BIRMINGHAM CITY COMMISSION
MUNICIPAL BUILDING, 151 MARTIN
MONDAY, OCTOBER 2, 2023
6:15 P.M.
SPECIAL MEETING
(WORKSHOP)

This will be considered a workshop session of the City Commission. No formal actions will be taken. The purpose of this workshop is to participate in a discussion on Unimproved Streets.

I. CALL TO ORDER

Therese Longe, Mayor

II. ROLL CALL

Alexandria Bingham, City Clerk

III. PRESENTATION & DISCUSSION

A. Introduction
B. Presentation – Melissa Coatta, City Engineer

1. **Current Special Assement District (SAD) Policy**
2. **Selecting Water and Sewer Projects**
3. **Unimproved to Improved Road Information**
4. **Cost of Cape Seal and Improved Road**

C. City Commission Discussion and Comment

IV. PUBLIC COMMENT

V. ADJOURN

Should you wish to participate in this meeting, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**
You may also present your written statement to the City Commission, City of Birmingham, 151 Martin Street, P.O. Box 3001, Birmingham, Michigan 48012-3001 prior to the hearing.

NOTICE: Individuals requiring accommodations, such as mobility, visual, hearing, interpreter or other assistance, for effective participation in this meeting should contact the City Clerk's Office at (248) 530-1880 (voice), or (248) 644-5115 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance. Las personas que requieren alojamiento, tales como servicios de interpretación, la participación efectiva en esta reunión deben ponerse en contacto con la Oficina del Secretario Municipal al (248) 530-1880 por lo menos el día antes de la reunión pública. (Title VI of the Civil Rights Act of 1964).

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Unimproved Roads

City Commission Workshop

Engineering Department

Date: October 2, 2023

Unimproved Roads

Introduction:

- Current Special Assement District (SAD) Policy

- Selecting Water and Sewer Projects
  - Scoring Process
  - Priority Roads List
  - Selecting Projects

- Unimproved to Improved Road Information
  - Street Standard
  - Lakeview Avenue

- Cost of Cape Seal and Improved Roads

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Current Special Assement District (SAD) Policy

- Sec 94 – Special Assement
  - Revised in October 2021
- Initiation of Improvement by Commission
- Property owners may petition for an improvement

SAD Unimproved Roads

- Cape Seal
  - 85% of the front-foot costs for improvement are assessed on all properties fronting on the improvement.
  - 25% of the side-foot costs for improvement are assessed on all residential properties siding on the improvement.
  - 85% of the side-foot costs for improvement are assessed on improved business properties siding on the improvement.
  - 25% of the side-foot costs for improvement are assessed on vacant business properties siding on the improvement.

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SAD Unimproved Roads

- Unimproved to Improved Road
  - 85% of the front-foot costs for improvement are assessed on all properties fronting on the improvement.
  - For single family houses, if the longer side of a corner property faces the street being constructed, the City will pay two-thirds (2/3) of the cost of the assessment for that property. The property owner will be charged the remaining third (1/3). If the short side of a corner property faces the street to be constructed, the owner pays 100% of the assessment.

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Selecting Water and Sewer Projects

- Scoring Process
  - Road: 0-100 points
  - Sewer: 0-100 points
  - Water: 0-100 points

  - Higher points: Required Replacement
  - Max Point: 300 points

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Road Scoring Process (up to 100 Points)

- PASER Rating
  - In PASER:
    - 10: Great Condition of Pavement
    - 1: Poor Condition of Pavement
- Road Scoring Process (up to 100 Points):

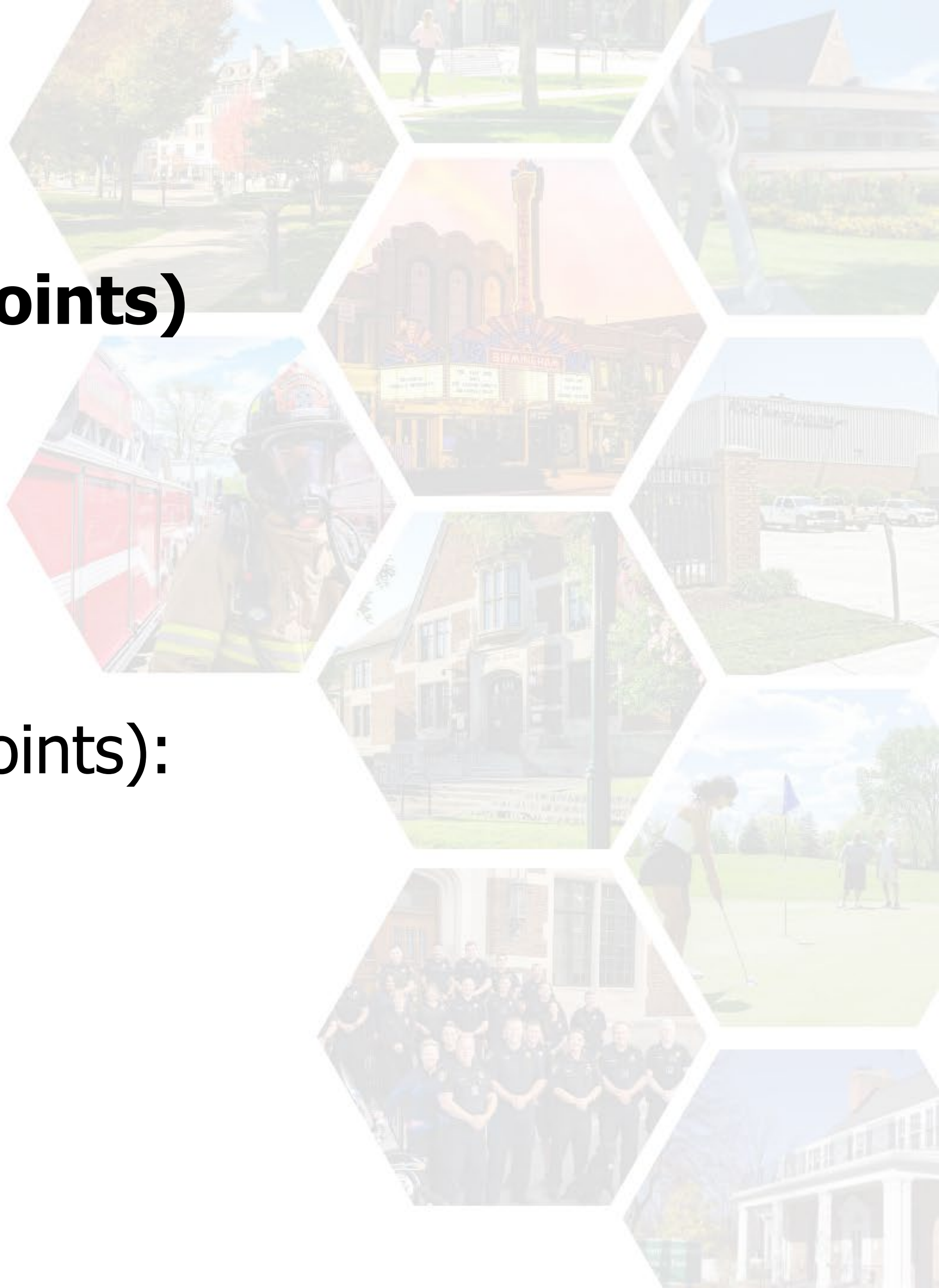
  (10-2021 PASER Rating) x 10

  Example: PASER Rating 7

  (10 - 7) X 10 = 30

  Example: PASER Rating 2

  (10 - 2) X 10 = 80



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Water Scoring Process (up to 100 Points)

- Age (0-20)
  - 1 year old: 0 points
  - 75 years old (expected service life): 20 points
- Size (0-20)
  - Current minimum size 8”
  - 6” water main: 10 points
  - 4” water main: 20 points
- Reinforcement (0-20)
  - Water Pressures from water modeling:
  - Points are assigned based on double the change in size recommended in the model
  - Example: existing 6” water main, model calculates 12” water main: (6 x 2) = 12 points
- Frequency of Breaks (0-40)
  - Each water main break equals 4 points
  - City records go back to approximately 1960’s

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Sewer Scoring Process (up to 100 Points)

- Structural Condition (0-30)
  - Segments with pipe fractures, cracks, and voids are scored higher
- Operation and Maintenance (0-20)
  - Segments that require frequent cleanings due to slow flows, roots, etc. are scored higher
- Capacity Deficiency (0-40)
  - Segments that are calculated as being too small for their service area
- Relief Sewer (0-10)
  - Points are given to segments that help drain not only immediate area but upstream areas.

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Unimproved Road Scoring List

Unimproved Roads Infrastructure Block Ratings

Roadsoft Block Name	Street (GIS Block Name)	Begin	End	Road Type	2021 Water Points (0-100)	2019 Sewer Points (0-100)	Road Points (0-100)	Total Block Rating (0-300)
BLOOMFIELD OLDWOODWARD	BLOOMFIELD	OLDWOODWARD	DEAD END	Unimproved	100	89	70	**262**
WIMBLETON OXFORD POPLLETON	WIMBLETON	OXFORD	POPLLETON	Unimproved	94	91	70	**258**
OXFORD ABBEY WIMBLETON	OXFORD	ABBEY	WIMBLETON	Unimproved	100	77	70	**250**
SHEPARDBUSH WARWICK	SHEPARDBUSH	WARWICK	WIMBLETON	Unimproved	100	77	70	**250**
TORRY TAUNTON SHEFFIELD BRADFORD	TORRY	TAUNTON	SHEFFIELD	Unimproved	94	72	80	**248**
HENLEY ABBEY OXFORD	HENLEY	ABBEY	OXFORD	Unimproved	100	73	70	**246**
HENLEY WARWICK OXFORD	HENLEY	WARWICK	OXFORD	Unimproved	100	73	70	**246**
TAUNTON WOODWARD TORRY	TAUNTON	WOODWARD	TORRY	Unimproved	100	71	70	**244**
BRADFORD SHEFFIELD TORRY CROFT	BRADFORD	SHEFFIELD	TORRY	Unimproved	94	72	70	**239**
WARWICK ABBEY HENLEY	WARWICK	ABBEY	HENLEY	Unimproved	100	75	60	**239**
ABBEY HENLEY	ABBEY	HENLEY	DEAD END	Unimproved	100	64	70	**237**
ABBEY HENLEY OXFORD	ABBEY	HENLEY	OXFORD	Unimproved	100	64	70	**237**
LARCHLEA LINCOLN MIDVALE	LARCHLEA	LINCOLN	MIDVALE	Unimproved	100	80	50	**235**
TOTTENHAM HENLEY	TOTTENHAM	HENLEY	SHEPARDBUSH	Unimproved	100	59	70	**232**
WARWICK HENLEY WIMBLETON	WARWICK	HENLEY	WIMBLETON	Unimproved	100	77	50	**232**
HENLEY TOTTENHAM PUTNEY	HENLEY	TOTTENHAM	PUTNEY	Unimproved	100	58	70	**231**
TOTTENHAM HENLEY WARWICK	TOTTENHAM	HENLEY	WARWICK	Unimproved	100	58	70	**231**
HUMPHREY ETON TAUNTON	HUMPHREY	ETON	TAUNTON	Unimproved	76	72	80	**230**
WESTWOOD RAYNALE OAK	WESTWOOD	RAYNALE	OAK	Unimproved	100	75	50	**230**
STANLEY WALLACE LINCOLN	STANLEY	WALLACE	LINCOLN	Unimproved	87	86	50	**228**
FAIRWAY GREENLAWN GOLFVIEW	FAIRWAY	GREENLAWN	GOLFVIEW	Unimproved	83	79	60	**226**
GREENLAWN HILLSIDE FAIRWAY	GREENLAWN	HILLSIDE	FAIRWAY	Unimproved	83	79	60	**226**
WESTWOOD OAK PINE	WESTWOOD	OAK	PINE	Unimproved	76	86	60	**226**
FLOYD GEORGE LINCOLN	FLOYD	GEORGE	LINCOLN	Unimproved	74	86	60	**224**
SOUTHLAWN LATHAM SOUTHFIELD	SOUTHLAWN	LATHAM	SOUTHFIELD	Unimproved	76	74	70	**223**
WIMBLETON POPPLETON ADAMS	WIMBLETON	POPPLETON	ADAMS	Unimproved	59	89	70	**221**
YOSEMITE YANKEE COLUMBIA	YOSEMITE	YANKEE	COLUMBIA	Unimproved	83	74	60	**221**
ARLINGTON SHIRLEY LINCOLN	ARLINGTON	SHIRLEY	LINCOLN	Unimproved	81	75	60	**220**
HENLEY ABBEY WARWICK	HENLEY	ABBEY	WARWICK	Unimproved	76	71	70	**220**
HUMPHREY TORRY TAUNTON	HUMPHREY	TORRY	TAUNTON	Unimproved	76	62	80	**220**

Selecting Projects

- Input from City Departments:
  - Fire Department
  - Department of Public Service
- Utility Phasing
- Street Phasing

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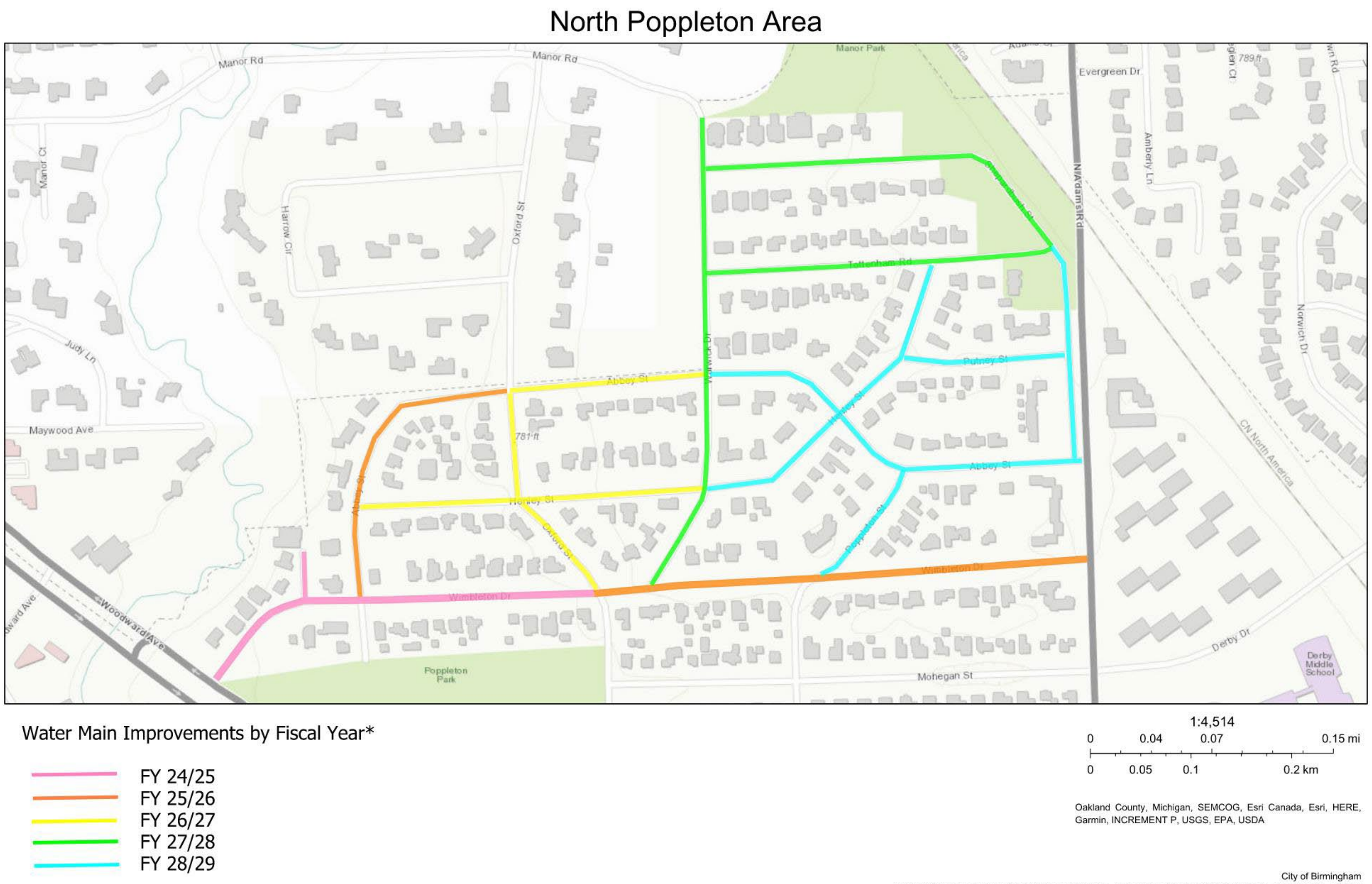
Selecting Project Example



* Tentative Schedule and is dependent on Budget Funds and City Commission Approval

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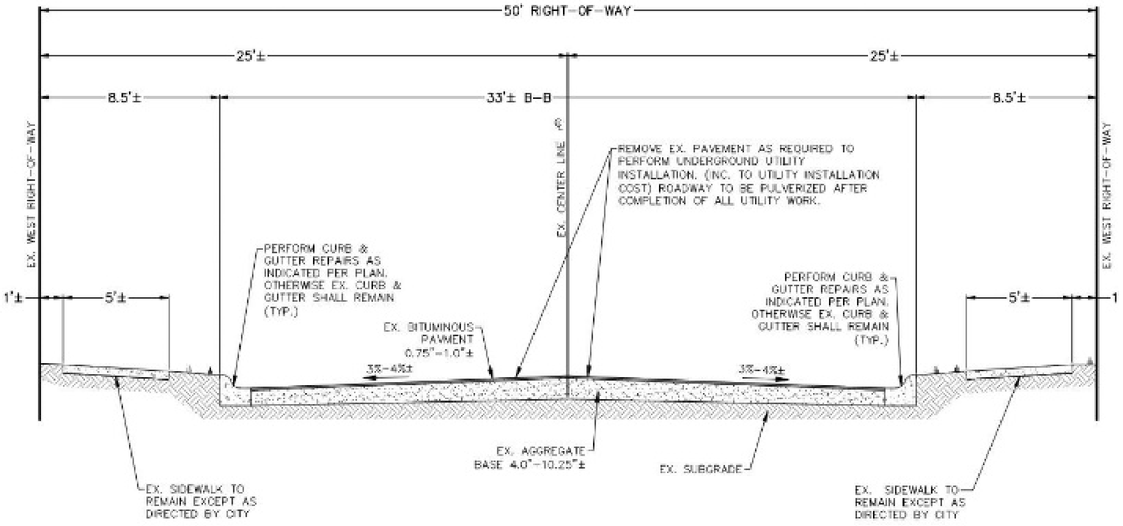
Unimproved to Improved Road

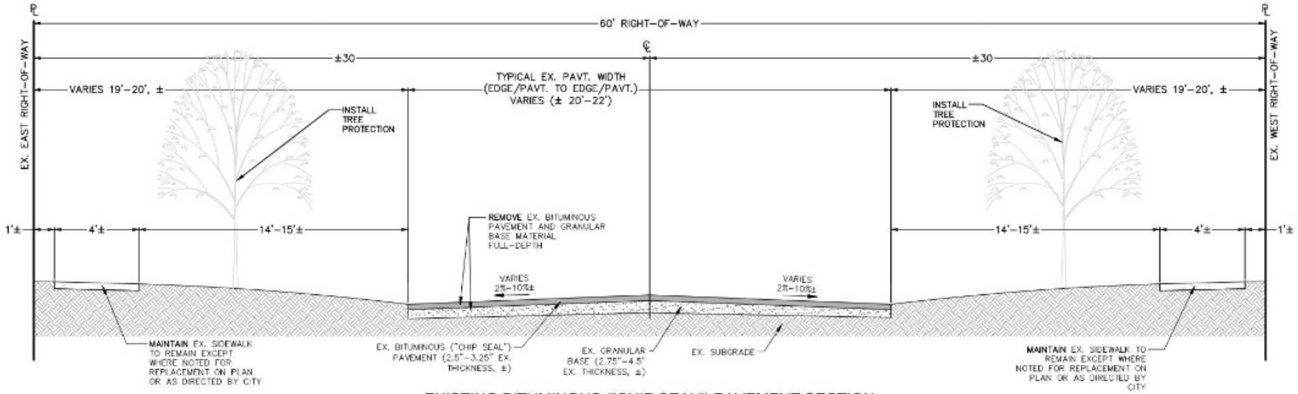
Unimproved Road: Existing Width Varies



EXISTING CHIPSEAL PAVEMENT SECTION

N.T.S.

WESTWOOD DRIVE



EXISTING BITUMINOUS ("CHIP SEAL") PAVEMENT SECTION

N.T.S.

LAKEVIEW AVENUE

APPLIES TO: STA. P.O.B. TO P.O.E.

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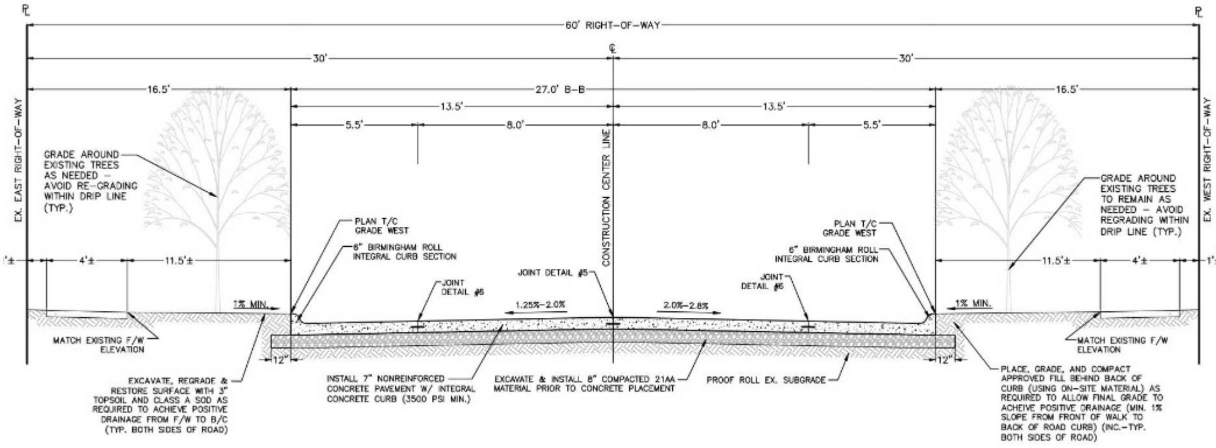
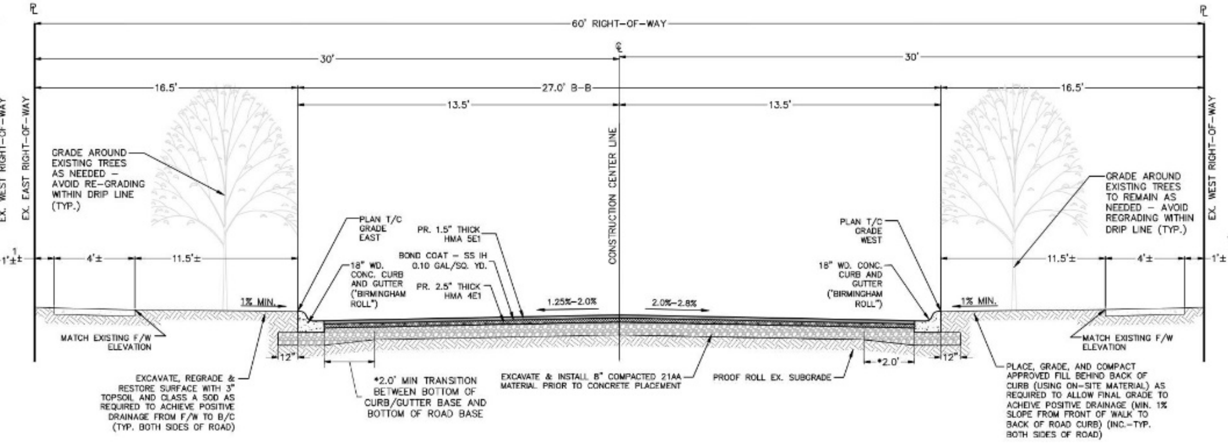
Unimproved to Improved Road: Street Standard Width

Improved Road: 26’ wide standard width for Residential Street Width Policy



PROPOSED CONCRETE PAVING SECTION (CROWN)

SCALE: 1"=4'
LAKEVIEW AVENUE



PROPOSED ASPHALT PAVING SECTION (CROWN)

SCALE: 1"=4'
LAKEVIEW AVENUE

Note: Existing City streets that are measured less than 20 feet wide the City offers a 20 feet wide pavement with no parking on one side.

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Lakeview Ave.

Before

After

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Lakeview Ave.

Before

After

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Lakeview Ave.

Before

After

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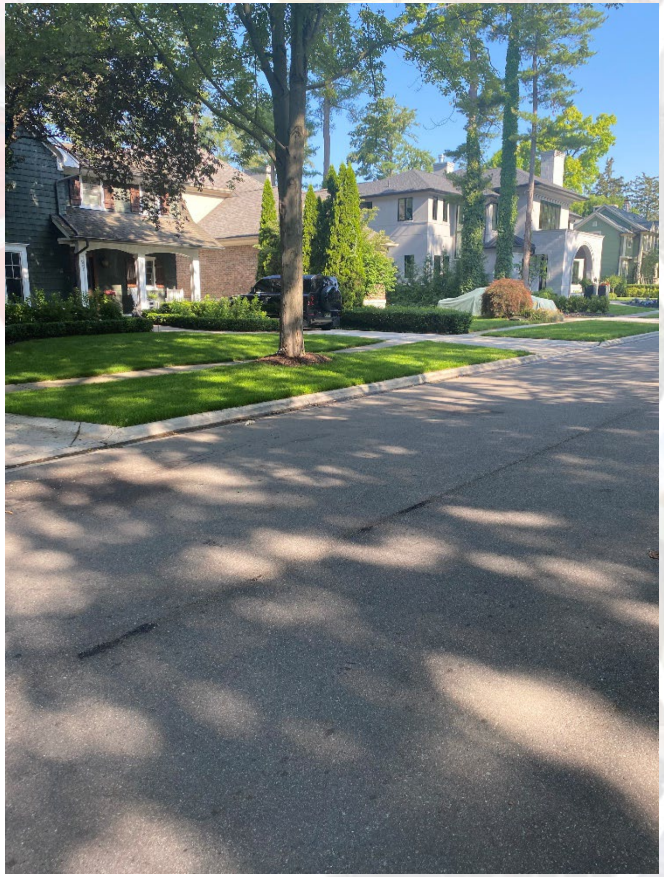
Lakeview Ave.

Before



After

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Cost – Cape Seal

2022-2023 Cape Seal Program:

- SAD Estimated Cost: $38.00/lft
- SAD Projected Cost (from Bids and Construction): $27.00/lft +/-
- 50’ Lot:
  - Resident: $27.00*50’*85%= $1,147.50 (no payment option)
  - City: $27.00*50’*15%= $202.50

2032-2033 Future Cape Seal:

- SAD Projected Cost (5% Inflation): $43.98/front +/-
- 50’ Lot:
  - Resident: $44.00*50’*85%= $1,870.00 (no payment option)
  - City: $44.00*50’*15%= $330.00

Resident Cost 10 year Period: $3,017.50

Cost – Improved Road

2022-2023 Improved Road:

- Estimated Cost for Paving Assement: $350.00/lft
- Estimate Cost for Drive Approach Assement: $11.75/sft
- 50’ Lot:
  - Resident: (($350.00*50’)+($11.75*130 sft))*85%= $16,173.38
  - City: (($350.00*50’)+($11.75*130 sft))*15%= $2,854.13

Resident Cost: $16,173.38 (10 year payment option)

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Cost – Breakeven Point

	Cape Seal	Improved Road
2023	$1,147.50	$16,173.38
2033	$1,870.00	
2043	$3,045.00	
2053	$4,959.43	
2063	$8,078.39	
	$19,100.32	$16,173.38

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Multimodal

2018
- Infrastructure

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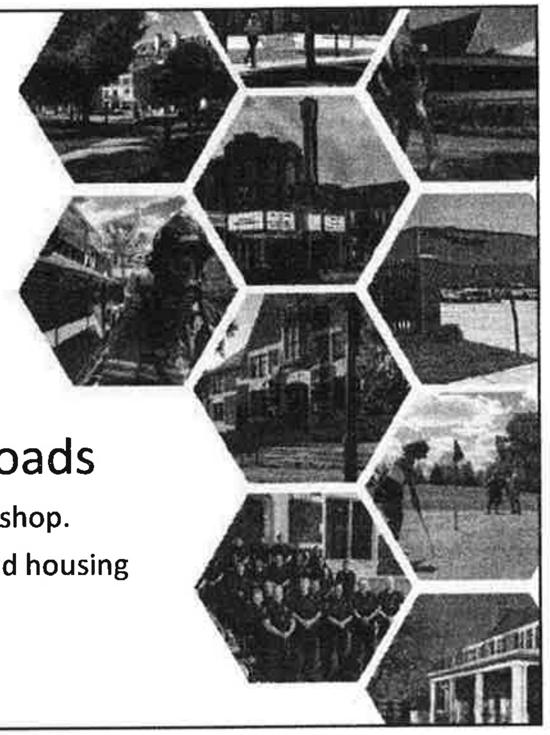

Unimproved Roads

City Commission Workshop.

Cost benefit to Resident and housing value evaluation

1

Cost calculation cross check

Cross check to my own assessment letter			
Cape seal assessment letter		Bids & Construction cost	
Total projected invoice	$ 1,776.50	Total projected invoice	$ 1,262.25
GIS property footage	55	GIS property footage	55
Total cost per foot	$ 38.00	Total cost per foot	$ 27.00
Resident cost per foot @ 85%	$ 32.30	Resident cost per foot @ 85%	$ 22.95

Improved Street	
Total cost per foot	$ 350.00
Resident portion	$ 297.50
Drive approach total cost per sq foot	$ 11.75
Resident portion	$ 9.99
50	$ 14,875.00
130	$ 1,298.38
Total	$ 16,173.38

		Unimproved streets						
		Annual inflation:	5%	85%	5%	85%	Example property footage	50
Total years	Cape seal cycle years	Year	Total Cost per foot by year	Resident portion	Total Cost per foot by year	Resident portion	Resident cost	Cumulative cost
1	1st 1	2025	$ 38.00	$ 32.30	$ 27.00	$ 22.95	$ 1,147.50	$ 1,147.50
11	2nd 1	2035	$ 61.90	$ 52.61	$ 43.98	$ 37.38	$ 1,869.16	$ 3,016.66
21	3rd 1	2045	$ 100.83	$ 85.70	$ 71.64	$ 60.89	$ 3,044.66	$ 6,061.32
31	4th 1	2055	$ 164.25	$ 139.60	$ 116.69	$ 99.19	$ 4,959.43	$ 11,020.74
37	7	2059	$ 220.09	$ 187.08	$ 156.38	$ 132.92		
38	8	2060	$ 231.09	$ 196.43	$ 164.20	$ 139.57		
41	5th 1	2065	$ 267.52	$ 227.39	$ 190.08	$ 161.57	$ 8,078.39	$ 19,099.13

Improved street cost
$ 16,173.38

Breakeven period

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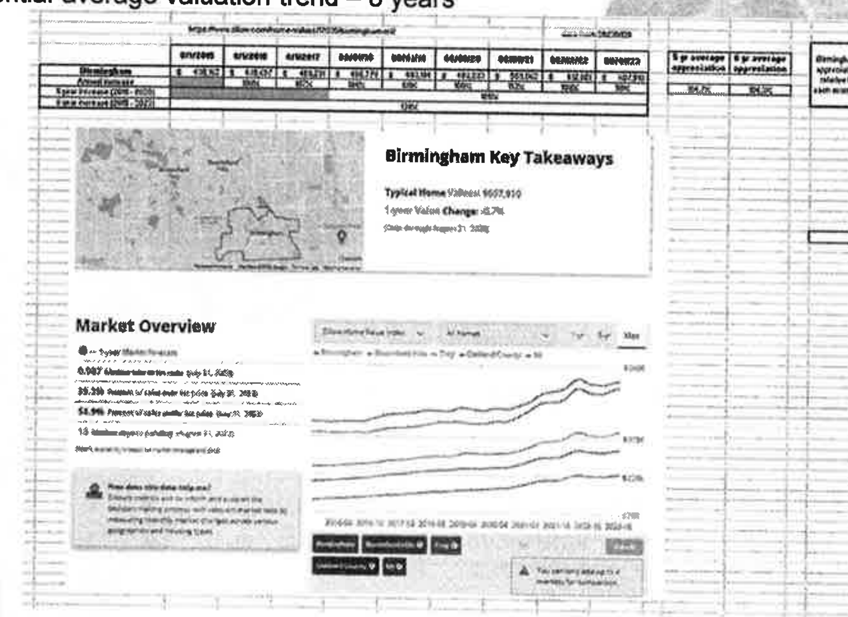
2

Residential average valuation trend – 8 years



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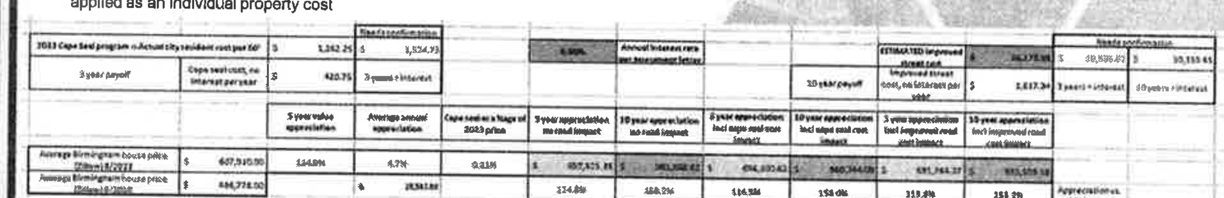
3

Effect of Unimproved and improved streets on home value – 10 year projection

- Using Zillow historical data as a guide to average appreciation and projecting forwards up to the 10 year payment period of an Improved Street assessment
- Showing the 3 year payment period of Unimproved and 10 year payment period of Improved.
- Calculation is to show how payment for a road improvement of any kind is an added cost to any homeowner that is over and above the normal costs of owning a home in Birmingham and it does not add any value to the home over and above the normal appreciation over time. It is a penalty to the homeowner's home equity valuation when applied as an individual property cost



- 3 year value increase, no road assessment: $607,910 -> $697,625
- 3 year value increase, Unimproved road assessment: $607,910 -> $696,100 = ($1,524)
- 3 year value increase Improved road assessment $607,910 -> $691,746 = ($5,861)

- 10 year value increase, no road assessment: $607,910 -> $961,868
- 10 year value increase, Unimproved road assessment: $607,910 -> $960,344 = ($1,524)
- 10 year value increase, Improved road assessment: $607,910 -> $931,509 = ($30,359)
-

Baseline -> Appreciated value = Relative gain / (loss)

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4

Payback period expectations

- Per the provided calculation, payback period is between 30 - 40 years, (my estimate ~ 37 years)
- Based upon the CDC provided Birmingham age demographics and median age, a 37 year payback period, statistically will only allow the youngest ~40% of residents the opportunity to see the breakeven point and be able to realise any financial benefit from that point forwards.

Cross check to my own assessment letter	
Site & Construction cost	
Total projected invoice	$ 1,263.23
GIS property footage	55
Total cost per foot	$ 27.00
Resident cost portion @ 85%	$ 22.95

Improved Street	
Total cost per foot	$ 350.00
Resident portion	$ 297.50
Drive approach total cost per sq foot	$ 11.75
Resident portion	$ 9.99
50	$ 14,875.00
130	$ 1,298.18
Total	$ 16,173.18

		Unimproved streets			
		5%	85%	Example property footage	50
Total years	Cape seal cycle years	Total Cost per foot by year	Resident portion	Resident cost	Cumulative cost
1	1st 1	$ 27.00	$ 22.95	$ 1,147.50	$ 1,147.50
11	2nd 1	$ 43.98	$ 37.38	$ 1,869.14	$ 3,016.64
21	3rd 1	$ 71.64	$ 60.89	$ 3,044.66	$ 6,061.32
31	4th 1	$ 116.69	$ 99.19	$ 4,959.43	$ 11,020.74
37	7	$ 156.38	$ 132.92		
38	8	$ 164.20	$ 139.57		
41	5th 1	$ 190.08	$ 161.57	$ 8,078.59	$ 19,099.13

Improved street cost
$ 16,173.18

Breakeven period

Birmingham Median age	2023 Average US life expectancy (https://www.cdc.gov/nchs/fastats/life-expectancy.htm)						76.4	
	2021 Birmingham age demographic							
41.5	0-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
	27%	6%	13%	14%	15%	13%	7%	6%
	37 - 59	37 - 48						

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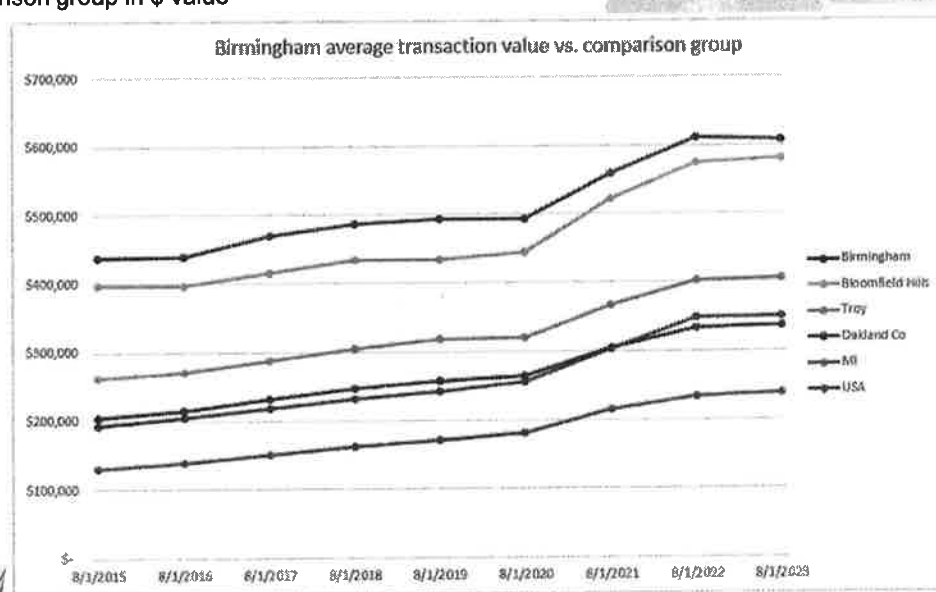
5

Birmingham average (Zillow data) transaction value vs. comparison group in $ value



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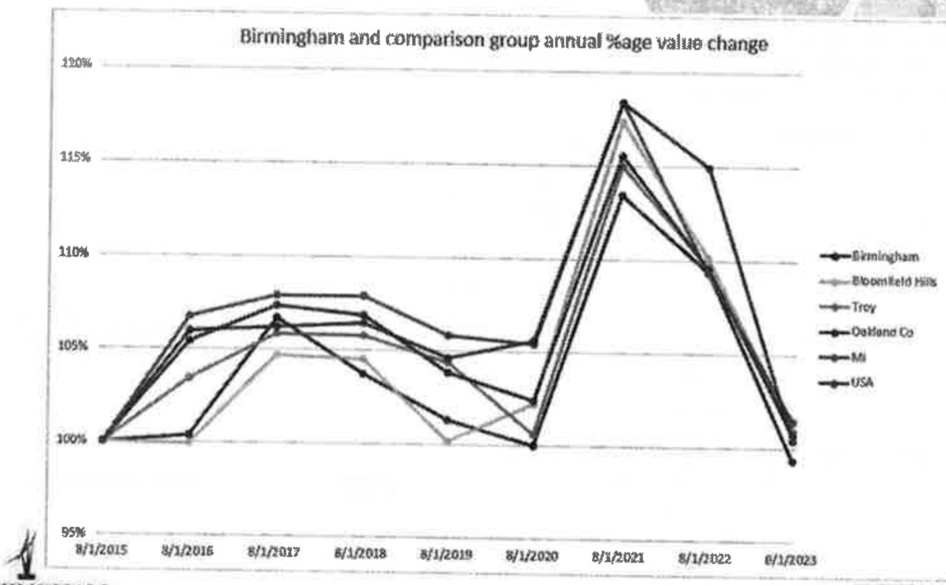
6

Birmingham average (Zillow data) transaction value change vs. comparison group in %



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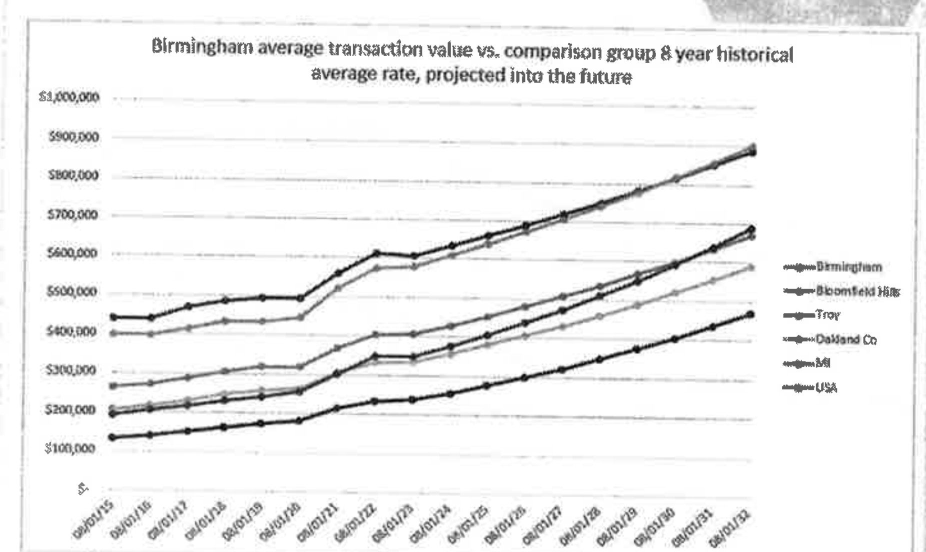
7

Birmingham average (Zillow data) transaction value vs comparison group future projection, not including street improvements cost penalty



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8

Chapter 21: Financing Capital Improvements

Few municipalities have cash resources to finance facilities with large price tags and long life, such as a new municipal office, a new water treatment facility, a new civic center, or other long term capital improvements. Most must incur debt in the form of a bond issue to finance such improvements and facilities, similar to the home buyer who must incur debt in the form of a mortgage.

The incurring of debt by a municipality should be considered among the most serious of all courses of action available to a village council. Indeed, state statutes and administrative regulations require local authorities to follow certain procedures and processes prior to issuance of most debt.

Bond Issuance and Notes—Incurring Debt

Notes

Notes are instruments of debt having shorter duration than the term of bonds. Notes may be issued for bridging short lapses of time between the date of need for an expenditure and the date when budgeted revenues are available.

The most common of these are tax anticipation notes (TANs) which may be issued for operating or capital improvement purposes. These notes are essentially a promise to pay the lender, usually a local bank, from tax revenues anticipated during the current or next succeeding fiscal year.

Amendments to the Municipal Finance Act (2001 PA 34) have provided cities and villages with additional tools and allow the issuance of short-term debt for the planning and engineering costs for capital improvements. As a result of these amendments, cities, villages, counties, and townships are able to issue bond anticipation notes (BANs), grant anticipation notes (GRANs) and revenue anticipation notes (RANs) in anticipation of funds from these bonds, grants, and revenue sharing, respectively. However, there are limitations on the amount of short-term debt that can be issued in relationship to the amount of the grant, revenue sharing, or bond issue. Prior to the issuance of these notes, the municipality is encouraged to contact its financial advisor and/or bond counsel to insure compliance with state law.

Energy conservation notes may be approved for issuance for periods not to exceed ten years. Use of proceeds from such notes is limited to financing improvements resulting in energy conservation.

Installment sales contracts are permitted by 1933 PA 99 (Purchase of Lands and Property for Public Purpose) for installment periods not exceeding 15 years or the useful life of the property being acquired, whichever is shorter. Installment contracts may be used for acquisition of land, equipment or property. Approval by the Michigan Department of Treasury and vote of the electorate are not required.

Bond Issuance

Long term municipal debt is most often incurred in the form of bond issues. Most are issued as tax exempt bonds but municipalities may be, under certain circumstances, required to issue taxable bonds. Interest income received by the buyer or holder of the tax-exempt bond is not subject to federal, state, or local income taxes. This creates a higher demand for tax-exempt bonds and issuing municipalities realize great savings in interest costs. This also reduces income tax revenues returned to the various units of government.

Financial experts and statutes have given titles to various types of bond issues which reflect the quality of the issue.

General obligation (GO) bonds are the highest quality because they pledge the taxing capacity of the municipality to retire the bonds and pay the interest on them. There are two types of GO bonds, discussed below. Revenue bonds on the other hand, have a lower quality because only the revenues from service fees and charges for use of the system (e.g. water, sewer, electric, parking, etc.) are available to pay principal and interest on the issued bonds.

Unlimited tax general obligation (UTGO) bonds, or voted GO bonds are bonds for which the electorate has pledged to tax themselves an amount which is sufficient to retire the bonds and pay interest on all that are outstanding. That is, the local taxing authority is not limited in the amount of taxes that can be levied to retire the bonds and pay interest in any year. The electorate must vote to approve the issue prior to the issuance of the debt.

Limited tax general obligation (LTGO) bonds or non-voted GO bonds are bonds for which the authority to raise taxes to pay principal and interest with bonds is limited to the maximum amount of taxes that the municipality is permitted to levy by state law and the local charter. The electorate has not approved the issue nor given specific authority to be taxed above the level authorized by law or charter to pay principal and interest on the issue.

With special assessment district (SAD) bonds, payment of principal and interest is assured by pledging revenues from collection of special assessments and interest thereon.

Revenue bonds are used to finance municipal operations which are characterized as being self-supporting and having their own revenue source such as service fees (e.g., sewer and water systems, golf courses and recreation facilities, parking garages, and auditoriums). Revenue bonds are retired with revenue produced from the facility or other service fees.

Villages may issue **Michigan Transportation Fund bonds** and pledge a portion of their statutory share of transportation funds to pay principal and interest on the bonds.

A city or village may issue **intergovernmental contracts and authority bonds** if they enter contracts with counties and authorities to have a facility (water system, sewer system) built and leased to the operating city or village, which pays rent on the facility in sufficient amount to pay debt service costs on the bonds issued by the county or authority. Local building authorities, which will be discussed later in this chapter, provide an example of such an authority.

The county drain commission may issue **county drain bonds**—bonds for drain and sanitary sewer system improvements and apportion the cost for debt service among the cities, villages, and townships which benefit.

Tax increment bonds—Tax increment financing (TIF) through the creation of TIFAs, LDFAs, and DDAs which may issue TIF bonds, are discussed in depth later in the chapter.

Amendments to the Municipal Finance Act also created **capital improvement bonds,** which may be issued for any "depreciable asset" as Limited Tax General Obligations (LTGOs) of the issuing municipality. This type of bond issue is subject to the right of referendum, as are several of the other types of bond issues discussed above, and is payable from the general taxing powers, subject to statutory and charter limitations, of the issuing municipality and/or other revenue sources.

There are pitfalls in incurring bonded indebtedness. Scarce resources are consumed by interest and principal costs and the cost of issuance. For example, debt service costs over a 15-year bond issue could be more than double the cost of the facility. Costs over a 30-year issue could be more than triple the initial cost of the facility or project. And, as infrastructure and facilities age, costs of repair and maintenance accelerate. Continuing debt service costs mitigate against the allocation of sufficient funds for current maintenance requirements.

Special Financing Tools for Development/Redevelopment

Cities and villages are the crucible for fostering development and redevelopment. Realizing this, the state legislature has enacted permissive legislation to assist cities and villages with this purpose.

- **Housing authorities** and building authorities are possibly the oldest of these special development entities, having been created by legislation in 1933 and 1948, respectively. Housing authorities were permitted for the purpose of eliminating detrimental housing conditions through acquisition, construction, and ownership of