

**CHARTER TOWNSHIP OF OXFORD
BOARD OF TRUSTEES REGULAR MEETING**

NOTICE AND AGENDA

Date: Wednesday, March 12, 2025

Time: 6:30 p.m.

Place: Oxford Township Meeting Room
300 Dunlap Road, Oxford, MI 48371

1. Call to Order
2. Respects to the flag
3. Noting of roll
4. Approval of the agenda
5. Approval of the consent agenda
 - Approval of Regular Township Board Meeting Minutes February 12, 2025
 - Regular Bills through March 7, 2025
 - Approval of Consultant Bills through March 7, 2025
 - Committee Reports
6. Public comment on items not on the agenda
7. Board of Trustees Comments
8. Presentations:
 - a. Four County Community Foundation – Kathy Dickens
 - b. Metronet Internet, Streaming, and Phone Services
9. Fire Department
 - a. Recognition of Fire Department personnel
10. Sharpe Engineering Report
11. Unfinished Business
 - a.

12. New Business
 - a. Allocation of Tri-Party Funds – Supervisor Curtis
 - b. Oakland County Treasurer’s Office Foreclosure Prevention – Supervisor Curtis
 - c. Adult-Use Marijuana Distributions – Supervisor Curtis
 - d. Ordinance Review Committee Request for Funding – Trustee Wagner
 - e. 2025 Lake Orion Schools, Oxford Community Schools, Oakland Intermediate Schools and Oakland Community College Summer Tax Collection Agreements – Treasurer Ferrari
13. Items Removed from Consent Agenda for Action or Discussion
14. Public Comment
15. Board of Trustees Comments
16. Adjournment

The Charter Township of Oxford will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting/hearing. Individuals with disabilities requiring auxiliary aids or services shall contact the Charter Township of Oxford, by writing or calling Curtis W. Wright, Township Clerk at 248-628-9787 as soon as possible to allow the Township sufficient time to have available the aids and services.

Charter Township of Oxford Clerk, Curtis W. Wright
300 Dunlap Road, Oxford, MI 48371 (248)628-9787

Oxford Cable Commission re-broadcasts of Oxford Township Board Regular Meetings are on Wednesdays at 7:00 p.m.

CHARTER TOWNSHIP OF OXFORD BOARD OF TRUSTEES REGULAR MEETING,
WEDNESDAY, FEBRUARY 12, 2025

A Regular Meeting of the Charter Township of Oxford Board of Trustees was held Wednesday, February 12, 2025, at the Oxford Township Meeting Room, 300 Dunlap Road, Oxford, Michigan 48371.

Supervisor Curtis called the meeting to order at 6:30 p.m.

RESPECTS TO THE FLAG

NOTING OF ROLL

Members Present: Wright, Wagner, Omtvedt, Charles, Ferrari, Colvin, Curtis

Members Absent: None.

Also Present: Township Attorney Brittney Ellis, Township Attorney Nancy Olind, Township Engineer Jim Sharpe, Fire Chief Matt Majestic, Assistant Fire Chief Randy Vesper, Building Official Tim London, Communications and Grants Manager C.J. Carnacchio, Deputy Supervisor Danielle Smith, Recording Secretary Susan McCullough, one camera person (OCTV), and 33 attendees.

APPROVAL OF THE AGENDA

Supervisor Curtis moved, Trustee Ferrari seconded, to approve the February 12, 2025 agenda as amended:

1. Changing the Clerk's Report in the Consent Agenda to indicate a November 2024 report;
2. Removing item 6.b. Four County Community Foundation Presentation;
3. Add item 6.b. Swearing in of Oxford Firefighters/ALS/EMTs;
4. Moving item 15 Closed Session to item 18, adjusting the remaining agenda items up accordingly.

Ayes: 7 Nays: 0 Absent: 0
Motion Carried.

APPROVAL OF THE CONSENT AGENDA

Treasurer Ferrari moved, Trustee Colvin seconded, to approve the February 12, 2025 Consent Agenda as presented:

1. Regular Township Board meeting minutes dated January 8, 2025
2. Regular Bills through February 7, 2025
3. Treasurer's report for November 2024
4. Clerk's report for November 2024
5. Consultant Bills through February 7, 2025
6. Committee Reports
7. Appointment to NOTA Board

Roll call:

Ayes: Charles, Wagner, Colvin, Ferrari, Wright, Omtvedt, Curtis
Nays: None
Absent: None
Motion Carried.

CHARTER TOWNSHIP OF OXFORD BOARD OF TRUSTEES REGULAR MEETING,
WEDNESDAY, FEBRUARY 12, 2025

PRESENTATIONS

Resolution in Honor of Tom Berger

Treasurer Ferrari moved, Colvin seconded, to adopt the Resolution in Honor of Tom Berger as presented.

Ayes: 7 Nays: 0 Absent: 0

Motion Carried.

Four County Community Foundation

Item removed from the agenda.

Swearing in of Oxford Firefighters/ALS/EMTs

Chief Majestic conducted the swearing in of Firefighter/Paramedic Hunter Drake and Firefighter/Paramedic Isaac Tabert.

Supervisor Curtis called a short recess from 6:43 p.m. and resumed at 6:45 p.m.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

No members of the public spoke during this portion of public comment.

BOARD OF TRUSTEE COMMENTS

Trustee Charles shared the following:

1. The first NO HAZ event will be held on April 12, 2025;
2. The Oxford DDA received its Main Street accreditation this week;
3. The Spongy Moth Committee (made up of Trustee Charles and Clerk Wright) recently toured the Township and found no active nests;
4. The OAYA is holding an event this week.

Trustee Wagner warned everyone to drive safely during the current inclement weather.

Clerk Wright stated that the Clerk's office staff will be attending an early voting update on February 28, 2025 at Oakland County.

Supervisor Curtis recommended that the tri-party funds be allocated toward the Dunlap Road paving project in 2027.

SECOND READINGS

Fire Department Cost Recovery Ordinance

Treasurer Ferrari moved, Trustee Colvin seconded, to approve the amended Second Reading of the Oxford Township Fire Department Cost Recovery Ordinance and direct the Township Clerk to publish said Ordinance in accordance with state law.

Roll call:

Ayes: Omtvedt, Wright, Ferrari, Colvin, Wagner, Charles, Curtis

Nays: None

Absent: None

Motion Carried.

CHARTER TOWNSHIP OF OXFORD BOARD OF TRUSTEES REGULAR MEETING,
WEDNESDAY, FEBRUARY 12, 2025

Parks and Recreation Ordinance 56.008

Treasurer Ferrari moved, Trustee Colvin seconded, to approve the Second Reading of Ordinance Amendments to Chapter 34, Article II of Oxford Township's Code of Ordinances, titled Public Conduct in Parks and authorize the Township Clerk to publish same in accordance with state law.

Roll call:

Ayes: Ferrari, Wright, Omtvedt, Colvin, Wagner, Curtis

Nays: Charles

Absent: None

Motion Carried.

FIRE DEPARTMENT

None.

SHARPE ENGINEERING REPORT

Engineer Sharpe provided a written update regarding ongoing projects in the Township.

UNFINISHED BUSINESS

Ad Rite Sign Application Amendment Request

Treasurer Ferrari moved, Trustee Colvin seconded to grant conditional approval for the application to convert the existing billboard located at 1245 South Lapeer Road to an electronic message sign (EMS). This conditional approval is based on the Carlisle|Wortman summary letter dated November 13, 2024 and February 12, 2025, noting all conversion application requirements under Ordinance have been met. The approval is subject to the following conditions:

1. Improvements to the existing support pole be made to improve its aesthetics via paint or other similar coatings;
2. The waiving of the height requirement of the new sign is conditioned upon compliance with the plans presented to the Board of Trustees on February 12, 2025;
3. The applicant must submit all necessary permit applications and obtain the required permits from Oxford Township for the EMS sign.

Roll call:

Ayes: Wagner, Charles, Omtvedt, Wright, Ferrari, Colvin, Curtis

Nays: None

Absent: None

Motion Carried.

NEW BUSINESS

Jonathan Nold Resignation from Planning Commission

Treasurer Ferrari moved, Trustee Colvin seconded, to accept the resignation of Jonathan Nold, with regret, from the Oxford Township Planning Commission, effective immediately.

Ayes: 7

Nays: 0

Absent: 0

Motion Carried.

CHARTER TOWNSHIP OF OXFORD BOARD OF TRUSTEES REGULAR MEETING,
WEDNESDAY, FEBRUARY 12, 2025

Appointment to Planning Commission

Supervisor Curtis moved, Treasurer Ferrari seconded, to appoint Patti Durr to the Oxford Township Planning Commission, effective immediately, with an appointment expiration date of December 31, 2025.

Roll call:

Ayes: Charles, Wagner, Colvin, Ferrari, Wright, Omtvedt, Curtis

Nays: None

Absent: None

Motion Carried.

Building Department 2024 Annual Report

Building Official Tim London presented the Building Department 2024 Annual Report.

Employee Handbook Revisions

Treasurer Ferrari moved, Trustee Colvin seconded, to approve the Resolution to adopt revisions to the Oxford Township Employee Handbook, pursuant to the Earned Sick Time Act, effective February 21, 2025, or any later effective date determined by the Michigan legislature, and authorize the Township Supervisor to execute required actions and the Clerk to file the same.

Roll call:

Ayes: Charles, Wagner, Colvin, Ferrari, Wright, Omtvedt, Curtis

Nays: None

Absent: None

Motion Carried.

CDBG for Emergency Services

Treasurer Ferrari moved, Trustee Colvin seconded, that the Oxford Township Board of Trustees awards the Emergency Services Contract for 2024 Community Development Block Grant Funds (CDBG) in the amount of \$4,597.00 to Oxford/Orion FISH and authorizes CDBG Coordinator Joseph G. Ferrari to sign the applicable documents and proposal ratification.

Roll call:

Ayes: Ferrari, Colvin, Wagner, Charles, Omtvedt, Wright, Curtis

Nays: None

Absent: None

Motion Carried.

Setting a First Reading of Zoning Ordinance 67A.037

Treasurer Ferrari moved, to authorize Carlisle|Wortman and Associates, the Township Planning consultants, to draft a text amendment per Section 18.1 of the Zoning Ordinance, to amend Section 3.5 to allow automobile convenience marts as special land uses in the I-1 and I-2 zoning districts and schedule a First Reading for the March 12, 2025, Charter Township of Oxford Board of Trustees meeting.

Motion died for lack of support.

Treasurer Ferrari moved, Trustee Colvin seconded, to authorize Carlisle|Wortman and Associates, the Township Planning consultants, to draft a text amendment per Section 18.1 of

CHARTER TOWNSHIP OF OXFORD BOARD OF TRUSTEES REGULAR MEETING,
WEDNESDAY, FEBRUARY 12, 2025

the Zoning Ordinance, to amend Section 3.5 to allow automobile convenience marts as special land uses in the I-1 and I-2 zoning districts.

Roll call:

Ayes: Wright, Omtvedt, Charles, Wagner, Colvin, Ferrari, Curtis

Nays: None

Absent: None

Motion Carried.

MDOT Performance Resolution for Municipalities

Treasurer Ferrari moved, Trustee Colvin seconded, to approve the Michigan Department of Transportation Performance Resolution for Municipalities as presented.

Roll call:

Ayes: Colvin, Ferrari, Wright, Omtvedt, Charles, Wagner, Curtis

Nays: None

Absent: None

Motion Carried.

Water and Sewer Committee

Water Valve Damage Replacement Reimbursement Request for 1075 Island Lake Drive

Treasurer Ferrari moved, Trustee Colvin seconded, that the Oxford Township Board of Trustees authorizes Supervisor Jack L. Curtis to send a letter to the property owner of 1075 Island Lake Drive and the Oakland County Water Resources Commissioner's office stating that Oxford Township agrees with its contractor, the Oakland County Water Resources Commission (WRC), and that everything regarding the installation of the water valve and stop box was completed correctly over twenty-four (24) years ago. Therefore, any request for reimbursement is denied.

Roll call:

Ayes: Colvin, Wagner, Ferrari, Charles, Omtvedt, Wright, Curtis

Nays: None

Absent: None

Motion Carried.

Sewer Grinder Pump at 245 Indian Lake Road

Treasurer Ferrari moved, Trustee Colvin seconded, that the Oxford Township Board of Trustees authorizes Supervisor Jack L. Curtis to send a letter to the property owner of 245 Indian Lake Road and the Oakland County Water Resources Commissioner's office stating that Oxford Township will no longer be responsible for any future maintenance of its sewer grinder pump and also request reimbursement for the last sewer grinder pump invoice of \$488.05.

Roll call:

Ayes: Ferrari

Nays: Wright, Omtvedt, Charles, Wagner, Colvin, Curtis

Absent: None

Motion Failed.

Treasurer Ferrari moved, Trustee Colvin seconded, that the Oxford Township Board of Trustees authorizes Treasurer Joseph G. Ferrari to send a letter to the property owner at 245

CHARTER TOWNSHIP OF OXFORD BOARD OF TRUSTEES REGULAR MEETING,
WEDNESDAY, FEBRUARY 12, 2025

Indian Lake Road and Oakland County Water Resources Commissioner's office for an invoice for the sewer grinder pump repair invoice for \$488.05. After that invoice is paid, further authorizes Supervisor Jack Curtis to send a letter to the property owner letting them know that any future maintenance of its grinder pump will not be handled by Oxford Township.

Roll call:

Ayes: None

Nays: Ferrari, Colvin, Wagner, Charles, Omtvedt, Wright, Curtis

Absent: None

Motion Failed.

Treasurer Ferrari moved, Trustee Charles seconded, that the Oxford Township Board of Trustees authorizes Treasurer Joseph G. Ferrari to send a letter to the property owner at 245 Indian Lake Road that they owe us for the last sewer grinder pump invoice \$488.05. From the date of that letter, they will have thirty (30) days to make that payment. The letter will also state that if the payment is not made, it will be placed as a special assessment against their 2025 winter tax bill. Furthermore, Supervisor Jack Curtis will send the owner of 245 Indian Lake Road a letter stating that Oxford Township will no longer be responsible for any future sewer grinder pump repair maintenance at 245 Indian Lake Road.

Roll call:

Ayes: Charles, Wagner, Colvin, Ferrari, Wright, Omtvedt, Curtis

Nays: None

Absent: None

Motion Carried.

Sewer Grinder Pump at Oxford Schools' Bus Garage

Treasurer Ferrari moved, Trustee Colvin seconded, that the Oxford Township Board of Trustees authorizes Treasurer Joseph G. Ferrari to send a bill to Oxford Schools requesting reimbursement for the last sewer grinder pump invoice of \$3,443.83. Furthermore, also authorize Supervisor Jack L. Curtis to request a meeting between Oxford Schools, Water and Sewer Committee Chairperson David Wagner, Township Engineer Jim Sharpe and Attorney Brittney Ellis to negotiate a new revised agreement whereas Oxford Township is no longer responsible for the bus garage grinder pump and its maintenance.

Roll call:

Ayes: Wagner, Colvin, Ferrari, Charles, Omtvedt, Wright, Curtis

Nays: None

Absent: None

Motion Carried.

ITEMS REMOVED FROM CONSENT AGENDA FOR ACTION OR DISCUSSION

None.

PUBLIC COMMENT

One resident spoke during this portion of public comment.

CHARTER TOWNSHIP OF OXFORD BOARD OF TRUSTEES REGULAR MEETING,
WEDNESDAY, FEBRUARY 12, 2025

BOARD OF TRUSTEES COMMENTS

Trustee Wagner stated that he appreciates everyone listening to his opinion earlier in the meeting.

CLOSED SESSION (7:51 p.m.)

Treasurer Ferrari moved, Trustee Colvin seconded, to enter into Closed Session to discuss two confidential legal opinions regarding potential policy amendments to the Township employee handbook and the 2024 payroll audit pursuant to MCL 15.268(h) and MCL 15.243(g) to include the Charter Township of Oxford Board of Trustees, Township Attorney Ellis, Fire Chief Matt Majestic, Building Official Tim London, Deputy Supervisor Smith, and Recording Secretary McCullough.

Roll call:

Ayes: Charles, Wagner, Colvin, Ferrari, Wright, Omtvedt, Curtis

Nays: None

Absent: None

Motion Carried.

Treasurer Ferrari moved, Trustee Colvin seconded, to return to Open Session at 8:33 p.m. for the purpose of possible Board action regarding the above Closed Session items.

Roll call:

Ayes: Wright, Omtvedt, Charles, Wagner, Colvin, Ferrari, Curtis

Nays: None

Absent: None

Motion Carried.

POSSIBLE ACTION

Treasurer Ferrari moved, Trustee Colvin seconded, to authorize the Township Personnel Committee to propose amendments to the Oxford Township Employee Handbook on the following topics:

1. Policy for designating an HR representative;
2. Consider hiring a part-time HR specialist;
3. Define nonexempt versus exempt roles;
4. Clarify flextime versus comp time eligibility;
5. Set more defined guidelines for working through lunch;
6. Establish criteria for releasing employees in the event of an emergency or inclement weather event;
7. Address requirements for participation in assigned committees;
8. Clarify the use of township versus personal vehicles for local travel; and

any other issues that people may have to the Personnel Committee by February 28, 2025. The Board further directs the Township attorney to draft the requested revisions with the Personnel Committee presenting its recommended amendments to the Board of Trustees for final approval.

Roll call:

Ayes: Charles, Colvin, Wagner, Ferrari, Omtvedt, Wright, Curtis

Nays: None

Absent: None

Motion Carried.

CHARTER TOWNSHIP OF OXFORD BOARD OF TRUSTEES REGULAR MEETING,
WEDNESDAY, FEBRUARY 12, 2025

ADJOURNMENT

Treasurer Ferrari moved, Trustee Colvin seconded, to adjourn the meeting at 8:36 p.m.

Ayes: 7 Nays: 0 Absent: 0

Motion Carried.

Jack Curtis, Supervisor

Curtis Wright, Clerk

Approved:
/smm

TOTAL MONTHLY BILLS
FEBRUARY 2025

TO: Board of Trustees

FROM: Curtis W. Wright

| | | PREPAIDS | TO BE PAIDS |
|--------------|--|------------------------|---------------------|
| 101 | General Fund | \$ 148,871.48 | \$ 14,153.50 |
| 204 | Road Fund | \$ - | \$ - |
| 206 | Oxford Fire Department Fund | \$ 65,365.63 | \$ 645.00 |
| 207 | Police (OCSO) Fund | \$ 354,950.87 | \$ 2,500.00 |
| 208 | Parks & Recreation Fund | \$ 145,948.51 | \$ - |
| 209 | Cemetery Maintenance Fund | \$ 124.00 | \$ - |
| 239 | Telecommunications Fund | \$ - | \$ - |
| 249 | Building Department Fund | \$ 3,183.38 | \$ 11,818.75 |
| 296 | Oxford Community Television Fund | \$ 6,431.94 | \$ - |
| 297 | Safety Path Fund | \$ 1,567.11 | \$ 500.00 |
| 298 | Polly Ann Trail Fund | \$ 2,010.19 | \$ - |
| 308 | Parks Debt Fund | \$ - | \$ - |
| 590 | Sewer Fund | \$ 141,948.90 | \$ 7,570.00 |
| 591 | Water Fund | \$ 4,547.41 | \$ 12,197.50 |
| 701 | Trust & Agency Fund | \$ - | \$ 12,570.00 |
| 703 | Tax Fund | \$ - | \$ - |
| 805 | SAD Bonds Construction Fund | \$ - | \$ - |
| 855 | SAD Bonds Debt Fund | \$ - | \$ - |
| | Payroll (General Fund) | \$ 81,467.99 | \$ - |
| | Payroll (Fire Department Fund) | \$ 242,717.41 | \$ - |
| | Payroll (Parks & Recreation Fund) | \$ 43,636.12 | \$ - |
| | Payroll (Oxford Community Television Fund) | \$ 18,820.71 | \$ - |
| TOTAL | | \$ 1,261,591.65 | \$ 61,954.75 |
| | | | |

Date: 3/6/2025

| Post Date GL Number | Journal | Summ/Det | Ref # Description | DR Amount | CR Amount |
|------------------------|---------|----------|-------------------------------|-----------------------|---------------------|
| 02/14/2025 | CD | S | 132301 | SUMMARY CD 02/14/2025 | |
| 100-000-001.000 | | | CHECKING ACCOUNT OXFORD BANK | | 672,831.99 |
| 100-000-084.101 | | | DUE FROM GENERAL FUND | 126,234.68 ✓ | |
| 100-000-084.206 | | | DUE FROM OXFORD FIRE DEPT | 23,059.71 ✓ | |
| 100-000-084.207 | | | DUE FROM POLICE | 347,786.74 ✓ | |
| 100-000-084.208 | | | DUE FROM PARKS & REC | 29,380.38 ✓ | |
| 100-000-084.209 | | | DUE FROM CEMETERY MAINTENANCE | 124.00 ✓ | |
| 100-000-084.249 | | | DUE FROM BUILDING DEPARTMENT | 547.42 ✓ | |
| 100-000-084.296 | | | DUE FROM CABLE | 1,042.54 ✓ | |
| 100-000-084.297 | | | DUE FROM SAFETY PATH | 1,567.11 ✓ | |
| 100-000-084.298 | | | DUE FROM POLLY ANN TRAIL FUND | 1,372.69 ✓ | |
| 100-000-084.590 | | | DUE FROM SEWER | 137,169.31 ✓ | |
| 100-000-084.591 | | | DUE FROM WATER | 4,547.41 ✓ | |
| 101-000-202.000 | | | ACCOUNTS PAYABLE | 126,234.68 | |
| 101-000-215.000 | | | DUE TO | | 126,234.68 |
| 206-000-202.000 | | | ACCOUNTS PAYABLE | 23,059.71 | |
| 206-000-215.000 | | | DUE TO CLEARING FUND | | 23,059.71 |
| 207-000-202.000 | | | ACCOUNTS PAYABLE | 347,786.74 | |
| 207-000-215.000 | | | DUE TO CLEARING FUND | | 347,786.74 |
| 208-000-202.000 | | | ACCOUNTS PAYABLE | 29,380.38 | |
| 208-000-215.000 | | | DUE TO CLEARING FUND | | 29,380.38 |
| 209-000-202.000 | | | ACCOUNTS PAYABLE | 124.00 | |
| 209-000-215.000 | | | DUE TO CLEARING FUND | | 124.00 |
| 249-000-202.000 | | | ACCOUNTS PAYABLE | 547.42 | |
| 249-000-215.000 | | | DUE TO CLEARING FUND | | 547.42 |
| 296-000-202.000 | | | ACCOUNTS PAYABLE | 1,042.54 | |
| 296-000-215.000 | | | DUE TO CLEARING FUND | | 1,042.54 |
| 297-000-202.000 | | | ACCOUNTS PAYABLE | 1,567.11 | |
| 297-000-215.000 | | | DUE TO CLEARING FUND | | 1,567.11 |
| 298-000-202.000 | | | ACCOUNTS PAYABLE | 1,372.69 | |
| 298-000-215.000 | | | DUE TO CLEARING FUND | | 1,372.69 |
| 590-000-202.000 | | | ACCOUNTS PAYABLE | 137,169.31 | |
| 590-000-215.000 | | | DUE TO CLEARING FUND | | 137,169.31 |
| 591-000-202.000 | | | ACCOUNTS PAYABLE | 4,547.41 | |
| 591-000-215.000 | | | DUE TO CLEARING FUND | | 4,547.41 |
| | | | | <u>1,345,663.98</u> | <u>1,345,663.98</u> |
| | | | | <u>1,345,663.98</u> | <u>1,345,663.98</u> |

PREPAIDS

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|------------------------|------|---------|----------------------------------|-------------------------------------|---------|------|-----------------|
| Fund: 101 GENERAL FUND | | | | | | | |
| 02/14/2025 | 029 | 72691 | HI-HILL LAWN SERVICE | MAINTENANCE GROUNDS | 932.001 | 265 | 251.57 |
| 02/14/2025 | 029 | 72692*# | HI-TECH SYSTEM SERVICE, INC | MAINTENANCE EQUIPMENT | 933.000 | 265 | 216.00 |
| | | | | MAINTENANCE EQUIPMENT | 933.000 | 265 | 200.00 |
| | | | | CHECK 029 72692 TOTAL FOR FUND 101: | | | <u>416.00</u> |
| 02/14/2025 | 029 | 72697*# | ISOLVED INC. | INSURANCE MEDICAL | 716.000 | 270 | 49.02 |
| 02/14/2025 | 029 | 72698*# | JANI-KING OF MICHIGAN, INC | JANITORIAL SERVICE | 831.000 | 265 | 1,503.25 |
| 02/14/2025 | 029 | 72704*# | MICHIGAN MUNICIPAL RISK MANAGEME | MISCELLANEOUS | 962.000 | 262 | 219.37 |
| | | | | INSURANCE LIABILITY | 955.000 | 267 | 8,943.36 |
| | | | | CHECK 029 72704 TOTAL FOR FUND 101: | | | <u>9,162.73</u> |
| 02/14/2025 | 029 | 72705 | MICHIGAN NOTARY SERVICE LLC | MISCELLANEOUS | 962.000 | 215 | 126.39 |
| 02/14/2025 | 029 | 72707 | MICHIGAN TOWNSHIP ASSOCIATION | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 701 | 25.00 |
| 02/14/2025 | 029 | 72708 | MIKE IAFRATE | MILEAGE EXPENSE | 860.000 | 701 | 324.80 |
| 02/14/2025 | 029 | 72715*# | O.C.W.R.C. | UTILITIES WATER | 927.001 | 265 | 102.23 |
| | | | | UTILITIES WATER | 927.001 | 265 | 231.87 |
| | | | | UTILITIES WATER | 927.001 | 265 | 109.82 |
| | | | | CHECK 029 72715 TOTAL FOR FUND 101: | | | <u>443.92</u> |
| 02/14/2025 | 029 | 72719*# | OXFORD CHAMBER OF COMMERCE | MEMBERSHIP DUES | 829.000 | 101 | 250.00 |
| 02/14/2025 | 029 | 72720*# | OXFORD TWP PARKS AND RECREATION | MAINTENANCE GROUNDS | 932.001 | 265 | 2,914.00 |
| 02/14/2025 | 029 | 72724*# | RICOH USA INC | MAINTENANCE EQUIPMENT | 933.000 | 267 | 83.83 |
| 02/14/2025 | 029 | 72726 | SARADAN CONSTRUCTION | ARPA EXPENSES | 962.002 | 267 | 97,600.00 |
| 02/14/2025 | 029 | 72730 | STATE OF MICHIGAN | ENGINEERING FEES - STORMWATER MGMT. | 821.004 | 447 | 500.00 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|------------------------|------|---------|----------------------------------|-------------------------------------|---------|------|---------------|
| Fund: 101 GENERAL FUND | | | | | | | |
| 02/14/2025 | 029 | 72734# | SUSAN MCCULLOUGH | RECORDING SECRETARY | 827.000 | 101 | 145.00 |
| | | | | RECORDING SECRETARY | 827.000 | 701 | 145.00 |
| | | | | CHECK 029 72734 TOTAL FOR FUND 101: | | | <u>290.00</u> |
| 02/14/2025 | 029 | 72741# | VIEW NEWSPAPER GROUP | LEGAL NOTICES | 903.000 | 101 | 292.30 |
| | | | | LEGAL NOTICES | 903.000 | 701 | 118.50 |
| | | | | CHECK 029 72741 TOTAL FOR FUND 101: | | | <u>410.80</u> |
| 02/14/2025 | 029 | 72742 | VOYA INSTITUTIONAL TRUST COMPANY | DEFERRED COMP | 231.040 | 000 | 1,235.22 |
| 02/14/2025 | 029 | 72744 | WOLVERINE POWER SYSTEMS | MAINTENANCE EQUIPMENT | 933.000 | 265 | 1,026.70 |
| 02/14/2025 | 029 | 72747*# | AMAZON CAPITAL SERVICES | MISCELLANEOUS | 962.000 | 215 | 30.72 |
| | | | | MISCELLANEOUS | 962.000 | 253 | 14.89 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 11.99 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 12.30 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 13.43 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 16.89 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 17.95 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 22.44 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 7.99 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 15.26 |
| | | | | CHECK 029 72747 TOTAL FOR FUND 101: | | | <u>163.86</u> |
| 02/14/2025 | 029 | 72748*# | AMERICAN CONTAINER SERVICES | TRASH DISPOSAL | 929.000 | 265 | 82.00 |
| 02/14/2025 | 029 | 72750 | APPLIED INNOVATION | MAINTENANCE EQUIPMENT | 933.000 | 267 | 171.34 |
| 02/14/2025 | 029 | 72751 | AQUA-WEED CONTROL INC | PAINT LAKE CANAL S.A.D. | 962.019 | 572 | 255.00 |
| 02/14/2025 | 029 | 72754*# | C4 ELECTRONICS | MAINTENANCE EQUIPMENT | 933.000 | 265 | 3,197.13 |
| 02/14/2025 | 029 | 72757*# | CARDMEMBER SERVICE | MEALS/LODGING EXPENSE | 860.001 | 101 | 36.00 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 101 | 800.00 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 101 | 25.00 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|---------------------------------------|------|---------|---------------------------|-------------------------------------|---------|------|-----------------|
| Fund: 101 GENERAL FUND | | | | | | | |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 171 | 180.00 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 171 | 250.00 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 171 | 250.00 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 171 | 90.00 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 215 | 25.00 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 247 | 100.00 |
| | | | | MEALS/LODGING EXPENSE | 860.001 | 253 | 18.00 |
| | | | | MEALS/LODGING EXPENSE | 860.001 | 253 | 146.04 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 253 | 400.00 |
| | | | | MISCELLANEOUS | 962.000 | 265 | 148.36 |
| | | | | INTERNET FEES | 970.004 | 265 | 33.90 |
| | | | | POSTAGE | 730.000 | 267 | 20.47 |
| | | | | POSTAGE | 730.000 | 267 | 35.57 |
| | | | | CONTRACTED SERVICES | 861.000 | 267 | 1,065.16 |
| | | | | PUBLIC RELATIONS | 880.000 | 267 | 250.00 |
| | | | | MISCELLANEOUS | 962.000 | 267 | 19.99 |
| | | | | CHECK 029 72757 TOTAL FOR FUND 101: | | | <u>3,893.49</u> |
| 02/14/2025 | 029 | 72761*# | DTE ENERGY | UTILITIES STREET LIGHTS | 926.000 | 448 | 1,410.63 |
| 02/14/2025 | 029 | 72762 | FP FINANCE PROGRAM | CONTRACTED SERVICES | 861.000 | 267 | 263.00 |
| 02/14/2025 | 029 | 72766 | HALL'S LOCKSMITH SERVICE | MAINTENANCE BLDG/GROUNDS | 931.000 | 265 | 185.00 |
| | | | | Total for fund 101 GENERAL FUND | | | 126,234.68 |
| Fund: 206 OXFORD FIRE DEPARTMENT FUND | | | | | | | |
| 02/14/2025 | 029 | 72693 | HOME DEPOT CREDIT SERICES | TOOLS | 752.000 | 357 | 3,071.92 |
| 02/14/2025 | 029 | 72695 | IMPERIALDADE | BUILDING MAINTENANCE-PARTS/SUPPLIES | 748.000 | 357 | 55.30 |
| 02/14/2025 | 029 | 72697*# | ISOLVED INC. | INSURANCE MEDICAL | 716.000 | 357 | 129.00 |
| | | | | INSURANCE MEDICAL | 716.000 | 357 | 10.32 |
| | | | | CHECK 029 72697 TOTAL FOR FUND 206: | | | <u>139.32</u> |
| 02/14/2025 | 029 | 72703 | MACQUEEN EMERGENCY | EQUIPMENT | 744.000 | 357 | 1,459.10 |
| | | | | EQUIPMENT | 744.000 | 357 | 183.89 |
| | | | | CHECK 029 72703 TOTAL FOR FUND 206: | | | <u>1,642.99</u> |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|---------------------------------------|------|---------|----------------------------------|-------------------------------------|---------|------|---------------|
| Fund: 206 OXFORD FIRE DEPARTMENT FUND | | | | | | | |
| 02/14/2025 | 029 | 72706 | MICHIGAN STATE FIREMEN'S ASSOC | EDUCATION TRAINING | 957.001 | 357 | 127.61 |
| 02/14/2025 | 029 | 72709 | MMTA | EDUCATION TRAINING | 957.001 | 357 | 379.00 |
| 02/14/2025 | 029 | 72710 | MUNICIPAL EMERGENCY SERVICES, IN | TURN-OUT GEAR | 743.000 | 357 | 58.45 |
| | | | | TURN-OUT GEAR | 743.000 | 357 | 625.00 |
| | | | | CHECK 029 72710 TOTAL FOR FUND 206: | | | <u>683.45</u> |
| 02/14/2025 | 029 | 72712 | NES PLUMBING, LLC | BUILDING MAINTENANCE - LABOR | 748.001 | 357 | 325.00 |
| 02/14/2025 | 029 | 72713 | NEW PIG CORPORATION | BUILDING MAINTENANCE-PARTS/SUPPLIES | 748.000 | 357 | 86.44 |
| 02/14/2025 | 029 | 72714 | NYE UNIFORM | UNIFORM EXPENSE UNIFORMS | 731.000 | 357 | 98.50 |
| 02/14/2025 | 029 | 72715*# | O.C.W.R.C. | UTILITIES WATER | 927.001 | 357 | 102.23 |
| | | | | UTILITIES WATER | 927.001 | 357 | 199.14 |
| | | | | CHECK 029 72715 TOTAL FOR FUND 206: | | | <u>301.37</u> |
| 02/14/2025 | 029 | 72717*# | OAKLAND COUNTY TREASURER | DISPATCHING | 805.000 | 357 | 7,609.33 |
| 02/14/2025 | 029 | 72722 | PRESSURE VESSEL TESTING | EQUIPMENT | 744.000 | 357 | 185.75 |
| 02/14/2025 | 029 | 72723 | RACHAEL ALBRECHT | UNIFORMS-PAID ON CALL | 754.000 | 357 | 100.00 |
| 02/14/2025 | 029 | 72724*# | RICOH USA INC | PRINTING & PUBLISHING | 729.000 | 357 | 412.42 |
| 02/14/2025 | 029 | 72728*# | SHARPE ENGINEERING | MISCELLANEOUS | 962.000 | 357 | 300.00 |
| 02/14/2025 | 029 | 72731*# | STEVE'S OXFORD AUTOMOTIVE | VEHICLE MAINTENANCE-FIRE | 791.001 | 357 | 123.83 |
| 02/14/2025 | 029 | 72732*# | STONES ACE OF OXFORD | VEHICLE MAINTENANCE-MEDICAL | 791.003 | 357 | 145.70 |
| 02/14/2025 | 029 | 72733 | STRYKER SALES, LLC | EQUIPMENT | 744.000 | 357 | 1,349.71 |
| 02/14/2025 | 029 | 72737 | TOOL SPORT & SIGN CO, INC | UNIFORM EXPENSE UNIFORMS | 731.000 | 357 | 36.00 |
| 02/14/2025 | 029 | 72739 | ULINE | MISCELLANEOUS | 962.000 | 357 | 1,192.68 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|---------------------------------------|------|---------|----------------------------------|-------------------------------------|---------|------|-----------------|
| Fund: 206 OXFORD FIRE DEPARTMENT FUND | | | | | | | |
| 02/14/2025 | 029 | 72745 | WONDER CLEANERS | DRY CLEANING | 723.000 | 357 | 258.75 |
| 02/14/2025 | 029 | 72747*# | AMAZON CAPITAL SERVICES | OPERATING SUPPLIES-FIRE | 742.001 | 357 | 73.95 |
| | | | | OPERATING SUPPLIES-FIRE | 742.001 | 357 | 8.90 |
| | | | | OPERATING SUPPLIES-FIRE | 742.001 | 357 | 46.99 |
| | | | | VEHICLE MAINTENANCE-MEDICAL | 791.003 | 357 | 19.79 |
| | | | | NOMAA | 962.032 | 357 | 179.91 |
| | | | | CHECK 029 72747 TOTAL FOR FUND 206: | | | <u>329.54</u> |
| 02/14/2025 | 029 | 72748*# | AMERICAN CONTAINER SERVICES | TRASH DISPOSAL | 929.000 | 357 | 100.00 |
| 02/14/2025 | 029 | 72749 | AMERICAN GENERATORS SALES & SERV | BUILDING MAINTENANCE - LABOR | 748.001 | 357 | 475.00 |
| | | | | BUILDING MAINTENANCE - LABOR | 748.001 | 357 | 475.00 |
| | | | | CHECK 029 72749 TOTAL FOR FUND 206: | | | <u>950.00</u> |
| 02/14/2025 | 029 | 72752 | BOUND TREE MEDICAL, LLC | UNIFORM EXPENSE UNIFORMS | 731.000 | 357 | 105.81 |
| | | | | UNIFORM EXPENSE UNIFORMS | 731.000 | 357 | 98.25 |
| | | | | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 247.80 |
| | | | | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 49.50 |
| | | | | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 12.49 |
| | | | | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 39.64 |
| | | | | OPERATING SUPPLIES-FIRE | 742.001 | 357 | 2.01 |
| | | | | UNIFORMS-PAID ON CALL | 754.000 | 357 | 95.74 |
| | | | | UNIFORMS-PAID ON CALL | 754.000 | 357 | 65.50 |
| | | | | UNIFORMS-PAID ON CALL | 754.000 | 357 | 65.50 |
| | | | | UNIFORMS-PAID ON CALL | 754.000 | 357 | 66.76 |
| | | | | UNIFORMS-PAID ON CALL | 754.000 | 357 | 138.82 |
| | | | | UNIFORMS-PAID ON CALL | 754.000 | 357 | 138.82 |
| | | | | UNIFORMS-PAID ON CALL | 754.000 | 357 | 138.82 |
| | | | | CHECK 029 72752 TOTAL FOR FUND 206: | | | <u>1,265.46</u> |
| 02/14/2025 | 029 | 72764 | GOLLING BUICK GMC, INC | VEHICLE MAINTENANCE-FIRE | 791.001 | 357 | 64.64 |
| | | | | VEHICLE MAINTENANCE (LABOR) | 934.001 | 357 | 18.95 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|---|------|---------|--------------------------------|---|---------|------|--------------|
| Fund: 206 OXFORD FIRE DEPARTMENT FUND | | | | | | | |
| | | | | CHECK 029 72764 TOTAL FOR FUND 206: | | | 83.59 |
| 02/14/2025 | 029 | 72765 | GOODYEAR TIRE & RUBBER COMPANY | VEHICLE MAINTENANCE-MEDICAL | 791.003 | 357 | 1,706.05 |
| | | | | Total for fund 206 OXFORD FIRE DEPARTMENT FUND | | | 23,059.71 |
| Fund: 207 POLICE CONTRACTING (OCSO) FUND | | | | | | | |
| 02/14/2025 | 029 | 72697*# | ISOLVED INC. | INSURANCE MEDICAL | 716.000 | 302 | 5.16 |
| 02/14/2025 | 029 | 72698*# | JANI-KING OF MICHIGAN, INC | JANITORIAL SERVICE | 831.000 | 302 | 1,002.17 |
| 02/14/2025 | 029 | 72717*# | OAKLAND COUNTY TREASURER | WAGES OVERTIME | 709.001 | 302 | 28,669.99 |
| | | | | CONTRACT O.C.S.D. | 711.001 | 302 | 312,526.33 |
| | | | | CHECK 029 72717 TOTAL FOR FUND 207: | | | 341,196.32 |
| 02/14/2025 | 029 | 72721 | PERSONAL TOUCH MOVING INC | SUBSTATION EXPANSION | 976.002 | 302 | 400.00 |
| 02/14/2025 | 029 | 72736 | THUMB ALARM SYSTEMS | SUBSTATION EXPANSION | 976.002 | 302 | 120.00 |
| 02/14/2025 | 029 | 72754*# | C4 ELECTRONICS | SUBSTATION EXPANSION | 976.002 | 302 | 4,067.13 |
| 02/14/2025 | 029 | 72757*# | CARDMEMBER SERVICE | SUBSTATION EXPANSION | 976.002 | 302 | 248.99 |
| | | | | SUBSTATION EXPANSION | 976.002 | 302 | 746.97 |
| | | | | CHECK 029 72757 TOTAL FOR FUND 207: | | | 995.96 |
| | | | | Total for fund 207 POLICE CONTRACTING (OCSO) FU | | | 347,786.74 |
| Fund: 208 PARKS & RECREATION FUND | | | | | | | |
| 02/14/2025 | 029 | 72692*# | HI-TECH SYSTEM SERVICE, INC | COMPUTER PROGRAMMING | 970.003 | 751 | 629.00 |
| 02/14/2025 | 029 | 72694 | HOME DEPOT CREDIT SERVICES | SEYMOUR GROUND MAINT/LAND IMPROV | 974.661 | 757 | 30.88 |
| | | | | EQUIPMENT PURCHASES | 980.661 | 757 | 159.00 |
| | | | | EQUIPMENT PURCHASES | 980.661 | 757 | 249.00 |
| | | | | CHECK 029 72694 TOTAL FOR FUND 208: | | | 438.88 |
| 02/14/2025 | 029 | 72696 | INDEED, INC | PUBLIC RELATIONS | | | ** VOIDED ** |
| Void Reason: P&R DIRECTOR PHIL REQUESTED TO BE VOIDED | | | | | | | |
| 02/14/2025 | 029 | 72699 | JASON KRATT | OPER. SUPPLIES YOUTH BOYS BASKETBALL | 740.623 | 752 | 283.52 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|-----------------------------------|------|---------|----------------------------------|---------------------------------------|---------|------|-----------------|
| Fund: 208 PARKS & RECREATION FUND | | | | | | | |
| 02/14/2025 | 029 | 72701 | LADY RENEGADES | OPER. SUPPLIES YOUTH SOFTBALL | 740.621 | 752 | 500.00 |
| 02/14/2025 | 029 | 72702 | LEGACY CENTER | OPER. SUPPLIES YOUTH VOLLEYBALL | 740.628 | 752 | 500.00 |
| | | | | OPER. SUPPLIES SELECT SOCCER LEAGUE | 740.637 | 752 | 825.00 |
| | | | | CHECK 029 72702 TOTAL FOR FUND 208: | | | <u>1,325.00</u> |
| 02/14/2025 | 029 | 72704*# | MICHIGAN MUNICIPAL RISK MANAGEME | INSURANCE LIABILITY | 955.000 | 751 | 9,436.56 |
| 02/14/2025 | 029 | 72711 | NAEIR | MAINTENANCE HARDWARE & MISC SUPPLIES | 932.100 | 757 | 188.25 |
| 02/14/2025 | 029 | 72716 | OAKLAND COUNTY MOMS | OPER. SUPPLIES SAFETY TOWN | 740.551 | 752 | 385.00 |
| 02/14/2025 | 029 | 72718 | ORION TOWNSHIP PARKS & REC | PROF/CONT TRAVEL | 816.671 | 758 | 92.40 |
| 02/14/2025 | 029 | 72719*# | OXFORD CHAMBER OF COMMERCE | MEMBERSHIP DUES | 829.000 | 751 | 100.00 |
| 02/14/2025 | 029 | 72725 | ROUTE 23 | PROF/CONT TRAVEL | 816.671 | 758 | 880.00 |
| 02/14/2025 | 029 | 72728*# | SHARPE ENGINEERING | CAPITAL OUTLAY | 970.001 | 751 | 3,920.00 |
| 02/14/2025 | 029 | 72729 | SPENCER OIL CO | GAS/DIESEL SEYMOUR | 934.661 | 757 | 807.09 |
| 02/14/2025 | 029 | 72731*# | STEVE'S OXFORD AUTOMOTIVE | MAINTENANCE MOWER/EQUIPMENT REPAIRS | 932.101 | 757 | 341.44 |
| | | | | MAINTENANCE MOWER/EQUIPMENT REPAIRS | 932.101 | 757 | 84.88 |
| | | | | VEHICLE MAINTENANCE (LABOR) | 934.001 | 757 | 140.45 |
| | | | | STONY GROUNDS MAINT./LAND IMPROV | 974.660 | 757 | 25.47 |
| | | | | CHECK 029 72731 TOTAL FOR FUND 208: | | | <u>592.24</u> |
| 02/14/2025 | 029 | 72732*# | STONES ACE OF OXFORD | MAINTENANCE BLDG & GROUNDS-CIVIC CENT | 931.665 | 751 | 242.79 |
| | | | | MAINTENANCE BLDG & GROUNDS-CIVIC CENT | 931.665 | 751 | 19.99 |
| | | | | CHECK 029 72732 TOTAL FOR FUND 208: | | | <u>262.78</u> |
| 02/14/2025 | 029 | 72735 | THE KELLY FIRM, PLC | LEGAL FEES | 826.000 | 751 | 525.00 |
| 02/14/2025 | 029 | 72738 | U.S. BANK EQUIPMENT FINANCE | RENTAL FEES LEASED OFFICE EQUIPMENT | 943.001 | 751 | 257.78 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|-------------------------------------|------|---------|---------------------------------|--|---------|------|---------------|
| Fund: 208 PARKS & RECREATION FUND | | | | | | | |
| 02/14/2025 | 029 | 72740# | VERIZON WIRELESS | CELL PHONES | 854.000 | 752 | 102.46 |
| | | | | CELL PHONES | 854.000 | 757 | 102.46 |
| | | | | CELL PHONES | 854.000 | 758 | 51.23 |
| | | | | CHECK 029 72740 TOTAL FOR FUND 208: | | | <u>256.15</u> |
| 02/14/2025 | 029 | 72746 | AIRGAS USA, LLC | RENTAL FEES EQUIPMENT SEYMOUR LAKE PA | 943.661 | 757 | 44.28 |
| 02/14/2025 | 029 | 72753 | BOWLING GREEN SOCCER CHALLENGE | OPER. SUPPLIES SELECT SOCCER LEAGUE | 740.637 | 752 | 7,790.00 |
| 02/14/2025 | 029 | 72755 | CANDACE GOWER | REFUND BABYSITTING | 964.643 | 752 | 20.00 |
| 02/14/2025 | 029 | 72756 | CARDCONNECT | RENTAL FEES LEASED OFFICE EQUIPMENT | 943.001 | 751 | 25.00 |
| 02/14/2025 | 029 | 72758*# | CHARTER COMMUNICATIONS | TELEPHONE | 853.000 | 751 | 169.98 |
| 02/14/2025 | 029 | 72760 | DONNA MARTIN | PROF/CONT SENIOR LIFE SKILLS | 816.404 | 758 | 296.00 |
| 02/14/2025 | 029 | 72761*# | DTE ENERGY | UTILITIES - ELECTRIC - SEYMOUR LAKE P | 921.661 | 767 | 23.77 |
| | | | | Total for fund 208 PARKS & RECREATION FUND | | | 29,248.68 |
| Fund: 209 CEMETERY MAINTENANCE FUND | | | | | | | |
| 02/14/2025 | 029 | 72720*# | OXFORD TWP PARKS AND RECREATION | MISCELLANEOUS | 962.000 | 276 | 124.00 |
| | | | | Total for fund 209 CEMETERY MAINTENANCE FUND | | | 124.00 |
| Fund: 249 BUILDING DEPARTMENT FUND | | | | | | | |
| 02/14/2025 | 029 | 72697*# | ISOLVED INC. | INSURANCE MEDICAL | 716.000 | 289 | 12.90 |
| 02/14/2025 | 029 | 72747*# | AMAZON CAPITAL SERVICES | OFFICE SUPPLIES | 728.000 | 289 | 8.30 |
| | | | | OFFICE SUPPLIES | 728.000 | 289 | 85.77 |
| | | | | OFFICE SUPPLIES | 728.000 | 289 | 22.45 |
| | | | | CHECK 029 72747 TOTAL FOR FUND 249: | | | <u>116.52</u> |
| 02/14/2025 | 029 | 72757*# | CARDMEMBER SERVICE | MEALS/LODGING EXPENSE | 860.001 | 289 | 18.00 |
| | | | | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 289 | 400.00 |
| | | | | CHECK 029 72757 TOTAL FOR FUND 249: | | | <u>418.00</u> |
| | | | | Total for fund 249 BUILDING DEPARTMENT FUND | | | 547.42 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|---|------|---------|----------------------------------|-------------------------------------|---------|------|------------|
| Fund: 296 CABLE TV FUND | | | | | | | |
| 02/14/2025 | 029 | 72700 | JOSEPH CALHOUN | MILEAGE EXPENSE | 860.000 | 296 | 32.20 |
| 02/14/2025 | 029 | 72719*# | OXFORD CHAMBER OF COMMERCE | EDUCATION WORKSHOPS AND CONFERENCES | 957.000 | 296 | 100.00 |
| 02/14/2025 | 029 | 72727 | SARAH MACY | OFFICE SUPPLIES | 728.000 | 296 | 50.00 |
| 02/14/2025 | 029 | 72743 | WILLIAM JULIEN | MILEAGE EXPENSE | 860.000 | 296 | 28.00 |
| 02/14/2025 | 029 | 72758*# | CHARTER COMMUNICATIONS | INTERNET FEES | 853.001 | 296 | 724.94 |
| 02/14/2025 | 029 | 72759 | DANIEL ZWIEZ | MILEAGE EXPENSE | 860.000 | 296 | 57.40 |
| 02/14/2025 | 029 | 72763 | GA BUSINESS PURCHASER LLC | SERVICES PROFESSIONAL | 819.001 | 296 | 50.00 |
| Total for fund 296 CABLE TV FUND | | | | | | | 1,042.54 |
| Fund: 297 SAFETY PATH FUND | | | | | | | |
| 02/14/2025 | 029 | 72704*# | MICHIGAN MUNICIPAL RISK MANAGEME | INSURANCE LIABILITY | 955.000 | 852 | 1,443.11 |
| 02/14/2025 | 029 | 72720*# | OXFORD TWP PARKS AND RECREATION | MAINTENANCE GENERAL | 932.000 | 852 | 124.00 |
| Total for fund 297 SAFETY PATH FUND | | | | | | | 1,567.11 |
| Fund: 298 POLLY ANN TRAIL FUND | | | | | | | |
| 02/14/2025 | 029 | 72757*# | CARDMEMBER SERVICE | TELEPHONE | 853.000 | 853 | 20.00 |
| | | | | MAINTENANCE OF GROUNDS | 932.000 | 853 | 827.50 |
| | | | | EQUIPMENT AND HARDWARE | 933.664 | 853 | 95.39 |
| | | | | EQUIPMENT AND HARDWARE | 933.664 | 853 | 408.44 |
| | | | | MISC ADVERTISING AND WEB | 962.011 | 853 | 21.36 |
| CHECK 029 72757 TOTAL FOR FUND 298: | | | | | | | 1,372.69 |
| Total for fund 298 POLLY ANN TRAIL FUND | | | | | | | 1,372.69 |
| Fund: 590 SEWER FUND | | | | | | | |
| 02/14/2025 | 029 | 72704*# | MICHIGAN MUNICIPAL RISK MANAGEME | INSURANCE LIABILITY | 955.000 | 527 | 3,265.19 |
| 02/14/2025 | 029 | 72717*# | OAKLAND COUNTY TREASURER | FEES COUNTY USAGE | 800.003 | 527 | 133,904.12 |
| Total for fund 590 SEWER FUND | | | | | | | 137,169.31 |
| Fund: 591 WATER FUND | | | | | | | |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|----------------------|------|---------|------------------------------------|---------------------|-------------------------------|------|------------|
| Fund: 591 WATER FUND | | | | | | | |
| 02/14/2025 | 029 | 72704*# | MICHIGAN MUNICIPAL RISK MANAGEMEME | INSURANCE LIABILITY | 955.000 | 538 | 4,547.41 |
| | | | | | Total for fund 591 WATER FUND | | 4,547.41 |
| TOTAL - ALL FUNDS | | | | | | | 672,700.29 |

'*'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE FUND

'#'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

| Post Date GL Number | Journal | Summ/Det | Ref # Description | DR Amount | CR Amount |
|------------------------|---------|----------|-------------------------------|-----------------------|-------------------|
| 02/28/2025 | CD | S | 132649 | SUMMARY CD 02/28/2025 | |
| 100-000-001.000 | | | CHECKING ACCOUNT OXFORD BANK | | 202,117.43 |
| 100-000-084.101 | | | DUE FROM GENERAL FUND | 22,636.80 ✓ | |
| 100-000-084.206 | | | DUE FROM OXFORD FIRE DEPT | 42,305.92 ✓ | |
| 100-000-084.207 | | | DUE FROM POLICE | 7,164.13 ✓ | |
| 100-000-084.208 | | | DUE FROM PARKS & REC | 116,568.13 ✓ | |
| 100-000-084.249 | | | DUE FROM BUILDING DEPARTMENT | 2,635.96 ✓ | |
| 100-000-084.296 | | | DUE FROM CABLE | 5,389.40 ✓ | |
| 100-000-084.298 | | | DUE FROM POLLY ANN TRAIL FUND | 637.50 ✓ | |
| 100-000-084.590 | | | DUE FROM SEWER | 4,779.59 ✓ | |
| 101-000-202.000 | | | ACCOUNTS PAYABLE | 22,636.80 | |
| 101-000-215.000 | | | DUE TO | | 22,636.80 |
| 206-000-202.000 | | | ACCOUNTS PAYABLE | 42,305.92 | |
| 206-000-215.000 | | | DUE TO CLEARING FUND | | 42,305.92 |
| 207-000-202.000 | | | ACCOUNTS PAYABLE | 7,164.13 | |
| 207-000-215.000 | | | DUE TO CLEARING FUND | | 7,164.13 |
| 208-000-202.000 | | | ACCOUNTS PAYABLE | 116,568.13 | |
| 208-000-215.000 | | | DUE TO CLEARING FUND | | 116,568.13 |
| 249-000-202.000 | | | ACCOUNTS PAYABLE | 2,635.96 | |
| 249-000-215.000 | | | DUE TO CLEARING FUND | | 2,635.96 |
| 296-000-202.000 | | | ACCOUNTS PAYABLE | 5,389.40 | |
| 296-000-215.000 | | | DUE TO CLEARING FUND | | 5,389.40 |
| 298-000-202.000 | | | ACCOUNTS PAYABLE | 637.50 | |
| 298-000-215.000 | | | DUE TO CLEARING FUND | | 637.50 |
| 590-000-202.000 | | | ACCOUNTS PAYABLE | 4,779.59 | |
| 590-000-215.000 | | | DUE TO CLEARING FUND | | 4,779.59 |
| | | | | <u>404,234.86</u> | <u>404,234.86</u> |
| | | | | <u>404,234.86</u> | <u>404,234.86</u> |

PREPAIDS

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|------------------------|------|---------|----------------------------------|-------------------------------------|---------|------|-----------------|
| Fund: 101 GENERAL FUND | | | | | | | |
| 02/28/2025 | 029 | 72767 | AARON'S LAWN IN ORDER LLC | CONTRACT CEMETERY MAINTENANCE | 825.000 | 567 | 6,666.67 |
| 02/28/2025 | 029 | 72772 | ALCOGARE LLC | MISCELLANEOUS | 962.000 | 267 | 945.30 |
| 02/28/2025 | 029 | 72773*# | ALLCOMM | MAINTENANCE BLDG/GROUNDS | 931.000 | 265 | 1,247.96 |
| 02/28/2025 | 029 | 72774# | AMAZON CAPITAL SERVICES | MISCELLANEOUS | 962.000 | 253 | 183.90 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 24.51 |
| | | | | OFFICE SUPPLIES | 728.000 | 267 | 7.99 |
| | | | | CHECK 029 72774 TOTAL FOR FUND 101: | | | <u>216.40</u> |
| 02/28/2025 | 029 | 72775*# | AMERICAN CONTAINER SERVICES | TRASH DISPOSAL | 929.000 | 265 | 82.00 |
| 02/28/2025 | 029 | 72776*# | AMERICAN UNITED LIFE INSURANCE C | INSURANCE MEDICAL | 716.000 | 270 | 274.33 |
| 02/28/2025 | 029 | 72790 | GENESEE VALLEY VAULT, INC | FEES CEMETERY OPENING/CLOSING | 712.011 | 567 | 675.00 |
| | | | | FEES CEMETERY OPENING/CLOSING | 712.011 | 567 | 675.00 |
| | | | | CHECK 029 72790 TOTAL FOR FUND 101: | | | <u>1,350.00</u> |
| 02/28/2025 | 029 | 72792 | GREAT LAKES SECURITY HARDWARE | MAINTENANCE BLDG/GROUNDS | 931.000 | 265 | 1,466.63 |
| 02/28/2025 | 029 | 72796*# | HI-TECH SYSTEM SERVICE, INC | MISCELLANEOUS | 962.000 | 215 | 1,003.15 |
| | | | | MISCELLANEOUS | 962.000 | 253 | 2,212.15 |
| | | | | MAINTENANCE EQUIPMENT | 933.000 | 267 | 1,601.00 |
| | | | | MAINTENANCE EQUIPMENT | 933.000 | 267 | 191.25 |
| | | | | CHECK 029 72796 TOTAL FOR FUND 101: | | | <u>5,007.55</u> |
| 02/28/2025 | 029 | 72797 | HURON VALLEY FIRE PROTECTION | MAINTENANCE EQUIPMENT | 933.000 | 265 | 209.55 |
| 02/28/2025 | 029 | 72806 | LOVE INC OF NORTH OAKLAND COUNTY | CONTRIBUTION TO LOVE INC | 965.865 | 995 | 1,141.67 |
| 02/28/2025 | 029 | 72817*# | OXFORD COMMUNITY SCHOOLS | MAINTENANCE GROUNDS | 932.001 | 265 | 931.56 |
| 02/28/2025 | 029 | 72818 | PASKELL CREATIVE PAINTING | ADDITIONS & IMPROVEMENTS | 976.000 | 265 | 900.00 |
| 02/28/2025 | 029 | 72826 | SHORELINE INVESTMENT SERVICES | MAINTENANCE BLDG/GROUNDS | 931.000 | 265 | 130.00 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|---------------------------------------|------|---------|----------------------------------|-------------------------------------|---------|------|-----------|
| Fund: 101 GENERAL FUND | | | | | | | |
| 02/28/2025 | 029 | 72829 | STAPLES | OFFICE SUPPLIES | 728.000 | 701 | 18.99 |
| 02/28/2025 | 029 | 72830 | SUSAN MCCULLOUGH | RECORDING SECRETARY | 827.000 | 701 | 145.00 |
| 02/28/2025 | 029 | 72832*# | TERMINIX EHRlich | MAINTENANCE BLDG/GROUNDS | 931.000 | 265 | 92.97 |
| 02/28/2025 | 029 | 72838 | VELLUCCI ELECTRIC, LLC | MAINTENANCE BLDG/GROUNDS | 931.000 | 265 | 525.00 |
| 02/28/2025 | 029 | 72840 | VOYA INSTITUTIONAL TRUST COMPANY | DEFERRED COMP | 231.040 | 000 | 1,235.22 |
| 02/28/2025 | 029 | 72841 | XTREME SHREDS | TRASH DISPOSAL | 929.000 | 265 | 50.00 |
| Total for fund 101 GENERAL FUND | | | | | | | 22,636.80 |
| Fund: 206 OXFORD FIRE DEPARTMENT FUND | | | | | | | |
| 02/28/2025 | 029 | 72769 | AFLAC | INSURANCE MEDICAL | 716.000 | 357 | 226.94 |
| 02/28/2025 | 029 | 72775*# | AMERICAN CONTAINER SERVICES | TRASH DISPOSAL | 929.000 | 357 | 100.00 |
| 02/28/2025 | 029 | 72779*# | AT&T MOBILITY | TELEPHONE | 853.000 | 357 | 21.25 |
| 02/28/2025 | 029 | 72780 | AUTOZONE, INC | VEHICLE MAINTENANCE-FIRE | 791.001 | 357 | 7.91 |
| 02/28/2025 | 029 | 72781 | BATTERY WORLD | OPERATING SUPPLIES-FIRE | 742.001 | 357 | 28.32 |
| 02/28/2025 | 029 | 72782 | BOUND TREE MEDICAL, LLC | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 242.92 |
| | | | | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 18.20 |
| | | | | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 212.52 |
| | | | | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 55.44 |
| | | | | CPR SUPPLIES | 742.002 | 357 | 55.75 |
| CHECK 029 72782 TOTAL FOR FUND 206: | | | | | | | 584.83 |
| 02/28/2025 | 029 | 72791 | GOODYEAR TIRE & RUBBER COMPANY | VEHICLE MAINTENANCE-FIRE | 791.001 | 357 | 1,118.80 |
| 02/28/2025 | 029 | 72795 | HAROLD J LOVE, PLLC | PHYSICALS | 836.000 | 357 | 750.00 |
| 02/28/2025 | 029 | 72798 | IMPERIALDADE | BUILDING MAINTENANCE-PARTS/SUPPLIES | 748.000 | 357 | 491.98 |
| 02/28/2025 | 029 | 72805 | LINDE GAS & EQUIPMENT INC | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 156.94 |
| | | | | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 130.55 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|--|------|---------|----------------------------------|-------------------------------------|---------|------|-----------|
| Fund: 206 OXFORD FIRE DEPARTMENT FUND | | | | | | | |
| | | | | CHECK 029 72805 TOTAL FOR FUND 206: | | | 287.49 |
| 02/28/2025 | 029 | 72807 | MACQUEEN EMERGENCY | VEHICLE MAINTENANCE-FIRE | 791.001 | 357 | 447.93 |
| 02/28/2025 | 029 | 72813 | MUNICIPAL EMERGENCY SERVICES, IN | EQUIPMENT ACQUISTION | 977.000 | 357 | 5,720.00 |
| 02/28/2025 | 029 | 72814 | NYE UNIFORM | UNIFORMS-PAID ON CALL | 754.000 | 357 | 338.24 |
| 02/28/2025 | 029 | 72816 | OAKLAND FUELS | GAS DIESEL FUEL | 780.010 | 357 | 776.48 |
| 02/28/2025 | 029 | 72821 | PREMIER OCCUPATIONAL HEALTH | PHYSICALS | 836.000 | 357 | 70.00 |
| 02/28/2025 | 029 | 72822 | PRESSURE VESSEL TESTING | EQUIPMENT | 744.000 | 357 | 890.00 |
| 02/28/2025 | 029 | 72824 | RANDY VESPER | UNIFORM EXPENSE UNIFORMS | 731.000 | 357 | 16.10 |
| 02/28/2025 | 029 | 72828 | STANDARD INSURANCE COMPANY | INSURANCE MEDICAL | 716.000 | 357 | 2,421.65 |
| 02/28/2025 | 029 | 72832*# | TERMINIX EHRlich | BUILDING MAINTENANCE - LABOR | 748.001 | 357 | 57.18 |
| 02/28/2025 | 029 | 72833 | THE ACCUMED GROUP | UNALLOCATED COST RECOVERY BILLING | 802.001 | 357 | 4,229.32 |
| 02/28/2025 | 029 | 72835 | TOOL SPORT & SIGN CO, INC | UNIFORM EXPENSE UNIFORMS | 731.000 | 357 | 144.00 |
| | | | | UNIFORMS-PAID ON CALL | 754.000 | 357 | 80.00 |
| | | | | MISCELLANEOUS | 962.000 | 357 | 76.00 |
| | | | | CHECK 029 72835 TOTAL FOR FUND 206: | | | 300.00 |
| 02/28/2025 | 029 | 72839 | VFIS | INSURANCE LIABILITY-VFIS | 955.000 | 357 | 6,020.46 |
| | | | | INSURANCE FIREFIGHTERS | 955.010 | 357 | 5,128.54 |
| | | | | FLEET INSURANCE | 955.020 | 357 | 11,149.00 |
| | | | | CHECK 029 72839 TOTAL FOR FUND 206: | | | 22,298.00 |
| 02/28/2025 | 029 | 72842 | ZOLL MEDICAL CORPORATION | OPERATING SUPPLIES-MEDICAL | 742.000 | 357 | 1,123.50 |
| Total for fund 206 OXFORD FIRE DEPARTMENT FUND | | | | | | | 42,305.92 |
| Fund: 207 POLICE CONTRACTING (OCSO) FUND | | | | | | | |
| 02/28/2025 | 029 | 72771 | AKA ARCHITECTS INC | SUBSTATION EXPANSION | 976.002 | 302 | 1,092.50 |
| 02/28/2025 | 029 | 72773*# | ALLCOMM | SUBSTATION EXPANSION | 976.002 | 302 | 4,802.92 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|---|------|---------|----------------------------------|---------------------------------------|---------|------|------------|
| Fund: 207 POLICE CONTRACTING (OCSO) FUND | | | | | | | |
| 02/28/2025 | 029 | 72776*# | AMERICAN UNITED LIFE INSURANCE C | INSURANCE MEDICAL | 716.000 | 302 | 37.15 |
| 02/28/2025 | 029 | 72817*# | OXFORD COMMUNITY SCHOOLS | MAINTENANCE BLDG/GROUNDS | 931.000 | 302 | 931.56 |
| 02/28/2025 | 029 | 72820 | PERSONAL TOUCH MOVING INC | SUBSTATION EXPANSION | 976.002 | 302 | 300.00 |
| Total for fund 207 POLICE CONTRACTING (OCSO) FU | | | | | | | 7,164.13 |
| Fund: 208 PARKS & RECREATION FUND | | | | | | | |
| 02/28/2025 | 029 | 72770 | AIS CONSTRUCTION EQUIPMENT | CAPITAL OUTLAY | 970.001 | 751 | 110,815.23 |
| 02/28/2025 | 029 | 72777 | ANDREW HUPPERTZ | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 70.00 |
| 02/28/2025 | 029 | 72778 | ANDY HOWALD | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 55.00 |
| 02/28/2025 | 029 | 72779*# | AT&T MOBILITY | CELL PHONES | 854.000 | 751 | 83.66 |
| | | | | OPER. SUPPLIES SUMMER CAMP | 740.550 | 752 | 27.84 |
| CHECK 029 72779 TOTAL FOR FUND 208: | | | | | | | 111.50 |
| 02/28/2025 | 029 | 72783 | BRANDI LITTLE | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 65.00 |
| 02/28/2025 | 029 | 72784 | CHELSEA BOLTE | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 55.00 |
| 02/28/2025 | 029 | 72785 | CHRIS COOLE | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 70.00 |
| 02/28/2025 | 029 | 72786# | DAFOE'S FEED | MAINTENANCE BLDG & GROUNDS-CIVIC CENT | 931.665 | 751 | 79.50 |
| | | | | SENIOR CENTER MAINTENANCE BLDG/GROUND | 931.000 | 758 | 79.50 |
| CHECK 029 72786 TOTAL FOR FUND 208: | | | | | | | 159.00 |
| 02/28/2025 | 029 | 72788 | DYLAN DODSON | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 65.00 |
| 02/28/2025 | 029 | 72789 | GABRIELA ORZA | PROF/CONT ART | 816.650 | 752 | 196.00 |
| | | | | PROF/CONT ART | 816.650 | 752 | 392.00 |
| CHECK 029 72789 TOTAL FOR FUND 208: | | | | | | | 588.00 |
| 02/28/2025 | 029 | 72794 | GREG GARRETT | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 70.00 |
| 02/28/2025 | 029 | 72796*# | HI-TECH SYSTEM SERVICE, INC | COMPUTER PROGRAMMING | 970.003 | 751 | 593.00 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|------------------------------------|------|---------|----------------------------------|--|---------|------|-----------------|
| Fund: 208 PARKS & RECREATION FUND | | | | | | | |
| 02/28/2025 | 029 | 72799 | INDEPENDENCE VILLAGE OF OXFORD | SENIOR ENRICHMENT SUPPLIES | 728.402 | 758 | 936.00 |
| | | | | SENIOR ENRICHMENT SUPPLIES | 728.402 | 758 | 168.00 |
| | | | | SENIOR ENRICHMENT SUPPLIES | 728.402 | 758 | 224.00 |
| | | | | SENIOR SPECIAL EVENTS SUPPLIES | 728.405 | 758 | 221.00 |
| | | | | CHECK 029 72799 TOTAL FOR FUND 208: | | | <u>1,549.00</u> |
| 02/28/2025 | 029 | 72800 | J & T ELECTRICAL SUPPLY, INC. | MAINTENANCE BLDG & GROUNDS-CIVIC CENT | 931.665 | 751 | 219.25 |
| 02/28/2025 | 029 | 72804 | JOE SMITH | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 70.00 |
| 02/28/2025 | 029 | 72808 | MARC BLAIN | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 55.00 |
| 02/28/2025 | 029 | 72809 | MATT MCCANN | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 70.00 |
| 02/28/2025 | 029 | 72810 | MICHAEL VAGTS | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 55.00 |
| 02/28/2025 | 029 | 72811 | MICHELLE KITCHING | WAGES & FEES FITNESS | 710.647 | 752 | 833.00 |
| 02/28/2025 | 029 | 72812 | MIKE KERNER | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 70.00 |
| 02/28/2025 | 029 | 72827 | SPENCER OIL CO | GAS/DIESEL SEYMOUR | 934.661 | 757 | 618.30 |
| 02/28/2025 | 029 | 72834 | TIMOTHY CURRY | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 70.00 |
| 02/28/2025 | 029 | 72836 | TRACTOR SUPPLY CREDIT PLAN | SEYMOUR GROUND MAINT/LAND IMPROV | 974.661 | 757 | 171.85 |
| 02/28/2025 | 029 | 72837 | TREVOR ROSS | REFUND YOUTH BOYS BASKETBALL | 964.623 | 752 | 70.00 |
| | | | | Total for fund 208 PARKS & RECREATION FUND | | | 116,568.13 |
| Fund: 249 BUILDING DEPARTMENT FUND | | | | | | | |
| 02/28/2025 | 029 | 72776*# | AMERICAN UNITED LIFE INSURANCE C | INSURANCE MEDICAL | 716.000 | 289 | 113.95 |
| 02/28/2025 | 029 | 72796*# | HI-TECH SYSTEM SERVICE, INC | MISCELLANEOUS | 962.000 | 289 | 1,122.01 |
| 02/28/2025 | 029 | 72802 | JIM SMITHER | MILEAGE EXPENSE | 860.000 | 289 | 350.00 |
| 02/28/2025 | 029 | 72803 | JODY KINJORSKI | MILEAGE EXPENSE | 860.000 | 289 | 350.00 |
| 02/28/2025 | 029 | 72819 | PATRICK H PAYNE | MILEAGE EXPENSE | 860.000 | 289 | 350.00 |
| 02/28/2025 | 029 | 72823 | RANDOLPH WARUNEK | MILEAGE EXPENSE | 860.000 | 289 | 350.00 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|------------------------------------|------|---------|-------------------------------------|---|---------|------|-----------------|
| Fund: 249 BUILDING DEPARTMENT FUND | | | | | | | |
| | | | | Total for fund 249 BUILDING DEPARTMENT FUND | | | 2,635.96 |
| Fund: 296 CABLE TV FUND | | | | | | | |
| 02/28/2025 | 029 | 72768 | ADDISON TOWNSHIP | FEEES ADDISON TWP. FRANCHISE FEES | 800.001 | 296 | 5,243.70 |
| 02/28/2025 | 029 | 72787 | DAVID F KENNY | MILEAGE EXPENSE | 860.000 | 296 | 25.90 |
| 02/28/2025 | 029 | 72801 | JEBEDIAH CALHOUN | MILEAGE EXPENSE | 860.000 | 296 | 48.30 |
| 02/28/2025 | 029 | 72831 | T-MOBILE | INTERNET FEES | 853.001 | 296 | 71.50 |
| | | | | Total for fund 296 CABLE TV FUND | | | 5,389.40 |
| Fund: 298 POLLY ANN TRAIL FUND | | | | | | | |
| 02/28/2025 | 029 | 72825 | ROSATI, SCHULTZ, JOPPICH, AMTSBUECH | LEGAL FEES | 826.000 | 853 | 637.50 |
| | | | | Total for fund 298 POLLY ANN TRAIL FUND | | | 637.50 |
| Fund: 590 SEWER FUND | | | | | | | |
| 02/28/2025 | 029 | 72793 | GREAT LAKES WATER AUTHORITY | FEES COUNTY USAGE | 800.003 | 527 | 1,380.12 |
| 02/28/2025 | 029 | 72815 | OAKLAND COUNTY TREASURER | POSTAGE | 730.000 | 527 | 2,527.37 |
| | | | | FEES COUNTY USAGE | 800.003 | 527 | 872.10 |
| | | | | CHECK 029 72815 TOTAL FOR FUND 590: | | | <u>3,399.47</u> |
| | | | | Total for fund 590 SEWER FUND | | | 4,779.59 |
| TOTAL - ALL FUNDS | | | | | | | 202,117.43 |

'*'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE FUND
 '#'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

Payroll Liability

| | | |
|--|--|--------------------|
| Total Cash Required | | \$39,537.47 |
| Debit for FSDD (Full Service Direct Deposit) | OXFORD BANK, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1968 | \$27,306.52 |
| Debit for Taxes | OXFORD BANK, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1968 | \$12,230.95 |
| Total cash required for OXFORD BANK, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1968 | | \$39,537.47 |

Important Note

Your cash required total does not include your fees for service. The invoice with the details of your fees will be sent the Monday after you process your payroll with the debit from your account occurring 3 banking days later.

TOWNSHIP

Payroll Liability

| | | |
|--|--|--------------------|
| Total Cash Required | | \$41,930.52 |
| Debit for FSDD (Full Service Direct Deposit) | OXFORD BANK, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1968 | \$29,220.60 |
| Debit for Taxes | OXFORD BANK, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1968 | \$12,709.92 |
| Total cash required for OXFORD BANK, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1968 | | \$41,930.52 |

Important Note

Your cash required total does not include your fees for service. The invoice with the details of your fees will be sent the Monday after you process your payroll with the debit from your account occurring 3 banking days later.

TOWNSHIP

| Liability | Taxes Debited | | | |
|-----------|---------------|---|--|-----------|
| Recap | | Federal Income Tax | | 12,639.97 |
| | | Earned Income Credit Advances | | .00 |
| | | Social Security - EE | | 6,193.89 |
| | | Social Security - ER | | 6,193.94 |
| | | Social Security Adj - EE | | .00 |
| | | Medicare - EE | | 1,448.58 |
| | | Medicare - ER | | 1,448.58 |
| | | Medicare Adj - EE | | .00 |
| | | Medicare Surtax - EE | | .00 |
| | | Medicare Surtax Adj - EE | | .00 |
| | | Federal Unemployment Tax | | .00 |
| | | FMLA-PSL Payments Credit | | .00 |
| | | FMLA-PSL ER FICA Credit | | .00 |
| | | FMLA-PSL Health Care Premium Credit | | .00 |
| | | Employee Retention Qualified Payments Credit | | .00 |
| | | Employee Retention Qualified Health Care Credit | | .00 |
| | | COBRA Premium Assistance Payments | | .00 |
| | | State Income Tax | | 4,034.62 |
| | | State Unemployment Insurance - EE | | .00 |
| | | State Unemployment Insurance - ER | | 212.48 |
| | | State Unemployment Insurance Adj - EE | | .00 |
| | | State Disability Insurance - EE | | .00 |
| | | State Disability Insurance - ER | | .00 |
| | | State Disability Insurance Adj - EE | | .00 |
| | | State Family Leave Insurance - EE | | .00 |
| | | State Family Leave Insurance - ER | | .00 |
| | | State Family Leave Insurance Adj - EE | | .00 |
| | | State Medical Leave Insurance - EE | | .00 |
| | | State Medical Leave Insurance - ER | | .00 |
| | | State Medical Leave Insurance Adj - EE | | .00 |
| | | State Parental Leave Insurance - EE | | .00 |
| | | State Parental Leave Insurance - ER | | .00 |
| | | State Parental Leave Insurance Adj - EE | | .00 |
| | | State LTCare - EE | | .00 |
| | | State Childcare Contribution - EE | | .00 |
| | | State Childcare Contribution - ER | | .00 |
| | | Workers' Benefit Fund Assessment - EE | | .00 |
| | | Workers' Benefit Fund Assessment - ER | | .00 |
| | | Transit Tax - EE | | .00 |
| | | Local Income Tax | | .00 |
| | | School District Tax | | .00 |

| | | | |
|----------------------------|-------------------|---------------------|------------------|
| Total Taxes Debited | Acct. No. XXX7204 | Tran/ABA XXXXXXXXXX | 32,172.06 |
|----------------------------|-------------------|---------------------|------------------|

| | | | | |
|------------------------|--------------------|-------------------|---------------------|-----------|
| Other Transfers | ADP Direct Deposit | Acct. No. XXX7204 | Tran/ABA XXXXXXXXXX | 71,767.96 |
| | Wage Garnishments | Acct. No. XXX7204 | Tran/ABA XXXXXXXXXX | 408.27 |

| | |
|--|-------------------|
| Total Amount Debited From Your Accounts | 104,348.29 |
|--|-------------------|

| | | |
|------------------------|--------------------------|-----|
| Bank Debits and | Checks | .00 |
| Other Liability | Adjustments/Prepay/Voids | .00 |

| | | |
|------------------------------------|-------------------|--|
| Taxes - Your Responsibility | None This Payroll | |
|------------------------------------|-------------------|--|

FIRE DEPT

| |
|------------------------|
| Total Liability |
| 104,348.29 |
| 104,348.29 |
| 104,348.29 |
| 104,348.29 |

Statistical Summary

Company: 7TH - CHARTER TOWN Service Center: 0056 Great Lakes Status: Under Review
 Week#: 9 Pay Date: 02/27/2025 P/E Date: 02/22/2025
 Qtr/Year: 1/2025 Run Time/Date: 14:28:32 PM EST 02/24/2025

| | | | |
|--|--|------------------|------------------------|
| Taxes Debited | Federal Income Tax | 15,599.52 | |
| | Earned Income Credit Advances | 0.00 | |
| | Social Security - EE | 8,139.66 | |
| | Social Security - ER | 8,139.63 | 8,139.63 |
| | Social Security Adj - EE | 0.00 | |
| | Medicare - EE | 1,903.65 | |
| | Medicare - ER | 1,903.62 | 1,903.62 |
| | Medicare Adj - EE | 0.00 | 10,043.25 |
| | Medicare Surtax - EE | 0.00 | |
| | Medicare Surtax Adj - EE | 0.00 | |
| | Federal Unemployment Tax | 0.00 | |
| | FMLA-PSL Payments Credit | 0.00 | |
| | FMLA-PSL ER FICA Credit | 0.00 | |
| | FMLA-PSL Health Care Premium Credit | 0.00 | |
| | Employee Retention Qualified Payments Credit | 0.00 | |
| | Employee Retention Qualified Health Care Credit | 0.00 | |
| | COBRA Premium Assistance Payments | 0.00 | |
| | State Income Tax | 5,392.87 | |
| | Non Resident State Income Tax | 0.00 | |
| | State Unemployment Insurance - EE | 0.00 | |
| | State Unemployment Insurance Adj - EE | 0.00 | |
| | State Disability Insurance - EE | 0.00 | |
| | State Disability Insurance Adj - EE | 0.00 | |
| | State Unemployment/Disability Ins - ER | 498.56 | 498.56 |
| | State Family Leave Insurance - EE | 0.00 | |
| | State Family Leave Insurance - ER | 0.00 | |
| | State Family Leave Insurance Adj - EE | 0.00 | |
| | State Medical Leave Insurance - EE | 0.00 | |
| | State Medical Leave Insurance - ER | 0.00 | |
| | State Medical Leave Insurance Adj - EE | 0.00 | |
| | State Parental Leave Insurance - EE | 0.00 | |
| | State Parental Leave Insurance - ER | 0.00 | |
| | State Parental Leave Insurance Adj - EE | 0.00 | |
| | State Cares Fund - EE | 0.00 | |
| | Transit Tax - EE | 0.00 | |
| Workers' Benefit Fund Assessment - EE | 0.00 | | |
| Workers' Benefit Fund Assessment - ER | 0.00 | | |
| State Child Care Fund - EE | 0.00 | | |
| State Child Care Fund - ER | 0.00 | | |
| Local Income Tax | 0.00 | | |
| School District Tax | 0.00 | | |
| Total Taxes Debited | | 41,577.51 | |
| Other Transfers | Full Service Direct Deposit Acct. No.XXX7204Tran/ABAXXXXXXXX | 96,383.34 | |
| | Wage Garnishments Acct. No.XXX7204Tran/ABAXXXXXXXX | 408.27 | |
| | Total Amount Debited From Your Account | | 138,369.12 |
| Bank Debits & Other Liability | Checks | 0.00 | |
| | Adjustments/Prepay/Voids | 0.00 | |
| | | | Total Liability |
| | | | 138,369.12 |
| | | | 138,369.12 |

FIRE DEPT

Payroll Liability

| | | |
|--|--|--------------------|
| Total Cash Required | | \$21,968.14 |
| Debit for FSDD (Full Service Direct Deposit) | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXXXX83-1 | \$16,011.56 |
| Debit for Taxes | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXXXX83-1 | \$5,956.58 |
| Total cash required for Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXXXX83-1 | | \$21,968.14 |

Important Note

Your cash required total does not include your fees for service. The invoice with the details of your fees will be sent the Monday after you process your payroll with the debit from your account occurring 3 banking days later.

PARKS & REC

Payroll Liability

| Total Cash Required | | \$21,667.98 |
|--|--|--------------------|
| Debit for Checks (Net Pay) | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXXXX83-1 | \$41.56 |
| Debit for FSDD (Full Service Direct Deposit) | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXXXX83-1 | \$15,735.20 |
| Debit for Taxes | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXXXX83-1 | \$5,891.22 |
| Total cash required for Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXXXX83-1 | | \$21,667.98 |

Important Note

Your cash required total does not include your fees for service. The invoice with the details of your fees will be sent the Monday after you process your payroll with the debit from your account occurring 3 banking days later.

PARKS & REC

Payroll Liability

| Total Cash Required | | \$9,996.84 |
|--|--|-------------------|
| Debit for Checks (Net Pay) | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1976 | \$37.02 |
| Debit for FSDD (Full Service Direct Deposit) | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1976 | \$7,584.94 |
| Debit for Taxes | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1976 | \$2,374.88 |
| Total cash required for Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1976 | | \$9,996.84 |

Important Note

Your cash required total does not include your fees for service. The invoice with the details of your fees will be sent the Monday after you process your payroll with the debit from your account occurring 3 banking days later.

CABLE

Payroll Liability

| Total Cash Required | | \$8,823.87 |
|--|--|------------|
| Debit for Checks (Net Pay) | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1976 | \$37.02 |
| Debit for FSDD (Full Service Direct Deposit) | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1976 | \$6,714.07 |
| Debit for Taxes | Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1976 | \$2,072.78 |
| Total cash required for Oxford Bank, Routing/Transit no. (ABA) 072404333, Bank account no. XXX1976 | | \$8,823.87 |

Important Note

Your cash required total does not include your fees for service. The invoice with the details of your fees will be sent the Monday after you process your payroll with the debit from your account occurring 3 banking days later.

CABLE

| Post Date GL Number | Journal | Summ/Det | Ref # Description | DR Amount | CR Amount |
|------------------------|---------|----------|------------------------------|-----------------------|-------------------|
| 03/12/2025 | CD | S | 132825 | SUMMARY CD 03/12/2025 | |
| 100-000-001.000 | | | CHECKING ACCOUNT OXFORD BANK | | 61,954.75 |
| 100-000-084.101 | | | DUE FROM GENERAL FUND | 14,153.50 | |
| 100-000-084.206 | | | DUE FROM OXFORD FIRE DEPT | 645.00 | |
| 100-000-084.207 | | | DUE FROM POLICE | 2,500.00 | |
| 100-000-084.249 | | | DUE FROM BUILDING DEPARTMENT | 11,818.75 | |
| 100-000-084.297 | | | DUE FROM SAFETY PATH | 500.00 | |
| 100-000-084.590 | | | DUE FROM SEWER | 7,570.00 | |
| 100-000-084.591 | | | DUE FROM WATER | 12,197.50 | |
| 100-000-084.701 | | | DUE FROM TRUST & AGENCY | 12,570.00 | |
| 101-000-202.000 | | | ACCOUNTS PAYABLE | 14,153.50 | |
| 101-000-215.000 | | | DUE TO | | 14,153.50 |
| 206-000-202.000 | | | ACCOUNTS PAYABLE | 645.00 | |
| 206-000-215.000 | | | DUE TO CLEARING FUND | | 645.00 |
| 207-000-202.000 | | | ACCOUNTS PAYABLE | 2,500.00 | |
| 207-000-215.000 | | | DUE TO CLEARING FUND | | 2,500.00 |
| 249-000-202.000 | | | ACCOUNTS PAYABLE | 11,818.75 | |
| 249-000-215.000 | | | DUE TO CLEARING FUND | | 11,818.75 |
| 297-000-202.000 | | | ACCOUNTS PAYABLE | 500.00 | |
| 297-000-215.000 | | | DUE TO CLEARING FUND | | 500.00 |
| 590-000-202.000 | | | ACCOUNTS PAYABLE | 7,570.00 | |
| 590-000-215.000 | | | DUE TO CLEARING FUND | | 7,570.00 |
| 591-000-202.000 | | | ACCOUNTS PAYABLE | 12,197.50 | |
| 591-000-215.000 | | | DUE TO CLEARING FUND | | 12,197.50 |
| 701-000-202.000 | | | ACCOUNTS PAYABLE | 12,570.00 | |
| 701-000-215.000 | | | DUE TO OTHER FUNDS | | 12,570.00 |
| | | | | <u>123,909.50</u> | <u>123,909.50</u> |
| | | | | <u>123,909.50</u> | <u>123,909.50</u> |

TO BE PAIDS

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|--|------|---------|-----------------------------|---|---------|------|-----------------|
| Fund: 101 GENERAL FUND | | | | | | | |
| 03/12/2025 | 029 | 72843*# | CARLISLE/WORTMAN ASSOCIATES | PLANNER/PROF. SERVICES PLANNER | 801.000 | 701 | 455.00 |
| | | | | PLANNER/PROF. SERVICES PLANNER | 801.000 | 701 | 5,067.50 |
| | | | | PLANNER/PROF. SERVICES PLANNER | 801.000 | 701 | 2,200.00 |
| | | | | PLANNER/PROF. SERVICES PLANNER | 801.000 | 701 | 760.00 |
| | | | | PLANNER/PROF. SERVICES MASTER PLAN | 801.001 | 701 | 745.00 |
| | | | | CHECK 029 72843 TOTAL FOR FUND 101: | | | <u>9,227.50</u> |
| 03/12/2025 | 029 | 72848*# | SHARPE ENGINEERING | ENGINEERING FEES - GENERAL | 821.000 | 447 | 700.00 |
| 03/12/2025 | 029 | 72850*# | THE KELLY FIRM, PLC | LEGAL FEES | 826.000 | 266 | 3,281.00 |
| | | | | LEGAL FEES | 826.000 | 701 | 885.00 |
| | | | | LEGAL FEES | 826.000 | 702 | 60.00 |
| | | | | CHECK 029 72850 TOTAL FOR FUND 101: | | | <u>4,226.00</u> |
| | | | | Total for fund 101 GENERAL FUND | | | 14,153.50 |
| Fund: 206 OXFORD FIRE DEPARTMENT FUND | | | | | | | |
| 03/12/2025 | 029 | 72850*# | THE KELLY FIRM, PLC | LEGAL FEES | 826.000 | 357 | 645.00 |
| | | | | Total for fund 206 OXFORD FIRE DEPARTMENT FUND | | | 645.00 |
| Fund: 207 POLICE CONTRACTING (OCSO) FUND | | | | | | | |
| 03/12/2025 | 029 | 72850*# | THE KELLY FIRM, PLC | LEGAL FEES | 826.000 | 302 | 2,500.00 |
| | | | | Total for fund 207 POLICE CONTRACTING (OCSO) FU | | | 2,500.00 |
| Fund: 249 BUILDING DEPARTMENT FUND | | | | | | | |
| 03/12/2025 | 029 | 72844 | JIM SMITHER | FEES HEATING INSPECTOR | 712.002 | 289 | 2,830.00 |
| | | | | FEES BUILDING INSPECTOR | 712.009 | 289 | 150.00 |
| | | | | CHECK 029 72844 TOTAL FOR FUND 249: | | | <u>2,980.00</u> |
| 03/12/2025 | 029 | 72845*# | JODY KINJORSKI | FEES PLUMBING INSPECTOR | 712.004 | 289 | 1,450.00 |
| | | | | FEES BUILDING INSPECTOR | 712.009 | 289 | 100.00 |
| | | | | CHECK 029 72845 TOTAL FOR FUND 249: | | | <u>1,550.00</u> |
| 03/12/2025 | 029 | 72846 | PATRICK H PAYNE | FEES ELECTRIC INSPECTORS | 712.001 | 289 | 2,150.00 |
| | | | | FEES BUILDING INSPECTOR | 712.009 | 289 | 100.00 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|------------------------------------|------|---------|---------------------|---|---------|------|-----------|
| Fund: 249 BUILDING DEPARTMENT FUND | | | | | | | |
| | | | | CHECK 029 72846 TOTAL FOR FUND 249: | | | 2,250.00 |
| 03/12/2025 | 029 | 72847 | RANDOLPH WARUNEK | FEES BUILDING INSPECTOR | 712.009 | 289 | 2,050.00 |
| 03/12/2025 | 029 | 72848*# | SHARPE ENGINEERING | ENGINEER INSPECTOR FEE | 712.010 | 289 | 337.50 |
| | | | | SOIL EROSION INSPECTOR | 712.013 | 289 | 1,211.25 |
| | | | | CHECK 029 72848 TOTAL FOR FUND 249: | | | 1,548.75 |
| 03/12/2025 | 029 | 72850*# | THE KELLY FIRM, PLC | LEGAL FEES | 826.000 | 289 | 1,440.00 |
| | | | | Total for fund 249 BUILDING DEPARTMENT FUND | | | 11,818.75 |
| Fund: 297 SAFETY PATH FUND | | | | | | | |
| 03/12/2025 | 029 | 72848*# | SHARPE ENGINEERING | ENGINEERING FEES - GENERAL | 821.000 | 852 | 500.00 |
| | | | | Total for fund 297 SAFETY PATH FUND | | | 500.00 |
| Fund: 590 SEWER FUND | | | | | | | |
| 03/12/2025 | 029 | 72845*# | JODY KINJORSKI | INSPECTOR FEES | 712.000 | 527 | 100.00 |
| 03/12/2025 | 029 | 72848*# | SHARPE ENGINEERING | ENGINEERING FEES - GENERAL | 821.000 | 527 | 485.00 |
| | | | | ENGINEERING FEES - GENERAL | 821.000 | 527 | 3,750.00 |
| | | | | ENG FEES-BRABB DEWEY SANITARY SEWER P | 821.012 | 527 | 2,155.00 |
| | | | | CHECK 029 72848 TOTAL FOR FUND 590: | | | 6,390.00 |
| 03/12/2025 | 029 | 72850*# | THE KELLY FIRM, PLC | BRABB-DEWEY SANITARY SEWER EXTENSION | 962.033 | 527 | 1,035.00 |
| 03/12/2025 | 029 | 72851 | THE KELLY FIRM, PLC | CAMP OAKLAND PUMP STATION PROJECT | 973.004 | 527 | 45.00 |
| | | | | Total for fund 590 SEWER FUND | | | 7,570.00 |
| Fund: 591 WATER FUND | | | | | | | |
| 03/12/2025 | 029 | 72845*# | JODY KINJORSKI | INSPECTOR FEES | 712.000 | 538 | 100.00 |
| 03/12/2025 | 029 | 72848*# | SHARPE ENGINEERING | WATER LINE EXTENSIONS | 972.000 | 538 | 11,602.50 |
| 03/12/2025 | 029 | 72850*# | THE KELLY FIRM, PLC | LEGAL FEES | 826.000 | 538 | 495.00 |

| Check Date | Bank | Check # | Payee | Description | Account | Dept | Amount |
|--|------|---------|-----------------------------|-----------------------|---------|------|-----------------|
| Fund: 591 WATER FUND | | | | | | | |
| Total for fund 591 WATER FUND | | | | | | | 12,197.50 |
| Fund: 701 TRUST & AGENCY FUND | | | | | | | |
| 03/12/2025 | 029 | 72843*# | CARLISLE/WORTMAN ASSOCIATES | BTA25-0002 | 283.001 | 000 | 110.00 |
| | | | | BTA24-0006 | 283.001 | 000 | 825.00 |
| | | | | BTA23-0007 | 283.001 | 000 | 110.00 |
| CHECK 029 72843 TOTAL FOR FUND 701: | | | | | | | <u>1,045.00</u> |
| 03/12/2025 | 029 | 72848*# | SHARPE ENGINEERING | Consultation (Escrow) | 283.001 | 000 | 200.00 |
| | | | | BTA24-0003 | 283.001 | 000 | 7,080.00 |
| CHECK 029 72848 TOTAL FOR FUND 701: | | | | | | | <u>7,280.00</u> |
| 03/12/2025 | 029 | 72849 | THE KELLY FIRM | BTA24-0006 | 283.001 | 000 | 1,005.00 |
| 03/12/2025 | 029 | 72850*# | THE KELLY FIRM, PLC | Consultation (Escrow) | 283.001 | 000 | 52.50 |
| | | | | Consultation (Escrow) | 283.001 | 000 | 472.50 |
| | | | | BTA23-0001 | 283.001 | 000 | 195.00 |
| | | | | Consultation (Escrow) | 283.001 | 000 | 460.00 |
| | | | | Consultation (Escrow) | 283.001 | 000 | 185.00 |
| | | | | Consultation (Escrow) | 283.001 | 000 | 210.00 |
| | | | | BTA23-0007 | 283.001 | 000 | 840.00 |
| | | | | BTA24-0004 | 283.001 | 000 | 15.00 |
| | | | | BTA24-0006 | 283.001 | 000 | 810.00 |
| CHECK 029 72850 TOTAL FOR FUND 701: | | | | | | | <u>3,240.00</u> |
| Total for fund 701 TRUST & AGENCY FUND | | | | | | | 12,570.00 |
| TOTAL - ALL FUNDS | | | | | | | 61,954.75 |

'*'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE FUND
 '#'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

Committee and Representative Reports

March 12, 2025 *(Reports not submitted **highlighted**)*

American Rescue Plan Act

Capital Improvement

Cemetery

Community Development Block Grant (CDBG)

Election Commission

Hardship Guidelines

Hazardous Waste (NO Haz)

Highway / Roads

North Oakland Transportation Authority (NOTA)

Ordinance Review (Planning Commission)

Oxford Area Cable Communications Commission (OACCC)

Oxford Addison Youth Assistance

Oxford Downtown Development Authority

Personnel Committee

Planned Unit Development (PUD)

Planning Commission

Polly Ann Trail

Safety Path

Salary Compensation

Southeast Michigan Council of Governments (SEMCOG)

Spongy Moth

Village of Oxford Planning Commission

Water & Sewer

Web Site

Zoning Board of Appeals (ZBA)

American Rescue Plan Act Committee Report

Date: March 12, 2025

To: Board of Trustees

From: American Rescue Plan Act (“ARPA”) Committee
(Catherine Colvin, Danielle Smith, Curtis Wright)

Re: ARPA Update

Dear Board Members:

- The ARPA Committee has NOT met since October 29, 2024.
- All \$2,031,964.94 ARPA Funds have been allocated or reallocated to comply with the Federal Regulations.
- The only item currently to address for 2025 is the Annual Report which is due April 30, 2025.

CEMETERY COMMITTEE REPORT

Date: March 12, 2025

To: Board of Trustees

From: Cemetery Committee
(Jack Curtis; Kelly Richter; Curtis Wright)

Re: Oxford Township Cemetery
North Oxford Cemetery
Mt. Pleasant Cemetery

Dear Board Members:

The Committee met February 27, 2025.

Sean Vidican from Aaron's Lawn in Order was also in attendance to discuss the 2025 maintenance schedule.

The Committee discussed projects for 2025 on the attached list.

| CEMETERY - MAINTENANCE and PROJECTS SCHEDULE for 2025 | | | | | |
|--|--|-------------------|------------------------|-----------------------|--|
| No. | Item | Start Date | Completion Date | Delegee | Comment(s) |
| 1 | Wreaths, grave blankets, winter items clean up schedule | April 1 | | Aaron's Lawn in Order | |
| 2 | Dumpster rental for winter clean up | March 28 | | Aaron's Lawn in Order | Sean Vidican orders dumpster and invoice sent to Oxford Township. A 30 yard dumpster was rented from 1-800-Rolloff in 2024 for \$545.00. |
| 3 | Notice for Winter Cleanup | March 20 | | Kelly Richter | Notice to be submitted by March 13th to be published March 19th and March 26th in Oxford Leader. |
| 4 | Placing gravel back in drives due to snow plowing | | | Aaron's Lawn in Order | Minimal due to the paving of Oxford Cemetery north side. |
| 5 | Oxford Cemetery, north side, Sidewalk clearing of snow | Continuous | Varies | Aaron's Lawn in Order | Sean Vidican will clean sidewalk as necessary and submit an invoice. |
| 6 | Graves that have ground settled over the winter months. | | | Aaron's Lawn in Order | Sean Vidican will clean sidewalk as necessary and submit an invoice. |
| 7 | Burial Spaces to be topsoiled and seeded in Spring 2025 | Continuous | Varies | Aaron's Lawn in Order | Kelly Richter provides Sean Vidican notice of burials. Graves are topsoiled and seeded based on weather conditions. |
| 8 | Garbage can contents clean up | Continuous | Varies | Aaron's Lawn in Order | Sean Vidican requested another garbage can for North Oxford Cemetery |
| 9 | Updated Certificate of Insurance from Aaron's Lawn in Order | April 15, 2025 | April 15, 2026 | Aaron's Lawn in Order | To be provided. |
| 10 | Flower Bed weeding | | | Aaron's Lawn in Order | Required once per year per contract. |
| 11 | Make sure Headstones and Markers are free of Grass Clippings | Continuous | Varies | Aaron's Lawn in Order | |
| 12 | Communication for scheduled Burials | Continuous | Varies | Kelly Richter | Kelly Richter to provide Sean Vidican notice of burials to assist in Sean's mowing schedule in the event there are funeral services. |
| 13 | Lenhoff - Houck Cemetery Lot/Grave Maintenance and Flower Planting | Before May 26th | Before May 26th | | Maintenance and Flower Planting required based on Hattie Lennhoff Last will and Testament and Codicil to Last Will and testament. |
| 14 | Water system start up date | | | | Mike Ksiazek from Falcon Lawn Sprinklers gets the water systems turned on in all three (3) cemeteries |
| 15 | Wall restoration at Oxford Cemetery | | | | 13 walls were restored in 2024 by Strictly Stone and Sons. |
| 16 | Headstones to be reestablished | | | | The Committee will be visiting all cemeteries to inventory headstones. |
| 17 | Ingress and egress for funeral processions, primarily Mt. Pleasant Cemetery | | | | A site visit at Mt. Pleasant Cemetery with Jim Sharpe will be scheduled. |
| 18 | Boundary Survey for Second and Third Addition of Oxford Cemetery | | | | Sharpe Engineering will be directed to provide a survey. |
| 19 | Fencing of Second and Third Addition of Oxford Cemetery | | | | To be considered after the survey is completed. |
| 20 | Fence conditions at all cemeteries to determine any necessary repairs | | | | The Committee will be visiting all cemeteries to inventory headstones. |
| 21 | Gravel placement in horseshoe drive at Mt. Pleasant Cemetery | | | | A site visit at Mt. Pleasant Cemetery with Jim Sharpe will be scheduled. |
| 22 | Condition of trees planted in Oxford Cemetery (North Side) | | | | The Committee will be visiting all cemeteries to analyze tree condition. |
| 23 | Trees to be trimmed and/or removed in all three (3) Cemeteries | | | | The Committee will be visiting all cemeteries to inventory headstones. |
| 24 | Tree root removal in Bituminous Drive in the Oxford Cemetery 3rd Addition | | | | To be considered at a future date. |
| 25 | Identifying and confirming salable Burial Spaces available in all cemeteries | | | | Possible project for high school students. |
| 26 | Pontem Cemetery Management Program | April 1, 2025 | April 1, 2026 | Kelly Richter | Annual support and maintenance subscription. 2024-2025 cost was \$1,135.00. |
| 27 | Historical Society Cemetery Tour | TBD | | | Jim Lehtola will be contacted. |
| 28 | Mausoleum Repairs and Maintenance | | | | The Committee will be visiting all cemeteries to analyze the mausoleum condition. |
| | a. 1887 Mausoleum | | | | |
| | b. 1894 Mausoleum | | | | |
| | c. 1924 Mausoleum | | | | |
| | d. Hovey Mausoleum | | | | |

CHARTER TOWNSHIP OF OXFORD

Date: March 12, 2025

To: Board of Trustees

From: Capital Improvement Committee

(Jack Curtis, Catherine Colvin, David Wagner, Danielle Smith)

Re. Capital Improvement Committee Update

Dear Board Members:

The committee will meet on March 13 to review proposed and active projects. An updated project tracker will be included with next month's committee report.

The committee welcomes any feedback and/or recommendations. Thank you.

ELECTION COMMISSION

Date: March 12, 2025

To: Board of Trustees

From: Election Commission
(Rod Charles; Jeffrey Omtvedt; Curtis Wright)

Re: Election Commission Report

Dear Board Members:

No elections are currently proposed for 2025.

The Election Commission will not be meeting until an election has been requested or statutorily scheduled.

CHARTER TOWNSHIP OF OXFORD HARDSHIP GUIDELINES COMMITTEE
MEETING THURSDAY, FEBRUARY 20, 2025

A Meeting of the Charter Township of Oxford Hardship Guidelines Committee was held on Thursday, February 20, 2025, at the Oxford Township Conference Room, 300 Dunlap Road, Oxford, Michigan 48371.

The meeting was called to order at 10:03 a.m.

NOTING OF ROLL

Members Present: Wagner, Charles, Ferrari

Also Present: Oakland County Equalization Assessors Leigh Ann Bouchey and Andrew Kramer

This meeting was called to discuss whether any changes were warranted to be made to our annual hardship guidelines as it relates to granting potential tax relief to qualified homeowners at either the July or December Board of Review.

We discussed what is currently in place for our 2024 guidelines and agreed to adopt same with the following changes for 2025:

For 2025 Income Guidelines:

We recommend utilizing the Federal Poverty Guidelines. We further agreed that the applicant's total household income cannot exceed one-and-a-quarter (1 ¼) times the prior calendar year poverty income figure, as reported by household size, in the "Federal Poverty Guidelines" updated annually in the Federal Register of the U.S. Department of Health and Human Services.

For Additional Document Requirements:

We recommend requiring the applicants' bank statements for the current month and for the month of December of the immediately preceding year.

For Income Verification:

We recommend that the Federal form T-4506 be filed with each application.

For Reductions:

For those that qualify, only a 50% reduction will be granted.

These changes will remain in effect unless further amended by the Oxford Township Board of Trustees

ADJOURNMENT

The meeting was adjourned at 11:12 a.m.

CHARTER TOWNSHIP OF OXFORD

Date: March 12, 2025

To: Board of Trustees

From: Highway/Roads Committee
(Jack Curtis, Curtis Wright, Joe Ferrari)

Re. Highway/Roads Committee Update

Dear Board Members:

The committee met on February 27 and discussed the following:

- Supervisor Curtis will serve as chair and Clerk Wright will serve as secretary of the committee.
- The committee recommends “banking” the 2025 Tri-Party funds received from the Road Commission of Oakland County (RCOC). These funds would go toward the 2027 Dunlap Rd. paving project. Please review the board packet for more information.

The committee welcomes any feedback and/or recommendations. Thank you.

CHARTER TOWNSHIP OF OXFORD

Date: March 12, 2025

To: Board of Trustees

From: North Oakland Transportation Authority (NOTA)
(Jack Curtis, Joe Ferrari)

Re. NOTA Update

Dear Board Members:

The NOTA board met on February 20. Minutes are not available at this time. The next meeting is March 20 at 4:30 p.m. Meetings are held at the Oxford Township Meeting Room, 300 Dunlap Rd. Thank you.

North Oakland Transportation Authority (NOTA)
Meeting Minutes
Board Meeting
Thursday, January 16, 2025
Oxford Township Offices
300 Dunlap, Oxford MI

The meeting was called to order by Chair Mike McDonald at 4:30 p.m.

Roll Call

Present

Mike McDonald, Chair
Mike Flood
Ed Brakefield
Jack Curtis
Carl Cyrowski
Bill Moore
Tanya Waple
Amber Granger

Representing

Addison Township
Orion Township
Addison Township
Oxford Township
Village of Lake Orion
Village of Leonard
TTI
Easterseals MORC

Absent - Excused

Jennifer Swack
Chris Barnett, Vice Chair
Carrie Hilgendorf

Village of Leonard
Orion Township
Orion Township

Others Present:

Joe Madore
Lynn Gromaski
Mike Joslyn

Village of Oxford Manager, nonvoting
NOTA Executive Director
NOTA Operations Manager

Respects to the Flag

The Pledge of Allegiance was given.

Agenda Approval

Moved by Ed Brakefield, seconded by Mike Flood, to approve the agenda as presented. By voice vote the motion passed unanimously.

Minutes Approval

Moved by Ed Brakefield, seconded by Bill Moore to approve the minutes of the December 19, 2024 meeting as presented. By roll call vote the motion passed unanimously.

Director's Report

Director Lynn Gromaski shared an overview of the progress made in 2024 including a 100% increase in rides, increase in staff from 57 to 123 employees, satellite facility, increase of 28 new vehicles, 5 admin positions, facility renovation for dispatch and planned renovation for entire facility in 2025, transition to new dispatch software, call center upgrade, successful pilot with Independence Township, LBO Funding and increase in Oakland County Transit Millage.

Moved by Mike Flood, seconded by Ed Brakefield, to receive and file the Director's report. By voice vote the motion passed unanimously.

Public Comments - none

Monthly Financial Packet

The monthly financial statements were presented. Moved by Mike Flood, seconded by Ed

Brakefield, to receive and file monthly financial packet.
By voice vote the motion passed unanimously.

Approval of the Bills

December 2024 bills were presented for payment totaling \$242,080.23.

Moved by Mike Flood, seconded by Carl Cyrowski to approve the bills as presented. By roll call vote motion passed unanimously.

Old Business

Discussion of Medical Evaluation Policy – Mike Joslyn gave an update on the medical evaluation policy. He updated the Fitness For Duty Exam which includes but is not limited to a vision with Peripheral test, hearing test, balance test, 50 lb lift test, bend test and range of motion test. This test will be used for pre-employment, bi-annually for drivers and as needed if a problem or concern arises. Also a new Driver Job Description form has been created to reflect the physical demands of the job, fitness for duty exam as well as the requirement to report any changes in health which may impact their ability to safely and effectively perform the required duties. Another addition is that if a driver has any moving traffic violation it must be reported no more than 2 weeks after receipt of the violation.

Moved by Ed Brakefield, seconded by Carl Cyrowski, to adopt the Medical Evaluation Policy and Driver Job Description as presented. By voice vote, motion passed unanimously.

New Business

NOTA Check Signer – Discussion if NOTA needed any new check signers other than Lynn Gromaski, Jack Curtis and Mike McDonald. The decision was to keep the check signers as status quo.

Intergovernmental Agreement – Lynn Gromaski discussed that the Intergovernmental Agreement is set to expire December 25 however there are so many changes that are necessary due to the Oakland County Transit Millage. Lynn Gromaski will start to input changes over the next few months and then give a draft to the board for them to bring to each community.

Public Comments - none

Monthly Rider and Mileage Reports

Moved by Ed Brakefield, seconded by Carl Cyrowski, to receive and file the reports. By voice vote the motion passed unanimously.

Board Member Comments

Tonya Waple, Ed Brakefield and Mike McDonald – Great job on the Directors Report.

Carl Cyrowski asked with the winter weather were there any recent accidents? Mike said there was a minor one which wasn't NOTA driver's fault.

Jack Curtis asked if his deputy supervisor could be a NOTA Board member. In the current agreement board members must be on the Township boards or one of the 3 other members.

Joe Madore had concern over having a non-elected board member representing the Township. He also mentioned what an amazing feat with what NOTA did this last year.

Adjournment

Moved by Mike Flood, seconded by Ed Brakefield, to adjourn the meeting at 5:10 p.m. By voice the motion passed unanimously.

*The next regular meeting is scheduled for Thursday, February 20th at 4:30 p.m. at Oxford Township
Offices, 300 Dunlap, Oxford
Minutes initially drafted by Lynn Gromaski*

To: Oxford Township Board of Trustees

From: Catherine Colvin

Date: March 6, 2025

Re: Oxford Cable TV Commission

The Oxford TV Cable Commission has not met since December 3, 2024. There is a meeting scheduled for March 24, 2025. The interlocal agreement between OCTV and the communities that it supports will expire on March 31, 2025. A draft agreement is under consideration by the OCTV Commission and will be presented to the communities once approved.



OXFORD – ADDISON YOUTH ASSISTANCE
1420 Lakeville Road Oxford, MI 48371
TEL: (248) 460-7011 - E-MAIL: oxfordaddisonya@gmail.com

**Oxford – Addison Youth Assistance
Board Meeting Agenda**

Date: February 25, 2025

Time: 4:00 P.M.

Location: Village of Oxford

Board Members: Todd Barlass, Pauline Bennett, Rod Charles, Patti Durr, Robyn Holzbaugh, Linda Moran, Mike Solwold, Judy Verse, Brendan Westenbarger, Linda Finch, and Stacy Williams.

1. Approval of Agenda
2. Minutes from January 28, 2024
3. Public Comment
4. Sponsorship
 - A. No Report
5. Treasurer's Reports
 - A. Bills – January 2025
6. Caseworker Report
 - A. Caseload/Trends
 - B. OCYA Update
 - C. Office Update
7. Events/Project Reports
 - A. Ballroom Dance Recap Expense/Revenue Update
 - B. Annual Meeting – Friday, February 28th
8. Discussion/Action Items
 - A. Youth Recognition – Food Budget
 - B. Board Meeting – March 18th
9. Active Core Programs
 - A. Annual Meeting (Chair: Linda Finch)
 - B. Camp and Skill Building (Chair: Pauline Bennett)
 - C. Family Education (Chair: Brendan Westenbarger)
 - D. Fundraising (Co-Chairs: Linda Moran and Patti Durr)
 - E. Membership Committee (Chair: Rod Charles)
 - F. Mentors Plus (Chair: Vacant)
 - G. Shop with a Hero (Chair: Mike Solwold)
 - H. Wildcat Cub Club (Chair: (Ben Kargetta)
 - I. Youth Recognition (Chair: Judy Verse)
10. Board Member Comments
11. Adjournment

Next Board of Directors Meeting — March 25, 2025, at 4:00 p.m. at Oxford Village Offices, Community Room

“Oxford – Addison’s Prevention Leader - Prevention Through Community Involvement”

Oxford-Addison Youth Assistance Board
Meeting Minutes
Tuesday, January 28, 2025

Call to Order @ 4:00 pm

Roll Call: Todd Barlass, Pauline Bennett, Rod Charles, Patti Durr, Robyn Holzbaugh, Linda Moran, Mike Solwold, Judy Verse, Linda Finch and Stacy Williams were present. Absent was: Brendan Westenbarger. Guest: Jenny Debnjak

- 1.) Agenda approved with all ayes.
- 2.) Approve November minutes (no Dec mtg): Pauline Bennett moved to approve, Linda Moran 2nd: All Aye approval.
- 3.) Public comment: None.
- 4.) Sponsorship:
 - a. Request for Addison Township & * Village of Leonard sponsorships by end of January.
- 5.) Treasurers Report:
 - a. Bills: Linda Moran moved to approve Pauline Bennett 2nd: Roll call: Todd Barlass, Pauline Bennett, Rod Charles, Patti Durr, Robyn Holzbaugh, Linda Moran, Mike Solwold, Judy Verse, Linda Finch all yes: approved.
- 6.) Casework Report:
 - a. Caseload/Trends: 18 referrals for Nov, 5 for Dec/ Early intervention (Prevention), Truancy & School Incurability were main reasons for end of year referrals.
 - b. OCYA : Annual Meeting was Dec 6th @ Village Club
 - c. Office Updates: Stacy attended an elementary principal meeting and updated on casework services and programs families within their school can use. Plans are in the works to do a secondary principal meeting soon.
- 7.) Events/Projects:
 - a. Annual meeting Luncheon: Artwork approved for Lego stress form/still need basket donations
 - b. Ballroom fundraiser: Issues launching/selling enough tickets: If able to break even or a small profit, move forward. If unable to at least break even, then cancel/postpone. Roby Holzbaugh moved to approve, Mike Solwold 2nd: Roll call: Todd Barlass, Pauline Bennett, Rod Charles, Patti Durr, Robyn Holzbaugh, Linda Moran, Mike Solwold, Judy Verse, Linda Finch all yes: approved.
- 8.) Discussion/Action Items:
- 9.) Active Core Programs
 - a.) Annual Meeting.
 - b.) Camps & Skill Building report in packet
 - c.) Family Ed:
 1. Week of 9th, M&M @ Leonard and Clear Lake.
 - d.) Fund raising: March Madness bottle drive
 - e.) Membership.
 - f.) Mentors: still on hold.
 - g.) Shop with a Hero
 - h.) Wildcat Cub Club
 - i.) Youth Rec: Venu etc.?
- 10.) Board Comments
- 11.) Adjournment: Rod Charles moved to adjourn, Linda Finch 2nd: All aye: adjourned at 5:00pm

Revenue & Expenses for January 2025

OAYA - 2025 Checks - Paid Out

| Date | *Cashed Check# | Written to | Amount | Notes | Category |
|---------|-------------------|-------------------|-------------|---|----------------|
| 1/1/25 | 4130 | Stacy Williams | \$ 304.90 | Homestead Website 1 year service | Website |
| 1/1/25 | 4131 | Boulder Point | \$ 1,000.00 | Deposit for Fundraisier Dance | Fundraising |
| 1/3/25 | 4132 | Stacy Williams | \$ 379.95 | Yoga mats for Mindfulness & Movement | Family Ed |
| 1/6/25 | 4133 | State of Michigan | \$ 15.00 | 50/50 raffle for Dance fundraiser | Fundraising |
| 1/6/25 | 4134 | State of Michigan | \$ 50.00 | Gift basket raffle | Annual Meeting |
| 1/7/25 | 4135 | Village of Oxford | \$ 648.44 | Payroll #925 (\$594, \$45.44, \$9) | Payroll |
| 1/7/25 | 4136 | Village of Oxford | \$ 716.26 | Payroll #929 (\$657, \$50.26, \$9) | Payroll |
| 1/14/25 | 4137 | Stacy Williams | \$ 79.66 | Meijer reimbursement containers for yoga mats | Family Ed |
| 1/15/25 | 4138 | Village of Oxford | \$ 648.44 | Payroll #933 | Payroll |
| 1/29/25 | 4139 | Village of Oxford | \$ 745.33 | Payroll#935 | Payroll |

Total \$4,587.98

OAYA - 2025 RECEIVABLES

Deposit

| Date | Check# | Written from | Amount | Notes | Check Date |
|---------|---------|-------------------------------|--------|------------------------------------|------------|
| 1/8/25 | cash | Linda Moran collected | 50.00 | Cash from annomous donor for Dance | 1/7/2025 |
| 1/9/25 | Pay Pal | Paul Odziana donation in 2024 | 200.00 | Pay Pal Web Donation | 12/21/2024 |
| 1/13/25 | Zeffy | Zeffy trace# 091000010911593 | 460.00 | Ballroom Dance tickets | 1/13/2025 |
| 1/21/25 | Zeffy | Zeffy trace# 091000019475089 | 300.00 | Ballroom Dance tickets | 1/21/2025 |
| 1/27/25 | Zeffy | Zeffy trace# 091000011872610 | 350.00 | Ballroom Dance tickets | 1/27/2025 |
| 2/2/25 | | Bank Interest | 4.84 | Bank interest | 2/2/2025 |
| | | | | | |

Total \$1,364.84

OAYA Budget Performance Report - January 2025

| | <u>January</u> | <u>YTD Total</u> | <u>Budget Amt</u> <u>App'd</u> <u>(9/24/24)</u> | <u>Percent</u> |
|-----------------------------|-------------------|-------------------|---|----------------|
| INCOME | | | | |
| Program Sponsors | | | | |
| Village of Oxford | | 0.00 | 2,500.00 | 0.00% |
| Oxford Township | | 0.00 | 12,900.00 | 0.00% |
| Oxford Schools | | 0.00 | 2,500.00 | 0.00% |
| Addison Township | | 0.00 | 5,400.00 | 0.00% |
| Village of Leonard | 4.84 | 4.84 | 500.00 | 0.97% |
| Sub Total | 4.84 | 4.84 | 23,800.00 | 0.02% |
| Additional Income | | | | |
| Sponsor a Child | | 0.00 | 1,000.00 | 0.00% |
| Camp | | 0.00 | 0.00 | 0.00% |
| Family Ed | | 0.00 | 0.00 | 0.00% |
| Shop With A Hero | | 0.00 | 0.00 | 0.00% |
| Skill Building | | 0.00 | 0.00 | 0.00% |
| Youth Rec | | 0.00 | 0.00 | 0.00% |
| Camp Registration Fee | | 0.00 | 0.00 | |
| Family Ed Fees | | 0.00 | 0.00 | |
| Fund Raisers | | 0.00 | 10,000.00 | 0.00% |
| Reserve Fund | | 0.00 | 17,144.00 | 0.00% |
| Donations - misc | 1,360.00 | 1,360.00 | 1,500.00 | 90.67% |
| Refunds & Reimbursements | | 0.00 | 50.00 | 0.00% |
| Interest Income | | 0.00 | 70.00 | 0.00% |
| Sub Total | 1,360.00 | 1,360.00 | 29,764.00 | 4.57% |
| TOTAL INCOME | 1,364.84 | 1,364.84 | 63,664.00 | 2.55% |
| EXPENDITURES | | | | |
| Operating Expenses | | | | |
| Office Assistant Salaries | 2,529.00 | 2,529.00 | 20,000.00 | 12.65% |
| Fica | 193.47 | 193.47 | 1,530.00 | 12.65% |
| Payroll Processing fee | 36.00 | 36.00 | 234.00 | 15.38% |
| Mileage | | 0.00 | 100.00 | 0.00% |
| Postage/Post Office Box | | 0.00 | 850.00 | 0.00% |
| Office Equipment | | 0.00 | 300.00 | 0.00% |
| Supplies | | 0.00 | 1,000.00 | 0.00% |
| Petty Cash | | 0.00 | 100.00 | 0.00% |
| OCYACC Insurance/ Hartford | | 0.00 | 1,500.00 | 0.00% |
| Public Relations | | 0.00 | 3,000.00 | 0.00% |
| Website | 304.90 | 304.90 | 300.00 | 101.63% |
| Membership | | | 300.00 | 0.00% |
| Miscellaneous | | 0.00 | 100.00 | 0.00% |
| Sub Total | 3,063.37 | 3,063.37 | 29,314.00 | 10.45% |
| Program Expenses | | | | |
| Annual Meeting/Report | 50.00 | 50.00 | 1,500.00 | 3.33% |
| Mentors PLUS | | 0.00 | 0.00 | |
| Family Education | 459.61 | 459.61 | 7,000.00 | 6.57% |
| Camp | | 0.00 | 2,500.00 | 0.00% |
| Skill Building | | 0.00 | 2,500.00 | 0.00% |
| WildCat Cub Club | | 0.00 | 500.00 | 0.00% |
| Youth Recognition | | 0.00 | 4,500.00 | 0.00% |
| Special Projects | | | | |
| Casework Support | | 0.00 | 500.00 | 0.00% |
| Emergency Funds | | 0.00 | 1,000.00 | 0.00% |
| Other | | 0.00 | 1,000.00 | 0.00% |
| Fund Raisers | 1,015.00 | 1,015.00 | 750.00 | 135.33% |
| Executive | | 0.00 | 300.00 | 0.00% |
| Holiday Support | | | | |
| Caseload Family Assistance | | 0.00 | 500.00 | 0.00% |
| Giving Trees | | 0.00 | 1,000.00 | 0.00% |
| Shop with Hero | | 0.00 | 500.00 | 0.00% |
| Sub Total | 1,524.61 | 1,524.61 | 24,050.00 | 6.34% |
| TOTAL EXPENDITURES | 4,587.98 | 4,587.98 | 63,364.00 | 8.60% |
| INCOME LESS EXPENSES | (3,223.14) | (3,223.14) | 200.00 | |



OXFORD – ADDISON YOUTH ASSISTANCE
1420 Lakeville Road Oxford, MI 48371
TEL: (248) 460-7011 E-MAIL: oxfordaddisonya@gmail.com

Oxford - Addison Youth Assistance
Caseworker Report
February 25, 2025

1) Stat Report

- a) See attached YTD Stat Reports for January
 - i) Total referrals were 8
 - ii) Trends:
 - Early Intervention and Intervention, Education Neglect, and assault and battery.
- b) Received a 3 referral from Leonard Elementary – 1st time since 2022 when I arrived.

2) Oakland County Youth Assistance

- a) OCYACC is putting together a Networking Meeting in March regarding ARPA mini grants. This meeting will help other areas to gather ideas on what they could use the mini grants for within their local offices.
- b) Circuit Court is rebranding and since they are separate from Oakland County they will be referred to the Sixth Judicial Circuit Court – Family Division.

3) Office Update

- a) On Friday February 21st Michigan implemented the Earned Sick Time Act (ESTA) which will replace the Paid Medical Leave Act (PMLA). This means OAYA will be providing 1 hour of paid ESTA time for every 30 hours worked for Amanda. Not exceeding 40 hours within a calendar year.
- b) Would like request \$60.00 (\$30.00 per ticket) for Stacy and Amanda to attend the Chamber of Commerce Community Breakfast on Wednesday, March 19th.

STATISTICAL REPORT

| | | | | |
|------|--|---------|-----------------|--------|
| 2025 | | January | SCHOOL DISTRICT | OXFORD |
|------|--|---------|-----------------|--------|

TRANSFER IN

| | |
|-------|--|
| NAME: | |
| NAME: | |
| NAME: | |

TRANSFER OUT

| | |
|-------|--|
| NAME: | |
| NAME: | |
| NAME: | |

II. INFORMATION AND REFERRAL

| TOTAL | CWR* | GWR** |
|-------|------|-------|
| 6 | 6 | |

| III. AGE | TOTAL | MALE | FEMALE |
|---------------------|----------|----------|----------|
| 0-5 YEARS | 0 | | |
| 6 YEARS | 1 | 1 | |
| 7 YEARS | 1 | 1 | |
| 8 YEARS | 0 | | |
| 9 YEARS | 1 | 1 | |
| 10 YEARS | 1 | | 1 |
| 11 YEARS | 0 | | |
| 12 YEARS | 2 | 1 | 1 |
| 13 YEARS | 0 | | |
| 14 YEARS | 0 | | |
| 15 YEARS | 2 | | 2 |
| 16 YEARS | 0 | | |
| 17 YEARS | 0 | | |
| TOTALS | 8 | 4 | 4 |
| YEAR TO DATE | 8 | 4 | 4 |

| | TOTAL | MALE | FEMALE |
|---------------------|----------|----------|----------|
| CLOSURES | 4 | 3 | 1 |
| YEAR TO DATE | 4 | 3 | 1 |

IV. REFERRAL

| REASON | TOTAL | MALE | FEMALE |
|--|----------|----------|----------|
| Assault & Battery | 1 | | 1 |
| Breaking & Entering | 0 | | |
| Destruction of Property | 0 | | |
| Ed. Neglect | 1 | | 1 |
| Home Incurrigblilty | 0 | | |
| Home Truancy | 0 | | |
| Marijuana Possession | 0 | | |
| School Threat | 0 | | |
| Early Intervention | 3 | 2 | 1 |
| Intervention | 3 | 2 | 1 |
| Retail Fraud | 0 | | |
| School Incurrigblilty | 0 | | |
| School Incorr. - Alcohol | 0 | | |
| School Incorr - Vape | 0 | | |
| School Truancy | 0 | | |
| Sexting/Obscene Matl / Computer Misuse | 0 | | |
| Sex - Related | 0 | | |
| Threatening Behavior | 0 | | |
| Weapons Possession | 0 | | |
| Other (*See Below) | 0 | | |
| TOTALS | 8 | 4 | 4 |
| YEAR TO DATE | 8 | 4 | 4 |

| V. REFERRAL SOURCE | CURRENT MONTH | | |
|------------------------|---------------|----------|----------|
| | TOTAL | MALE | FEMALE |
| Police | 0 | | |
| School | 6 | 4 | 2 |
| Parent | 1 | | 1 |
| *Other (MDHHS ,court) | 1 | | 1 |
| TOTALS | 8 | 4 | 4 |
| YEAR TO DATE | 8 | 4 | 4 |

| VI. COMMUNITY SERVICE DATA | CURRENT MONTH | | |
|----------------------------|---------------|------|--------|
| | TOTAL | MALE | FEMALE |
| A. Clients Screened | | | |
| B. Placements Completed | | | |
| C. Total Hours Completed | | | |

* Other =

Breakdown of Silent Auction Items

| | Auction Items | Value | Paid | \$ Received |
|----|---|----------|--------|-------------|
| 1 | Wines for Humanity Donated By Donna DiPonio | \$300.00 | \$0.00 | \$155.00 |
| 2 | Wines for Humanity Donated By Donna DiPonio | \$300.00 | \$0.00 | \$150.00 |
| 3 | Lions Liquor Basket Donated by Patty Durr | \$130.00 | \$0.00 | \$15.00 |
| 4 | Dance Lessons (4) Donated by Curtis from Elegance in Motion (Candy donated by Linda Moran) | \$200.00 | \$0.00 | \$125.00 |
| 5 | Lotto Ticket Basket Donations by Ben Kargetta, Pauline Bennett, Judy Verse, Stacy Williams, Amanda Cavanaugh | \$118.50 | \$0.00 | \$60.00 |
| 6 | Lions Parking Sign Donated by Joe Madore | \$40.00 | \$0.00 | \$15.00 |
| 7 | Red Tailed Hawk photo Donated by: | \$250.00 | \$0.00 | \$20.00 |
| 8 | Light at Bald Mountain photo Donated by: | \$350.00 | \$0.00 | \$35.00 |
| 9 | Prosecco Sparkling Wine Donated by Linda Moran (basket from Amanda Cavanaugh) | \$20.00 | \$0.00 | \$40.00 |
| 10 | Rose Sparling Wine Donated by Linda Moran (basket from Amanda Cavanaugh) | \$20.00 | \$0.00 | \$55.00 |

| | | | |
|---------------|-------------------|---------------|-----------------|
| Totals | \$1,728.50 | \$0.00 | \$670.00 |
|---------------|-------------------|---------------|-----------------|

| In-Kind Donation Items | Value |
|---|----------|
| Table decorations Patty Durr | \$75.00 |
| Dollar Tree Décor items Linda Moran | \$13.75 |
| Wooden Arch and balloons Brendan and his Father-in-law | \$200.00 |
| Stacy background streamers | \$15.00 |
| Amanda Valentine Door décor | \$6.25 |

| | |
|--------------|-----------------|
| Total | \$310.00 |
|--------------|-----------------|

| | |
|--|-------------------|
| Total Value of In-Kind Donations: | \$2,038.50 |
|--|-------------------|

2025 Ballroom Dance Fundraiser Revenue and Expenses

February 15th, 2025

| Expenses | Amount |
|--------------------|-------------------|
| License Fee | \$15.00 |
| Boulder Point | \$1,518.40 |
| Elegance in Motion | \$350.00 |
| Total Costs | \$1,883.40 |

| Revenue | Amount |
|-----------------------|-------------------|
| Zeffy Ticket Sales | \$2,850.00 |
| Cash Ticket Payment | \$150.00 |
| Check Payments: | \$225.00 |
| Mike: \$150 | |
| Pauline: \$75 | |
| Cash: | \$475.00 |
| 50/50: \$80 | |
| Silent Auction: \$340 | |
| Donations: \$55 | |
| Zeffy Extra Donations | \$60.00 |
| Pay Pal: | \$330.00 |
| BW \$170 | |
| HC \$150 | |
| 50/50 \$10 | |
| Total Revenue | \$4,090.00 |

| | |
|----------------------|-------------------|
| Revenue | \$4,090.00 |
| Expenses | \$1,883.40 |
| Total Profit: | \$2,206.60 |

OAYA Annual Luncheon Donations - 2025

Last Updated: 2/20/2025

| Business | Contact Name | Contact Email | Donation Item | Donation Amt |
|---|-------------------------|---------------------------------|---|--------------|
| Harvest Time Farm Market & Pet Supplies | Joe Sosville | harvesttime.1125@att.net | Gift Certificate | \$25.00 |
| Collier Lanes | Matt Heichel | mheichel@yahoo.com | Gift Certificate | \$50.00 |
| WIN Home Inspection | Mike Finch | mfinch@wini.com | Engraved glasses | \$37.50 |
| Divot Den Social | Nick Baldwin | nick@divotdensocial.com | Two Gift Certificates, two ball caps, two sleeves of golf balls, two golf towels, two divot repair tools. | \$258.00 |
| Home Grown Brewery | Jeff Powers | Info@homegrownbrewco.com | Brew Pub Membership - Growler, t-shirt, Beer Glass. | \$70.00 |
| Twinkle Toes | Charisse Boyer | Boyer2003@gmail.com | Gift Certificate | \$25.00 |
| Goodwill | Shelly Marino | smarino@goodwillmidmichigan.org | St. Patrick's Day Gift Basket | \$40.99 |
| Urban Air | Amie von Knorring | Amie@UrbanAirOxford.com | Gift certificates, 4 Platinum Passes, 4 pr grip socks, 4-\$10.00 Arcade Cards | \$200.00 |
| Grav Cap Brewing | Thomas & Theresa Wrobel | gravelcapital@gmail.com | \$25.00 gift card & Growler | \$30.00 |
| GQT Oxford 7 | Erick Drozd | edrozd@gqtmovies.com | Gift Certificates, 4 movie passes, 4 small drinks, 4 small popcorn | \$84.76 |
| Caveman & Pip | Nicolette Shagena | cavemanandpip@gmail.com | Home decor paper flower arrangement & vase and wall hanging. | \$75.00 |
| | | | | \$896.25 |



Skill Building Committee Update

Month: January 2025

SKILL BUILDING

Total number of Skill Building requests for the month: 1

Total number of Skill Building applications approved for the month: 0

Total amount of Skill Building funds paid by OAYA for the month: \$480.00

Skill Building activity and agency name: Drivers Training – Seg. 1

Additional comments:

CAMP

Total number of camp requests for the month:

Total number of camp applications approved for the month:

Total amount of camp funds paid by OAYA for the month:

Additional Comments:

Other committee information:

Received Overnight Camp Paperwork for local agencies.
Stacy will begin the process to looking at caseload and
obtaining referrals from school staff.

Authorized Signature, Chairperson Skill building Committee



OXFORD – ADDISON YOUTH ASSISTANCE

1420 Lakeville Road Oxford, MI 48371

TEL: (248) 460-7011 E-MAIL: oxfordaddisonya@gmail.com

Family and Youth Education

February 25, 2025

Program Update:

- Mindfulness and Movement wrapping up at Leonard and Clear Lake within the next few weeks. Lakeville will end on March 18th.
- Conversations with OCS to have Love and Logic with childcare for elementary age students in partnership with OCS and elementary schools.
- Shoplifting Prevention tent. Schedule for May 6th for the 7th grade student at OMS.
- OMS would like to partner with Officer Westenbarger to do a school wide assembly on Cyber Safety. Begin to discuss timeframes.

Discussion and Approval Request:

- Would like to request \$800.00 for Girls Stand Strong. \$700.00 would cover the cost of facilitator fee and \$100.00 for snacks and end of the group pizza party.
- Would like to request up to \$800.00 to contract a local therapist to work with a teacher to learn mindfulness and breathing techniques into the classroom to manage difficult behaviors that affect the environment. There would be a series of meetings with teachers teach, role play and then implement within the classroom. Would also provide newsletter to parents to provide opportunities to utilize in the home as well.

Next Committee Meeting: TBA

“Oxford – Addison’s Prevention Leader - Prevention Through Community Involvement”



OXFORD – ADDISON YOUTH ASSISTANCE
1420 Lakeville Road Oxford, MI 48371
TEL: (248) 460-7011 E-MAIL: oxfordaddisonya@gmail.com

Wildcat Cub Club February 25, 2025

- Cub Club used ARPA grant money to purchase new games and supplies.
- Clear Lake mentors orientation and monthly support meeting was held on January 30th. These meetings are scheduled back-to-back starting with orientation for new volunteers to begin at 10:30 followed by an 11:45 support meeting for existing mentors. Pizza and salad were provided to all volunteers as we are encouraged our new volunteers to stay for the support meeting. This will give everyone a chance to meet and collaborate. Cupcakes were also brought in to celebrate birthdays for Amanda, Stacy, Elaine, and Kay.
- Mentor supplies and information sheets handed out to new members.
- All mentors given invite to Annual Meeting
- Wildcat Cub Club shirts distributed to volunteers and participating Clear Lake staff.
- Currently serving 8 mentees at OES and 6 mentees at Clear Lake.

Next Steps:

- 6 of the 7 volunteers have been matched and have begun meeting with their students. Due to snow days some have been delayed. OAYA office is still waiting for 1 student to be identified.
- Next Monthly Support Group will be held on Friday, March 14, 2025 at 10:30 a.m. at Oxford Parks and Recreation Senior Center.
- Follow up with new volunteers as they begin meeting their students
- Begin planning for the recruitment process for Lakeville, Daniel Axford, and Leonard this summer.

Next Committee Meeting: TBA

“Oxford – Addison’s Prevention Leader - Prevention Through Community Involvement”

To: Oxford Township Board of Trustees

From: Rod Charles

Date: March 4, 2025

Re: Oxford DDA

The DDA Board met on February 17, 2025.

Please refer to <https://downtownoxford.info> for more information.

To: Oxford Township Board of Trustees

From: Personnel Committee

Date: March 6, 2025

Re: Personnel Committee Meeting

Dear Board Members:

The Personnel Committee met to discuss several items discussed at the previous Board meeting and comments from several Board members. The committee identified some areas for clarification and updates. The committee has another meeting scheduled for March 19, 2025. Once all items are agreed on, the Committee will present its recommendations to the full Board for consideration.

CHARTER TOWNSHIP OF OXFORD

Date: March 12, 2025

To: Board of Trustees

From: Planned Unit Development Committee

(Jack Curtis, Jeffrey Omtvedt, Korey Bailey, Bob Turner)

Re. Planned Unit Development Committee Update

Dear Board Members:

The committee has not met and has nothing to report at this time. The committee welcomes any feedback and/or recommendations. Thank you.

POLLY ANN TRAIL

Date: March 12, 2025

To: Board of Trustees

From: Polly Ann Trailway Management Council ("*Council*") Representatives
(*Catherine Colvin; Curtis Wright*)

Re: Polly Ann Trail

Dear Board Members:

The Council approved the following Meeting Schedule for 2025:

January 15, 2025 Oxford Township Offices

April 16, 2025 Oxford Village Offices

June 18, 2025 Oxford Township Offices

August 20, 2025 Orion Township Offices

October 15, 2025 Addison Township Offices

December 17, 2025 Orion Township Offices

The Council began the preliminary steps for the 2026-2030 Master Plan.

The next Council Meeting is 3:00 p.m. Wednesday, April 16, 2025 at the Oxford Village Offices.

CHARTER TOWNSHIP OF OXFORD

Date: March 12, 2025

To: Board of Trustees

From: Safety Path Committee

(Jack Curtis, ~~Rod Charles~~, David Wagner, Korey Bailey)

Re. Safety Path Committee Update

Dear Board Members:

The committee met on February 25, 2025 to review proposed and active projects. Township Engineer Jim Sharpe was present. A Safety Path Master Plan recommendation, with inclusion of all received changes, was updated and sent to Matteo for inclusion on the Planning Commission agenda. It was agreed that a review of the safety ordinance should be done to bring it more up to date, the last revisions were done in 2004.

The committee welcomes any feedback and/or recommendations. Thank you.

SPONGY MOTH COMMITTEE

Date: March 12, 2025

To: Board of Trustees

From: Spongy Moth Committee
(Rod Charles; Curtis Wright)

Re: Spongy Moths

Dear Board Members:

The Spongy Moth Committee last met on Tuesday, January 28, 2025.

No citizen requests have been received for field surveys to confirm infestation.

No future meetings have been scheduled.

Date: March 12, 2025

To: Board of Trustees

From: Curtis W. Wright, Clerk

Re: Four County Community Foundation

Dear Board Members:

Kathy Dickens is scheduled to address the Township Board regarding the Four County Community Foundation organization.

Kelly Richter

From: C.J. Carnacchio
Sent: Wednesday, March 5, 2025 10:49 AM
To: Curtis Wright; Kelly Richter
Cc: Danielle Smith
Subject: FW: Metronet Fiber Build Project Board Agenda Item draft text
Attachments: Metronet New Market Development Presentation FY2025.pdf

Importance: High

Good morning, Curtis and Kelly:
Please include this email (see below) and attachment in the March 12 meeting packet under the “Metronet presentation” agenda item. Please add it to the Metronet materials I previously sent you. Also, Telly would like to display the attached slides during the meeting. Thank you.
Take care,



Please consider the environment before printing this email.

C.J. Carnacchio

Communications & Grants Manager
Oxford Township

W : (248) 628-9787 Ext. 117
C : (248) 462-9997
ccarnacchio@oxfordtownship.org
300 Dunlap Rd.
Oxford, MI 48371

www.oxfordtownship.org



Metronet, the nation’s largest independently owned, 100% Fiber-to-the-Premise (FTTP) provider, is assessing the possibility of bringing new high-speed internet competition to portions of Macomb and Oakland counties, including Oxford Township. Metronet was named *PCMag's* “Fastest Major ISP” for 2023 and 2024. They have over 2 million customers in over 300 communities to date. The company has invested millions of dollars in Michigan to deploy fiber optic infrastructure that delivers multi-gigabit, symmetrical connectivity to residential and commercial properties – *without asking for public dollars.*

Metronet will submit a METRO Act packet for municipal action to obtain access to the public right-of-way prior to the start of this fiber infrastructure build. Township Staff met with representatives of the company to understand their project scope and discuss construction standards. Metronet is also coordinating with the Roads Commission of Oakland County, Macomb County Department of Roads and the MDOT on this fiber network deployment. Dr. Telly Whitfield, Director of New Market Development, will introduce the company and provide a brief overview of the project to the Township Board.



Telly C. Whitfield, Ph.D.

Director of New Market Development | Metronet

910-813-0085

telly.whitfield@metronet.com

517 Lamon St • Fayetteville, NC 28301

From: Telly Whitfield

Sent: Tuesday, February 25, 2025 1:42 PM

To: Danielle Smith <dsmith@oxfordtownship.org>; C.J. Carnacchio <ccarnacchio@oxfordtownship.org>

Subject: RE: Metronet Update for Oxford Township

Excellent, will do.



Telly C. Whitfield, Ph.D.

Director of New Market Development | Metronet

910-813-0085

telly.whitfield@metronet.com

517 Lamon St • Fayetteville, NC 28301

From: Danielle Smith <dsmith@oxfordtownship.org>

Sent: Tuesday, February 25, 2025 1:29 PM

To: Telly Whitfield <Telly.Whitfield@metronet.com>; C.J. Carnacchio <ccarnacchio@oxfordtownship.org>

Subject: RE: Metronet Update for Oxford Township

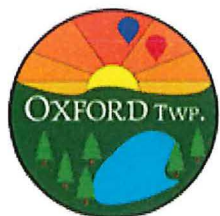
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Hi Telly,

If you could please provide a written summary to be included in the packet, it would be greatly appreciated. The deadline for board packet materials is Thursday, March 6 at noon.

Thank you,



Danielle Smith

Deputy Supervisor

Oxford Township

W : (248) 628-9787 Ext. 102

C : (248) 274-6266

dsmith@oxfordtownship.org

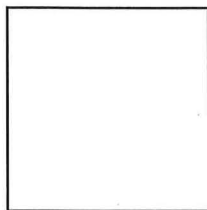
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300 Dunlap Rd.
Oxford, MI 48371
www.oxfordtownship.org



From: Telly Whitfield <Telly.Whitfield@metronet.com>
Sent: Tuesday, February 25, 2025 1:11 PM
To: C.J. Carnacchio <ccarnacchio@oxfordtownship.org>; Danielle Smith <dsmith@oxfordtownship.org>
Subject: RE: Metronet Update for Oxford Township

Please let me know if you need me to provide a written summary for the agenda package and when the item text/presentation attachment is due as you prepare for the board meeting.



Telly C. Whitfield, Ph.D.
Director of New Market Development | Metronet
910-813-0085
telly.whitfield@metronet.com
517 Lamon St • Fayetteville, NC 28301

From: Telly Whitfield <Telly.Whitfield@metronet.com>
Sent: Monday, February 24, 2025 1:32 PM
To: C.J. Carnacchio <ccarnacchio@oxfordtownship.org>; Danielle Smith <dsmith@oxfordtownship.org>
Subject: Re: Metronet Update for Oxford Township

Thank you.

Telly C. Whitfield, Ph.D.
Director of New Market Development
Metronet

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From: C.J. Carnacchio <ccarnacchio@oxfordtownship.org>
Sent: Monday, February 24, 2025 10:41:10 AM
To: Telly Whitfield <Telly.Whitfield@metronet.com>; Danielle Smith <dsmith@oxfordtownship.org>
Subject: Re: Metronet Update for Oxford Township

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Good morning, Telly:

I confirmed with the township clerk that you are scheduled to make your presentation to the Oxford Township Board of Trustees at its **6:30 p.m. Wednesday, March 12** meeting. Meetings are held at the Oxford Township Hall, 300 Dunlap Rd. (The same place you met with Danielle, Pauline and myself.) See you then!

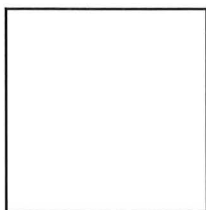
Take care,
C.J.

From: Telly Whitfield <Telly.Whitfield@metronet.com>
Sent: Wednesday, February 19, 2025 11:38:34 AM
To: C.J. Carnacchio <ccarnacchio@oxfordtownship.org>; Danielle Smith <dsmith@oxfordtownship.org>
Subject: RE: Metronet Update for Oxford Township

Hi C.J.

Yes, I can do that.

Just let me know the parameters of the presentation regarding length and focal content as we get closer to the date.



Telly C. Whitfield, Ph.D.

Director of New Market Development | Metronet

910-813-0085

telly.whitfield@metronet.com

517 Lamon St • Fayetteville, NC 28301

From: C.J. Carnacchio <ccarnacchio@oxfordtownship.org>
Sent: Wednesday, February 19, 2025 10:40 AM
To: Telly Whitfield <Telly.Whitfield@metronet.com>; Danielle Smith <dsmith@oxfordtownship.org>
Subject: RE: Metronet Update for Oxford Township

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Good morning, Telly:

Are you available to make a presentation and answer questions at our 6:30 p.m. Wednesday, March 12 township board of trustees meeting? We can add your presentation as an agenda item. Please let me know. Thank you!

Take care,



Please consider the environment before printing this email.

C.J. Carnacchio

Communications & Grants Manager
Oxford Township

W : (248) 628-9787 Ext. 117

C : (248) 462-9997

ccarnacchio@oxfordtownship.org

300 Dunlap Rd.

Oxford, MI 48371

www.oxfordtownship.org



From: Telly Whitfield <Telly.Whitfield@metronet.com>

Sent: Wednesday, February 19, 2025 10:25 AM

To: Danielle Smith <dsmith@oxfordtownship.org>; C.J. Carnacchio <ccarnacchio@oxfordtownship.org>

Subject: Metronet Update for Oxford Township

Good morning, Danielle and CJ.

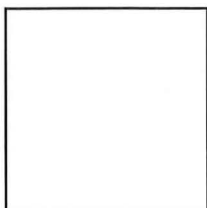
I hope you are both doing well. I anticipate being **back in Michigan in the second week of March (3/11-13)** for follow up conversations with municipalities prior to submitting permits. This would be our "discovery" meeting where my network development partner can learn more about how you would like to address any township right-of-way requirements, utility locating efforts and other ordinances that may be applicable to our build.

Can I get some time on your calendar that week to go over our project in more detail? Would anyone else benefit from hearing the conversation?

Updating our activities in eastern Michigan....we have made good traction with the Department of Roads on their ROW permitting process. We have experience working with MDOT and are familiar with their controlled roads throughout our proposed build. We've held multiple positive conversations with officials in Macomb County and Macomb Township plus started talking to Chesterfield Township, too. I am now working on my initial engagement with Washington Township. These meetings have validated our assumptions about the appetite for additional high-speed broadband competition in the market as well as the ability to work together to make it happen. We are now ready to move from the due diligence/market evaluation stage into our engineering/pre-construction planning for the proposed fiber network design. In fact, the Oakland County fiber build project has been designed and is expected to be approved for construction by our Metronet finance board later this week. We have submitted METRO Act packages for each municipalities' formal action and have met with the Roads Commission of Oakland County about rights-of-way access. Needless to say, we are very excited about the opportunities across the market!

Please let me know if we can lock in an appointment for that week.

Thanks, take care and have a great rest of the week,
Telly



Telly C. Whitfield, Ph.D.

Director of New Market Development | Metronet

910-813-0085

telly.whitfield@metronet.com

517 Lamon St • Fayetteville, NC 28301

From: Telly Whitfield

Sent: Friday, February 7, 2025 11:05 AM

To: dsmith@oxfordtownship.org; Carnacchio@oxfordtownship.org; pbennett@addisontownshipmi.gov

Subject: 2-6-2025 Metronet Fiber Build Project introductory meeting Summary

Good afternoon, Danielle, CJ, and Pauline.

Thank you for spending a few minutes with me yesterday discussing Metronet's fiber deployment plans for the area. As a follow up, please find the current list of Michigan communities with our infrastructure [here](#). Plus, I have attached a **slide deck presentation and reference sheets** that can be used to further introduce Metronet to those you believe would benefit from learning more about us. Finally, please find the **Brattle fiber study** that I mentioned during our conversation.

Metronet believed that there is a strong appetite for additional high-speed broadband competition in the market. We also believe that our strategic advantage in this industry is our competence and proven track record as a pure play fiber builder for over twenty years, our focus on relationships which helps navigate the political and regarding regulatory processes, and finally, our "time to market" from construction start to first pass release. We understand that a fiber deployment of this magnitude has its share of challenges and concerns (political and administrative) that come along with it PRIOR to service delivery. Therefore, I will be the point of contact to make sure it goes smoothly. Below, I've tried to summarize our preliminary plans for the area and build a bridge for the work ahead.

Current Activities and Prospective Plans:

Here are the highlights from Metronet's very preliminary plans for the "north Oakland County" expansion area (including portions of *City of Auburn Hills, Orion Township, Oxford Township, the Villages of Lake Orion, and Oxford*):

- To date, our team is about halfway through our market assessment and pre-construction work for **the larger "Oakland County cluster" project**. This phase includes the network design. We expect this project to go before our finance board for construction **approval on February 20th**.
- If approved, we anticipate **investing up to \$50 million in private capital** in that area, **without asking for public dollars**, to complete our initial build.
- We believe our initial build could provide **multi-gigabit, symmetrical, and redundant fiber-to-the-premise accessibility** for **40,000+ residential households, businesses, and institutions (aka "passes")** in the Oakland County cluster who are currently without reliable high-speed options.
- We anticipate the **"north Oakland County" expansion area could eventually add up to another 17,000 passes to the build**. Right now, **the Oxford Township makes up approximately 4,000 passes** out of that amount. Again, we will be happy to share a **preliminary map** of the initial build in time, however, please keep in mind that it is subject to multiple revisions before completion. We are also interested in build expansions as development grows in and around the community including joint trench opportunities.
- We have the resources to complete our entire initial build within a **24-month horizon** using both aerial and underground construction methods following existing power.
- We have a three-pronged **communications plan for residents** throughout the construction process and **tools to deflect calls away from local officials**.
- We **stay engaged with local government staff** throughout the fiber deployment via the sharing of daily street sheets, holding weekly stand ups in the field, and conducting regular construction update meetings for local leadership.
- We deploy a **"restore as we go" approach** to mitigate the impact on neighborhood livability, traffic flow and the public infrastructure.
- We have an **active community engagement** unit to maintain a positive presence in the areas we serve.

As I mentioned in our meeting, the pace of production is dictated by **3 Ps** – **Poles** (the ability to attach to existing utility structures for aerial construction), **Permits** (local and state approvals for underground ROW construction) and **Paint**

(internal capacity of the local government to locate existing underground utilities). Therefore, those topics are typically the crux of future conversations with various jurisdictional engineering and utilities departments. We have already started these conversations with the Roads Commission of Oakland County.

Next Steps:

- I will continue to reach out to your neighboring local governments to discuss our potential fiber deployment plans. I appreciate any assistance you can provide in making connections to other officials!
- Our team will place the area in our design queue.
- **Pauline, we can also continue discussing the viability of including portions of Addison Township in this build.**
- Currently, our legal staff is working on the various METRO Act documents needed for local authorities.
- Assuming project approval, we would schedule a “construction kick-off” for all relevant staff to *walk through* our build prior permit submissions. This will happen only after the proper approvals to build have been received.

Metronet Fiber Project Assumptions:

Metronet does recognize that the market is being served by a legacy cable ISP. We were also not surprised to hear that other fiber providers previously discussed deploying in the area as well. Currently, Metronet **does not “overbuild fiber”** as a business practice, meaning attempt to add new infrastructure in areas where another FTTP provider already has aerial or underground plant accessible to customers. **Residential density** is an important factor to our initial builds because it keeps Capex sustainable as we scale. **Hence, the cost per pass is a key metric.** Finally, our sales department must believe we will receive a **good penetration rate across the market** (*number of subscriptions as a percent of passes built*) **within 36 months** for a project to move forward. Given those factors trend positively in our modeling for Macomb County, we believe that Metronet can deploy fiber in several neighborhoods that are currently void of reliable broadband service and where others may not have plans to build in the immediate future!

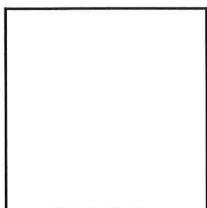
Final Thoughts:

We strive to have a construction process that yields a safe, efficient project that is also as non-intrusive as possible for community livability. Once completed, we believe that residents and businesses will appreciate multi-Gigabit speed fiber internet connectivity... as competition is good for quality of life and economic development.

Thanks again for your willingness to assist in making this potential project come to fruition as it will be a tremendous opportunity for the entire region. Finally, I wanted to share a couple of links to videos that might be beneficial when talking to others about our fiber infrastructure project. Let us know if you have any other questions or concerns.

1. [The Fiber Difference](#)
2. [Fiber construction](#)
3. [Service Installations](#)

Have a wonderful weekend,
Telly



Telly C. Whitfield, Ph.D.

Director of New Market Development | Metronet

910-813-0085

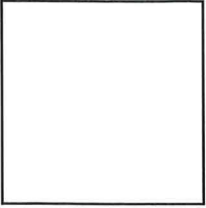
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- Remote, VA



Telly Whitfield

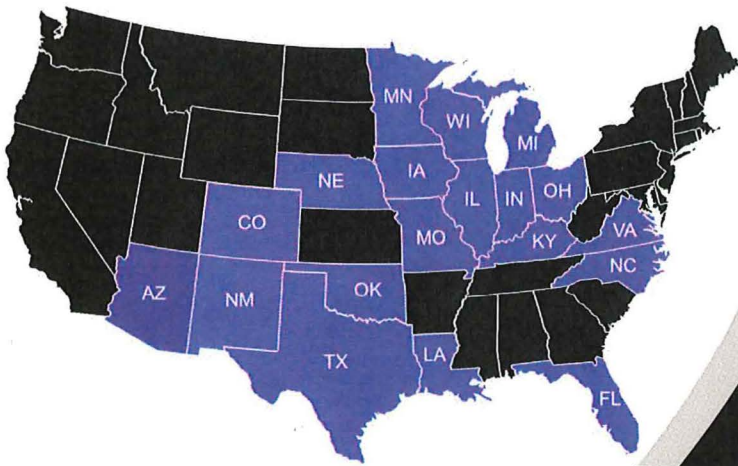
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- Remote, VA

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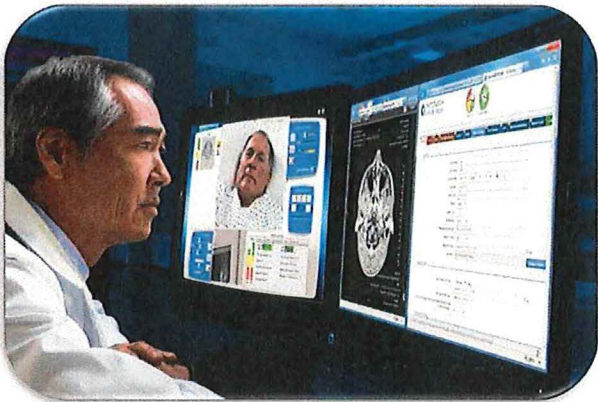


About Us

- Headquartered in Evansville, IN
- Nations largest independently owned, “pure play” FTTP in the U.S.
- Build 1st 100% fiber-optic network in 2005 (Greencastle, IN)
- Serving 300+ communities in 19 states
- 2 million residential and business subscribers
- We finance, construct and provide service!

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THE FIBER CHOICE



» **Quality of Life Imperative**

Reliably-fast internet, allowing crystal clear streaming with no buffering, lag, or pixelation. And for phone, clear call quality.

» **Future Proof Economic Vitality**

Fiber Optics is the fastest way to transmit information for greater business output and resiliency. Metronet provides this connection directly to homes and businesses.

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WHY ARE WE UNIQUE



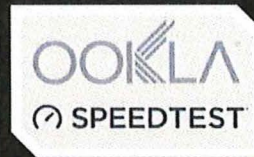
Blazing-fast
symmetrical
internet

Upload AS
FAST as you
download!



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RECOGNIZED BY INDUSTRY LEADERS



Metronet has been ranked the fastest internet service provider (ISP) in IA, IN and KY.

Based on analysis by Ookla® of Speedtest Intelligence® data for median download speeds in Q3 2021.



Recognized Metronet as the Best Performer in its Internet Service Provider Speed Index

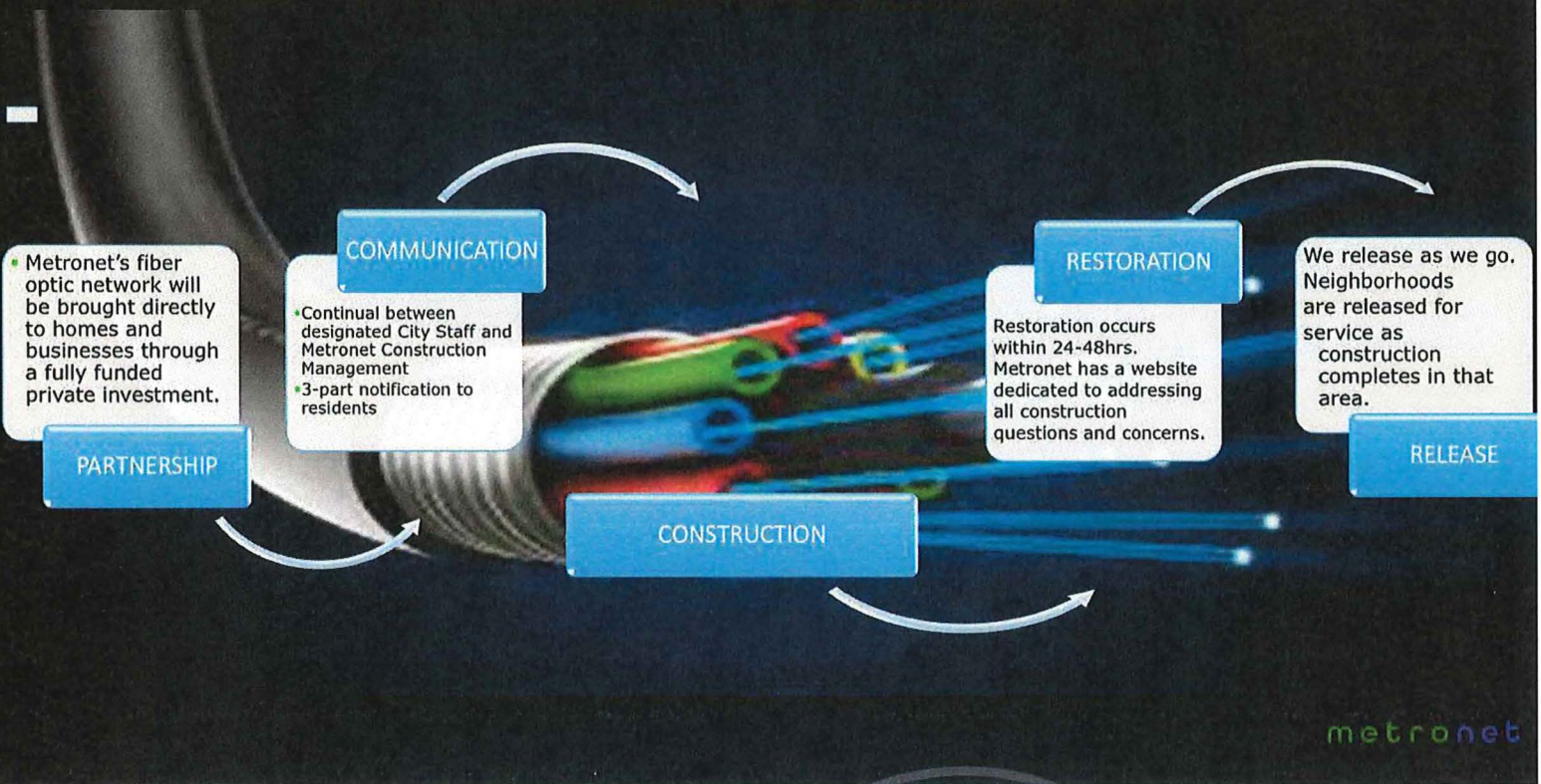


- Recognized as one of the Fastest Real-World Speeds
- Received Most Affordable Plans award
- Most significant fiber expansion award

*Regional Awards



THE ROAD TO A GIGABIT COMMUNITY!



PARTNERSHIP



- » Provides transparency and accountability to city
- » Prevent call volume to city centers
- » Reduce surprises related to neighborhood construction activity.
- » Build goodwill and awareness with residents

COMMUNICATION

- » 1st Notification - Letter mailed to residents 30-45 days prior to the start of construction
- » 2nd notification - Postcards mailed 7-10 days prior
- » 3rd notification. Yard signs placed 3-5 days prior
- » 4th Notification Sign placed at entrance and exit of neighborhood

metronet
Save your internet.

Fiber optic internet is coming to your neighborhood.
And, you're going to love it!

Dear Neighbor, We are excited to announce that fiber optic internet is coming to your neighborhood. This means you'll be able to enjoy faster speeds and more reliable service than ever before. We're committed to providing you with the best possible experience, and we're confident that you'll love the new service.

Anticipating the future you will expect:

- A gigabit or more per second download speeds
- Large bandwidth download speeds of your neighborhood network
- The best and the fastest post-mailing, making your post office.

Frequently Asked Questions:

Q: How fast is fiber optic internet?
A: Fiber optic internet is the fastest available, with speeds up to 100 times faster than traditional copper service.

Q: How much will it cost?
A: The service is available for a limited time at a special introductory rate. We'll be happy to help you understand the details.

Q: How do I sign up?
A: Visit metronet.com or call 1-877-386-3876. We'll be happy to help you get started.

metronet
Save your internet.

Construction underway.

Better internet is coming.

Dear Neighbor, We're excited to announce that fiber optic internet is coming to your neighborhood. This means you'll be able to enjoy faster speeds and more reliable service than ever before. We're committed to providing you with the best possible experience, and we're confident that you'll love the new service.

Sign up today! Visit metronet.com or call 1-877-386-3876. We'll be happy to help you get started.

metronet
Save your internet.

Construction underway.

We're building our 100% fiber optic network.

Questions? 1-877-386-3876
metronet.com/construction



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Save your internet.

Construction underway.

We're building our 100% fiber optic network.

Questions? 1-877-386-3876
metronet.com/construction

METRONET
Save your internet.

CONSTRUCTION UNDERWAY

We're building our 100% fiber optic network.

Questions? 1-877-386-3876
metronet.com/construction

CONSTRUCTION PROCESS EDUCATION

» Educational Videos

- » What is an Easement?
- » What to Expect During Construction



» Outline of Construction Phases

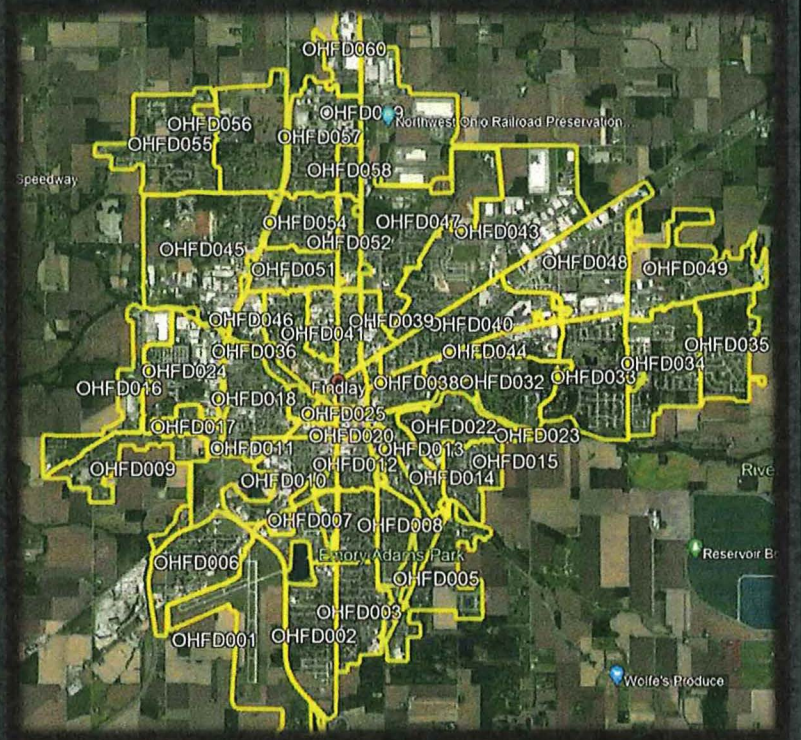
- » Utility Marking
- » Physical locating of Utilities
- » Placement of Infrastructure
- » Restoration



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CONSTRUCTION

- » Buildout is designed into manageable sized locations
- » "Kick-off" meeting before construction begins
- » Meet monthly with City team to review previous months work



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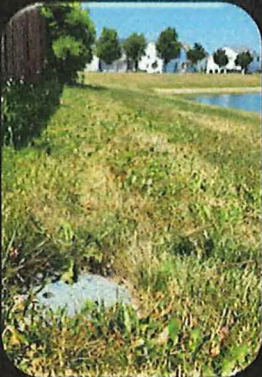
RESTORATION

- » Restoration within 24-48 hours
- » Restore as we build
- » Responsive to Resident and City Restoration questions\needs
- » 99%+ Response rate within 24 hrs



metronet

POST CONSTRUCTION



metronet

COMMUNITY COMMITMENT

Industry-Leading Customer Service

- » An average of **30%+ higher** customer satisfaction scores than peers

Local Presence

- » **Community involvement and local sponsorships with:**

- Civic Associations & HOAs
- Fairs, Special Events & Holidays
- Youth Sports Leagues
- Chamber partnerships

- » **Charitable Events:**

- Blood & Food Drives
- Clothing donations
- Electronic Recycling
- School Activities
- Movie nights

...and so much more!



metronet™

Telly C. Whitfield, Ph.D.
Director of New Market Development
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Economic Benefits of Fiber Deployment

THE BRATTLE GROUP

PREPARED BY

Paroma Sanyal
Coleman Bazelon
Yong Paek
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PREPARED FOR

Fiber Broadband Association
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November 20, 2024



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NOTICE

- This report was prepared for the Fiber Broadband Association and Frontier Communications in accordance with The Brattle Group's engagement terms and is intended to be read and used as a whole and not in parts.
- The report reflects the analyses and opinions of the authors and does not necessarily reflect those of The Brattle Group's clients or other consultants. However, we are grateful for the valuable contributions of Preetul Sen, Peter Christenson, Natasha Abrol and Natalie Selfie.
- There are no third-party beneficiaries with respect to this report, and The Brattle Group does not accept any liability to any third-party in respect of the contents of this report or any actions taken or decisions made as a consequence of the information set forth herein.

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TABLE OF CONTENTS

Executive Summary.....v

I. Introduction.....1

II. Fiber Broadband and U.S. Fiber Deployment3

 A. Fiber Optic Networks Perform Better Compared to Other Fixed Broadband Technologies and are Future-Proof 3

 B. Despite Increases in Deployment Almost Half of the U.S. BSLs Lacks Access to Fiber 5

III. Externalities, Market Failure and Sub-Optimal Fiber Investment and Deployment8

 A. The Theory of Externalities and Underinvestment 8

 B. Estimating Positive Economic Spillovers from Fiber Deployment Even in the Presence of Other High-Speed Broadband Technologies..... 10

IV. Access to Fiber Can Generate Billions of Dollars of Economic Impact13

 A. Housing Values 14

 B. Household Income and Employment 15

 1. Household Income 15

 2. Employment 16

 C. Remote Work..... 18

 D. Environmental Benefits That Should Be Considered When Deciding Between Investments in Fiber and Other Technologies 20

 E. Enhanced Wireless Connectivity with 5G and IoT..... 21

 F. Other Economic Benefits..... 22

 1. Improved Health Benefits of Fiber Deployment 23

 2. Positive Educational Outcomes of Fiber Deployment 24

 3. Improved Adoption of Up-and-Coming Artificial Intelligence Technology..... 26

V. Government Funding and Temporal Externalities.....28

 A. Existing Government Funding 28

 B. Future Proofing..... 29

VI. Conclusion31

Appendix A : Quantitative Analysis Methodology34

Executive Summary

Currently, about 62 million Broadband Serviceable Locations (BSLs), which include at least 56 million households – *i.e.*, over half the BSLs and forty percent of the households in the United States, do not have fiber broadband. There is an ongoing debate about the existence and magnitude of economic benefits that would be realized if fiber was deployed to locations that are already served by high-speed broadband, but do not have fiber broadband.

Our study is the first to show that fiber deployment has significant incremental economic benefits even in the presence of other high-speed broadband technologies. The report also argues that because private actors will not capture all the benefits of fiber deployment the marketplace will not deploy enough fiber on its own. Based on these findings we suggest a few policy takeaways.

- First, because the social return on investment is higher for fiber, directing more of the existing public funds towards fiber deployment will generate greater economic returns compared to investment in other high-speed broadband technologies such as hybrid fiber-coaxial (HFC). Thus, the various public programs, such as the Rural Digital Opportunity Fund (RDOF), the Broadband Equity, Access, and Deployment (BEAD) program, ReConnect, Capital Projects Fund and the federal Broadband Infrastructure Program (BIP), which are prioritizing fiber builds are on the right policy path. This prioritization needs to continue if the gains from deploying fiber are to be realized.
- Second, based on available data, our research implies that even if fiber is deployed as an overbuild to existing high-speed technologies, the incremental benefits are sizeable. Thus, when the federal or local governments are measuring the underserved population, one important metric may be using a fiber-unserved metric and not just a speed-based metric. This will allow these entities to better target funding towards a fiber solution.
- Third, federal and local governments that promote fiber deployment, such as BIP, Louisiana's Granting Unserved Municipalities Broadband Opportunities (GUMBO) program and Maine's ConnectMaine fund, should be encouraged and expanded. Additionally, the focus on fiber that some of these programs have, should be supported, and used as a model for other private-public initiatives.

- Last, fiber is a future-proof solution and when the benefits and costs are evaluated on a long-run horizon, fiber becomes the optimal choice for delivering fixed high-speed broadband.
- We find that deploying fiber to the 56 million households that are in tracts unserved by fiber, has the potential to generate at least **\$3.24 trillion** in terms of net present value (NPV) in incremental economic impact.
- Deploying fiber has the potential to increase **housing values** by **\$1.64 trillion** (in NPV terms).
 - It could **increase average household values** between **14% - 17%** depending on non-urban versus urban areas.
 - This translates to an average increase of **\$27,000 - \$41,000 per house** per year.
 - The effect on housing values in non-urban areas is five times greater than in urban areas and is driven by the greater number of unserved households in non-urban areas.
 - For the 56 million unserved households, in net present value (NPV) terms, this implies a **\$1.4 trillion** total increase in house values for **non-urban areas** and **\$242 billion** total increase for **urban** areas.
- Deploying fiber to all fiber-unserved locations can potentially lead to a one-time increase in **income by \$1.6 trillion** (in NPV terms).
 - The income effect comes from non-urban areas. U.S. households in **non-urban areas** with new access to fiber will likely experience an **increase in their average income** by **\$1,450** in one year.
 - This translates to a total increase of **\$81 billion in one year**.
- Fiber deployment also has the potential to create **at least 380,000 new jobs** for the U.S. economy.
- Fiber deployment also has a significant impact on remote work, environmental benefits, and is best equipped to handle the increased connectivity needs in a 5G world and beyond. In addition, it improves educational outcomes, reduces health costs (thereby increasing health savings), and accelerates technology adoption.

- Additionally, a significant advantage of fiber is that it is a future-proof technology due to its ability to provide the critical broadband infrastructure required to deliver high speeds, scalability, reliability, and support for emerging applications and technologies. An optimal lower cost data network today will likely not meet the needs of tomorrow. Consequently, the least costly way of providing a given level of service today may create greater upgrade costs in the future. Fiber has the potential to handle all future capacity needs. Even if it is not the least-costly solution today, the government should target more current funding towards fiber deployment, with an eye towards the future.

I. Introduction

Investing in fiber is not just a technological upgrade; it is a strategic move that underpins long-term productivity and economic growth in the United States. The importance of high-quality broadband is beyond doubt, and the highest quality broadband is delivered over fiber optic cables. With the demand for high-definition content, low latency applications such as video conferencing, remote surgeries, industrial automation and millions of gigabytes of data being transferred, having a fast and reliable internet connection is essential for businesses and consumers.¹ As we build out our nation’s critical broadband infrastructure, fiber is absolutely necessary to deliver the future-proof speed, capacity, and ultra-low latency that will enable future innovations. When data does not make its way to an end user (referred to as last mile) over a fiber optic cable, one of four technologies are typically used: cable (typically hybrid fiber-coaxial), copper (typically a digital subscriber line (DSL) connection, delivered over a twisted-pair telephone line), a terrestrial wireless link (fixed or mobile), or satellite (Low Earth Orbit (LEO) such as Starlink or geo-stationary orbit, such as Hughes or Viasat). All these technologies have advantages in certain circumstances, but network upgrades all point in the direction of pushing fiber further out into the network, which offers a range of technological, economic, and societal benefits, making it a strategic investment for improving overall connectivity and internet services.

So far, the speed of the transition to fiber-based network connections in the U.S. has been slower than is ideal. The United States lags many other developed nations in fiber penetration. Countries such as South Korea, Singapore, and China exhibit significantly higher overall fiber performance compared to the U.S.²

We find that private actors will not deploy fiber as fast as is socially optimal, because their investment decisions are based on their private profitability and do not consider social benefits, *i.e.*, the positive externalities or spillovers that they cannot capture in their profits.³ For example,

¹ Neos Networks, “What is Low Latency and Why is it Needed?” January 24, 2024, <https://neosnetworks.com/resources/blog/what-is-low-latency-why-is-it-needed/>.

² Ofcom, “International Broadband Scorecard 2023: Interactive Data – 1 – Fixed Broadband Coverage,” last accessed August 5, 2024, <https://www.ofcom.org.uk/research-and-data/telecoms-research/broadband-research/eu-bbroadband-scorecard/international-broadband-scorecard-2023-interactive-data>.

³ Thomas Helbling, “Externalities: Prices Do Not Capture All Costs,” International Monetary Fund, <https://www.imf.org/en/Publications/fandd/issues/Series/Back-to-Basics/Externalities>, last accessed August 5, 2024, (“Externalities: Prices Do Not Capture All Costs”). Note, Arthur Pigou’s seminal work in *The Economics of*

Continued on next page

in the wake of the Covid-19 pandemic, the positive side effects stemming from swift and dependable internet service have been driven by its capacity to mitigate the adverse effects of pandemic.⁴ It is important to note that this represents only a fraction of the overall societal advantages derived from voice and broadband connectivity. Additional instances include the expansion of telemedicine,⁵ enhanced equity in accessing education,⁶ and an elevated standard of education.⁷

The remedy for this situation is well-established, and economic policy interventions are called for when a market will not provide the efficient level of a good or service. In the U.S., the government has partially recognized this and stepped in to provide added support for fiber deployment through its American Rescue Plan Act (ARPA), U.S. Department of Agriculture (USDA) Rural Utility Service (RUS) ReConnect Program, U.S. Department of Treasury Capital Projects Fund (CPF), NTIA's Broadband Infrastructure Program (BIP), Federal Communications Commission (FCC) Rural Digital Opportunity Fund (RDOF) and the NTIA Broadband Equity, Access, and Deployment

Welfare defines market failures and externalities, and he argues that governments should subsidize those who create positive externalities. See, Arthur Pigou, *The Economics of Welfare*, 1932, <https://oll.libertyfund.org/titles/pigou-the-economics-of-welfare>.

- ⁴ Canan Birimoglu Okuyan and Mehmet A. Begen, "Working from Home During the COVID-19 Pandemic, Its Effects on Health, and Recommendations: The Pandemic and Beyond," *Perspectives in Psychiatric Care*, 58(1) (2022): 173-179, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8242705/> ("Working from Home During the COVID-19 Pandemic").
- ⁵ Yosselin Turcios, "Digital Access: A Super Determinant of Health," Substance Abuse and Mental Health Services Administration, March 22, 2023, <https://www.samhsa.gov/blog/digital-access-super-determinant-health>; Ambrish A. Pandit, et al., "Association Between Broadband Capacity and Telehealth Utilization Among Medicare Fee-for-Service Beneficiaries During the COVID-19 Pandemic," *Journal of Telemedicine and Telecare*, (2023): 1-8, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10076155/>; Adie Tomer, et al., "Digital Prosperity: How Broadband Can Deliver Health and Equity to All Communities," The Brookings Institution, February 27, 2020, <https://www.brookings.edu/articles/digital-prosperity-how-broadband-can-deliver-health-and-equity-to-all-communities/>.
- ⁶ Thomas McElroy, "Addressing The Digital Divide an Education: Technology and Internet Access for Students in Underserved Communities," *Forbes*, December 3, 2021, <https://www.forbes.com/sites/forbestechcouncil/2021/12/03/addressing-the-digital-divide-in-education-technology-and-internet-access-for-students-in-underserved-communities/?sh=355949d25cec>; Adie Tomer, et al., "Digital Prosperity: How Broadband can Deliver Health and Equity to All Communities," The Brookings Institution, February 27, 2020, <https://www.brookings.edu/articles/digital-prosperity-how-broadband-can-deliver-health-and-equity-to-all-communities/>.
- ⁷ Internet Society, "Internet Access and Education: Key Considerations for Policy Makers," November 20, 2017, last accessed March 11, 2024, <https://www.internetsociety.org/resources/doc/2017/internet-access-and-education/>; North Carolina Department of Information Technology, "Why Broadband is Important," last accessed August 5, 2024, <https://www.ncbroadband.gov/digital-divide/why-broadband-important>.

(BEAD) Program.⁸ However, as we explain later in the report, there is a mismatch in where the funding is targeted and where it should be targeted. If policy makers appropriately assess economic spillovers from fiber investment relative to other broadband technologies, current funding efforts would be geared towards increased fiber deployment.

In this report we will discuss the market failure that leads to sub-optimal investment in fiber deployment and estimate the positive externalities generated by fiber deployment. In Section II, we discuss the status of fiber deployment in the U.S., including the evolution over the past few years, and benchmark the U.S. performance against other countries. In Section III, we briefly discuss the Economics literature on externalities and investment and show why there is a market failure in the fiber deployment market. In Section IV, we discuss the contemporaneous externalities associated with the deployment of fiber and estimate the effect of fiber deployment on various economic indicators. In Section V, we discuss current funding and why, in addition to the contemporaneous externalities, the existence of temporal externalities also push the needle in favor of increased fiber deployment today. Section VI concludes.

II. Fiber Broadband and U.S. Fiber Deployment

A. Fiber Optic Networks Perform Better Compared to Other Fixed Broadband Technologies and are Future-Proof

Comparing the performance characteristics of the fixed broadband technologies discussed above, fiber optic technology stands out from other fixed broadband technologies due to its

⁸ The White House, "Fact Sheet: Biden-Harris Administration Announces Over \$25 Billion in American Rescue Plan Funding to Help Ensure Every American Has Access to High Speed, Affordable Internet," June 7, 2022, <https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/07/fact-sheet-biden-harris-administration-announces-over-25-billion-in-american-rescue-plan-funding-to-help-ensure-every-american-has-access-to-high-speed-affordable-internet/>; U.S. Department of Treasury, "Capital Projects Fund," last accessed August 27, 2024, <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/capital-projects-fund>; USDA, "ReConnect Loan and Grant Program," last accessed August 27, 2024, <https://www.usda.gov/reconnect>; NTIA, "Broadband Infrastructure Program," last accessed August 27, 2024, <https://broadbandusa.ntia.doc.gov/broadband-infrastructure-program>; FCC, "Auction 904: Rural Digital Opportunity Fund," <https://www.fcc.gov/auction/904>; Broadband USA, "Broadband Equity Access and Deployment Program," <https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program>.

superior speed, bandwidth, reliability, low latency, symmetrical speeds, longer transmission distances, and enhanced security features.⁹

- *Higher Speed and Bandwidth* Fiber has significantly higher data transfer speeds compared to cable broadband and can support symmetric gigabit and even multi-gigabit speeds, providing much greater bandwidth for data-intensive applications like video streaming, online gaming, and cloud computing.¹⁰ Fiber optic technology has the potential to support future advancements in telecommunications technology for decades to come. This makes fiber optic infrastructure a long-term investment that can adapt to evolving technological requirements and consumer demands.
- *Lower Latency* Fiber optic networks offer ultra-low latency, which is crucial for real-time applications such as online gaming, video conferencing, and financial transactions.¹¹ As more low latency applications are developed, fiber will be able to meet their network needs without the need for expensive upgrades or replacement of the fiber optic cable.
- *Greater Reliability* Fiber optic cables are more reliable and can transmit data over longer distances without signal degradation.¹² This allows fiber optic networks to cover larger geographic areas with consistent high-speed connectivity, thus offering greater reliability and consistency in delivering high-quality internet connectivity.¹³
- *Greater Security* Fiber optic cables are inherently more secure than other broadband technologies because they do not emit electromagnetic signals that can be intercepted.¹⁴

⁹ Mobile broadband is not considered separately as its performance is constrained by the fixed broadband backhaul used by the mobile network.

¹⁰ Rebecca Brill and Corinne Tynan, "DSL vs. Cable vs. Fiber Internet: Major Differences, Pros And Cons," Forbes, last updated April 4, 2024, https://www.forbes.com/home-improvement/home/dsl-vs-cable-vs-fiber/#which_internet_is_best_section.

¹¹ DCS Content Team, "How Fiber Optic Cables Improve Data Center Speed and Latency," Data Center Systems, April 4, 2023, <https://blog.datacentersystems.com/how-fiber-optic-cables-improve-data-center-speed-and-latency>.

¹² Gateway Fiber, "Why Fiber Internet is More Reliable," March 7, 2023, last accessed April 9, 2024, <https://www.gatewayfiber.com/blog/why-fiber-internet-is-more-reliable>; Genius Modules, "Is Fiber Optic Good for Long Distance?" January 5, 2024, https://www.genuinemodules.com/is-fiber-optic-good-for-long-distance_a3375.

¹³ Ziplly Fiber, "Fiber Internet and the Rise of Remote Work," February 16, 2024, <https://zipllyfiber.com/blogs/article/fiber-and-the-rise-of-remote-work> ("Fiber Internet and the Rise of Remote Work").

¹⁴ PeakOptical A/S, "Why Fiber Optic Networks Are More Secure Than Copper Cable Networks For Businesses," LinkedIn, January 9, 2023, <https://www.linkedin.com/pulse/why-fiber-optic-networks-more-secure-than-copper-cable->.

Fiber optic networks are more resistant to hacking and eavesdropping, enhancing data security for users, which is increasingly becoming a critical issue for broadband networks.

- *Greater Sustainability* Fiber optic cables significantly reduce the carbon footprint as it enables the deployment of Passive Optical Networks (PON), which eliminated the active (powered) network components, improving network reliability and reducing power consumption.
- *Greater Durability* Fiber broadband's inherent resilience, cost-efficiency, and repairability make it a superior choice for maintaining reliable internet connectivity, especially in the face of natural disasters. Fiber optic cables are made of glass or plastic, which are not susceptible to corrosion or electrical interference, and this makes them more resilient to extreme weather conditions such as floods, high winds, and lightning strikes compared to metal-based cables. Additionally, fiber optics do not conduct electricity, which means they are not affected by electrical surges and lightning strikes that can damage other broadband services.

These characteristics make fiber optic networks a *future-proof technology*, highly desirable for meeting the growing demands of modern high-speed internet applications. As discussed below, although fiber deployments in the U.S. have increased over the last decade, there are significant gaps in fiber connectivity.

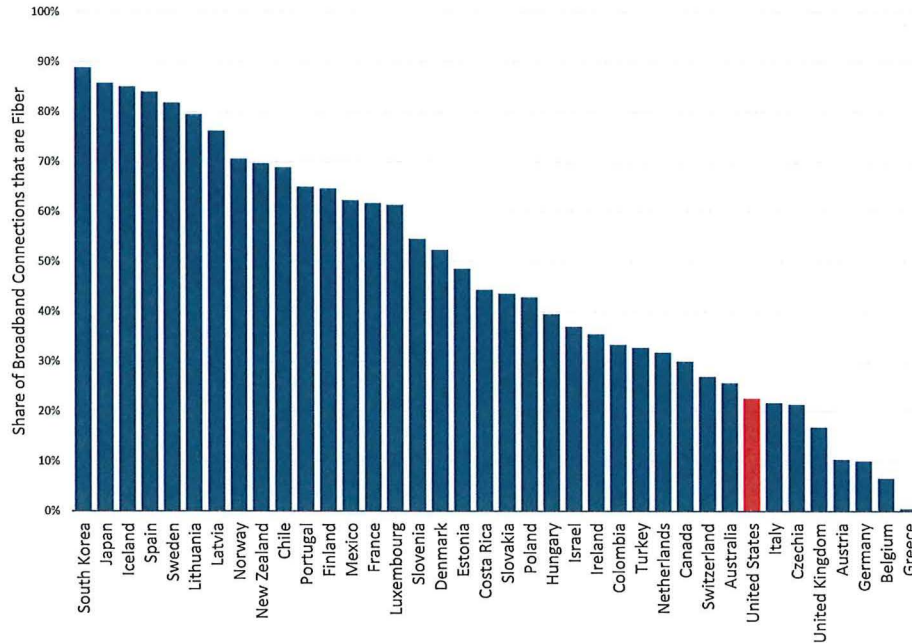
B. Despite Increases in Deployment Almost Half of the U.S. BSLs Lacks Access to Fiber

Over the past decade, access to fiber technology has increased in the U.S., making it more widely available now than it was in the past.¹⁵ As shown in Figure 1, the U.S. is lagging behind most developed countries in terms of fiber deployment. In South Korea, Japan, Iceland, Spain and Sweden, fiber comprises of 80% or more of their broadband deployment. In the U.S. it is around 20%.¹⁶

¹⁵ Fiber access refers to the availability of fiber lines at a specific location. Fiber penetration refers to the rate at which fiber is adopted by consumers.

¹⁶ Petroc Taylor, "Fiber share of total broadband connections in OECD countries 2023," Statista, last accessed August 27, 2024, <https://www.statista.com/statistics/604623/share-of-fibre-connections-in-broadband-oecd/>.

FIGURE 1: FIBER SHARE OF TOTAL BROADBAND CONNECTIONS ACROSS COUNTRIES



Sources and Notes:

Petroc Taylor, “Fiber share of total broadband connections in OECD countries 2023,” *Statista*, last accessed March 21, 2024, <https://www.statista.com/statistics/604623/share-of-fibre-connections-in-broadband-oecd/>.

According to the Fiber Broadband Association (FBA), as of 2023, fiber broadband passed nearly 69 million of the 132 million homes in the U.S., which reflected a 13% growth for that year.¹⁷ Additionally, approximately 5.6 million new households have subscribed to fiber since December 2021.¹⁸ However, even with all the progress, a little over half of the serviceable locations (an FCC metric that is a combination of homes and businesses) in the U.S. were unserved by fiber in 2023 as seen from Table 1 below. The table shows what percentage of broadband serviceable locations (BSLs) in the U.S. are served, unserved and underserved for two types of technology. As can be seen from the table, 63 million BSLs or 54.6% are still unserved by fiber. This implies that 56 million households (which are a sub-set of the BSLs) are unserved by fiber.¹⁹

¹⁷ Sean Buckley, “North American Fiber Broadband Industry Passed 9M Homes in 2023,” December 14, 2023, <https://www.lightwaveonline.com/home/article/55030843/north-american-fiber-broadband-industry-passed-9m-homes-in-2023>. See also, Statista, “Number of Households in the U.S. from 1960 to 2023,” last accessed May 30, 2024, <https://www.statista.com/statistics/183635/number-of-households-in-the-us/>.

¹⁸ Tyler Cooper, “Over Half of America Now Has Access to Fiber,” *BroadbandNow Research*, November 14, 2023, <https://broadbandnow.com/research/fiber-penetration-trends> (“Over Half of America Now Has Access to Fiber Article”).

¹⁹ We overlay the BDC shapefiles (fiber availability) with census shapefiles (tract boundaries) to estimate the number of households that are unserved by fiber.

TABLE 1: OVERVIEW OF SERVICE IN THE U.S. (2023)

| | Total [1] | Cable [2] | Fiber [3] |
|---|--------------|--------------|--------------------|
| Total Broadband Serviceable Locations (BSL) | 115,342,228 | 115,342,228 | 115,342,228 |
| Served BSL | 105,089,107 | 94,935,898 | 52,325,639 |
| % of Total | 91.1% | 82.3% | 45.4% |
| Underserved BSL | 3,041,565 | 475,618 | 60,543 |
| % of Total | 2.6% | 0.4% | 0.1% |
| Unserved BSL | 7,211,556 | 19,930,712 | 62,956,046 |
| % of Total | 6.3% | 17.3% | 54.6% |

Sources and Notes:

FCC Broadband Data Collection June 2023. The data was collected from

<https://www.arcgis.com/home/item.html?id=22ca3a8bb2ff46c1983fb45414157b08#overview> and published by juliah_esri on March 12, 2023 and last updated January 3, 2024. We last accessed this data on March 28, 2024.

Served: low latency fiber, cable, copper or licensed terrestrial fixed wireless offering speeds greater than or equal to 100/20 Mbps.

Underserved: low latency fiber, cable, copper or terrestrial licensed fixed wireless offering speeds greater than or equal to 25/3 Mbps but less than 100/20 Mbps.

Unserved: all service that is not low-latency or less than 25/3 Mbps and all geostationary satellite, non-geostationary satellite, unlicensed terrestrial fixed wireless and other.

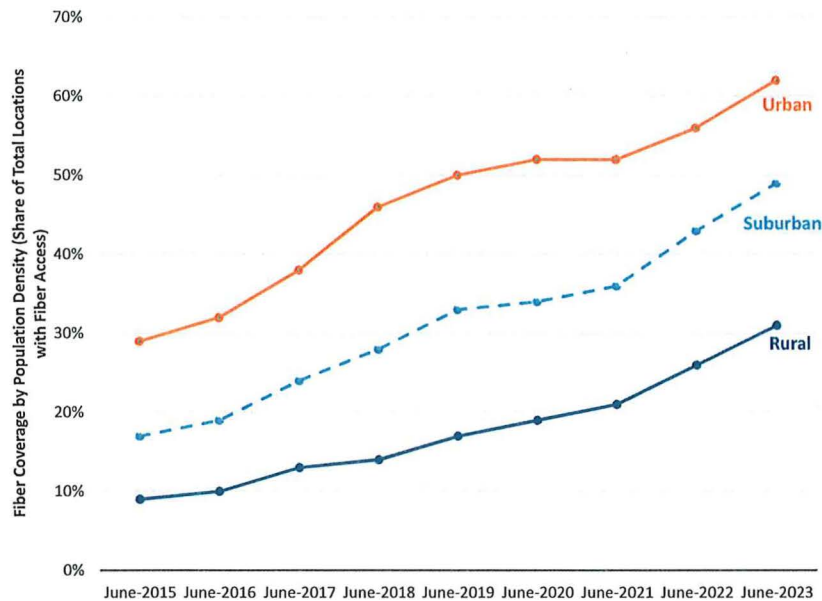
In addition, there is a large disparity in the percentage of households with fiber internet access between urban and rural states. In December 2021, the difference in average percent of households with fiber access between rural and urban areas was approximately 24.0%.²⁰ In June 2023, this difference grew to 25.1% even though access has grown in both urban and rural areas.²¹ Figure 2 below shows fiber coverage by population density. The disparity between urban and rural areas is quite large and narrowing this gap is crucial to ensure that people living in rural areas can keep pace when it comes to technological advancements such as artificial intelligence, telemedicine, and education technology.²²

²⁰ Tyler Cooper, "Over Half of America Now Has Access to Fiber," BroadbandNow Research, November 14, 2023, <https://broadbandnow.com/research/fiber-penetration-trends> ("Over Half of America Now Has Access to Fiber").

²¹ See, Over Half of America Now Has Access to Fiber.

²² See, Section IV.

FIGURE 2: FIBER COVERAGE BY POPULATION DENSITY



Sources and Notes:

Fiber Broadband Association, Fiber Deployment Annual Report 2023, https://fiberbroadband.org/wp-content/uploads/2024/01/Fiber-Deployment-Annual-Report-2023_FBA-and-Cartesian.pdf, p. 8.

III. Externalities, Market Failure and Sub-Optimal Fiber Investment and Deployment

Why is there a fiber connectivity gap? To understand this, we focus on the economic concept of market failures and how the presence of positive externalities leads to a socially sub-optimal level of investment in the fiber market.

A. The Theory of Externalities and Underinvestment

A market failure occurs when the price signals in a market do not reflect the underlying costs of the resources used. This leads to a situation where the choices made based on those price signals do not lead to the efficient use of resources. In general, in a well-functioning market where private actors fully capture the benefits from their investment decisions, the level of investment is both privately and socially optimal. In such a situation, the private benefit and the benefit to society as a whole (social benefit) are identical and fully captured by the entity incurring the cost of the decision. This has the benefit of market prices for goods and services reflecting the actual

cost of resources needed to produce those goods and services. Externalities occur when the actions of one party in a transaction affect the well-being of a third party, without compensation or consent. Externalities can be positive (beneficial) or negative (harmful), and they often lead to market failures because the prices of goods and services do not reflect the full social costs or benefits.²³ Positive externalities can result in a misallocation of resources, where resources are diverted away from activities that generate positive externalities towards activities with private benefits only. This misallocation leads to an inefficient allocation of resources and suboptimal social outcomes.²⁴

Underinvestment can often be linked to externalities, particularly when positive externalities are present.²⁵ For instance, a firm might underinvest in research and development because it cannot fully capture the benefits (externalities) that spill over to other firms or society as a whole.²⁶ In this case, society corrects this market failure by creating patents and other intellectual property rights so that inventors are incentivized to invent more. Similarly, education generates positive externalities by enhancing the productivity of individuals and fostering innovation and economic growth. However, individuals may underinvest in education due to the inability to fully capture the societal benefits, leading to suboptimal levels of human capital accumulation.²⁷ Thus positive externalities create a situation where the social benefits from an economic decision such as investing in a particular technology or sector is greater than the private benefit captured by the entity incurring the costs of those investments.

Figure 3 below illustrates such a situation. Equilibrium is characterized by where the lines cross because at that point the incremental benefit is just offset by the incremental cost. Left to the private market, investment will be at I_1 where the private marginal cost (PMC) and private marginal benefit (PMB) curves intersect. The PMB curve shows the incremental benefit that a private investor can expect if they invest \$1 extra. The social marginal benefit (SMB) curve shows how much society stands to gain from the \$1 investment. The SMB curve is higher than the private benefit curve due to the positive externalities – that is, at each level of investment society benefits more than the private actor making the investment. Thus, if one factors in all the positive

²³ See, Externalities: Prices Do Not Capture All Costs.

²⁴ See, Externalities: Prices Do Not Capture All Costs.

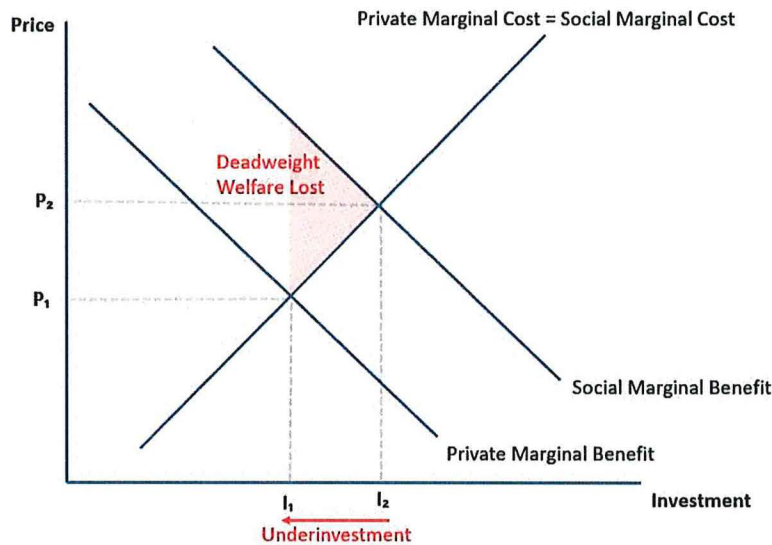
²⁵ Stiglitz, J. E. (1989). "The Economic Role of the State." *Oxford Review of Economic Policy*, 5(1), 1-20. Romer, P. M. (1990). "Endogenous Technological Change." *Journal of Political Economy*, 98(5), S71-S102.

²⁶ Griliches, Z. (1992). "The Search for R&D Spillovers." *The Scandinavian Journal of Economics*, 94(0), S29-S47. Jaffe, A. B. (1986). "Technological Opportunity and Spillovers of R&D: Evidence from Firms' Patents, Profits, and Market Value." *The American Economic Review*, 76(5), 984-1001.

²⁷ Heckman, J. J., Lochner, L. J., & Todd, P. E. (2006). "Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond." *Handbook of the Economics of Education*, 1, 307-458.

externalities or spillovers, *i.e.*, social benefits, the optimal level of investment should be I_2 . The private market equilibrium generates a sub-optimal level of investment. In the next section that follows, we are estimating the gap between the PMB and the SMB curve for fiber deployment. We will demonstrate that these significant positive externalities and spillovers are substantial, underscoring the need for increased investment in fiber infrastructure.

FIGURE 3: POSITIVE EXTERNALITIES AND UNDERINVESTMENT



B. Estimating Positive Economic Spillovers from Fiber Deployment Even in the Presence of Other High-Speed Broadband Technologies

As discussed above, when examining where fiber is deployed and adopted, there exist economic externalities that suggest private market transactions alone will not create the optimal level of fiber investment. There are two types of externalities that are associated with fiber deployment – contemporaneous externalities and temporal externalities. Contemporaneous externalities, for example, imply that fiber expansion will lead to various economic gains for the area where fiber is deployed, such as increased income, more employment, higher housing values, improved 5G deployment in rural America, increased connectivity options for anchor institutions, such as hospitals and libraries, and increased health and social benefits – none of which is fully captured by the private broadband operator investing in the fiber. In this section we will focus on these contemporaneous externalities. Temporal externalities are tied to fiber providing the highest

quality connections but the benefits occurring far into the future and not being fully captured by the private actors who invest in fiber. These will be addressed in Section V.

The existence of externalities implies that increasing the current access to fiber broadband has spillover effects on economic activity, today and tomorrow.²⁸ Recognizing or internalizing these externalities would encourage more fiber investment. To do so requires quantifying these externalities. In this paper, we will estimate a sub-set for these positive externalities and their effect on economic metrics such as housing values, income, employment, and work patterns.

There are numerous studies that show the positive spillovers and economic benefits that occur when high speed broadband is deployed to a community.²⁹ This paper, in contrast, focuses on the incremental benefits of fiber deployment controlling for the presence of availability of other high-speed broadband. We find that fiber presence in a geography is linked to many positive economic spillovers. We define general economic spillovers as externalities which show up in high-level economic indicators such as housing values, income and unemployment, in contrast to benefits that accrue to a specific industry (say, healthcare and education).³⁰ We empirically quantify these spillovers with publicly available data and well-established econometric techniques which estimate causal effects.³¹ In particular, we find a positive statistically significant relationship of varying magnitudes between fiber deployment and employment, housing value, household income, and rates of remote work, *i.e.*, fiber deployment is observed to increase these indicators.

To quantitatively assess the economic impact of expanded fiber access, we restrict our analysis to census tracts that had at least one HFC provider in all years and exclude tracts that already had fiber in 2014. We use broadband availability data from the FCC's 477 and Broadband Data Collection (BDC) data collection merged with economic indicators from the U.S. Census American Community Survey (ACS) to construct a difference in differences estimator at the census tract level. Difference in differences analysis uses a "treatment" group that is affected by the policy or

²⁸ Speed Matters, "Economic Growth & Quality Jobs," accessed September 4, 2024, <https://speedmatters.org/economicgrowthqualityjobs>.

²⁹ Wolfgang Briglauer, Carlo Cambini, and Klaus Gugler, "Economic Benefits of High-Speed Broadband Network Coverage and Service Adoption: Evidence from OECD Member States," Research Paper, No. 23, 2023, EcoAustria – Institute for Economic Research, Vienna, <https://www.econstor.eu/bitstream/10419/279415/1/186569830X.pdf>.

³⁰ These industry specific spillovers are discussed in the subsections below.

³¹ We use a difference in difference regression model to estimate the impact of fiber deployment on general economic indicators. See, Appendix A for a detailed description of the data and econometric methodology used.

event in question, and a “control” group that is unaffected (*i.e.*, untreated), and measures the difference in outcome between the two groups before and after the treatment. This is done in order to properly isolate the effect of the treatment from other confounding variables that might otherwise contribute to the difference in outcomes between the two groups. In our analysis, we define the control group as census tracts that do not have fiber access in any year of the sample, 2014 through 2021. Our treatment group is the subset of the sample that gained fiber access in either 2017 or 2018. Our estimates for fiber presence effects on economic indicators should be interpreted as the incremental effect conditional on having broadband of fiber over not having fiber, and accounts for any potential pre-existing trends, HFC deployment, and demographic similarities that fiber deployed geographies might have. We estimate this model separately for non-urban (rural and suburban) and urban census tracts where data variation allows such disaggregated estimation (*i.e.* for housing values and household income). Below we report and interpret our findings.

TABLE 2: GENERAL SPILLOVER EFFECTS OF FIBER PRESENCE

| Impact on: | | Sample Average without Fiber | Impact of Fiber Presence | Implied % Change |
|----------------------|-----|---------------------------------|-----------------------------|---------------------|
| Median Housing Value | [1] | | | |
| <i>Non-Urban</i> | | \$192,827 | \$27,061 | 14.0% |
| <i>Urban</i> | | \$241,736 | \$41,201 | 17.0% |
| Household Income | [2] | | | |
| <i>Non-Urban</i> | | \$56,260 | \$1,613 | 2.9% |
| <i>Urban</i> | | \$52,354 | - | - |
| Employment Rate | [3] | 67.90% | +0.5% | 0.74% |
| Work from Home Rate | [4] | 5.34% | +1.2% | 22.5% |

Sources and Notes: See, Appendix A for details on data sources and econometric methodology.

[1]: Note that the employment rate in the American Community Survey is defined as the percent of employed people out of the population. In contrast to the commonly cited unemployment statistic which considers the percentage of people that are unemployed and out of the labor force. The U.S. Bureau of Labor Statistics defines the labor force as the number of people who are either working or actively looking for work. See, U.S. Bureau of Labor Statistics, “Labor Force Statistics from the Current Population Survey,” <https://www.bls.gov/cps/definitions.htm#laborforce>.

[2]: Brattle analysis of Census and FCC 477 Data.

* Our econometric model for household income effects in urban tracts show that median income is on average higher in tracts that have fiber, however this difference between the tracts that do and do not have fiber is not statistically significant.

[3]: Brattle analysis of Census and FCC 477 Data

[4]: Brattle analysis of Census and FCC 477 Data

As shown in Table 2 we find that fiber deployment in a given census tract has different effects in urban and non-urban areas for housing value and household income. For urban and non-urban areas, housing values increase by 17% and 14% respectively. For non-urban areas household income increases by 2.9% but the income effect is not statistically significant in urban areas.³² From the US-wide model we find that there is a 0.05% increase in the employment rate, and a 22.5% increase in the remote work rates. The relatively modest positive impacts on the employment rate and household income are unsurprising, as these economic indicators are more directly impacted by a plethora of macro-economic forces. In the following section we illustrate the significance of these impacts created by fiber over other broadband deployments.

IV. Access to Fiber Can Generate Billions of Dollars of Economic Impact

In this section, we explain the economic impacts found in our model by focusing on some illustrative small, medium and large cities. In addition, we also estimate a U.S.-wide effect. It is worth reiterating, that the model isolates the effect of fiber deployment and estimates the positive economic spillovers from that investment separately in urban and non-urban areas. This effect is incremental to any benefits that may occur when any high-speed broadband is deployed. By isolating the effect of fiber, we show that investing in fiber has large and significant added economic benefits to communities that are generated solely by fiber and not other technologies. From the FCC's 2023 BDC, we find that there are approximately 56 million households in census tracts that have no fiber broadband.³³ This constitutes of 50 million non-urban (rural and suburban) households and about 6 million urban households. This includes tracts that don't have fiber but have HFC or other non-fiber broadband options, as well as tracts that have no broadband at all. We do not consider tracts that are partially served by fiber, i.e. homes without fiber that are partially served are not in our 56 million estimate.

³² When we estimated the econometric model, the income effect in urban areas couldnot be estimated with precision and was thus statistically insignificant. In other words, this implies that the evidence is insufficient to conclude that there is a meaningful effect of fiber deployment (in areas with existing high-speed broadband) on urban income, in the context of the model being estimated.

³³ We overlay the BDC shapefiles (fiber availability) with census shapefiles (tract boundaries) to estimate the number of households that are unserved by fiber. See, Appendix A.

A. Housing Values

We find that with access to fiber broadband (where there was only non-fiber broadband before) the median housing values (which was approximately \$200,000 in 2023) increase by around 14% or \$29,000 on average.³⁴ This is a substantial impact because these are places where there was already high-speed non-fiber internet. Just the deployment of fiber is enough to show this significant increase in home values.

This increase in home values can positively impact the local economy through enhanced spending, investment, and tax revenues. Higher home values generally lead to increased property tax revenues for local governments leading to increased public spending. Homeowners with higher home equity often feel wealthier and more financially secure, which can lead to increased consumer spending. This boost in spending can stimulate local businesses and support job creation in retail, services, and other sectors. Also, with more valuable homes, homeowners might be more willing to invest in local businesses or start their own enterprises. This can spur entrepreneurship and economic diversification in the community.

- For example, for a city such as Detroit, with 311,291 housing units and \$83,600 in median housing value, if say, 35% of the housing units are unserved by fiber, then deploying fiber to all the unserved households would increase housing value by \$1.6 billion.³⁵
- For example, for a small rural town such as Iron Mountain, Michigan, with 3,631 housing units and \$112,600 in median housing value, if say, 31% of the housing units are unserved by fiber, then deploying fiber to all the unserved households would increase housing value by \$18 million.³⁶

³⁴ These numbers are a weighted average of the urban and non-urban values. *See*, Appendix A.

³⁵ For households and housing values *see*, Census Reporter, “Iron Mountain, MI,” accessed September 4, 2024, <https://censusreporter.org/profiles/16000US2640960-iron-mountain-mi/> (“Census Reporter: Iron Mountain, MI”). *See also*, Census Reporter, “Detroit, MI,” accessed September 4, 2024, <https://censusreporter.org/profiles/16000US2622000-detroit-mi/> (“Census Reporter: Detroit, MI”). For fiber availability, *see*, United States Census Bureau, “American Community Survey S2801: Types of Computers and Internet Subscriptions Detroit,” accessed September 4, 2024, <https://data.census.gov/table?q=internet%20access%20in%20Detroit> (“American Community Survey S2801: Types of Computers and Internet Subscriptions Detroit”). We calculate fiber unserved households as the total households minus those served by cable or fiber. Hence this is an underestimate.

³⁶ For households and housing values *see*, Census Reporter: Iron Mountain, MI. For fiber availability, *see*, American Community Survey S2801: Types of Computers and Internet Subscriptions Detroit. We calculate fiber unserved households as the total households minus those served by cable or fiber. Hence this is an underestimate.

- We find that deploying fiber to 56 million fiber-unserved households has the potential to generate at least these economic impacts in terms of housing values (expressed in NPV for a permanent one-time increase in housing value):
 - \$1.4 trillion for rural and suburban areas and \$242 billion for urban areas.
 - The aggregate U.S. impact in net present value terms (NPV) is \$1.64 trillion.

B. Household Income and Employment

1. Household Income

From the econometric model, we have found that access to fiber broadband (where there was broadband, but no fiber) increases the median household income (which is \$56,000 in 2023) by 3% or \$1450 on average.³⁷ This is significant because these areas all had high-speed internet, but no fiber, and our estimate isolates the effect of fiber broadband from other high-speed internet. For a city this can have a tremendous economic impact, both in terms of direct and indirect effect. This income increase will have positive spillovers on other parts of a local economy.

- When we estimate the incremental effect of fiber deployment for urban and rural areas separately, for urban areas such as Detroit, our model predicts negligible incremental income effect of fiber. Note that this is an underestimate as this does not account for the effect of deploying fiber in areas that are unserved by any broadband.
- For example, for the small rural town such as Iron Mountain, Michigan, deploying fiber to all the unserved households would increase household income value by approximately \$2 million annually.³⁸

³⁷ The urban effects are not statistically significant. There the effect on urban households is considered to be zero. These numbers are a weighted average of the urban and non-urban values, where the urban increase is \$0. See Table 2 and Appendix A.

³⁸ For households and income *see* Census Reporter: Iron Mountain, MI. For fiber availability, *see*, <https://data.census.gov/table?q=internet%20access%20in%20iron%20mountain,%20MI>. For fiber availability, *see*, United States Census Bureau, "American Community Survey S2801: Types of Computers and Internet Subscriptions Iron Mountain, Michigan," accessed September 4, 2024, <https://data.census.gov/table?q=internet%20access%20in%20iron%20mountain,%20MI> ("American Community Survey S2801: Types of Computers and Internet Subscriptions Michigan"). We calculate fiber unserved households as the total households minus those served by cable or fiber. Hence this is an underestimate.

- For the U.S.-wide effect we find that deploying fiber to 56 million fiber-unserved households has the potential to generate at least these economic impacts in terms of income:
 - On an annual basis income will increase by:
 - \$81 billion, which is approximately \$1,450 per households with new fiber access if applied to all unserved U.S. households.³⁹
 - On a perpetuity basis income will increase by:
 - \$1.6 trillion (NPV) for non-urban areas and negligible impact for urban areas.
 - The aggregate U.S. impact is \$1.6 trillion (NPV).

2. Employment

High-speed broadband is a critical infrastructure that supports modern economies. As part of his Budget Request for the \$42 billion in BEAD funding, the Biden administration said that the installation of high-speed internet creates high-paying jobs and strengthens local economies.⁴⁰ Broadband can boost job creation in various ways. It initially creates jobs through construction and deployment programs, which act as short-term economic stimulants. It allows businesses to move functions to regions with lower costs, potentially shifting jobs from cities to rural areas, thus creating a more sustainable rural economy. Lastly, broadband expands market reach, enabling businesses to set up physical operations in remote locations, like satellite clinics in healthcare, which can create jobs in those underserved areas.

³⁹ When our model is estimated separately for rural and urban census tracts, we find that the income effect is not significant for urban areas. See, Appendix A for the estimated model.

⁴⁰ NTIA, "Broadband Equity, Access, and Deployment Program Notice of Funding Opportunity," last accessed August 5, 2024, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>. NTIA states that "[t]his program will lay critical groundwork for widespread access, affordability, equity, and adoption of broadband, create good-paying jobs; grow economic opportunities, including for local workers, provide increased access to healthcare services, enrich educational experiences of students, close long-standing equity gaps, and improve the overall quality of life across America."

There is extensive literature that documents the effects of increases in employment levels (both direct from the fiber construction and indirect from spillovers).⁴¹ This literature shows that for every 1% increase in the broadband penetration rate, employment increases between 0.14% to 5.32%.⁴² However, these estimates are calculating broadband's impact in the early 2000s, approximately 20 years ago. This time spans when broadband was first getting deployed, thus, the effects are likely larger than what we would expect today. In this paper, since we study the incremental effect of fiber broadband in areas that already have high-speed internet, one of the primary channels of fiber deployment on increases to employment levels is likely through the construction effect.⁴³ This can create jobs through several channels.⁴⁴ First, there will be a direct effect in employment growth during the network deployment phase. For instance, jobs may be created in roles related to telecommunications technicians, construction workers, and engineers. There are also additional jobs created through indirect channel. For instance, secondary economic activity, like employment opportunities for individuals with experience relating to metal products, electrical equipment, and professional services, are driven by the spending of businesses supporting the network rollout. Third, there will be an induced effect where jobs are generated by increased household spending from incomes earned through direct and indirect job effects. This includes roles in consumer goods, retail, and services.

Our analysis shows the incremental impact of fiber deployment on job creation beyond what occurs due to general high-speed broadband penetration. We estimate that:

- Access to fiber incrementally increases the employment rate by a small but measurable 0.74%. This is equivalent to a 0.5% increase in employment.⁴⁵

⁴¹ Crandall, R., C. Jackson, and H. Singer, "The Effect of Ubiquitous Broadband Adoption on Investment, Jobs, and the U.S. Economy, 2003, Washington, DC: Criterion Economics. Atkinson, R., D. Castro, and S.J. Ezell, "The Digital Road to Recovery: A Stimulus Plan to Create Jobs, Boost Productivity and Revitalize America., 2009, Washington, DC: Te Information Technology and Innovation Foundation. Liebenau, J., R.D. Atkinson, P. Kärrberg, D. Castro, and S.J. Ezell, "The UK's Digital Road to Recovery, 2009, <https://ssrn.com/abstract=1396687>. Raul L. Katz, "The Impact of Broadband Internet on Employment," in Lorenzo Pupillo et al., *Digitized Labor: The Impact of the Internet on Employment*, (New York: Palgrave Macmillan, 2018), pp. 95-108, <https://business.columbia.edu/sites/default/files-efs/imce-uploads/CITI/Articles/Katz%20Impact%20of%20Broadband%20Internet%20on%20Employment.pdf>, ("Katz (2018)"

⁴² See, Katz (2018).

⁴³ See, Katz (2018) p. 3.

⁴⁴ See, Katz (2018) p. 3.

⁴⁵ The jobs impact number is low because these places already have high-speed internet and this is only the incremental impact on jobs if fiber is deployed to these areas. The effect would be higher if these were unserved areas. See Appendix A.

- For a city such as Detroit, with a labor force of approximately 356,408 people, deploying fiber to all the unserved households would create 36 new jobs.⁴⁶
- For a small rural town such as Iron Mountain, Michigan, with a labor force of approximately 4,363 people, deploying fiber to all the unserved households would create at least 14 new jobs.⁴⁷
- For the U.S.-wide effect we find that deploying fiber to 56 million fiber-unserved households, or 77 million Americans in the workforce who are without fiber, has the potential to generate at least 380,000 new jobs.⁴⁸

C. Remote Work

We also find a large positive impact on indicators that are more directly associated with access to reliable and high-speed internet. The incremental increase in the number of workers working from home in census tracts with fiber over tracts without fiber is expected and intuitive. The availability of a more reliable home broadband option should encourage more workers to choose to work from home. As more people consider fully remote or hybrid work as a long-term option for employment, housing demand in geographies with fiber access should increase. In fact, our findings suggest that more broadly funding fiber deployment may help even out housing value disparities across the nation. This may also help explain our high estimated impact on housing value.⁴⁹

To investigate a possible contribution to the stark increase in remote work, we also conduct a separate analysis of the trend in work from home rates for census tracts with and without fiber access. In particular, we conduct another difference in differences analysis with our control group. Our control group is once again defined as census tracts never gaining fiber access, and our treatment group is now defined as any census tract with fiber access (according to our 15% threshold) by 2019. We then measure the differential effect of the Covid-19 pandemic as a

⁴⁶ For labor force data, *see*, United States Census Bureau, “Labor Force in Detroit, MI,” last accessed August 7, 2024, <https://data.census.gov/table?q=labor%20force%20in%20detroit,%20MI>. We define labor force as population between 20 – 64 years.

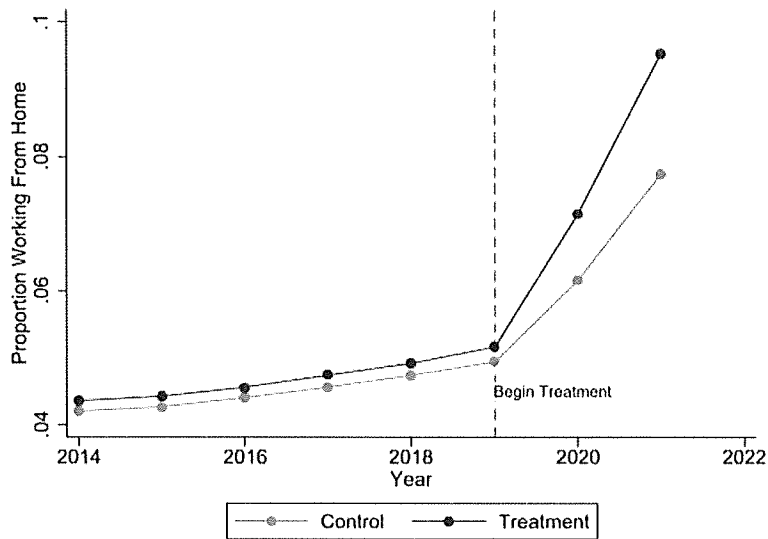
⁴⁷ For labor force data *see*, United States Census Bureau, “Labor Force in Iron Mountain, MI,” last accessed August 7, 2024, <https://data.census.gov/table?q=labor%20force%20in%20iron%20mountain,%20MI>.

⁴⁸ *See*, Row [G] of Table 6 shows that the workforce without fiber is estimated to be approximately 77 million. 77 million multiplied by 0.5% equals approximately 380,000.

⁴⁹ *See*, Section IV.A.

substantial exogenous shock to work from home rates, defining our pre-treatment period as 2014 to 2019 and using 2020 and 2021 as our post-treatment period. We find that work-from-home rates increased by 2.4 percentage points (a whopping 54% increase) for the control group, and the rate increased by an additional 1.2 percentage points (27%) in census tracts with fiber access prior to the pandemic. This is despite virtually identical work from home rates prior to the treatment. This effect can be clearly seen in Figure 4 below.

FIGURE 4: TRENDS IN WORK FROM HOME RATES FOR TRACTS WITH AND WITHOUT FIBER ACCESS PRIOR TO THE COVID-19 PANDEMIC



The onset of the COVID-19 pandemic shifted large swathes of workers to a work-from-home format. As of 2023, 12.7% of full-time employees were working from home while 28.2% had hybrid work models.⁵⁰ High-speed broadband access is critical for successful work-from-home arrangements and fiber has played a critical role in enabling this as we have shown in our econometric analyses.⁵¹

⁵⁰ Dr. John W. Mitchell, "The State of Hybrid Workplaces in 2024," Forbes, January 24, 2024, <https://www.forbes.com/sites/forbesbooksauthors/2024/01/24/the-state-of-hybrid-workplaces-in-2024/#:~:text=Statistics%20That%20Tell%20the%20Story&text=As%20of%202023%2C%2012.7%25%20of,still%20work%20in%20an%20office.>

⁵¹ S&P Global, "U.S. Broadband Expansion: Bridging Access Gaps," April 6, 2023, https://www.spglobal.com/_assets/documents/ratings/research/101575133.pdf.

Precisely measuring the impact of remote work enabled by fiber deployment on the environment is an extremely complex empirical exercise which needs to account for a multitude of factors.⁵² However, recent studies show that remote work can bring environmental benefits of working from home. For example, a 2023 study found the working remotely for 4 or more days a week can reduce people’s carbon footprint by 54% when coupled with additional sustainable habits.⁵³

D.Environmental Benefits That Should Be Considered When Deciding Between Investments in Fiber and Other Technologies

Fiber is considered a greener alternative to HFC cable deployment for several reasons. A recent FBA study finds that fiber significantly reduces the carbon footprint compared to HFC (DOCSIS 4.0).⁵⁴ For instance, the network operational carbon footprint of fiber is up to 96% less than HFC.⁵⁵ Similarly, fiber networks have a 60% lower carbon footprint associated with network component manufacturing compared to HFC.⁵⁶ The most significant benefit from an environmental perspective is that fiber has a much smaller carbon footprint than its alternatives. Fiber networks use “passive” (non-powered) devices such as optical splitters, whereas HFC cable use “active” (powered devices such as amplifiers and powered taps).⁵⁷ A 2017 European study found that at 50 Mbps, fiber networks emit 1.7 tons of carbon dioxide per year, while the most efficient copper networks emit 2.7 tons.⁵⁸ The study also noted that at higher speeds, the savings would be even greater since fiber-optic networks require less power for signal transmission over

⁵² See, for e.g., Ganga Shreedhar, Kate Laffan, and Laura M. Giurge, “Is Remote Work Actually Better for the Environment?” March 7, 2022, <https://hbr.org/2022/03/is-remote-work-actually-better-for-the-environment>.

⁵³ Cornell University, “Remote Work Can Slash Your Carbon Footprint — If Done Right,” September 18, 2023, last <https://www.eurekalert.org/news-releases/1001874>.

⁵⁴ Fiber Broadband Association, “Fiber Broadband Deployment is Paramount To Achieving Zero Carbon Footprint,” FBA Sustainability Working Group, July, 2024, https://fiberbroadband.org/wp-content/uploads/2024/07/FBA-059_Sustainability_WhitePaper_FIN.pdf, (“Fiber Broadband Deployment is Paramount To Achieving Zero Carbon Footprint”).

⁵⁵ See, Fiber Broadband Deployment is Paramount To Achieving Zero Carbon Footprint.

⁵⁶ See, Fiber Broadband Deployment is Paramount To Achieving Zero Carbon Footprint.

⁵⁷ FS, “Environmental Consideration: Are Fiber Optic Cables More Sustainable?” December 18, 2023, <https://community.fs.com/article/environmental-consideration-are-fiber-optic-cables-more-sustainable.html> (“Environmental Consideration: Are Fiber Optic Cables More Sustainable?”).

⁵⁸ European Commission, “Fibre is the Most Energy Efficient Broadband Technology,” November 24, 2020, <https://digital-strategy.ec.europa.eu/en/library/fibre-most-energy-efficient-broadband-technology> (“European Commission: Fibre is the Most Energy Efficient Broadband Technology”).

long distances.⁵⁹ The use of “active” devices in the non-fiber networks also imply that these active devices use energy (power) which generates carbon output and reduces reliability. As powered devices tend to fail over time, they drive up operating expenses of HFC when, compared to fiber, increases truck rolls required to maintain the non-fiber network. Thus, in the long run, fiber cables require less maintenance than alternatives.

Due to their ability to transmit larger amount of data, fiber optic cables require less plastic-based cladding materials than copper cables, which further reduces the amount of mining and extraction required for their production.⁶⁰ Second the installation of fiber optic cables is significantly less disruptive to the environment due to their lightweight and compact nature. This can support the preservation of delicate ecologies while ensuring expanded access.⁶¹ Fiber is also considerably more resilient and are estimated to last up to 25 years or more.⁶² Updates to fiber cables do not require replacing the cables themselves, which makes them more cost-effective and environmentally friendly.⁶³ Repairs are required much less frequently, and by some estimates, repair times are up to 67% faster than for other wired technologies.⁶⁴ Additionally, their overall energy efficiency benefits organizations and homes relying on them as well by passing on energy savings.⁶⁵

E. Enhanced Wireless Connectivity with 5G and IoT

5G and the Internet of Things (IoT) are expected to be game changers for our time. The evolution of 5G networks is expected to facilitate the deployment of new applications including the IoT. IoT refers to the linking of and communication between physical objects, such as roadways and bridges communicating with cars, or agricultural sensors and farm management systems, using wired and wireless networks.⁶⁶ Ericsson estimates that worldwide, there could be 5.6 billion 5G

⁵⁹ See, European Commission: Fibre is the Most Energy Efficient Broadband Technology.

⁶⁰ Harry Guinness, “How Does Choosing Fiber Internet Benefit the Environment?” Frontier, September 30, 2022, <https://blog.frontier.com/2022/09/how-does-choosing-fiber-internet-benefit-the-environment/>.

⁶¹ FiberMart, “4 Environmental Benefits of Fiber Optic Cables,” May 19, 2023, <https://www.fiber-mart.com/news/4-environmental-benefits-of-fiber-optic-cables-a-6194.html>.

⁶² STL, “Environmental Considerations for Sustainable Fibre Deployment,” June 5, 2023, <https://stl.tech/blog/environmental-considerations-for-sustainable-fibre-deployment/> (“Environmental Considerations for Sustainable Fibre Deployment”).

⁶³ See, Environmental Consideration: Are Fiber Optic Cables More Sustainable.

⁶⁴ See, Environmental Considerations for Sustainable Fibre Deployment.

⁶⁵ See, Environmental Consideration: Are Fiber Optic Cables More Sustainable.

⁶⁶ Michael Chui, Markus Löffler, and Roger Roberts, “The Internet of Things,” McKinsey Quarterly, March 2010, <http://www.mckinsey.com/industries/high-tech/our-insights/the-internet-of-things>.

mobile subscriptions by 2029.⁶⁷ By 2034, 5G is expected to generate \$12.3 trillion of global economic activity, \$2.2 trillion in GDP for the global economy and 22 million jobs by 2035.⁶⁸ For the United States, 5G is expected to result in \$719 billion of gross output, and generate 3.4 million jobs by 2035.⁶⁹

All of these benefits depend on high bandwidth and low latency services powered by fiber backhaul connectivity. For these wireless solutions to provide low latency, fiber needs to be deployed as close to the end user application as possible, getting the broadband signal “out of the air and into the ground” as the first available point.⁷⁰ For the latency-sensitive applications in the context of 5G, latency is an important component of gauging the quality of experience for broadband users. Many new technologies with the potential to greatly benefit society require the speed and capacity of 5G networks (fiber in particular). 5G is expected to decrease end-to-end latency by 10 times, thereby improving user experiences for current technologies and providing an opportunity for innovation.⁷¹ In particular, IoT technologies, such as robotic surgery, autonomous vehicles, and drones will require extremely low latency. 5G will also enhance the online gaming experience as small lags can drastically alter a game. There are a fair number of applications that would benefit significantly from low latencies. Thus, the tradeoff should not be evaluated just in terms of current uses of broadband technology, but also with an eye towards building in potential capacity for future needs.

F. Other Economic Benefits

Fiber's demonstrated benefits over other fixed broadband alternatives very likely extend to many other areas. Here we examine several areas that are sensitive to the availability and, especially, quality of broadband connections. Although we do not have any incremental fiber benefits to

⁶⁷ Ericsson, “Ericsson Mobility Report,” June 2024, p. 3, <https://www.ericsson.com/49ed78/assets/local/reports-papers/mobility-report/documents/2024/ericsson-mobility-report-june-2024.pdf>.

⁶⁸ IHS Economics and IHS Technology, “The 5G Economy: How 5G Will Contribute to the Global Economy,” January 2017, <https://cdn.ihs.com/www/pdf/IHS-Technology-5G-Economic-Impact-Study.pdf> (“The 5G Economy”), p. 4. For GDP estimate, *see*, GSMA, “Study on Socio-Economic Benefits of 5G Services Provided in mmWave Bands,” The WRC Series, December 2018, <https://www.gsma.com/spectrum/wp-content/uploads/2019/10/mmWave-5G-benefits.pdf>, pp. 9, 21.

⁶⁹ *See*, The 5G Economy, p. 19.

⁷⁰ Asset Essentials, “Why Fiber Is the Key to Getting Faster 5G Everywhere,” July 26, 2023, <https://www.assetessentials.com/why-fiber-is-the-key-to-getting-faster-5g-everywhere/>.

⁷¹ Mohammed Al Khairy, “How 5G Low Latency Improves Your Mobile Experiences,” Qualcomm, May 12, 2019, <https://www.qualcomm.com/news/onq/2019/05/how-5g-low-latency-improves-your-mobile-experiences>.

measure here, it is highly likely that the noted benefits from quality broadband connections would only be enhanced if that broadband was delivered over fiber.

1. Improved Health Benefits of Fiber Deployment

Internet provided over fiber is generally more reliable and lower latency than other high-speed broadband technologies (such as HFC cable internet).⁷² Hence, it is the ideal technology on which various healthcare services can be provided on. In particular, telemedicine is well suited for patients who medically or socially find it difficult to see physicians in-person.⁷³ These patients likely have high marginal value for access to healthcare. Furthermore, advancements in technology now allow healthcare providers to monitor patients outside the traditional care environment.⁷⁴ This type of monitoring is especially beneficial for patients with chronic health conditions.⁷⁵ Remote patient monitoring (RPM) allows healthcare providers to access health data in real-time and based on this data, allow them to adjust prescriptions or change a diagnosis.⁷⁶ For chronic care management, 93% of surveyed physicians state that they would take advantage of telehealth services, including RPM.⁷⁷ RPM require internet and bad internet connectivity can cause obstacles to patient monitoring.⁷⁸ Accessibility and connectivity issues would be especially pronounced in rural areas where high speed internet is less frequently available.⁷⁹

Additionally, from the healthcare provider's perspective, there are cost savings realized through reduced overhead expenses as less physical clinic space and administrative staff are needed to operate.⁸⁰ Telemedicine also increases the likelihood of early detection and treatment of

⁷² Lauren Hannula, "Cable vs. Fiber Internet," WhistleOut, last updated December 7, 2023, <https://www.whistleout.com/Internet/Guides/cable-and-fiber-internet-differences>.

⁷³ Michael X Jin, Sun Young Kim, Lauren J Miller, Gauri Behari and Ricardo Correa, "Telemedicine: Current Impact on the Future," Cureus, Vol. 12(8), August 20, 2020, last accessed March 22, 2024, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7502422/>.

⁷⁴ Colton Hood, Neal Sikka, Cindy Manaoat Van, and Sarah R. Mossburg, "Remote Patient Monitoring," PSNET, March 15, 2023, last accessed March 22, 2024, <https://psnet.ahrq.gov/perspective/remote-patient-monitoring> ("Remote Patient Monitoring").

⁷⁵ See, Remote Patient Monitoring.

⁷⁶ Prognocis, "Pros and Cons of Remote Patient Monitoring," last accessed March 22, 2024, <https://prognocis.com/pros-and-cons-of-remote-patient-monitoring/> ("Pros and Cons of Remote Patient Monitoring").

⁷⁷ See, Pros and Cons of Remote Patient Monitoring.

⁷⁸ See, Pros and Cons of Remote Patient Monitoring.

⁷⁹ See, Section II.B.

⁸⁰ See, Smart Clinix, "How Does Telemedicine Reduce Costs," November 23, 2023, <https://smartclinix.net/how-does-telemedicine-reduce-costs/> ("Smart Clinix: How Does Telemedicine Reduce Costs").

diseases, which can prevent the increased costs of treating more serious diseases.⁸¹ Lastly, remote monitoring of diseases prevent readmission into the hospital which can be another source of cost savings for consumers.⁸² When considering widening gaps in programs like Medicaid, the cost savings from early preventative care become even more pronounced.⁸³ This, once again, underscores the importance of universal availability for high speed two-way internet lines, which is best provided by fiber deployment.

2. Positive Educational Outcomes of Fiber Deployment

During the COVID-19 pandemic, 93% of parents reported that their children received online instruction of some form and 34% reported experiencing at least one technology-related obstacle related to schoolwork during this time.⁸⁴ These obstacles disproportionately affected children from rural and/or lower-income households. This phenomenon is known as the homework gap, which remains a persistent issue as the use of internet-based learning has increased.⁸⁵ During the COVID-19 pandemic, students worldwide that were unable to participate in remote learning due to lack of internet and reliable connectivity, risk losing \$17 trillion in lifetime earnings.⁸⁶ Regional studies in various countries revealed substantial losses in math and reading and the learning losses were approximately proportional to the length of the closures.⁸⁷

As of the fall of 2022, 6% of all U.S. college students attended primarily online institutions.⁸⁸ Over the 2021 to 2022 school year, these institutions enrolled over 560,000-full-time students and

⁸¹ See, Smart Clinix: How Does Telemedicine Reduce Costs.

⁸² See, Smart Clinix: How Does Telemedicine Reduce Costs.

⁸³ Center on Budget and Policy Priorities, "The Medicaid Coverage Gap: State Fact Sheets," April 3, 2024, last <https://www.cbpp.org/research/health/the-medicaid-coverage-gap>.

⁸⁴ Katherine Schaeffer, "What We Know About Online Learning and the Homework Gap Amid the Pandemic," Pew Research Center, October 1, 2021, <https://www.pewresearch.org/short-reads/2021/10/01/what-we-know-about-online-learning-and-the-homework-gap-amid-the-pandemic/> ("What We Know About Online Learning and the Homework Gap Amid the Pandemic").

⁸⁵ Lauraine Langreo, "The 'Homework Gap' Persists. Tech Equity Is One Big Reason Why," EducationWeek, June 7, 2022, last accessed April 10, 2024, <https://www.edweek.org/technology/the-homework-gap-persists-tech-equity-is-one-big-reason-why/2022/06>.

⁸⁶ World Bank-UNESCO-UNICEF, "Learning Losses from COVID-19 Could Cost this Generation of Students Close to \$17 Trillion in Lifetime Earnings," December 6, 2021, <https://www.worldbank.org/en/news/press-release/2021/12/06/learning-losses-from-covid-19-could-cost-this-generation-of-students-close-to-17-trillion-in-lifetime-earnings> ("World Bank-UNESCO-UNICEF: Learning Losses from COVID-19").

⁸⁷ See, World Bank-UNESCO-UNICEF: Learning Losses from COVID-19.

⁸⁸ Ilana Hamilton, Veronica Beagle, and David Clingenpeel, "By the Numbers: The Rise of Online Learning In the U.S.," March 22, 2024, <https://www.forbes.com/advisor/education/online-colleges/online-learning-stats/> ("By

Continued on next page

559,000 part-time students and female students made up 66% of all students.⁸⁹ According to data collected across 10 states, virtual school enrollment rose to 170% compared to pre-pandemic levels in 2020-2021 and 176% in 2021-2022.⁹⁰ Even in traditional classroom settings, educators are incorporating technology more than before. Education technology (EdTech) has made it possible for educators to incorporate new tools and technologies in their teaching.⁹¹ Lack of high-speed internet access is one of the major barriers to incorporating EdTech tools in classrooms.⁹² And the substantial increase in the capacity and speeds requirements, and the expected increase in the future can be best addressed with fiber deployments.

We observe that, as shown in Figure 5, below, the share of students learning online amongst graduate and undergraduate students is considerably high. This effect is even more pronounced at lower levels of household income. Given that rural households will benefit greatly from online learning in the U.S., it is important to ensure that rural areas of the U.S. have sufficient fiber access to facilitate online learning. As we discussed earlier, rural areas of the U.S. still lack sufficient access to high-speed internet, and it is essential for regulators to narrow the gap in fiber access rates between urban and rural areas.

the Numbers: The Rise of Online Learning in the U.S.”). Note, “NCES defines primarily online schools as those enrolling 90% or more of their student body in distance education.”)

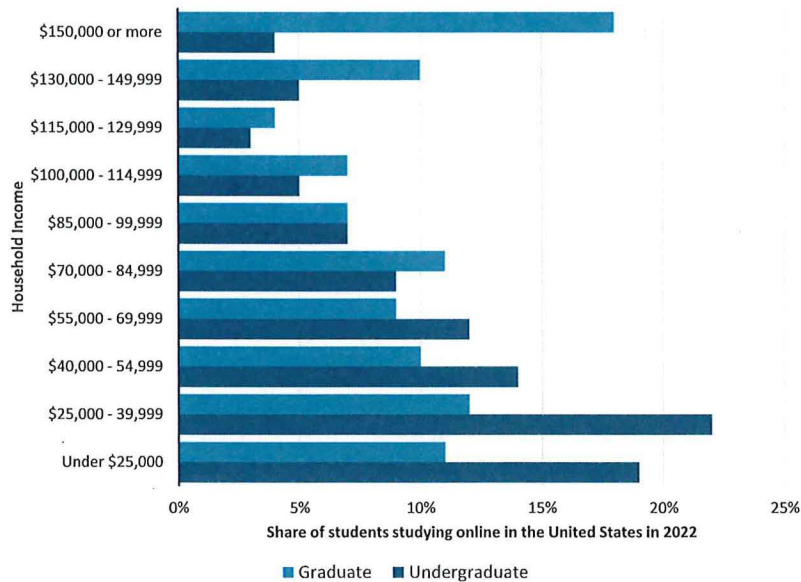
⁸⁹ See, *By the Numbers: The Rise of Online Learning in the U.S.* For student enrollment, see, National Center for Education Statistics, “Table 311.33. Selected statistics for degree-granting postsecondary institutions that primarily offer online programs, by control of institution and selected characteristics: Fall 2022 and academic year 2021-22,” accessed September 4, 2024, https://nces.ed.gov/programs/digest/d23/tables/dt23_311.33.asp.

⁹⁰ Asher Lehrer-Small, “Virtual School Enrollment Kept Climbing Even As COVID Receded, New Data Reveal,” updated November 16, 2022, <https://www.the74million.org/article/virtual-school-enrollment-kept-climbing-even-as-covid-receded-new-data-reveal/>.

⁹¹ All Assignment Help, “Major Barriers Education Technology Faces in the Modern Times,” November 28, 2022, <https://www.allassignmenthelp.com/blog/major-barriers-education-technology-faces-in-the-modern-times/> (“Major Barriers Education Technology Faces in the Modern Times”).

⁹² See, *Major Barriers Education Technology Faces in the Modern Times*.

FIGURE 5: SHARE OF STUDENTS STUDYING ONLINE IN THE U.S. (2022) BY TOTAL HOUSEHOLD INCOME



Sources and Notes:

Veera Korhonen, "Share of Students Studying Online in the U.S., by Income 2022," August 3, 2023, last accessed March 25, 2024, <https://www.statista.com/statistics/956154/share-students-studying-online-income-education-level/>.

3. Improved Adoption of Up-and-Coming Artificial Intelligence Technology

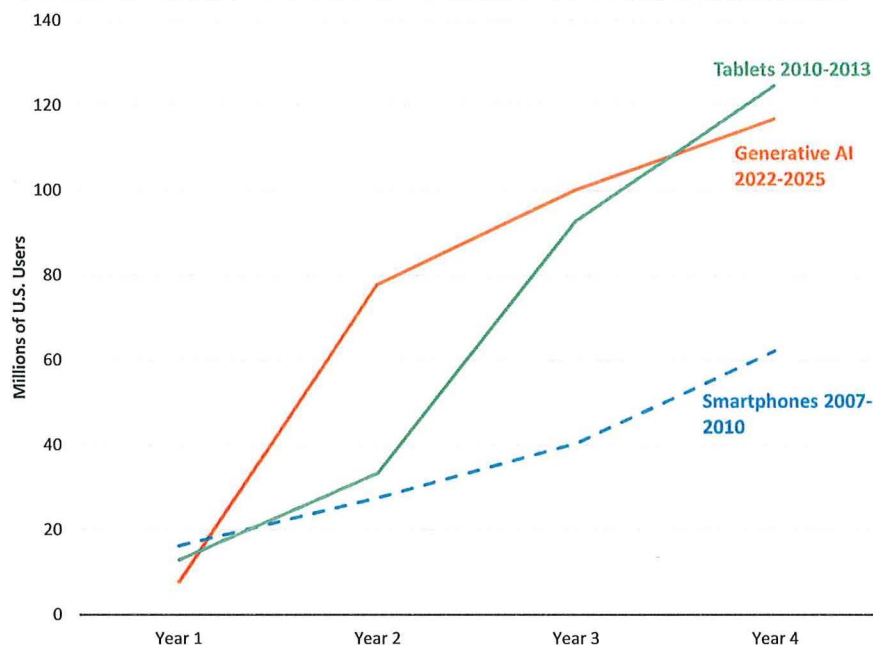
In recent years, there have been significant advancements in the field of artificial intelligence (A.I.) and looking ahead, we can expect these developments to continue pushing the frontier of A.I. technology. Especially for small businesses, AI can provide efficiency gains and cost savings.⁹³ According to a report by Small Business and Entrepreneurship Council (SBEC), 75% of all surveyed small businesses utilized AI tools in their operations and some of the most popular use cases included financial management tools, email marketing automation, cybersecurity and inventory management.⁹⁴ Furthermore, 54% of businesses have reported increased cost savings and efficiencies from A.I. implementation and 64% of businesses expect A.I. to improve

⁹³ Neil Hare, "How Small Businesses Are Using AI—And How Your Business Can Benefit Too," Forbes, November 17, 2023, <https://www.forbes.com/sites/allbusiness/2023/11/17/how-small-businesses-are-using-ai-and-how-your-business-can-benefit-too/?sh=231fee142344>.

⁹⁴ Small Business & Entrepreneurship Council, "Small Business A.I. Adoption Survey," October 2023, <https://sbecouncil.org/wp-content/uploads/2023/10/SBE-Small-Business-AI-Survey-Oct-2023-FINAL.pdf>, p. 4.

productivity.⁹⁵ Improving fiber access can lead to positive knock-on effects such as efficiency gains from greater adoption of A.I technology.

FIGURE 6: A.I. ADOPTION RATES COMPARED TO OTHER TECHNOLOGIES



Sources and Notes:

Sara Lebow, "Generative AI Adoption Climbed Faster Than Smartphones, Tablets," eMarketer, August 11, 2023, last accessed March 27, 2024, <https://www.emarketer.com/content/generative-ai-adoption-climbed-faster-than-smartphones-tablets>.

As shown in Figure 6, there is evidence that suggests that the rate of adoption for A.I. significantly exceeds the initial rates of adoption for smartphones.⁹⁶ For instance, in Year 2 (which in 2024 for A.I. and 2008 for smartphones) the adoption rate of A.I. is expected to be around 78% whereas smartphone adoption was around 30%.⁹⁷ A wide gap in internet access can contribute to wider gaps in A.I. adoption amongst rural and urban consumers. In the U.S., one in three people do not use internet at speeds high enough to support applications like Zoom, and as A.I. becomes more

⁹⁵ Susie Marino, "43 Insane AI Statistics & What They Mean for Your Business," July 21, 2023, <https://localiq.com/blog/ai-statistics/>.

⁹⁶ Jochai Ben-Avie, "Don't Let AI Become the Newest Digital Divide," January 18, 2024, Council on Foreign Relations, <https://www.cfr.org/blog/dont-let-ai-become-newest-digital-divide> ("Don't Let AI Become the Newest Digital Divide").

⁹⁷ Sara Lebow, "Generative AI Adoption Climbed Faster Than Smartphones, Tablets," eMarketer, August 11, 2023, last accessed March 27, 2024, <https://www.emarketer.com/content/generative-ai-adoption-climbed-faster-than-smartphones-tablets>.

sophisticated, these same consumers will face challenges in accessing the benefits of A.I. driven technology.⁹⁸ There are growing concerns that A.I. will become the “new digital divide.”⁹⁹

V. Government Funding and Temporal Externalities

As discussed, and demonstrated above, society as a whole benefits from the positive externalities of fiber deployment. However, no group of private investors can fully capture these benefits. As a result, a private market equilibrium that balances the marginal revenue and marginal cost of fiber deployment will lead to an under-provision of fiber resources, resulting in market failure.¹⁰⁰ The solution to this issue is well-established: economic policy interventions are necessary when the market fails to provide an efficient level of a good or service.¹⁰¹ The U.S. government has acknowledged this underinvestment in broadband and has implemented several funding mechanisms to bridge this gap.

A. Existing Government Funding

There are several federal programs to fund the expansion of high-speed internet offered by the U.S. government. BEAD is the largest such program, offering over \$42 billion to all 50 U.S. states, Washington, D.C., and all U.S. territories.¹⁰² In October 2020, the FCC held the RDOF Phase I auction that provided subsidies around \$20.4 billion for terrestrial broadband deployment.¹⁰³ Another major program focused on improving rural broadband connectivity is the USDA’s ReConnect Program. Established in 2018 via the Consolidated Appropriations Act, the ReConnect

⁹⁸ See, Don’t Let AI Become the Newest Digital Divide.

⁹⁹ See, Don’t Let AI Become the Newest Digital Divide.

¹⁰⁰ Thomas Helbling, “Externalities: Prices Do Not Capture All Costs,” International Monetary Fund, [https://www.imf.org/en/Publications/fandd/issues/Series/Back-to-Basics/Externalities_\(“Externalities: Prices Do Not Capture All Costs”\)](https://www.imf.org/en/Publications/fandd/issues/Series/Back-to-Basics/Externalities_(“Externalities: Prices Do Not Capture All Costs”)).

¹⁰¹ See, Externalities: Prices Do Not Capture All Costs.

¹⁰² BroadbandUSA, “Broadband Equity Access and Deployment Program,” BEAD, <https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program>, accessed September 4, 2024.

¹⁰³ FCC, “Auction 904: Rural Digital Opportunity Fund,” <https://www.fcc.gov/auction/904> (“Auction 904: Rural Digital Opportunity Fund”).

Program provides grants, loans, and loan-grant combinations.¹⁰⁴ ARPA and Treasury's \$9.6 billion Capital Projects Fund (CPF) are also major sources of federal funding for broadband.¹⁰⁵ While some of these programs target fiber connectivity to some extent, these are not exclusively for funding fiber deployment.

Despite these programs, there still remains a significant gap between the amount of funding that is directed towards fiber deployment and the amount required to ensure ubiquitous fiber deployment nationwide. For instance, a 2023 study argued that the BEAD funding was insufficient to effectively fix the digital gap using FTTH networks.¹⁰⁶

Given these results, what does the government need to consider if it has to focus its subsidies on fiber deployment over other types of broadband? The first consideration is that there are incremental positive spillovers (contemporaneous externalities discussed earlier) of fiber deployment over other technologies. Additionally, there is a need to articulate the existence of temporal externalities and why that too moves the needle in favor of fiber over other technologies. We explain this below.

B. Future Proofing

Temporal externalities play a significant role in economic analysis, particularly in understanding the dynamics of intertemporal decision-making and its implications for market outcomes and social welfare. It refers to the effects that the timing of economic activities or decisions of one party have on others, which are not reflected in the market prices. Temporal externalities can lead to inefficient outcomes in markets because market prices fail to fully capture the long-term costs or benefits associated with certain actions.

The existence of temporal externality implies that the low-cost solution today may not be the low-cost solution over time. It is important to recognize that an optimal data network today will likely not meet the needs of tomorrow. Consequently, what is the least costly way of providing

¹⁰⁴ USDA, "ReConnect Program: Funding to Facilitate Broadband Deployment in Underserved Rural Areas," last updated May 2024, <https://www.rd.usda.gov/sites/default/files/usda-rd-rus-reconnect-factsheet-02212024.pdf> ("ReConnect Program: Funding to Facilitate Broadband Deployment in Underserved Rural Areas"), p. 2.

¹⁰⁵ U.S. Department of Treasury, "Capital Projects Fund," last accessed May 30, 2024, <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/capital-projects-fund>.

¹⁰⁶ Light Reading, "BEAD Funding Falls Short for Fiber-Only Options – Study," April 26, 2023, <https://www.lightreading.com/digital-divide/bead-funding-falls-short-for-fiber-only-options-study>.

a given level of service today may create greater upgrade costs in the future, and thus one needs a longer time horizon, *i.e.*, longer than what private industry uses, to evaluate the deployment of fiber.

Decision-making based on short-term costs and benefits analysis can lead to the wrong outcome when considering longer-lived assets. A myopic cheaper solution today may not necessarily be the optimal outcome in the long run. This is true for broadband deployment. Fiber typically costs more to deploy than HFC or FWA, but investments in fiber last longer. As a consequence, the shorter your planning horizon, the more distorted your choice will be about which technology to deploy. This problem is exacerbated with fiber deployments because the outyear benefits that are ignored in a shorter planning horizon are even larger due to the externalities noted in previous sections. Thus, the government needs to step in to correct this market failure. Government policies and regulations on broadband funding priorities will significantly influence market outcomes. To address the market failure and increase fiber access, government funding should prioritize fiber. Thus, the various public programs, such as RDOF, BEAD, Reconnect, CFP and BIP, that are prioritizing fiber builds are on the right policy path. This prioritization needs to continue if the gains from deploying fiber are to be realized.

Take, for example, a program that provides subsidies to extend broadband coverage further into a rural area. It may take a lower subsidy to incentivize a FWA deployment than a fiber deployment because the initial capital expenditures are lower and deployment costs can be recovered over a shorter period of time. But a decade later, as broadband capabilities expand (higher bandwidths, lower latencies, etc.) the FWA deployment will likely need significant additional capital expenditures to meet those future needs. A fiber deployment, in contrast, will be able to meet those future needs with a much lower incremental investment. From this perspective, society would be better off initially subsidizing the fiber deployment both because it would cost less over the long run *and* because we would enjoy the incremental benefits of fiber over other broadband modes now and into the future.

The significant advantage of fiber is that it is relatively future-proof technology due to its ability to deliver high speeds, scalability, reliability, and support for emerging applications and technologies. It has the potential to handle increasing data demands as technology continues to advance and can ensure that the internet infrastructure remains relevant and capable of meeting the evolving needs of businesses, education, healthcare, and entertainment. Fiber optic infrastructure enables future technology innovations such as Quantum Networking, the Metaverse, and AI/Machine Learning which will accelerate a wide range of applications beyond traditional internet access, such as remote surgery, smart city initiatives, autonomous vehicles,

and more – *i.e.*, applications that may require functionality such as greater reliability and lower latency than can be handled by other high-speed broadband technologies. As new technologies and applications emerge, fiber optic networks provide the necessary infrastructure to support these innovations and drive economic growth.¹⁰⁷ Fiber optic cables have a longer expected lifespan compared to copper or coaxial cables, and this minimizes the need for frequent upgrades or replacements, reducing maintenance costs and ensuring the continued reliability of the network infrastructure over time.¹⁰⁸

This particular externality, future-proofing the network, does not appear to be fully accounted for in the deployment subsidies given by the FCC or other government entities. The incremental nature of public broadband infrastructure investment over the last decade and the need for continual upgrades shows that the government may not be using the correct social benefit curve or discounting rate. Thus, government agencies and entities are not investing in a future-proof technology such as fiber, where the upfront costs would be larger, but longer-term upgrade costs would be minimal or nil. Even without accounting for the contemporaneous externalities, which would shift the benefits curve, if the government had internalized the temporal externalities, then we would potentially see larger fiber investment funding in the shorter term.

VI. Conclusion

Investing in fiber is not merely a technological upgrade, it's a strategic decision that bolsters long-term productivity and economic growth in the U.S. The critical role of high-quality broadband is indisputable, and the highest quality broadband is delivered via fiber optic cables. With the increasing demand for high-definition content, low-latency applications such as video conferencing, remote surgeries, and industrial automation, alongside the transfer of millions of gigabytes of data, a fast and reliable internet connection is essential for both businesses and consumers. As we expand our nation's critical broadband infrastructure, fiber is indispensable for providing the future-proof speed, capacity, and ultra-low latency necessary to drive future innovations.

¹⁰⁷ CLTEL, "The Role of Fiber Internet in Fostering Community Growth," January 31, 2024, <https://www.cltel.com/articles/the-role-of-fiber-internet-in-fostering-community-growth/>.

¹⁰⁸ Hayden Beeson, "Fiber Broadband Association Research Explores Scalability and Longevity of Fiber Broadband," Broadband Technology Report, March 18, 2024, <https://www.broadbandtechreport.com/fiber/article/14310423/fiber-broadband-association-research-explores-scalability-and-longevity-of-fiber-broadband>.

Currently 55% of the BSLs, *i.e.*, about 63 million locations, which include at least 56 million households do not have fiber broadband. Why is there a fiber connectivity gap? To understand this, we focus on market failures in broadband marketplace and how the presence of positive externalities leads to a socially sub-optimal level of investment in the fiber market. As explored above, there are two types of externalities that are associated with fiber deployment: contemporaneous externalities and temporal externalities. These positive externalities drive a wedge between private decision-making and the socially optimal outcome, leading to socially sub-optimal investment.

Several federal programs fund the expansion of high-speed internet offered by the U.S. government. While some of these programs target fiber connectivity to some extent, these are not exclusively for funding fiber deployment.¹⁰⁹ This report shows that fiber deployment has incremental economic benefits compared to other high-speed broadband technologies and thus, directing more of the existing funds towards fiber deployment will generate greater economic spillovers compared to other high-speed broadband technologies such as HFC.

We find that:

- Deploying fiber to 56 million fiber-unserved households has the potential to generate at least \$1.64 trillion of total value (NPV) in terms of increased housing values.
- We also find a similar impact on income of an increase of \$1.6 trillion (NPV) in total household income in the U.S. This effect primarily comes from non-urban areas.
- Fiber deployment also has the potential to create at least 380,000 new jobs for the U.S. economy.

Additionally, fiber deployment has a significant impact on remote work and has significant environmental benefits and is the best equipped to handle the increased connectivity needs in a 5G world and beyond, increases educational outcomes and health cost savings, and increases technology adoption.

¹⁰⁹ What States Need to Know About Federal BEAD Funding; NTIA, "Broadband Equity, Access, and Deployment Program," Notice of Funding Opportunity, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf>, p. 7. Auction 904: Rural Digital Opportunity Fund. USDA, "ReConnect Program: Program Overview," <https://www.usda.gov/reconnect/program-overview>. USDA, "ReConnect Program FY 2023 Funding Opportunity Announcement Awardees," <https://www.usda.gov/reconnect/round-four-awardees>.

Another significant advantage of fiber is that it is relatively future-proof technology due to its ability to deliver high speeds, scalability, reliability, and support for emerging applications and technologies. It has the potential to handle increasing data demands as technology continues to advance and can ensure that the internet infrastructure remains relevant and capable of meeting the evolving needs of businesses, education, healthcare, and entertainment.

Key Policy Takeaways:

Our study is the first to show that fiber deployment has significant incremental economic benefits even in the presence of other high-speed broadband technologies. The report also argues that because private actors will not capture all the benefits of fiber deployment the marketplace will not deploy enough fiber on its own. Based on these findings we suggest a few policy takeaways.

- First, because the social return on investment is higher for fiber, directing more of the existing public funds towards fiber deployment will generate greater economic returns compared to investment in other high-speed broadband technologies such as HFC. Thus, the various public programs, such as RDOF, BEAD, ReConnect, Capital Projects Fund, and BIP funding, that are prioritizing fiber builds are on the right policy path. This prioritization needs to continue if the gains from deploying fiber are to be realized.
- Second, based on available data, our research implies that even if fiber is deployed as an overbuild to existing high-speed technologies, the incremental benefits are sizeable. Thus, when the federal or local governments are measuring the underserved population, one important metric may be using a fiber-unserved metric and not just a speed-based metric. This will allow them to better target funding towards a fiber solution.
- Third, federal and local governments that promote fiber deployment, such as the federal Broadband Infrastructure Program, Louisiana's GUMBO program and Maine's ConnectMaine, should be encouraged and expanded. Additionally, the focus on fiber, that some of these programs have should be supported, and used as a model for other private-public initiatives.
- Last, fiber is a future-proof solution and when the benefits and costs are evaluated on a long-run horizon, fiber becomes the optimal choice for delivering high-speed broadband.

Appendix A: Quantitative Analysis Methodology

To quantitatively assess the economic impact of expanded fiber access, we use internet availability data from the FCC's Form 477 merged with economic indicators from the U.S. Census American Community Survey (ACS) to construct a difference in differences estimator at the census tract level. Difference in differences analysis uses a "treatment" group that is affected by the policy or event in question, and a "control" group that is unaffected (*i.e.*, untreated), and measures the difference in outcome between the two groups before and after the treatment. This is done to properly isolate the effect of the treatment from other confounding variables that might otherwise contribute to the difference in outcomes between the two groups.

In our analysis, we define the control group as census tracts that do not have fiber access in any year of the sample, 2014 through 2021. Our treatment group is the subset of the sample that gained fiber access in either 2017 or 2018. This is done for several reasons. First, using these two years as our treatment period gives us a symmetric pre- and post-treatment period which allows us to properly analyze the trends. Using an earlier treatment period would limit our ability to assess the necessary assumption that the treatment and control groups have parallel trends before the treatment. Using a later treatment period would prevent us from seeing the full effect as we suspect that many of our outcome variables may take time to respond to a stimulus such as fiber expansion. Second, using these two years gives us a larger sample size than we could get from a single period or any other two-year period as the largest group of tracts (about 28% of our sample) gained fiber access in 2017 or 2018.

Finally, because fiber expansion happened in different years for different census tracts, we are concerned that combining all of the treatment groups in a two-way fixed effects model could suffer from bias introduced in the presence of heterogeneity in treatment effects across either time or groups, which frequently arises in cases of difference in differences with staggered treatments.¹¹⁰ Restricting our analysis to a single treatment period ameliorates these issues.

Importantly, we define fiber access at the tract level as at least 15% of the blocks in the tract having fiber access in the FCC 477 data and BDC data. This is roughly the 50th percentile in terms of the percentage of blocks with access among tracts with at least one fiber enabled block and is just above the average rate of fiber access in rural areas signifying a significant access threshold.

¹¹⁰ Seth M. Freedman, Alex Hollingsworth, Kosali I. Simon, Coady Wing, Madeline Yozwiak, "Designing Difference in Difference Studies with Staggered Treatment Adoption: Key Concepts and Practical Guidelines," NBER Working Paper 31842, https://www.nber.org/system/files/working_papers/w31842/w31842.pdf.

We restrict our analysis to census tracts that had at least one HFC provider in all years and exclude tracts that already had fiber in 2014. Because our data is annual, it is not possible to tell precisely when fiber access was gained and whether this was before or after our outcomes were measured in a given year, and so we exclude 2017 and 2018 from the analysis in order to isolate the pre-treatment and post-treatment outcomes.¹¹¹

We analyzed four main economic indicators as our outcomes of interest: the percent of 20–64-year-olds employed (employment rate), the percentage of 18-24 year olds with a bachelor’s degree or higher (educational attainment), median household income, and median house value. Results are presented in Table 3 below, where the coefficients on the interaction between the treatment group and time period indicator show the isolated treatment effect.

TABLE 3: DIFFERENCE IN DIFFERENCES REGRESSION RESULTS

| VARIABLES | (1) Pct. Employed (20-64) | (2) Median House Value | (3) Median HH Income |
|----------------------------------|------------------------------|---------------------------|-------------------------|
| Post-Treatment | 0.0269** (0.00120) | 48,752** (2,432) | 10,818** (331.9) |
| Treatment Group | 0.0208** (0.00122) | 61,476** (2,483) | 726.0* (338.2) |
| Treatment Group x Post-Treatment | 0.00480** (0.00176) | 46,874** (3,589) | 2,195** (489.4) |
| Constant | 0.678** (0.000826) | 195,708** (1,678) | 56,020** (229.1) |
| Observations | 61,008 | 59,073 | 60,685 |
| R-squared | 0.029 | 0.062 | 0.038 |

Standard errors in parentheses

** p<0.01, * p<0.05

We also analyzed these same economic indicators separately for urban and non-urban census tracts. These results are presented in Table 4 and Table 5 below, respectively. Note that the employment effects are insignificant for both urban and non-urban populations when studied separately. We believe this is because the employment effects are driven primarily by urban census tracts, but on their own, urban tracts are too small a sample size with too few control tracts to get statistical significance given the small magnitude of the effect. As such, we use the pooled regression in Table 3 as our primary result for the marginal employment effects of increased fiber access.

¹¹¹ This leaves us with a sample size of over 60,000 observations, of which roughly 46% are in the treatment group.

Table 6 contains our estimate for the number of households and population with and without fiber. This is done by aggregating census blocks containing fiber technologies using the FCC National Broadband Map and the respective population and number of households in each census block.¹¹² To estimate the population of the workforce without fiber, we multiply the population without fiber by the percentage of population aged 20-64.¹¹³

¹¹² For the FCC's National Broadband Map, *see*, "FCC National Broadband Map," FCC, last accessed June 4, 2024, <https://broadbandmap.fcc.gov/data-download>. We use fixed broadband data from each state as of December 31, 2023. We separately use shapefiles containing the population and number of households in each census block in 2020 to estimate population and household totals. *See*, "TIGER/Line Shapefiles," United States Census Bureau, last accessed June 4, 2024, <https://www.census.gov/geographies/mapping-files/2020/geo/tiger-line-file.html>.

¹¹³ We estimate the percentage of the population aged 20-64 to be 58%. *See*, "Age and Sex Composition in the United States: 2020," United States Census Bureau, last accessed June 4, 2024, <https://www.census.gov/data/tables/2020/demo/age-and-sex/2020-age-sex-composition.html>.

TABLE 4: DIFFERENCE IN DIFFERENCES REGRESSION RESULTS FOR URBAN CENSUS TRACTS

| VARIABLES | (1) Pct. Employed (20-64) | (2) Median House Value | (3) Median HH Income |
|----------------------------------|------------------------------|---------------------------|-------------------------|
| Post-Treatment | 0.0404** (0.00461) | 107,333** (12,283) | 13,097** (1,284) |
| Treatment Group | 0.0205** (0.00362) | 81,339** (9,616) | -4,113** (1,007) |
| Treatment Group x Post-Treatment | 0.00313 (0.00516) | 41,201** (13,720) | 2,050 (1,437) |
| Constant | 0.656** (0.00324) | 241,736** (8,609) | 52,354** (900.5) |
| Observations | 10,356 | 9,763 | 10,304 |
| R-squared | 0.046 | 0.083 | 0.062 |

Standard errors in parentheses

** p<0.01, * p<0.05

TABLE 5: DIFFERENCE IN DIFFERENCES REGRESSION RESULTS FOR NON-URBAN CENSUS TRACTS

| VARIABLES | (1) Pct. Employed (20-64) | (2) Median House Value | (3) Median HH Income |
|----------------------------------|------------------------------|---------------------------|-------------------------|
| Post-Treatment | 0.0261** (0.00124) | 44,660** (2,302) | 10,675** (342.2) |
| Treatment Group | 0.0284** (0.00137) | 38,423** (2,539) | 3,953** (377.3) |
| Treatment Group x Post-Treatment | 0.00107 (0.00198) | 27,061** (3,683) | 1,613** (547.6) |
| Constant | 0.679** (0.000855) | 192,827** (1,588) | 56,260** (236.0) |
| Observations | 50,652 | 49,310 | 50,381 |
| R-squared | 0.031 | 0.035 | 0.040 |

Standard errors in parentheses

** p<0.01, * p<0.05

TABLE 6: HOUSEHOLDS, POPULATION WITH FIBER

| | | Urban | Non-urban |
|---|-----|------------|-------------|
| Households | [A] | 22,627,697 | 117,871,039 |
| <i>With fiber</i> | [B] | 16,751,576 | 67,809,402 |
| <i>Without fiber</i> | [C] | 5,876,121 | 50,061,637 |
| Population | [D] | 55,935,176 | 275,514,105 |
| <i>With fiber</i> | [E] | 40,484,114 | 158,368,358 |
| <i>Without fiber</i> | [F] | 15,451,062 | 117,145,747 |
| <i>Without fiber</i> <i>(in workforce)</i> | [G] | 8,954,323 | 67,889,240 |

Notes:

[A], [D]: Households and Population are estimated using 2020 census data provided at the census block level.

[B], [C], [E], [F]: The FCC's National Broadband Map is used to determine census blocks with fiber (as of December 31, 2023). See, <https://broadbandmap.fcc.gov/data-download>.

[G]: To estimate the population without fiber in the workforce, we use the percentage of the population aged 20-64 (approximately 58%) in 2020 multiplied by the population without fiber. See, <https://www.census.gov/data/tables/2020/demo/age-and-sex/2020-age-sex-composition.html>.

References



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New Bern, NC (Pop. 31,346)

Metronet began construction of its 100% fiber network in the City of New Bern, birthplace of Pepsi Cola, in November 2021. Metronet is fully funding the multi-million-dollar investment in infrastructure that will provide over 11,000 New Bern households and businesses with access to high-speed fiber optic internet, phone and streaming services. The first service installations were made available within ten months of the project's start with completion expected by the close of 2024. Ookla® of Speedtest Intelligence® has already ranked Metronet as the fastest internet service provider in the community as of August 2023. Residents are taking advantage of symmetrical internet speeds up to 2 gigabits per second while businesses may choose speeds of up to 10 gigabits. Metronet's fiber deployment is increasing the quality of life and economic growth for this charming riverfront community. The city is looking forward to becoming the next Certified Gigabit City on the Atlantic Coast.



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ajohnson@urbandale.org

Urbandale, IA (Pop. 45,583)

Metronet started deploying a 100% fiber-to-the-premise network for the City of Urbandale in November 2020. Urbandale, along with several other Iowa communities like Ankeny, Clive, Grimes, Hampton, Iowa City, Jewell, Johnston, Mason City, and Sheffield are among the first in the state to have access to Metronet fiber. The city partnered with Metronet as an efficient and cost-effective way to build out a fiber optic network to connect city facilities in the western part of Urbandale, which is already included in the CIP plan. Metronet has invested more than \$150 million across Iowa. This infrastructure expands broadband service to nearly 15,000 homes and businesses in Urbandale alone. In June 2021, initial services were released and the project has reached substantial completion with only a few small areas wrapping up over the next few months. Urbandale was ranked No. 47 on Money Magazine's 2020 "Best Places to Live" list and this investment in fiber infrastructure has only bolstered its wonderful quality of life amenities. Today announced Metronet has been ranked the fastest internet service provider (ISP) in Iowa. According to recently released data from Ookla® Speedtest Intelligence®, Metronet was ranked the "Fastest Internet Service Provider in Iowa" with a median download speed of 251.21 megabits per second (Mbps) and median upload speed of 213.55 Mbps for Q2 2023.



John Nevenhoven
Village Administrator
jnevenhoven@elburn.il.us

Elburn, IL (Pop. 6,283)

In February 2020, the Village of Elburn in Kane County approved an agreement with Metronet to construct a 100% fiber optic network within its municipal limits. Elburn is a quiet bedroom community west of the "Chicagoland" region that has a passenger rail service into the Windy City. Metronet is committed to delivering services comparable or superior to those offered in large metropolitan areas. The availability of broadband service facilitates learning and working from home, opens economic development options for businesses and entrepreneurs, and helps close the digital divide. While construction is now complete, Metronet continues to partner with the Village leadership on new opportunities as this innovative community grows.

References



Shay Gallagher
Deputy City Administrator
gallaghers@kentwood.us



Cray Crouse
CIO Bryan, TX
ccrouse@bryantx.gov

Kentwood, MI (Pop. 54,304)

In September 2022, Metronet began construction of its high-speed 100% fiber optic network in Kentwood, a city in the Grand Rapids MSA, along with Wyoming, and East Grand Rapids. This fully funded, multimillion-dollar investment will eventually provide access to light-speed broadband services to over 140,000 households, businesses, and institutions in the greater Grand Rapids region. City officials meet with Metronet monthly to review the construction progress, and review opportunities for future expansion of the network. Residents are already receiving service in the initial construction areas throughout Kentwood less than a year into the fiber deployment project. As Metronet's service becomes available throughout the city, residents will have access to multi-gigabit speeds up to 2 gigabits; and businesses may access speeds up to 10 gigabits. Upon completion of Metronet's state-of-the-art multi-gigabit network, Kentwood will join the country's internet elite as a Certified Gigabit City.

Bryan, TX (Pop. 83,980)

Everything is bigger, and now faster, in Texas! The City of Bryan is the first municipality to have Metronet fully fund a fiber network deployment in Texas. The City of Bryan is now supported by a future-proof infrastructure that has the ability to scale to even faster speeds, enhancing the online experience for residents while also having a direct positive impact on Bryan's continued growth and economic development. The project will provide multi-gigabit, symmetrical broadband availability to over 25,000 households and businesses in the community once completed. A key ingredient to any project, communication with the city, occurs at least monthly and involves city leadership, public works, and permitting. In addition, fiber infrastructure facilitates greater business efficiency and stimulates further private investment. Network construction started in November 2021, with over fifty percent of the project being complete to date and services being made available. While Bryan is one step closer becoming a Certified Gigabit City, Metronet looks forward to starting additional projects throughout the state within the next year.

References



Aldona Valecenti
CIO
ovalicenti@lexingtonky.gov



Douglas J. Hewett,
ICMA-CM
City Manager
DougHewett@FayettevilleNC.gov



Robert Van Geons
CEO Economic Development
robert@fayedc.com



Wayne Tedder
Asst. City Manager
Wayne.Tedder@talgov.com

metronet.com/gigabit-city

Lexington, KY (Pop. 321,793)

In 2018, Metronet began a multi-year construction project to build their 100% fiber optic infrastructure in Lexington. Lexington became the third (and largest) Gigabit City in America through their partnership with Metronet. The initial city build included an \$80 million private investment in the community resulting in deploying 4.4 million feet of fiber across the city in less than three years. Throughout the initial city build, Metronet met with the city monthly and continues to maintain a local presence through a retail store that residents can visit to discuss the benefits of fiber optics and sign-up for services. Metronet is also actively involved in the community through the Metro C.A.T.S. program, a collaboration with the City of Lexington, the University of Kentucky, and Lexington Traditional Magnet School, providing symmetrical internet service, computers, and technology classes for kids at the Charles Young Community Center in Lexington's East End neighborhood.

Fayetteville, NC (Pop. 208,778)

In February 2021, Metronet began construction of their 100% fiber optic network in Fayetteville, home to the Army's largest military installation at Fort Liberty. The initial planned build included a \$70 million dollar investment in the community and service over 60,000 Fayetteville residents and businesses. Almost 40,000 more passes are expected in the surrounding MSA. The build construction is currently at 75% complete and over 44,000 homes and businesses are able to receive service. The city meets with Metronet monthly to review the construction progress, and to review opportunities for expansion of the network. A local retail store opened in December 2022 and features an interactive concept design.

Tallahassee, FL (Pop. 201,731)

In December 2019, Metronet began construction on a fiber deployment project in Tallahassee, Florida's capital city and home to both FSU and Florida A&M. Tallahassee was the first community in Sunshine State to access Metronet's multi-gigabit speeds. The initial \$75 million investment funded the broadband infrastructure to serve around 70,000 homes and businesses. It was completed in early 2023 and now Metronet is exploring expansion opportunities within the surrounding areas and privately held access areas with community partners. In April 2021, the first local Florida-based Metronet retail store opened, providing a customized experience to residents. According to data from Ookla® Speedtest Intelligence®, Metronet, once again, ranked as the "Fastest Internet Service Provider in Tallahassee" in August 2023.

metronet
love your internet

From: Matthew Majestic <mmajestic@oxfordfiredept.com>

Sent: Wednesday, March 5, 2025 4:06 PM

To: OXFD All <oxfd-all@oxfordfiredept.com>

Cc: Jack Curtis <JCurtis@oxfordtownship.org>

Subject: Thank you from a family member

Good day all,

I just wanted to share some news we received from a family member of a patient we treated last Saturday evening.

Last Saturday we responded to Italia Gardens for a man not breathing. The patient ended up being an employee of the restaurant. Our crews encountered the man not conscious, not breathing, and no pulse present with bystander CPR in progress. We took over care and initiated advanced life support measures. The crew was able to get the patient back after the first rounds of advanced life support care and transported him to the hospital. (Cardiac monitor did show an Inferior Wall STEMI)

The patient's sister wanted to express her gratitude for saving her brother's life. They wanted us to know that her brother is awake, alert, and did not suffer any brain damage. He will be undergoing surgery once he is stronger.

I too want to express my gratitude to the crews involved for doing a wonderful job and for being the professionals you are. Keep it up, what you do matters!

The members involved in this call were:

Ron Jahlas, Steve Giroux, Rob Fitzpatrick, Ben Parshall, Isaac Tabert, Lilian Freundl, Rachael Albrecht, and Anthony Bono.

Job well done everyone! Thank you!

Matt

--
Matthew Majestic
Fire Chief
Oxford Fire Department
248-969-9483 Office
586-747-3531 Cell
248-916-8559 Cell





Oxford Township Project Activity Report – March 2025

Oxford Township Municipal Projects

1. North Area Sanitary Sewer Special Assessment District:
 - Sewer installation between Harriett and Dunlap is complete.
 - Project was substantially completed on 11/20/24.
 - Contact to remain open into 2025 until restoration can be verified.
2. Camp Oakland Pump Station:
 - The major construction work to upgrade the existing pump station is complete.
 - Valve vault work and installation of the new sewage pumps is complete.
 - Project is fully functional and was deemed substantially complete on 12/19/24.
 - Contact to remain open into 2025 until restoration items are completed.
3. Brabb-Dewey Engineering Design Grant:
 - Survey and design work related to a proposed sanitary sewer project in the Brabb-Dewey subdivision is complete.
 - **Permit applications submitted to RCOC and WRC.**
 - Awaiting deposit of grant funds before beginning bidding and construction processes.
4. Willow Lake PRV Project:
 - Design work related to an existing Pressure Reducing Valve (PRV) at the southeast corner of Willow Lake Drive & State Street is complete.
 - EGLE and RCOC permits have been received.
 - **Notice to proceed issued to Trojan Development via Township Board approval.**
 - Construction anticipated in spring of 2025.
5. Seymour Lake Water Main Project:
 - Design for a new 16" water main from Dunlap to Sanders is complete.
 - **Permit applications submitted to RCOC and WRC.**
 - Bidding and construction dates to be determined based on funding.
6. Seymour Lake Road Safety Path Project (Dunlap – Sanders):
 - Survey and engineering design of Seymour Lake Road safety path is complete.
 - **Permit applications submitted to RCOC and WRC.**
7. 2024 Cemetery Paving Project:
 - Paving portion of project has been completed.
 - Contact to remain open into 2025 until restoration can be verified.
8. Sanitary Sewer Master Plan:
 - Sharpe Engineering is in process of compiling necessary data, preparing maps, and preparing a written report pertaining to the Township's sanitary sewer system.
 - Draft report to be presented to W/S Committee in spring 2025.



Oxford Township Project Activity Report – March 2025

Oxford Township Private Development Projects

1. McLaren Urgent Care:
 - Redevelopment of the existing McLaren site with new 2-story, 50k square foot building.
 - Phase 1 & Phase 2 infrastructure has been completed and accepted.
 - Record drawings and final documentation in process of being completed.
2. Sanctuary Hills:
 - Residential project consisting of 85 single family homes on south side of E. Drahner.
 - Final site plan was approved by the PC on 12/14/23.
 - Project is currently in the final engineering design phase.
 - The infrastructure construction has no estimated start date.
3. The Villages and Peninsula of Tullamore:
 - Residential project consisting of 61 single family homes and 105 condominium units located at the northeast corner of E. Drahner and Oxford Lakes Drive.
 - Project received preliminary site plan approval on 4/25/24.
 - Project is currently in the final engineering design phase.
 - The infrastructure construction has no estimated start date.
4. Enclaves of Woodbridge – Phase 3:
 - Residential condo project off Market Street consisting of 11 buildings (20 units total).
 - Project has received final site plan, engineering, and all permit approvals.
 - **Infrastructure construction has been completed and as-builts are being prepared.**
 - **Completion of roadways expected in May.**
5. Barron Industries:
 - 17,600 SF commercial building expansion on Oakwood Road.
 - Project received final site plan approval at 12/12/24 PC meeting.
 - Project is currently in the final design and permitting phase.
6. Wellbridge of Oxford:
 - A proposed 90-bed skilled nursing and rehabilitation facility on Drahner Rd near Pontiac Street.
 - **Project received preliminary site plan approval from Planning Commission in February.**
 - **Project is currently in the final engineering design phase.**

Date: March 12, 2025

To: Board of Trustees

From: Highway and Roads Committee
(*Jack Curtis, Joseph Ferrari, Curtis Wright*)

Re: Allocation of Tri-Party Funds

Dear Board Members:

For several years the Road Commission for Oakland County (“RCOC”) has administered a Tri-Party Road Funding Program.

This program’s purpose is to fund road improvement projects in which the three (3) entities listed below contribute one-third (1/3) of the funds toward a project.

- RCOC
- Oakland County
- Charter Township of Oxford

Attached is a summary of the Tri-Party Program and the recent history of Tri-Party funding allocations for the Charter Township of Oxford.

For 2025 you will see \$115,140.00 has been budgeted and allocated to the Charter Township of Oxford for a road project. The Highway and Roads Committee met on February 26, 2025. The Committee is recommending that the budgeted Tri-Party funds be allocated to the Dunlap Road paving project.

The following PROPOSED motion is offered for consideration:

I move that any 2025 Road Commission for Oakland County Tri-Party Program funds received by the Charter Township of Oxford be allocated for the proposed 2027 Dunlap Road paving project

***ROAD COMMISSION FOR OAKLAND COUNTY
TRI-PARTY PROGRAM***

Your participation is requested in the FY 2025 Tri-Party Program. The fiscal year governing this program is October 1, 2024 through September 30, 2025. The Oakland County Board of Commissioners has approved a Tri-Party budget of \$2.0 million to create a \$6.0 million program for FY 2025. A total of \$3 million will be designated for townships and a total of \$3 million will be designated for cities and villages.

The distribution formula and method of calculation of Tri-Party allocations have remained the same to distribute the Tri-Party dollars most equitably. For cities and villages, it includes RCOC road miles and three-year average annual crashes. For townships, the most recent census population figures are combined with RCOC road miles and three-year annual crashes.

Separate formulas are used because population in the city/village equation would skew the results toward more densely populated cities with fewer RCOC road miles. In townships, population has been used as a determining factor to prevent the distribution from being skewed toward townships with high road miles and small populations. The population data includes the most recent official count from the 2020 U.S. Census and the most recent traffic crash data available from the Traffic Improvement Association of Oakland County is from 2022 to 2024.

A historical report of your community's Tri-Party Program participation is attached along with your community's FY2025 allocation. The report lists the projects that have been completed with their associated costs and shows the allocations that have been reserved for future Tri-Party projects.

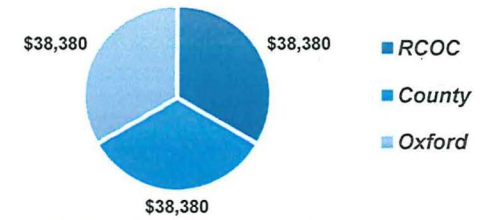
Please contact Samuel Fitzer at (248) 645-2000 extension 2367 if you have any questions.

**ROAD COMMISSION FOR OAKLAND COUNTY
TRI-PARTY PROGRAM
CHARTER TOWNSHIP OF OXFORD**

**COUNTY COMMISSIONER:
Michael Spisz - District 5**

| At-A-Glance Summary | |
|---|-------------------|
| Budgets through fiscal year 2025 | \$ 2,977,493 |
| Project totals through fiscal year 2025 | \$ 2,862,353 |
| Total Budget All Shares | \$ 115,140 |

At-A-Glance Summary by Share



| PROJECT DESCRIPTION | DATE | PROJECT NUMBER | AMOUNT OF AGREEMENT | ADDITIONAL FUNDING ALL SHARES | BUDGET ALL SHARES | REFUND ALL SHARES | PROJECT TOTAL ALL SHARES | REMAINING BUDGET ALL SHARES |
|---------------------------|-----------------|----------------|---------------------|-------------------------------|---------------------|-------------------|--------------------------|-----------------------------|
| <i>2014 Budget Amount</i> | <i>01/01/14</i> | <i>Budget</i> | | | \$ 55,613 | | \$ - | \$ 55,613 |
| Gravel 2014 | 04/24/14 | 52312 | \$ 55,613 | | | | \$ 55,613 | \$ - |
| <i>2015 Budget Amount</i> | <i>01/01/15</i> | <i>Budget</i> | | | \$ 55,965 | | \$ - | \$ 55,965 |
| <i>2016 Budget Amount</i> | <i>01/01/16</i> | <i>Budget</i> | | | \$ 111,496 | | \$ - | \$ 167,461 |
| Pontiac Road | 06/09/16 | 53331 | \$ 388,956 | | | | \$ 388,956 | \$ (221,495) |
| <i>2017 Budget Amount</i> | <i>01/01/17</i> | <i>Budget</i> | | | \$ 111,677 | | \$ - | \$ (109,818) |
| <i>2018 Budget Amount</i> | <i>01/01/18</i> | <i>Budget</i> | | | \$ 109,818 | | \$ - | \$ - |
| <i>2019 Budget Amount</i> | <i>01/01/19</i> | <i>Budget</i> | | | \$ 110,016 | | \$ - | \$ 110,016 |
| Wood Trail | 07/11/19 | 54254 | \$ 150,000 | | | | \$ 150,000 | \$ (39,984) |
| <i>2020 Budget Amount</i> | <i>01/01/20</i> | <i>Budget</i> | | | \$ 109,178 | | \$ - | \$ 69,194 |
| 2020 Gravel Road Program | 12/15/20 | 56142 | \$ 81,187 | | | | \$ 81,187 | \$ (11,993) |
| <i>2021 Budget Amount</i> | <i>01/01/21</i> | <i>Budget</i> | | | \$ 110,257 | | \$ - | \$ 98,264 |
| <i>2022 Budget Amount</i> | <i>01/01/22</i> | <i>Budget</i> | | | \$ 111,149 | | \$ - | \$ 209,413 |
| 2022 Gravel Road Program | 04/14/22 | 56832 | \$ 209,413 | | | | \$ 209,413 | \$ - |
| <i>2023 Budget Amount</i> | <i>01/01/23</i> | <i>Budget</i> | | | \$ 113,017 | | \$ - | \$ 113,017 |
| 2023 Gravel Road Program | 02/23/23 | 57232 | \$ 113,017 | | | | \$ 113,017 | \$ - |
| <i>2024 Budget Amount</i> | <i>01/01/24</i> | <i>Budget</i> | | | \$ 114,198 | | \$ - | \$ 114,198 |
| 2024 Gravel Road Program | 03/21/24 | 57812 | \$ 114,198 | | | | \$ 114,198 | \$ - |
| <i>2025 Budget Amount</i> | <i>01/01/25</i> | <i>Budget</i> | | | \$ 115,140 | | \$ - | \$ 115,140 |
| TOTALS | | | \$ 2,862,353 | \$ - | \$ 2,977,493 | \$ - | \$ 2,862,353 | \$ 115,140 |



1200 N. Telegraph Road, Dept. 479
Pontiac, MI 48341-0479
(248) 858-0611
oakgov.com/treasurer

Robert Wittenberg, Treasurer

Jody Weissler DeFoe, Chief Deputy Treasurer

Oakland County Treasurer's Office Foreclosure Prevention

The Oakland County Treasurer's Office is in the final stretch of our foreclosure prevention efforts. The tax foreclosure deadline for the 2022 and/or prior year taxes is on March 31, 2025. That means if these taxes aren't paid off by March 31st or any interested party hasn't entered into a repayment schedule with the Treasurer's office by then, the property will be foreclosed.

Since December of 2024, the Treasurer's office has conducted over a thousand Taxpayer Assistance Meetings to assist taxpayers with keeping their properties by working with them to get on a repayment schedule and/or by identifying resources that may be beneficial to them and their situation. We are here to help and strongly encourage taxpayers to contact us before the tax foreclosure deadline if they have delinquent taxes for 2022 and/or prior tax years. Taxpayers interested in scheduling a Taxpayer Assistance Meeting may call us at 248-858-0611 or they may visit www.oakgov.com/treasurer

Thank you!

A handwritten signature in black ink, appearing to read "Robert Wittenberg".

Robert Wittenberg
Oakland County Treasurer

CHARTER TOWNSHIP OF OXFORD

Date: March 12, 2025

To: Board of Trustees

From: Jack Curtis, Supervisor

Re: Adult-Use Marijuana Funds for Fire Training Tower

Dear Board Members:

The township recently received its 2024 adult-use marijuana funds from the state totaling \$174,685.98. I am proposing the board allocate a portion of these funds for the construction of the Oxford Fire Department's training tower. Since the community benefit agreements signed by the marijuana establishments in the township require their donations go toward the construction of the fire department's training tower, I find it appropriate that the additional revenue we received due to the presence of these establishments be allocated to the project. Attached is Chief Majestic's cost breakdown for the tower.

Per the community benefit agreement, Frequency Wellness (the one establishment in the township that hasn't opened) has committed to contributing \$100,000 to the project. In anticipation of receiving these funds and in order to get the tower constructed this year, I propose allocating \$100,000 of the adult-use marijuana funds to this project. When the Frequency Wellness facility opens and they honor their \$100,000 commitment, that money would then go to the township for future allocation.

Currently, the fire department is responsible for \$37,000 of the project cost, which would come from the fire millage. I propose the fire department utilizes its millage funds for daily operations and the township allocates an additional \$37,000 in marijuana funds to cover the fire department's portion of the tower's cost.

The following motion is offered for consideration:

I move to allocate \$137,000.00 of adult-use marijuana funds for the construction of the Oxford Fire Department training tower. If and when the Frequency Wellness facility opens, their \$100,000 community benefit contribution will be used to reimburse the general fund for future allocation. This \$137,000.00 is to be expensed to account number 206-357-962.036 Training Tower Expenses.



OXFORD FIRE DEPARTMENT

96 N. Washington St. • PO Box 911 • Oxford, Michigan, 48371
Ph. (248) 628-2525 • Fax. (248) 969-9489

MEMORANDUM

Date: March 3, 2025

To: Danielle Smith, Deputy Supervisor

From: Matthew Majestic, Fire Chief

Subject: Fire Department Training Tower funding

The funding for the Fire Training Tower, as it was relayed to me by CJ Carnacchio is as follows:

- \$100,000 Frequency Wellness
- \$100,000 Lifted Investments III, LLC
- \$25,000 Kurativ LLC
- \$70,566 Gary Sinise Foundation
- \$5,000 Grant from Enbridge Fueling Futures
- \$2,500 donation from Benson Ford Jr.
- \$69,000 Fire Department land sale
- \$37,000 Fire Department contribution from budget

For a grand total of \$409,066

The total price for the structure as ordered from Fire Training Systems (FTS) was \$408,941.

The price from FTS does not include the cost to prep the site property behind Fire Station 1. We are still waiting for the blueprints from the manufacturer to be able to receive a cost estimate for balancing the site and setting concrete footings.



Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

TO: Oxford Charter Township Board of Trustees
FROM: Matteo Passalacqua, Associate Planner
DATE: March 4th, 2025
RE: Ordinance Review Committee Workplan and Budget

At their February 13th, 2025 meeting, the Planning Commission recommended approval of the Ordinance Review Committee (ORC) workplan to the Township Board. The proposed workplan is attached and structured to highlight priorities that will guide the ORC's tasks over the next 12 months. A note is provided above the workplan matrix indicating that priorities may be adjusted upon adoption of the Township's master plan. This will allow the ORC to modify its tasks based on the context of the new master plan.

The ORC is scheduled to meet on the second Tuesday of each month at noon at Township Hall. We estimate that CWA will need to provide 125 – 160 hours of support to ORC meetings, drafting services, and the facilitation of passage the 2025 ORC workplan. This wide range is meant to accommodate some larger tasks that may require additional research to ensure proper drafting and adoption. We anticipate this work can be completed with a not to exceed budget of \$16,750.

We look forward to working with the ORC and Township in 2025. Let us know if you have any additional questions or additions.

Sincerely,



CARLISLE/WORTMAN ASSOC., INC.
Matteo Passalacqua
Community Planner

Benjamin R. Carlisle, *President* John L. Enos, *Vice President* Douglas J. Lewan, *Principal*
David Scurto, *Principal* Sally M. Elmiger, *Principal* R. Donald Wortman, *Principal* Craig Strong, *Principal*
Paul Montagno, *Principal*, Megan Masson-Minock, *Principal*, Laura Kreps, *Principal*
Richard K. Carlisle, *Past President/Senior Principal*

Ordinance Review Committee (ORC)
Zoning Ordinance Amendment Workplan for 2025

HIGH PRIORITY

Section 11.2.C – General Requirements for private roads

Issue: Section as written is not legally enforceable.

Recommendation: Language should be modified to address uses with lots or parcels having frontage on a road (public or private) that meet the engineering requirements in order to apply for building permits.

Anticipated Time: 8-12 hours; 2-3 ORC meetings

Notes: *Current circumstances with older lot configurations would prohibit the issuance of a building permit which could be interpreted as a taking.*

Industrial Setbacks

Issue: Current setbacks in the L-1 and L-2 range between 25 to 75 feet however most industrial lots in the Township are small thus making it difficult to build or expand without the need for variances.

Recommendation: Conduct inventory of current lot size in industrial zones to assess appropriate reduction in setback requirements.

Anticipated Time: 7-10 hours; 2-3 ORC meetings

Notes: *Consideration should be given to the timeline in which future industrial zones will be added to the map and size of the lots in question.*

MEDIUM PRIORITY

Landscaping Standards

Issue: The landscaping article does not provide clear guidance for appropriate or inappropriate species.

Recommendation: Examine the potential for developing lists of appropriate and inappropriate species.

Anticipated Time: 8-12 hours; 3-4 ORC meetings

Notes: *Attention to tree species is becoming more important with the spread of invasive species. Article 7 does provide language that allows for list flexibility (ie refer to State lists that are updated from time to time).*

Ordinance Review Committee (ORC)
Zoning Ordinance Amendment Workplan for 2025

Woodlands Ordinance

Issue: Site plans outlined in Article 12 are required to provide information regarding the location and type of existing plants as well as whether plants are to be removed or retained. However, this information has a limited value because there is no requirement or incentive to retain mature trees or plants or requirements for tree preservation during and after construction. During the master plan process, residents expressed a strong desire for natural preservation.

Recommendation: Examine whether a woodlands ordinance or landscaping zoning ordinance amendments could achieve the wishes of the community. At a minimum, add requirements or incentives for the protection of existing trees/vegetation to be preserved during and after construction.

Anticipated Time: 28-32 hours; 3-4 ORC meetings

Notes: *Recent Michigan case law needs to be accounted for. A workshop with the Township Board and Planning Commission could be useful.*

Zoning Map Maintenance

Issue: Areas have been identified where the current zoning district may be inconsistent with the current use and the updated future land use map. This can cause challenges for the use and development of these properties. Proactive map maintenance facilitates development in a timely manner consistent with the Master Plan.

Recommendation: Continue to review the zoning map on an annual or every-other-year basis to identify amendments as appropriate.

Anticipated Time: 28-32 hours; 3-4 ORC meetings

Notes: *Significant map maintenance has been conducted in late 2021 into 2022. Map maintenance in 2025 is likely to focus more on areas to be developed in the near future.*

Traffic Impact Study Requirements

Issue: Traffic generation is becoming a prevalent concern when reviewing proposed developments.

Recommendation: Examine current thresholds for requiring a traffic study and the information that must be included in the report.

Anticipated Time: 9-11 hours; 2-3 ORC meetings

Notes: *Review Section 8.4 to determine if potential revisions to the requirements and contents of Traffic Impact Studies. Consult with Township Engineering early to better understand what reasonable revisions could be.*

Ordinance Review Committee (ORC)
Zoning Ordinance Amendment Workplan for 2025

Environmental Impact Statement

Issue: The zoning ordinance does require some environmental performance standards but does not require an environmental impact statement. An EIS can provide information including, but not limited to, potential proposed development impacts to land, water, and air, measures to reduce or avoid impacts, and maps and technical details of the project area.

Recommendation: Examine the potential for developing zoning ordinance amendments defining an EIS and standards or thresholds for when an EIS would be required.

Anticipated Time: 9-11 hours; 2-3 ORC meetings

Notes: *Sharpe engineering should be included on the drafting review of this language as they would assist in EIS review.*

Zoning Board of Appeals

Issue: The Zoning Board of Appeals article does not include standards or processes for review of appeals of decision and other processes are not as clear as they could be.

Recommendation: Review and revise processes and standards to fill in any gaps and to be consistent with recent case law.

Anticipated Time: 6-8 hours; 2-3 ORC meetings

Notes: *This has been a lower-priority item since 2022 because there are few cases heard by the Zoning Board of Appeals at this time.*

Mixed-Use Zoning

Issue: The Master Plan/Future Land Use Plan calls for a mixed-use future land use area: Contemporary Mixed-Use. Currently, the Zoning Ordinance does not include mixed-use zoning districts.

Recommendation: Add in Mixed-Use or Attached Single Family zoning districts into zoning map.

Anticipated Time: 14-16 hours; 3-4 ORC meetings

Notes: *Due to complexity of mixed use zoning, this may require a separate budget and coordination with the Township attorney earlier in the process.*

Ordinance Review Committee (ORC)
Zoning Ordinance Amendment Workplan for 2025

LOW PRIORITY

Residential Development Recreation Requirements

Issue: Recreation amenities are not required as part of new large residential developments.

Recommendation: Examine the potential for developing requirements or incentives for residential developments to offer private recreation within the development, in site plans, residential PUD's and open space communities.

Anticipated Time: 9-11 hours; 2-3 ORC meetings

Notes: *Consider what is acceptable recreation so we can provide a list of preferred recreation types (walking paths, playgrounds, athletic courts, etc.) Consider a calculation for how much square footage or rec space is required per total site size or unit count.*

Oxford Township Ordinance Review Committee 2025 Workplan

- Priorities are subject to amendment once 2025 Master Plan is adopted

| ZONING ITEM | ORC Meeting for Initial Discussion | CWA Drafting | ORC Review Complete | Other Agency Review (Engineering, Legal, Public Safety, etc) | ORC Review Final | PC Public Hearing | BOT Meeting to Approve Readings | BOT 1 st and 2 nd Readings | BOT Meeting to Adopt / Deny | Effective Date | Comments |
|---|------------------------------------|--------------|---------------------|--|------------------|-------------------|---------------------------------|--|-----------------------------|----------------|--|
| High Priority | | | | | | | | | | | |
| General Requirements for Private Roads / Section 11.2.C | | | | | | | | | | | Current circumstances with older lot configurations would prohibit the issuance of a building permit which could be interpreted as a taking. |
| Industrial Setbacks | | | | | | | | | | | Consideration should be given to the timeline in which future industrial zones will be added to the map and size of the lots in question. |

| ZONING ITEM | ORC Meeting for Initial Discussion | CWA Drafting | ORC Review Complete | Other Agency Review (Engineering, Legal, Public Safety, etc) | ORC Review Final | PC Public Hearing | BOT Meeting to Approve Readings | BOT 1 st and 2 nd Readings | BOT Meeting to Adopt / Deny | Effective Date | Comments |
|-----------------------|------------------------------------|--------------|---------------------|--|------------------|-------------------|---------------------------------|--|-----------------------------|----------------|---|
| Medium Priority | | | | | | | | | | | |
| Landscaping Standards | | | | | | | | | | | Examine the potential for developing lists of appropriate and inappropriate species. |
| Woodlands Ordinance | | | | | | | | | | | Examine whether a woodlands ordinance or landscaping zoning ordinance amendments could achieve the wishes of the community. At a minimum, add requirements or incentives for the protection of existing trees/vegetation to be preserved during and after construction. |

Oxford Township Ordinance Review Committee 2025 Workplan

- Priorities are subject to amendment once 2025 Master Plan is adopted

| ZONING ITEM | ORC Meeting for Initial Discussion | CWA Drafting | ORC Review Complete | Other Agency Review (Engineering, Legal, Public Safety, etc) | ORC Review Final | PC Public Hearing | BOT Meeting to Approve Readings | BOT 1 st and 2 nd Readings | BOT Meeting to Adopt / Deny | Effective Date | Comments |
|--------------------------------|------------------------------------|--------------|---------------------|--|------------------|-------------------|---------------------------------|--|-----------------------------|----------------|---|
| Medium Priority | | | | | | | | | | | |
| Zoning Map Maintenance | | | | | | | | | | | <i>Significant map maintenance has been conducted in late 2022 and 2024. Map maintenance in 2025 is likely to focus more on areas to be developed in the near future and is reliant on finalization of the Master Plan.</i> |
| Traffic Impact Study | | | | | | | | | | | <i>Review Section 8.4 to determine if potential revisions to the requirements and contents of Traffic Impact Studies. Consult with Township Engineering early to better understand what reasonable revisions could be.</i> |
| Environmental Impact Statement | | | | | | | | | | | <i>Examine the potential for developing zoning ordinance amendments defining an EIS and standards or thresholds for when an EIS would be required.</i> |
| Zoning Board of Appeals | | | | | | | | | | | <i>This has been a lower-priority item since 2022 because there are few cases heard by the Zoning Board of Appeals at this time. ZBA and CWA will monitor variance requests to identify potential patterns.</i> |
| Mixed Use Zoning | | | | | | | | | | | <i>Due to complexity of mixed use zoning, this may require a separate budget and coordination with the Township attorney earlier in the process.</i> |

Oxford Township Ordinance Review Committee 2025 Workplan

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| ZONING ITEM | ORC Meeting for Initial Discussion | CWA Drafting | ORC Review Complete | Other Agency Review (Engineering, Legal, Public Safety, etc) | ORC Review Final | PC Public Hearing | BOT Meeting to Approve Readings | BOT 1 st and 2 nd Readings | BOT Meeting to Adopt / Deny | Effective Date | Comments |
|--|------------------------------------|--------------|---------------------|--|------------------|-------------------|---------------------------------|--|-----------------------------|----------------|---|
| Low Priority | | | | | | | | | | | |
| <i>Residential Development Recreation Requirements</i> | | | | | | | | | | | <i>Consider what is acceptable recreation so we can provide a list of preferred recreation types (walking paths, playgrounds, athletic courts, etc.) Consider a calculation for how much square footage or rec space is required per total site size or unit count.</i> |

Appendix A

AGREEMENT FOR SUMMER TAX COLLECTIONS

Whereas, the Lake Orion Community Schools are desirable of having the Charter Township of Oxford collect 2025 Summer taxes and subsequent years on behalf of the school system, and,

Whereas, Oxford Township is willing to collect the taxes for the school district, 100% non-homestead (school operating), 100% school sinking and 100% school debt in the summer.

Be it Resolved that the Charter Township of Oxford will collect the 2025 Summer Taxes and subsequent years at a cost of \$4.00 per parcel.

Be it Further Resolved that the school relinquishes any right to the interest earned on the 2025 collection and subsequent years provided the township will pay by the third and eighteenth of each month during the tax-collection season. If those dates fall on weekends, the next business day will be utilized.

Shannon Hojna, Director of
Business and Finance
Lake Orion Community Schools

Date

Joseph G. Ferrari, Treasurer
Charter Township of Oxford

Date

Appendix B

AGREEMENT FOR SUMMER TAX COLLECTIONS

Whereas, the Oxford Community Schools are desirable of having the Charter Township of Oxford collect 2025 Summer taxes and subsequent years on behalf of the school system, and,

Whereas, Oxford Township is willing to collect the taxes for the school district, 100% non-homestead (school operating) and 100% school debt in the summer.

Be it Resolved that the Charter Township of Oxford will collect the 2025 Summer Taxes and subsequent years at a cost of \$4.00 per parcel.

Be it Further Resolved that the school relinquishes any right to the interest earned on the 2025 collection and subsequent years provided the township will pay by the third and eighteenth of each month during the tax-collection season. If those dates fall on weekends, the next business day will be utilized.

John D. Fitzgerald, Assistant
Superintendent of Business and
Operations for Oxford Community
Schools

Date

Joseph G. Ferrari, Treasurer
Charter Township of Oxford

Date

Appendix C

AGREEMENT FOR SUMMER TAX COLLECTIONS

Whereas, the Oakland Intermediate Schools are desirable of having the Charter Township of Oxford collect 2025 Summer taxes and subsequent years on behalf of the school system, and,

Whereas, Oxford Township is willing to collect the taxes for the intermediate school district in the summer.

Be it Resolved that the Charter Township of Oxford will collect the 2025 Summer Taxes and subsequent years at a cost of \$2.25 per parcel.

Be it Further Resolved that the school relinquishes any right to the interest earned on the 2025 collection and subsequent years provided the township will pay by the third and eighteenth of each month during the tax-collection season. If those dates fall on weekends, the next business day will be utilized.

Michelle Saunders, Executive
Director of Financial Services
for Oakland Intermediate Schools

Date

Joseph G. Ferrari, Treasurer
Charter Township of Oxford

Date

AGREEMENT FOR SUMMER TAX COLLECTIONS

Whereas, the Oakland Community College is desirable of having the Charter Township of Oxford collect 2025 Summer taxes and subsequent years on behalf of the school system, and,

Whereas, Oxford Township is willing to collect the taxes for the community college in the summer.

Be it Resolved that the Charter Township of Oxford will collect the 2025 Summer Taxes and subsequent years at a cost of \$1.50 per parcel.

Be it Further Resolved that the school relinquishes any right to the interest earned on the 2025 collection and subsequent years provided the township will pay by the third and eighteenth of each month during the tax-collection season. If those dates fall on weekends, the next business day will be utilized.

Christina M. Kostiuik, Vice
Chancellor for Administrative
Services for Oakland Community
College

Date

Joseph G. Ferrari, Treasurer
Charter Township of Oxford

Date