Vice Chair, Treasurer and Recording Secretary shall constitute the executive committee. The last former Chair shall be a non-voting member and the Executive Director shall be a non-voting ex officio member of this committee. The executive committee shall fix the hours and place of meetings, make recommendations to the Board, and shall perform such other duties as specified in these By-

Laws or as may be specified by the Board

Article VI - Board Committees and Advisory Committees

Section 1 - Board Committees. The Board, by resolution, may designate and appoint one or more committees to advise the Board. Committee members shall be members of the Board. Any board member may serve on any standing committee of the Board. The Chair of the Board shall appoint the members and select the chair of the Board committees and will solicit volunteers to chair the standing committees. Any committee member may add an agenda item to a committee meeting agenda. The committees may be terminated by vote of the Board. At the annual meeting, the committees will be evaluated and reappointed or dissolved. A majority of the committee will constitute a quorum. A majority of the members present at the meeting at which a quorum is present shall be the action of the committee. As the work of the DDA is done primarily through Committee, it is expected that each Board member will actively serve on at least one committee, and will attend a minimum of 70% of the committee's meetings per year as a condition of remaining on the DDA Board.

Section 2 - Advisory Committees. The Board may, by resolution, authorize the establishment of advisory committees to the Board. The Chair shall select, with the advice and consent of the Board members, the members of each advisory committee. The advisory committees shall elect their own officers and establish rules governing their actions.

Article VII - Indemnification

Section 1 - Indemnification. Whenever any claim is made or any civil action is commenced against any member, officer or employee of the Authority, or injuries to persons or property caused by the negligence of the officer or employee while in the course of their employment, and while acting within the scope of their authority, the Board may, but is not required, to pay for legal services and also for any judgment or compromised settlement of the claim, pursuant to Act 170 of the Public Acts of 1964 as amended.

Section 2 - Reimbursement. Any indemnification under Section 1 shall be made by the Board only as authorized in the specific case upon a determination that indemnification of the member, employee or officer is proper in circumstances because they have met the applicable standard of conduct set forth in Section 1. Such determination shall be made in either of the following ways:

1. By a majority vote of the members of the Board who were not parties to such action, suit or proceeding, or
2. If such quorum is not obtainable, or even if obtainable, a quorum of disinterested members so directs, supported by the recommendation of legal counsel in a written opinion.

Section 3 - Insurance. The Board may purchase and maintain insurance on behalf of

any person who is or was a director, member or officer of the corporation against any liability asserted against the officer or employee and incurred by them in any such capacity or arising out of their status as such, whether or not the Board would have power to indemnify that person against such liability under Sections 1 and 2 of this article.

Article VIII - Amendment of By-Laws

These By-Laws may be amended at any regular meeting of the Board by a majority vote, provided that the amendment has been submitted in writing at the previous regular meeting.

A2 DOWNTOWN DEVELOPMENT AUTHORITY

CITY MILLAGES

TAX YEAR	FISCAL YEAR	DDA TAXABLE VALUE	TAXABLE VALUE USED FOR DDA CAPTURE	DDA CAPPED TAXABLE VALUE	TAXABLE VALUE RETAINED BY CITY	CITY MILLAGE SUBJECT TO DDA CAPTURE	TOTAL CITY TAXES IN DDA	CITY TAXES DISTRIBUTED TO DDA	NET IMPACT OF DDA CAP	TAXES RETAINED BY CITY
2009	FY10	381,872,618	128,317,202	128,317,202	253,555,416	16.7970	\$6,414,314	\$2,155,344		\$4,258,970
2010	FY11	392,193,873	140,612,435	140,612,435	251,581,438	16.8164	\$6,595,289	\$2,364,595		\$4,230,694
2011	FY12	385,589,884	134,258,709	134,258,709	251,331,175	16.4660	\$6,349,123	\$2,210,704		\$4,138,419
2012	FY13	396,717,191	136,869,018	136,869,018	259,848,173	16.5720	\$6,574,397	\$2,268,193		\$4,306,204
2013	FY14	434,858,457	160,486,288	160,486,288	274,372,169	16.4501	\$7,153,465	\$2,640,015		\$4,513,450
2014	FY15	462,079,459	180,417,233	180,417,233	281,662,226	16.4501	\$7,601,253	\$2,967,882		\$4,633,372
2015	FY16	484,315,441	191,020,761	191,020,761	293,294,680	16.4436	\$7,963,889	\$3,141,069		\$4,822,820
2016	FY17	543,058,501	238,281,006	224,000,000	319,058,501	16.3003	\$8,852,016	\$3,651,267	\$232,785	\$5,200,749
2017	FY18	581,216,132	253,780,289	231,840,000	349,376,132	16.1390	\$9,380,247	\$3,741,666	\$354,094	\$5,638,581
2018	FY19	631,089,079	271,055,351	239,954,400	391,134,679	15.8885	\$10,027,059	\$3,812,515	\$494,147	\$6,214,543
2019	FY20	721,715,247	332,870,533	248,352,804	473,362,443	15.7131	\$11,340,384	\$3,902,392	\$1,328,036	\$7,437,991

OTHER TAXING AUTHORITIES (OTA)

TAX YEAR	FISCAL YEAR	DDA TAXABLE VALUE	TAXABLE VALUE USED FOR DDA CAPTURE	DDA CAPPED TAXABLE VALUE	TAXABLE VALUE RETAINED BY OTA	TOTAL OTA MILLAGES SUBJECT TO CAPTURE	TOTAL OTA TAXES IN DDA	OTA TAXES DISTRIBUTED TO DDA	NET IMPACT OF DDA CAP	TAXES RETAINED BY OTA
2009	FY10	381,872,618	128,317,202	128,317,202	253,555,416	10.9774	\$4,191,968	\$1,408,589		\$2,783,379
2010	FY11	392,193,873	140,612,435	140,612,435	251,581,438	10.9804	\$4,306,446	\$1,543,981		\$2,762,465
2011	FY12	385,589,884	134,258,709	134,258,709	251,331,175	11.0194	\$4,248,969	\$1,479,450		\$2,769,519
2012	FY13	396,717,191	136,869,018	136,869,018	259,848,173	10.9530	\$4,345,243	\$1,499,126		\$2,846,117
2013	FY14	434,858,457	160,486,288	160,486,288	274,372,169	10.7877	\$4,691,123	\$1,731,278		\$2,959,845
2014	FY15	462,079,459	180,417,233	180,417,233	281,662,226	11.4914	\$5,309,940	\$2,073,247		\$3,236,693
2015	FY16	484,315,441	191,020,761	191,020,761	293,294,680	11.6134	\$5,624,549	\$2,218,401		\$3,406,148
2016	FY17	543,058,501	238,281,006	224,000,000	319,058,501	11.7735	\$6,393,699	\$2,637,264	\$168,137	\$3,756,435
2017	FY18	581,216,132	253,780,289	231,840,000	349,376,132	11.7199	\$6,811,795	\$2,717,142	\$257,138	\$4,094,653
2018	FY19	631,089,079	271,055,351	239,954,400	391,134,679	12.6024	\$7,953,237	\$3,024,001	\$391,947	\$4,929,236
2019	FY20	721,715,247	332,870,533	248,352,804	473,362,443	12.5420	\$9,051,753	\$3,114,841	\$1,060,021	\$5,936,912

* Beginning with the 2016 tax year the maximum captured taxable value shall be 224,000,000. Each tax year thereafter, the maximum captured taxable value shall be increased by 3.5% per annum (Ord. No. 14-82, 5-1-82; Ord. No. 13-28, 2, 11-18-13)

Millages subject to capture by the DDA are County millages, Washtenaw Community College, AAATA, and Ann Arbor District Library. Public School millages are not eligible for TIF capture.

Ann Arbor Downtown Development Authority
FY 2020
Property Tax Levy

2020 Tax (FY21) Revenue Estimate

	2017 DDA Value	2018 DDA Value	2019 DDA Value	2020 DDA Value	DDA Cap					
DDA Real PRE	15,630,576	16,170,448	17,264,171	19,210,396	19,210,396.00					
DDA Real Non PRE	221,943,313	241,944,503	307,820,933	311,718,886	227,843,856.00	Percent Delinquent				
DDA Real Total				330,929,282	247,054,252					
DDA Personal	16,206,400	12,980,800	10,350,500	9,990,900	9,990,900					
Total Taxable Value	253,780,289	271,095,751	335,435,604	340,920,182	257,045,152	Amount to bill DDA for their portion of Street millage:	=	\$	30,677.58	
IFT		\$0								

Purpose	Rate Certified	Total DDA Capture	Total DQ Roll	Total DDA Real	DQ DDA Real	Paid DDA Real	Total DDA Personal	DQ DDA Personal	Paid DDA Personal	Paid DDA Total
City of Ann Arbor										
Operating	5.8359	1,500,089.80		1,441,783.91	-	1,441,783.91	58,305.89	-	58,305.89	1,500,089.80
Employee benefits	1.9452	500,004.23		480,569.93	-	480,569.93	19,434.30	-	19,434.30	500,004.23
Refuse collection	2.3339	599,917.68		576,599.92	-	576,599.92	23,317.76	-	23,317.76	599,917.68
Streets	2.0289	521,518.91		501,248.37	-	501,248.37	20,270.54	-	20,270.54	521,518.91
Parks	1.0805	277,737.29		266,942.12	-	266,942.12	10,795.17	-	10,795.17	277,737.29
Park Acq	0.4519	116,158.70		111,643.82	-	111,643.82	4,514.89	-	4,514.89	116,158.70
AAATA City	1.9452	500,004.23		480,569.93	-	480,569.93	19,434.30	-	19,434.30	500,004.23
City Total	15.6215	4,015,430.84	-	3,859,358.00	-	3,859,358.00	156,072.84	-	156,072.84	4,015,430.84
Washtenaw County										
Operating	4.3947	1,129,636.33		1,085,729.32	-	1,085,729.32	43,907.01	-	43,907.01	1,129,636.33
Parks	0.70200	180,445.70		173,432.08	-	173,432.08	7,013.61	-	7,013.61	180,445.70
EECS	0.1930	49,609.71		47,681.47	-	47,681.47	1,928.24	-	1,928.24	49,609.71
HCMA	0.2104	54,082.30		51,980.21	-	51,980.21	2,102.09	-	2,102.09	54,082.30
Vets	0.0970	24,933.38		23,964.26	-	23,964.26	969.12	-	969.12	24,933.38
MH&PS	0.9791	251,672.91		241,890.82	-	241,890.82	9,782.09	-	9,782.09	251,672.91
County Total	7.0538	1,690,380.33	-	1,624,678.17	-	1,624,678.17	65,702.16	-	65,702.16	1,690,380.33
AAATA County	0.6880	176,847.06	-	169,973.33	-	169,973.33	6,873.74	-	6,873.74	176,847.06
Washtenaw Community College	3.3538	862,078.03	-	828,570.55	-	828,570.55	33,507.48	-	33,507.48	862,078.03
Ann Arbor District Library	1.8365	472,063.42	-	453,715.13	-	453,715.13	18,348.29	-	18,348.29	472,063.42
Grand Total	27.8656	7,216,799.69	-	6,936,295.18	-	6,936,295.18	280,504.51	-	280,504.51	7,216,799.69

Ann Arbor DDA
Bond Debt Schedule
For FY 2021

Issue Date	Project	Issue Amount	FY 2021 Principal	FY2021 Interest	FY2021 Fees	FY2021 Payment	Principal Balance at 6/30/20
Totals		71,835,000.00	3,640,000.00	1,819,332.50	-	5,459,332.50	57,985,000.00
1/16/2019	Streetscape Improvements Huron/1st & Ashley/William	14,780,000.00	900,000.00	445,450.00	-	1,345,450.00	14,015,000.00
2/27/2019	Library Lane/5th & Division Non Taxable	37,175,000.00	1,825,000.00	1,155,975.00	-	2,980,975.00	35,610,000.00
6/1/2016	4th & William Renovation (refi)	2,790,000.00	260,000.00	39,800.00	-	299,800.00	1,990,000.00
1/29/2015	4th & Washington, Maynard, Forest	6,335,000.00	-	-	-	-	-
1/22/2013	First and Washington - Non-Taxable	4,045,000.00	195,000.00	87,302.50	-	282,302.50	2,770,000.00
1/22/2013	First and Washington - Taxable	4,480,000.00	220,000.00	81,005.00	-	301,005.00	3,110,000.00
1/17/2012	4th & William Renovation	2,230,000.00	240,000.00	9,800.00	-	249,800.00	490,000.00

Payment Allocation

248	General TIF Fund	2,739,468.31
231	Parking Fund	2,719,864.20
	Total	5,459,332.50

Annual Allocation

2020	3,925,000.00	2,238,218.61	6,163,218.61
2021	3,640,000.00	1,819,332.50	5,459,332.50
2022	3,755,000.00	1,728,665.00	5,483,665.00
2023	3,625,000.00	1,634,640.00	5,259,640.00
2024	3,735,000.00	1,541,790.00	5,276,790.00
2025	3,860,000.00	1,435,020.00	5,295,020.00
2026	3,965,000.00	1,323,912.50	5,288,912.50
2027	4,110,000.00	1,209,125.00	5,319,125.00
2028	3,940,000.00	1,088,300.00	5,028,300.00
2029	4,075,000.00	968,900.00	5,043,900.00
2030	4,220,000.00	931,175.00	5,151,175.00
2031	4,375,000.00	716,887.50	5,091,887.50
2032	4,535,000.00	583,650.00	5,118,650.00
2033	4,090,000.00	406,000.00	4,496,000.00
2034	2,960,000.00	242,400.00	3,202,400.00
2035	3,100,000.00	124,000.00	3,224,000.00
Total Debt Future Years (FY22 - FY35)	54,345,000.00	13,934,465.00	68,279,465.00

Ann Arbor DDA
Debt Payment Allocation
FY 2020

Issue Date	Project	Issue Amount	TIF/Parking Split	Annual Payment	City of Ann Arbor Invoices					Variance Annual vs Total
					08/01/19	11/07/19	03/04/20	05/06/20	Total	
DEBT				6,163,218.61						
1/16/2019	Streetscape Improvements Huron/1st & Ashley/William	14,780,000.00	100/0	1,343,994.44		344,794.44		999,200.00	1,343,994.44	-
2/27/2019	Library Lane/5th & Division Non Taxable	37,175,000.00	36.98/63.02	2,967,954.17		807,360.41		2,160,593.75	2,967,954.16	0.01
6/1/2016	4th & William Renovation (refi)	2,790,000.00	0/100	299,900.00	22,450.00			277,450.00	299,900.00	-
1/29/2015	4th & Washington, Maynard, Forest	6,335,000.00	0/100	721,000.00	10,500.00			710,500.00	721,000.00	-
1/22/2013	First and Washington - Non-Taxable	4,045,000.00	50/50	281,102.50		45,551.25		235,551.25	281,102.50	-
1/22/2013	First and Washington - Taxable	4,480,000.00	50/50	299,767.50		42,383.75		257,383.75	299,767.50	-
1/17/2012	4th & William Renovation			249,500.00	7,250.00			242,250.00	249,500.00	-
FEES and OTHER										
	First and Washington - Non-Taxable					300.00			300.00	
	First and Washington - Taxable					300.00			300.00	
	4th & William Addition				500.00			200.00	700.00	
	Court and Police Refunding					254,304.00		254,304.00	508,608.00	
Distribution										
248-728-890	Other Grants					254,304.00		254,304.00	508,608.00	
248-905-963	Bond Fees					300.00		-	300.00	
231-905-963	Bond Fees				500.00	300.00	200.00	-	1,000.00	
248-905-961	Bonds - General TIF Fund (248)			2,731,978.89		687,323.82		2,044,655.07	2,731,978.89	0.00
231-905-961	Bonds - Parking Fund (231)			3,431,239.72	40,200.00	552,766.03	1,230,200.00	1,608,073.68	3,431,239.71	0.01
Total				6,163,218.61	40,700.00	1,494,993.85	1,230,400.00	3,907,032.75	6,673,126.60	

Ann Arbor DDA
Bond Debt Schedule

Issue Amt **\$37,175,000.00**
 Name 2019 Refunding Bonds
 Type Refunds Capital Improvement Bonds (LTGO), Series 2019-A
 Project **Library Lane/5th & Division Non Taxable**

Funding: TIF Fund 36.98% Issue Date: 2/27/2019
 Parking Fund 63.02%

Years Amortized	Budget Year	Payment Date	Principal Due	Interest Rate	Interest Due	Annual Principal	Annual Interest	Annual Fees	Annual Payment	Principal Balance
Totals			37,175,000.00		12,212,354.17	37,175,000.00	12,212,354.17	-	49,387,354.17	
		11/1/2019			807,360.42				-	
2	2020	5/1/2020	1,565,000.00	2.25%	595,593.75	1,565,000.00	1,402,954.17		2,967,954.17	35,610,000.00
		11/1/2020			577,987.50				-	
3	2021	5/1/2021	1,825,000.00	2.50%	577,987.50	1,825,000.00	1,155,975.00		2,980,975.00	33,785,000.00
		11/1/2021			555,175.00				-	
4	2022	5/1/2022	1,885,000.00	2.50%	555,175.00	1,885,000.00	1,110,350.00		2,995,350.00	31,900,000.00
		11/1/2022			531,612.50				-	
5	2023	5/1/2023	1,955,000.00	2.50%	531,612.50	1,955,000.00	1,063,225.00		3,018,225.00	29,945,000.00
		11/1/2023			507,175.00				-	
6	2024	5/1/2024	2,020,000.00	3.00%	507,175.00	2,020,000.00	1,014,350.00		3,034,350.00	27,925,000.00
		11/1/2024			476,875.00				-	
7	2025	5/1/2025	2,100,000.00	3.00%	476,875.00	2,100,000.00	953,750.00		3,053,750.00	25,825,000.00
		11/1/2025			445,375.00				-	
8	2026	5/1/2026	2,145,000.00	3.00%	445,375.00	2,145,000.00	890,750.00		3,035,750.00	23,680,000.00
		11/1/2026			413,200.00				-	
9	2027	5/1/2027	2,235,000.00	3.00%	413,200.00	2,235,000.00	826,400.00		3,061,400.00	21,445,000.00
		11/1/2027			379,675.00				-	
10	2028	5/1/2028	2,325,000.00	3.00%	379,675.00	2,325,000.00	759,350.00		3,084,350.00	19,120,000.00
		11/1/2028			344,800.00				-	
11	2029	5/1/2029	2,410,000.00	3.00%	344,800.00	2,410,000.00	689,600.00		3,099,600.00	16,710,000.00
		11/1/2029			308,650.00				-	
12	2030	5/1/2030	2,505,000.00	3.00%	308,650.00	2,505,000.00	617,300.00		3,122,300.00	14,205,000.00
		11/1/2030			271,075.00				-	
13	2031	5/1/2031	2,605,000.00	3.00%	271,075.00	2,605,000.00	542,150.00		3,147,150.00	11,600,000.00
		11/1/2031			232,000.00				-	
14	2032	5/1/2032	2,705,000.00	4.00%	232,000.00	2,705,000.00	464,000.00		3,169,000.00	8,895,000.00
		11/1/2032			177,900.00				-	
15	2033	5/1/2033	2,835,000.00	4.00%	177,900.00	2,835,000.00	355,800.00		3,190,800.00	6,060,000.00
		11/1/2033			121,200.00				-	
16	2034	5/1/2034	2,960,000.00	4.00%	121,200.00	2,960,000.00	242,400.00		3,202,400.00	3,100,000.00
		11/1/2034			62,000.00				-	
17	2035	5/1/2035	3,100,000.00	4.00%	62,000.00	3,100,000.00	124,000.00		3,224,000.00	-

Ann Arbor DDA
Bond Debt Schedule

Issue Amt **\$2,790,000.00**
 Name 2016 Parking Facility Refunding
 Type Limited General Tax Obligation
 Project **4th & William Renovation (refi)**

Funding: Parking Fund 100% Issue Date: 6/1/2016

Years Amortized	Budget Year	Payment Date	Principal Due	Interest Rate	Interest Due	Annual Principal	Annual Interest	Annual Fees	Annual Payment	Principal Balance
Totals			2,790,000.00		351,495.00	2,790,000.00	351,495.00	500.00	3,141,995.00	
4		9/2/2019			22,450.00					
	2020	3/1/2020	255,000.00	2%	22,450.00	255,000.00	44,900.00		299,900.00	1,990,000.00
5		9/1/2020			19,900.00					
	2021	3/1/2021	260,000.00	2%	19,900.00	260,000.00	39,800.00		299,800.00	1,730,000.00
6		9/1/2021			17,300.00					
	2022	3/1/2022	270,000.00	2%	17,300.00	270,000.00	34,600.00		304,600.00	1,460,000.00
7		9/1/2022			14,600.00					
	2023	3/1/2023	280,000.00	2%	14,600.00	280,000.00	29,200.00		309,200.00	1,180,000.00
8		9/2/2023			11,800.00					
	2024	3/1/2024	285,000.00	2%	11,800.00	285,000.00	23,600.00		308,600.00	895,000.00
9		9/1/2024			8,950.00					
	2025	3/1/2025	290,000.00	2%	8,950.00	290,000.00	17,900.00		307,900.00	605,000.00
10		9/1/2025			6,050.00					
	2026	3/1/2026	300,000.00	2%	6,050.00	300,000.00	12,100.00		312,100.00	305,000.00
11		9/1/2026			3,050.00					
	2027	3/1/2027	305,000.00	2%	3,050.00	305,000.00	6,100.00		311,100.00	-

Ann Arbor DDA
Bond Debt Schedule

Issue Amt **\$6,335,000.00**
 Name 2015 Refunding, Series A
 Type General Obligation Limited Tax Refunding
 Project **4th & Washington, Maynard, Forest**

Funding: Parking Fund 100% Issue Date: 1/29/2015

Years Amortized	Budget Year	Payment Date	Principal Due	Interest Rate	Interest Due	Annual Principal	Annual Interest	Annual Fees	Annual Payment	Principal Balance
Totals			6,335,000.00		442,359.48	6,335,000.00	442,359.48	500.00	6,777,859.48	
5	2020	9/1/2019 3/1/2020	700,000.00	3%	10,500.00 10,500.00	700,000.00	21,000.00		721,000.00	-

Ann Arbor DDA
Bond Debt Schedule

Issue Amt **\$4,045,000.00**
 Name 2013 Parking Facility Capital Improvement Bonds, Series B
 Type Limited Tax General Obligation
 Project **First and Washington - Non-Taxable**

Funding: TIF Fund 50% Issue Date: 1/22/2013
 Parking Fund 50%

Years Amortized	Budget Year	Payment Date	Principal Due	Interest Rate	Interest Due	Annual Principal	Annual Interest	Annual Fees	Annual Payment	Principal Balance
Totals			4,045,000.00		1,393,623.92	4,045,000.00	1,393,623.92	-	5,438,623.92	
		11/1/2019			45,551.25					
8	2020	5/1/2020	190,000.00	1.75%	45,551.25	190,000.00	91,102.50		281,102.50	2,770,000.00
		11/1/2020			43,651.25					
9	2021	5/1/2021	195,000.00	1.75%	43,651.25	195,000.00	87,302.50		282,302.50	2,575,000.00
		11/1/2021			41,555.00					
10	2022	5/1/2022	200,000.00	1.80%	41,555.00	200,000.00	83,110.00		283,110.00	2,375,000.00
		11/1/2022			39,205.00					
11	2023	5/1/2023	205,000.00	2.00%	39,205.00	205,000.00	78,410.00		283,410.00	2,170,000.00
		11/1/2023			36,642.50					
12	2024	5/1/2024	210,000.00	2.25%	36,642.50	210,000.00	73,285.00		283,285.00	1,960,000.00
		11/1/2024			33,807.50					
13	2025	5/1/2025	215,000.00	2.40%	33,807.50	215,000.00	67,615.00		282,615.00	1,745,000.00
		11/1/2025			30,743.75					
14	2026	5/1/2026	225,000.00	2.50%	30,743.75	225,000.00	61,487.50		286,487.50	1,520,000.00
		11/1/2026			27,312.50					
15	2027	5/1/2027	230,000.00	3.00%	27,312.50	230,000.00	54,625.00		284,625.00	1,290,000.00
		11/1/2027			23,575.00					
16	2028	5/1/2028	240,000.00	3.00%	23,575.00	240,000.00	47,150.00		287,150.00	1,050,000.00
		11/1/2028			19,375.00					
17	2029	5/1/2029	250,000.00	3.00%	19,375.00	250,000.00	38,750.00		288,750.00	800,000.00
		11/1/2029			15,000.00					
18	2030	5/1/2030	255,000.00	3.00%	15,000.00	255,000.00	30,000.00		285,000.00	545,000.00
		11/1/2030			10,218.75					
19	2031	5/1/2031	265,000.00	3.00%	10,218.75	265,000.00	20,437.50		285,437.50	280,000.00
		11/1/2031			5,250.00					
20	2032	5/1/2032	280,000.00	3.00%	5,250.00	280,000.00	10,500.00		290,500.00	-

Ann Arbor DDA
Bond Debt Schedule

Issue Amt **\$4,480,000.00**
 Name 2013 Parking Facility Capital Improvement Bonds, Series A
 Type Limited Tax General Obligation - exempt
 Project **First and Washington - Taxable**

Funding: TIF Fund 50% Issue Date: 1/22/2013
 Parking Fund 50%

Years Amortized	Budget Year	Payment Date	Principal Due	Interest Rate	Interest Due	Annual Principal	Annual Interest	Annual Fees	Annual Payment	Principal Balance
Totals			4,480,000.00		1,292,784.44	4,480,000.00	1,292,784.44	-	5,772,784.44	
		11/1/2019			42,383.75					
8	2020	5/1/2020	215,000.00	1.75%	42,383.75	215,000.00	84,767.50		299,767.50	3,110,000.00
		11/1/2020			40,502.50					
9	2021	5/1/2021	220,000.00	1.75%	40,502.50	220,000.00	81,005.00		301,005.00	2,890,000.00
		11/1/2021			38,577.50					
10	2022	5/1/2022	225,000.00	1.80%	38,577.50	225,000.00	77,155.00		302,155.00	2,665,000.00
		11/1/2022			36,552.50					
11	2023	5/1/2023	230,000.00	2.00%	36,552.50	230,000.00	73,105.00		303,105.00	2,435,000.00
		11/1/2023			34,252.50					
12	2024	5/1/2024	240,000.00	2.25%	34,252.50	240,000.00	68,505.00		308,505.00	2,195,000.00
		11/1/2024			31,552.50					
13	2025	5/1/2025	245,000.00	2.40%	31,552.50	245,000.00	63,105.00		308,105.00	1,950,000.00
		11/1/2025			28,612.50					
14	2026	5/1/2026	255,000.00	2.50%	28,612.50	255,000.00	57,225.00		312,225.00	1,695,000.00
		11/1/2026			25,425.00					
15	2027	5/1/2027	265,000.00	3.00%	25,425.00	265,000.00	50,850.00		315,850.00	1,430,000.00
		11/1/2027			21,450.00					
16	2028	5/1/2028	270,000.00	3.00%	21,450.00	270,000.00	42,900.00		312,900.00	1,160,000.00
		11/1/2028			17,400.00					
17	2029	5/1/2029	275,000.00	3.00%	17,400.00	275,000.00	34,800.00		309,800.00	885,000.00
		11/1/2029			13,275.00					
18	2030	5/1/2030	285,000.00	3.00%	13,275.00	285,000.00	26,550.00		311,550.00	600,000.00
		11/1/2030			9,000.00					
19	2031	5/1/2031	295,000.00	3.00%	9,000.00	295,000.00	18,000.00		313,000.00	305,000.00
		11/1/2031			4,575.00					
20	2032	5/1/2032	305,000.00	3.00%	4,575.00	305,000.00	9,150.00		314,150.00	-

Ann Arbor DDA
Bond Debt Schedule

Issue Amt **\$2,230,000.00**
 Name 2012 Series
 Type Limited Tax Refunding
 Project **4th & William Renovation**

Funding: Parking 100% Issue Date: 1/17/2012

Years Amortized	Budget Year	Payment Date	Principal Due	Interest Rate	Interest Due	Annual Principal	Annual Interest	Annual Fees	Annual Payment	Principal Balance
Totals			2,230,000.00		245,338.19	2,230,000.00	245,338.19	200.00	2,475,538.19	
6		9/1/2019			7,250.00				-	
	2020	3/1/2020	235,000.00	2%	7,250.00	235,000.00	14,500.00		249,500.00	490,000.00
5		9/1/2020			4,900.00				-	
	2021	3/1/2021	240,000.00	2%	4,900.00	240,000.00	9,800.00		249,800.00	250,000.00
6		9/1/2021			2,500.00				-	
	2022	3/1/2022	250,000.00	2%	2,500.00	250,000.00	5,000.00		255,000.00	-