## **Summary**

The Planning Commission recognizes the practical value of maintaining the Township's existing sidewalk infrastructure by prioritizing the repair of deficient sidewalk slabs and the installation of ADA ramps to connect existing sidewalks to roads (orphans), as well as educational and enforcement tools to reduce barriers to sidewalk use (such as overgrown vegetation, parked vehicles, and uncleared snow, particularly for sidewalks along busy streets). In addition, new sidewalks are encouraged via the Township's site plan review process for developing properties and for relatively busy roadways when funds are available.



# Update to the Non-motorized Transportation Master Plan

Approved by the Kalamazoo Township Planning Commission on June 3, 2021 and adopted by the Charter Township of Kalamazoo Board of Trustees on June 14, 2021

A citizen survey in November 2013 revealed public interest in non-motorized transportation (39% of respondents prioritized sidewalk repair and 36% prioritized adding bike/walk paths, compared to 77% for road maintenance – the highest priority). In response, the Charter Township of Kalamazoo adopted a Non-motorized Transportation Master Plan on 12/08/2014 (a link is available at <a href="www.ktwp.org">www.ktwp.org</a>) to study non-motorized options. Since the Plan's adoption to the present, the Township has actively implemented Plan components. Now is an appropriate time to review, evaluate, and update the Plan as a tool to guide future efforts, including the following highlights:

#### Update 1: Commitment remains strong

The Plan's purpose is still pertinent to "articulate a vision for non-motorized transportation in the Township." And, the Township continues to recognize non-motorized systems as "a wonderful community asset" that supports "recreation, alternative transportation, increased mental and physical well-being, pollution reduction, conservation of natural resources, increase in property values, and improved quality of life" and other benefits. In addition, the Township remains committed to its Complete Streets Resolution (adopted June 2015) to promote multiple transportation uses, including vehicles, pedestrians, bicycling, and public transportation.

#### **Update 2: Implementation Strategy**

Given limited resources to address the Plan's overwhelming scope of identified needs, a citizen-based Non-motorized Implementation Committee outlined a strategy by October 2015 to emphasize the following priorities:

- Advance Safe Routes to Schools
- Complete existing infrastructure, such as tying together existing sidewalks where gaps occur, connecting orphaned corners where existing sidewalks fail to reach the road, and replacing curb barriers with ADA ramps where sidewalks meet roads.
- Improve access to the Kalamazoo River Valley Trail
- Construct sidewalks for County primary and other busy roads.

The Implementation Strategy continues to provide valuable guidance.

#### Update 3: Accomplishments since the Plan's adoption in December 2014

In 2015, a partnership with the Township, the City of Kalamazoo and Oshtemo Charter Township facilitated new sidewalks for Drake Road, including signed bicycle routes on Drake Road and sidewalk access north of Grand Prairie Road to Kalamazoo Central High School and the Kalamazoo River Valley Trail.

In February 2015, a voter-approved Transportation Bond financed significant infrastructure improvements from 2015-2018 for roads, road drainage, and many non-motorized transportation elements throughout the Township, including:

- Correcting 44 "orphaned" corners to provide barrier-free access to intersections (particularly serving schools) with ADA-compliant ramps to correct obstacles like curb & gutter sidewalks and existing sidewalks ending in grass without reaching roads,
- Completing over 100, "spot" repairs of existing, high-use sidewalks, typically involving 1-7 concrete slabs per "spot" repair,
- Constructing approximately four miles of signed, bicycle routes on E. Main Street, Drake Road, and bicycle boulevards through Eastwood and Westwood to identify less congested routes, and
- Installing 2.8 miles of new sidewalks adjacent to primary and other busy roads, including portions of Grand Prairie Road, Nazareth Road, Sunnyside Drive, Kendall Avenue, Olmstead Road, and West Main Street/M-43 (between Solon and Sabin Streets).

To continue momentum following the Transportation Bond, the Township increased the General Fund's line item for sidewalks, \$5,000 of which finances the Sidewalk Replacement Program (outlined in Update #5, below). However, limitations related to COVID-19 cancelled plans for 2020's non-motorized improvements. In 2021, due to increased labor and material costs associated with the COVID challenge, the Township aims to scale down the scope of work, to concentrate on filling sidewalk gaps and installing an ADA ramp on the south side of Edison Street to enhance Safe Routes to Parchment Northwood Elementary School, as well as a "spot" repair at Haskell Street and two orphaned corners on Grand Pre Avenue.

## **Update 4: Funding**

Funding is the biggest constraint for more infrastructure improvements. Until a large funding source is available, infrastructure improvements rely on General Fund allocations to incrementally address smaller scale projects, such as the spot repairs and orphaned sidewalks (see Update 6, below).

Larger sources of potential future funding to consider include:

- Local foundation grants.
- Federal/state grant funds. Competitive federal funds such as Safe Routes to Schools administered by the Michigan Fitness Foundation and MDOT's Transportation Alternative Program (TAP) -- are available to Act 51-eligible parties, such as the Road Commission of Kalamazoo County (RCKC) and the City of

Kalamazoo. TAP prioritizes trail projects over sidewalks. Generally, Act-51 eligible organizations contribute 20% of the construction costs, as well as all of the engineering and planning costs, which can represent 10-20% of the construction costs. To use these federal funds, one option is to partner with the City of Kalamazoo (following the Drake Road example) on a project involving our common borders, such as sidewalks on

- 1) Brook Drive to provide access to Spring Valley Park,
- 2) Croyden, Canterbury and Piccadilly to connect the Township's existing sidewalks to Fray's Park and Westwood Plaza,
- 3) Sage Street and Stonebrooke Avenue to connect Westland Meadows and Briarwood to Drake, and
- 4) W. North Street.

Another option may be to partner with RCKC, for which the Township would fund all non-grant costs.

- Special assessment districts. Benefiting property owners can petition the Township to create a special district to assess properties to fund improvements within the district.
- A non-motorized transportation millage.

### <u>Update 5: Seeking public participation</u>

In addition to previous public input on the Steering Committee and the Non-motorized Transportation Implementation Committee to guide the December 2014 Plan, public involvement continues to be a valuable and welcomed resource. Opportunities for public input include:

- Enhance participation in the Township's *Sidewalk Replacement Program*, which reimburses property owners for a portion of their costs to correct sidewalk deficiencies as defined in the Maintenance Standards in Ordinance #604.004 C.2. Despite a program budget of \$5,000/year, the program is underutilized; over the last five years (2016-2020), only nine property owners participated, awarding a total \$4,287.50 an average of \$855.50/year.
- Continually document public input concerning specific areas of need (see working lists in Update 6), potentially using an interactive web feature to encourage public participation with identifying potential "spot" repairs and other concerns, similar to RCKC's "Contact Us" webpage.
- Encourage neighbors to help neighbors to keep sidewalks clear of snow, ice, vegetation, parked cars, and other barriers, possibly via an Adopt a Block Captain program.
- Communicate (via the township's webpage, Facebook, newsletters, and other communication vehicles) to enhance public awareness of the:
  - o Sidewalk Replacement Program,
  - need to minimize sidewalk barriers (such as snow, ice, overgrown vegetation, and parked vehicles), particularly for relatively busy roads (such as Gull Road, Nazareth Road, Sunnyside Lane, East Main Street, West Main Street, Kendall Avenue, Alamo Avenue Nichols Road, North Drake Road, Lake Street, Olmstead Road, and Edison Street),
  - value of walking and bicycling in neighborhoods to promote physical and mental health, a sense of community, public safety, and other benefits.
- Educational and code enforcement efforts can help resolve sidewalk barriers, as the December 2013
   Community Survey overwhelmingly supports. And, the township may find opportunities to improve some ordinances to increase the practicality of enforcement.
- In February 2021, the Board of Trustees approved a short-term Task Force to consider sidewalk topics.

#### Update 6: Updating the list of specific needs

As the Plan recognizes, "This is a living document and it is anticipated that, over time and as additional information is collected, it is possible that the proposed locations for non-motorized trails could change due to a number of issues such as funding, leadership changes, project priorities, public opinion, and land use." The Plan's list of potential projects can be updated with additional public input, so potential projects are closer to being "shovel ready" to proceed when funding and other variables are favorable.

Potential, future work areas include outstanding areas identified in the 2014 Plan as well as the following new, updates:

## **Orphaned sidewalk corners:**

An estimated 184 orphaned sidewalk corners exists, where sidewalks do not extend to the street. See table below.

Estimated number of current orphaned sidewalk corners per neighborhood:

Neighborhood	# orphaned corners
Eastwood  Examples of high-priority sites include the most frequently used sidewalks located closest to E. Main Street, including:  1. Coy's 24 orphans between Washburn & Craft,  2. Anne's 10 orphans between Stamford & Texel, &  3. Dearborn's 16 orphans between Wallace & Ira.	97 south of E. Main St. and 15 north of E. Main St.
Lakewood	1 (south end of Olmstead Road from KPEP to BL-94)
Northwood	7
Westwood	64
Examples of high-priority sites include:	
<ol> <li>Alamo at Brownell St and Warren Place to promote Safe Routes to Hillside Middle School and serve residents with a disability (4 orphans)</li> </ol>	
<ol><li>Canterbury at Cherokee and Mohawk to complete Canterbury's other ADA ramped corners (8 orphans)</li></ol>	
<ol> <li>Olney at Mohawk to complete Olney's other ADA ramped corners (2 orphans)</li> </ol>	
4. Cranbrook, particularly to serve residents with a disability (4 orphans)	
Estimated total	184

## Spot repairs of existing sidewalks:

The following table identifies 376 deficient, concrete sidewalk slabs, as defined in the Maintenance Standards in Ordinance #604.004 C.2. The most common type of deficiency is a concrete slab raised at least 2". This list is a working document, which can continually adjust with public input.

Property owners are responsible for maintaining sidewalks adjacent to their property, and the Sidewalk Replacement Program offers financial assistance. In some cases, the Township may take enforcement action to repair deficiencies. Repairing deficient sidewalk slabs enhances the Township's existing infrastructure and recognizes that sidewalks are both an individual and a common good. Spot repairs are a high priority because it takes only one raised sidewalk slab to prevent a resident with a mobility disability from being able to use a sidewalk.

## Spot Repair Locations (Estimated # of deficient concrete slabs)

#### Eastwood (total: 136 concrete slabs)

- 716 Arthur (2)
- 730 Arthur (2)
- 926 Arthur (2)
- 930 Arthur (2 in 2 areas)
- 1011 Arthur (2)
- 1031 Arthur (2)
- 1220 Baker (1)
- 1322 Baker (1)
- 524 Chicago (1)
- 532 Chicago (1)
- 538 Chicago (2)
- 550 Chicago (1)
- 618 Chicago (1)
- 624 Chicago (1)
- 723 Chicago (1)
- 912 Chrysler (1)
- 1108 Chrysler (2 in 2 areas)
- 621 Clearview (3)
- North of 918 Clearview (1)
- 1013 Clearview (1)
- 3209 Kenilworth on Clearview/east side (2)
- 538 Cooper (1)
- 605 Cooper (1)
- 614 Cooper (1)
- 919 Cooper (1)
- 1002 Cooper (3)
- 1011 Cooper (1)
- 1019 Cooper (1)
- 3308 Coy (1, at the SW corner of Coy x Chrysler)
- 562 Dayton (2)
- 539 Dayton (3)
- 729 Dayton (2)
- 913 Dayton (2)
- 1029 Dayton (1)
- 2726 E. Main on Dayton/east side (2)
- 2306 Dearborn (1)
- 616 Fenimore (3, depressed valley)
- 619 Fenimore (2)
- 624 Fenimore (1)
- 808 Fenimore (1)
- 814 Fenimore (2)
- 819 Fenimore (3)
- 902 Fenimore (1)
- 612 Gayle (1)
- 927 Ira (2)
- 539 Ira (1+)
- 521 Ira (1)
- 625 Lum (1)

- 715 Lum (2)
- 722 Lum (2)
- 915 Lum (4)
- 927 Lum (1)
- 1236 Nassau (2, missing slabs)
- 1326 Nassau (1)
- 1423 Nassau (1)
- 1507 Nassau (2+)
- 2611 E. Main on Nassau/east side (3 in 2 areas)
- 3020 E. Main (2)
- 506 Stamford
- 1414 1418 Stamford (12)
- 1427 Texel (3)
- 551 Washburn (1)
- 903 Washburn (2)
- 1032 Washburn (1)
- 1111 Washburn (1)
- 2402 E. Main on Washburn/west side (1)
- 1237 Waverly (2)
- 1419 Waverly (1)
- 1424 Waverly (1)
- 1517 Waverly (1)
- 1520 Waverly (1)
- 1228 Woodrow (2 in 2 areas)
- 1231 Woodrow (2)
- 1237 Woodrow (2)
- 1236 Woodrow (2)
- 1301 Woodrow (3)
- 1508 Woodrow (2)
- 1509 Woodrow (1)

### **Lakewood** (total: \_\_ concrete slabs)

TBD

#### Northwood (total: 21 concrete slabs)

- 518 Edison (1)
- NE corner of Taft x Edison (west side), broken slabs at driveway (2)
- North of 4107 Taft
- 4118 Taft
- North of 4125 Taft
- 4204 Waldorf (5)
- 4122 Waldorf (2)
- 4188 Waldorf (1)

## Westwood (total: 219 concrete slabs)

- 2131 Alamo (4 on west/Richland side)
- 2211 Alamo (1)
- 2305 Alamo (8 in 3 areas)
- 2419 Alamo (2)
- 115 S. Arlington (2 missing slabs)
- 116 S. Arlington (1)
- 122 S. Arlington (1)
- South of 122 S. Arlington, before sidewalk ends (13 slabs)

- 426 Arlington (4, broken & lifted)
- 440 Arlington (4, broken & lifted)
- 110 N. Berkley (4+)
- 136 N. Berkley (5)
- 502 N. Berkley (1)
- 1103 Bretton (3)
- 1204 Bretton (6)
- 1206 Bretton (3)
- 1336 Bretton (3)
- 1335 Calhoun (2)
- 1343 Calhoun (2)
- 10--- 0 !! (2)
- 1355 Calhoun (2)
- 1350 Calhoun (2)
- 437 Campbell (1)
- 526 Campbell (2)
- 808 Campbell (5)
- 3425 Canterbury (?)
- 2505 Chaparral (4)
- 1908 Commonwealth (2)
- 1917 Commonwealth (1 broken slab)
- 3419 Cranbrook (1)
- 3503 Cranbrook (2)
- 3901 Croyden (1)
- 627 N. Dartmouth (4 broken & missing slabs at drive)
- 3903 Devonshire (1)
- 3721 Devonshire (4)
- 427 Fletcher (4 in 2 areas)
- 543 Fletcher (2)
- 1012 Fletcher (1)
- 729 & 803 Fletcher (7 deteriorating surface)
- 3012 Grace (2)
- 1006 Grand Pre (3)
- 1027 Grand Pre (1)
- 3727 Grace (1)
- West of 1707 Grove (4 crushed by remodeling dumpster)
- 1728 Grove (7)
- 3011 Haskell (2)
- 3720 Iroquois Seminole side (2)
- 1209 Manor (4 deteriorated surface)
- 1215 Manor (1 deteriorated surface)
- South of 428 Jenks (4+)
- 436 Jenks (2)
- Jenks & Grand Pre Park, across from 428 Jenks (1)
- 1106 Jenks (2)
- 1129 Jenks (2)
- 1218 Jenks (4)
- 2220 Kenwood (2)
- 2226 Kenwood (3 in 2 areas)
- 833 Nichols on Canterbury side (1)
- 3211 Olney Nichols/east side (6 in 3 areas)

- 3308 Olney (2)
- 3617 Olney (2)
- 3626 Olney (1)
- 3704 Olney (1)
- 3712 Olney (3)
- 121 Nelson (2)
- 208 Nelson (5)
- 218 Nelson (4)
- 222 Nelson (3)
- 226 Nelson (3)
- 231 Nelson (8)
- 611 Pinehurst (1)
- 705 Pinehurst Waverly/south side (2 in 2 areas)
- 403 Pinehurst (3)
- 1112 Turwill (4)
- 424 Wealthy (1)
- 438 Wealthy (1)
- 2402 W. Main Wealthy/east side (3 in 3 areas)
- West of 2324 W. Main (2 in 2 areas on the Wealthy/east side & 4 on the W. Main/south side)

Grand Total: 376 concrete slabs

## Sidewalks:

The 2014 Non-motorized Transportation Master Plan lists high-priority, new sidewalk projects (see pages 29 – 30), some of which have been completed. The following list identifies additional priority sidewalk projects. The list is a working document, which can expand with more input over time.

- 1. Seminole Street: Complete the existing sidewalk's gaps, spot repairs, and orphaned corners to enhance access to primary corridor of Grand Prairie Rd.
- 2. Cherokee St. (west side where five parcels already have sidewalk on this relatively busy street).
- 3. Turwill Lane (south of Devonshire, on at least one side of this relatively busy street).
- 4. Hickory Nut Lane and Sweet Cherry Lane, which intersect the Valleywood Plat.
- 5. Eastwood's Ashley, Dwillard, Upland and Baker (particularly the first blocks off E. Main).
- 6. Edison St (between Glen St and N. Westnedge Ave) to complete the last, sidewalk segment.

Chaparral St and Sagebrush St area: Facilitate
a loop (Chaparral-Aspen-Andora-SagebrushGrand Prairie) by completing orphaned
corners (including four, curb & gutter
corners), sidewalk gaps (see yellow lines on
aerial photo, below), and a few spot repairs.



Yellow lines denote missing sidewalk segments of a Chaparral-Aspen-Andora-Sagebrush-Grand Prairie Loop.

8. Hillsdale Ave corridor (including the large, topographically challenged area of Dartmouth St/North St./Berkley St/Pinehurst Blvd/Campbell Ave/Crown St/Fletcher Ave/Richland Ave/Climax Ave/Ferndale Ave). Evaluate options to increase safety for non-motorized users (currently, only one segment of

sidewalk exists on Hillsdale Ave, west of Climax Ave), particularly access to Hillside Middle School. The area's significant slopes (particularly the limited sight-distances of Fletcher Ave and Pinehurst Blvd) and the existing steps at the intersection of Berkley St and North St (a barrier to wheelchair users) require careful, coordinated planning to include ADA guidelines.



Yellow arrows indicate sharp slopes without sidewalks in the Hillsdale Avenue

## **Road diets:**

The Plan identified candidates for a "road diet" to eliminate or narrow traffic lanes to allow for bicycle lanes (see Page 26 of the Plan). Since the Plans adoption, RCKC converted East Main Street from four traffic lanes to two traffic lanes, a center turn lane, and widened shoulders for bicycles.

As the December 2014 Plan notes, opportunities exists for additional "road diets" for Edison Street (narrow lanes to 10-11 feet) and **Douglas Avenue** (to connect to a recent road diet and bicycle lanes of the City of **Kalamazoo**). The Township can continue to communicate its interest in road diets with RCKC and MDOT.

#### Marked bike lanes:

Despite recent improvements, such as N. Drake Road's and E. Main Street's marked bike lanes, off-road paths and paved shoulders remain few (see page 11 of the Plan).

## **Intersection crossings:**

The December 2014 Plan continues to highlight the need for pedestrian safe crossings at the following intersections (see page 28 of the Plan):

- 1. Olmstead Rd and Business Loop 94
- 2. Olmstead Rd and Lake St
- 3. Nichols Rd and Solon Rd at West Main St
- 4. Lake St and Sprinkle Rd
- 5. Gull Rd and Nazareth Rd
- 6. Mosel Ave and Douglas Ave (note: a site plan review of the SW corner on 4/1/21 includes sidewalks)
- 7. Grand Prairie Rd and Nichols Rd

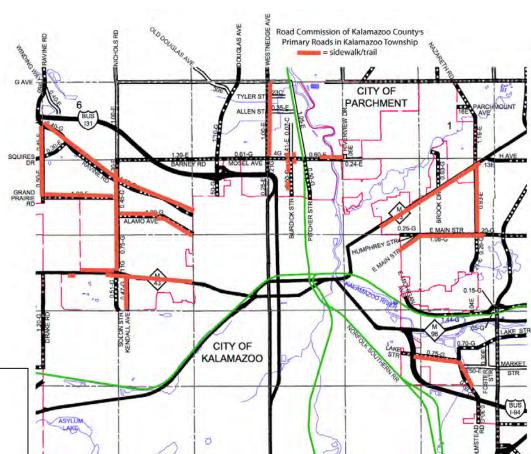
## **Shared-Use Path:**

The December 2014 Plan notes desirable, shareduse paths (see pages 27 & 31).

#### **Bicycle facilities:**

The December 2014 Plan highlights a long-term goal to provide bicycle facilities along all "primary roads" or roads eligible for federal aid within the Township (see pages 32-35). Some of these projects identified in the Plan were completed.

Red highlights (right) indicate existing sidewalks or trails on primary roads.



#### Additional input received concerning the working draft Plan Update:

- 1. The KRVT needs to be completed along Ravine Road to eliminate the gravel section. And, a sidewalk on the south side of W. North Street is particularly needed for pedestrians due to safety concerns poised by fast vehicles (shared by Bob Schellenberg in a 2/18/21 letter).
- 2. Jim Ferner submitted the following in writing to the Board of Trustees on 2/22/21:

### "Finding #1 Commitment remains strong

How can commitment remain strong if there is no consistent, dedicated, reliable, adequate source of funding for a project the size and scope of sidewalks in KTwp? See Sidewalk Costs below.

#### "Finding #2 Implementation Strategy

Under the 2<sup>nd</sup> bullet point no mention was made of an inventory of repair/replacement for existing slabs heaved or the repair of potholes in concrete surfaces. These are trip hazards. An inventory needs to be assembled listing all the trip hazards on Twp sidewalks. Does one exist? Given the very limited funds available trip hazards need to be fixed before access to recreation trails are built or sidewalks built on busy roads given their costs. Trip hazards, in addition to potential accident and injury to residents are an imminent liability to the Twp.

#### "Finding #4 Funding Needs

In the 6+ years since the NM Plan was adopted has any Federal, State money been applied for from KATS? Why not? It is a 2 to 3 year process to gain funding for a project. Two funding cycles at KATS have passed with no funds obtained. Have any funds been applied for from the Kalamazoo Foundation in the same 6+ years? If not why not? If we're really serious about the state of sidewalks in the Twp a consistent, adequate source of funding needs to be established. A Sidewalk Improvement Program (SIP) needs to be established overseen by a Program Manager to administer the program and the funds. Anything less is not a serious commitment given the scope and cost of this project. \$70,000 a year from the Twp will take well over 164 years to realize a complete sidewalk system given the scope of the Twp NM Plan.

### "Finding #5 Seeking Public Participation

- 1. Public participation is built on transparency, accountability and respect for the citizens by Twp officials. When citizens can't discern the budget process or the process for initiating or volunteering on projects or feel they are not respected that bond of trust is broken. Work needs to be done to build respect, transparency and accountability in order for citizen participation to improve in the Township.
- 2. A vehicle to increase public participation and input would be to create a Sidewalk Improvement Program (SIP) in the Twp. administered by a Program Manager. The Program would divide the Twp into 4 districts, one for each neighborhood. Volunteers from each neighborhood would be recruited and selected to participate in their respective districts. Each spring volunteers from each district would meet to decide which sidewalks need repair or construction in their district. The opportunity to decide how their money would be spent and direct which sidewalks to repair/replace would give citizens a sense of ownership, pride and accomplishment for the time they spend working to improve the sidewalks in their neighborhoods.
- Additionally a snow removal program could be created with the above model. A
  snow removal machine stationed in each neighborhood would be available for
  volunteers, KPEP participants or low income people to clear the sidewalks after
  each snowfall.
- 4. A team of volunteer inspectors in their respective districts could inspect the sidewalks for routine maintenance to be added to the repair list each spring.

- 5. In addition to a series of potlucks, an **annual sidewalk celebration**, in each neighborhood augmented by community participation, merchant donations and Twp funding could build citizen pride for the community work done on sidewalks. All this would increase citizen participation in the Twp.
- 6. There is no mention of inspection and enforcement of standards. When asked, Code Enforcement Officer (CEO), said he had 0% time to inspect sidewalks. The sidewalk power point mentioned what a great job the CEO was doing when in fact sidewalk violations have never been addressed on my street/neighborhood. This is not a personnel problem. The CEO is doing what his supervisor tells him to do. He only works part time. It is a failure of the current "system". Inspection and enforcement need to be under the authority of a Sidewalk Improvement Program (SIP) administered by a Program Manager. See #4 in this section for inspection ideas. CEO would not be needed or needed very little if the Twp had a Sidewalk Improvement Program.

"Finding #6 Updating List of Specific Needs

The public input for updating the list of sidewalk improvements could be done by citizens in the

SIP in the spring for each district. Again fixing Trip Hazards, spot repairs, should be the priority due to imminent injury to the residents. Fixing orphaned corners are a necessity but given limited funding and no Program in place, trip hazards need to be dealt with now. All new construction due to increased prices from Covid need to be put on hold until prices go down and a Program with predictable, consistent funding can be established.

**Sidewalk costs** for 2014 NM Plan at today's prices:

**New const**.(2018 prices = \$8/sq.ft) 20.64 miles left (544, 896 sq. ft.) x \$8/sq. ft. = **\$4,359,168** 

(20.64 mi. x 5280 ft. /mi = 108,979.2 lin. ft. x 5' wide = 544,896 sq. ft).

**Repair/Mntce** (2018 prices \$12/sq. ft.) 68 miles x .33 = 22.44 mi

22.44 mi x 5280 ft/mi = 118,483 lin ft. x 5' = 592.416 sq ft x \$12/sq ft = **\$7,108,992** 

Grand Total \$11,468,160

There are 68 miles of existing sidewalks figuring 1/3 are fairly new and need no repair, 1/3 are older but in good condition and need no repair, and 1/3 (22.44 miles) are older and in need of repair

"The Grand Total is a very conservative estimate which does not include permit fees, design costs, road closures if any, retaining walls, ADA standards for steep grades or any miscellaneous costs. This is just a cost for concrete and installation at 2021 prices based on the mileage in the NM Plan.

"As you can see this is a formidable project on par with the road repair project. To continue to address sidewalks with the same Twp method and funding like the Twp has done in the past and in its 2021 budget (\$70,000) would take well over 164 years to complete if all costs are figured in.

"To complete the sidewalk plan in 10 years would require approximately \$1,500,000 funding each year for 10 years for a total of approximately \$15 million which could be augmented by residential, commercial and industrial fees, Twp annual budget contributions, and grants from Federal, State and local sources. If local annual fees and Twp budget allocation could raise \$700,000 annually then \$800,000 would need to come from other funding sources annually.

(Annual fee: \$70 per residential lot (\$5.83/ mo), \$200 and up for rental complexes, commercial and industrial businesses.) The program would need to be administered by a program manager. A person with grant writing skills would need to be hired to apply for and administer the grants.

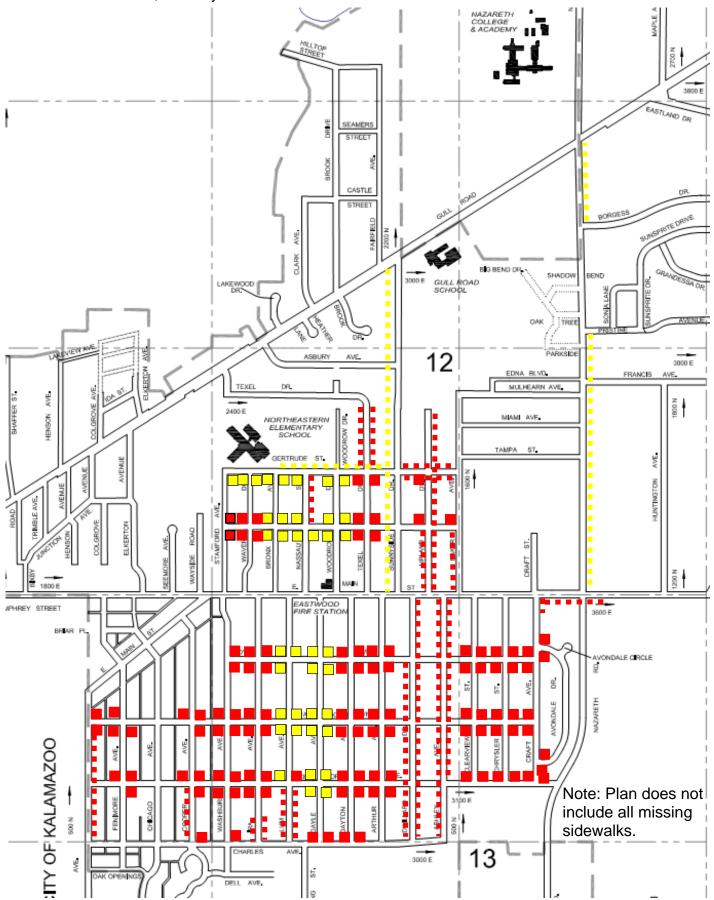
#### "Conclusion:

To say the Twp has a "system" for dealing with Twp sidewalks, given the total cost and scope of the project, is not accurate. A more efficient, predictable, consistent "system" of dealing with all the issues associated with sidewalks in the Twp is needed to really be committed to building, repairing and improving sidewalks in Kalamazoo Twp and getting the job done."

- 3. '"Property owners are responsible to maintain their properties' adjoining sidewalk ... including snow, ice, and overgrown vegetation." This is not enforced at all. There should be community sidewalk plowing on major thoroughfares.' (Posted on Facebook by Ian Magnuson, 3/18/21)
- 4. Consider opportunities to use heated sidewalks to manage snow accumulation. (noted to the Planning Commission)
- 5. Explore options to provide service to remove snow from sidewalks where MDOT and RCKC snow plows inundate sidewalks with snow and ice. A special assessment is a potential funding option.
- 6. A raised, concrete sidewalk slab prevented my friend who uses a wheelchair from using a sidewalk with me in my neighborhood. The raised slab is also a tripping hazard for me. Therefore, it's the most immediate challenge for non-motorized needs. (Noted by Westwood resident Bill Chapman, who has a visual impairment).
- 7. The Planning Commission invited public input and discussed the Update to the Non-motorized Transportation Master Plan at its March 4 & 17, April 1& 14, and May 6, 2021 meetings. The greatest amount of discussion occurred at the 4/14/21 meeting, when the Planning Commission particularly focused on the value of asset management of the Township's existing sidewalk infrastructure, including prioritizing the repair of deficient sidewalk slabs, connecting existing sidewalks to roads (orphans), and using educational and enforcement tools to reduce barriers that block sidewalk use (such as overgrown vegetation, parked vehicles, and uncleared snow on the sidewalks of busy streets where non-motorized travel is less safe in the roads. Discussion also noted the potential for new sidewalks when a large funding source may become available and via the site plan review process for developing properties. Jim Ferner reiterated support for fixing the existing sidewalk infrastructure to ADA standards and other points that he submitted in writing (see pages 11-12).

## Portion of Eastwood Neighborhood (4/16/21 update)

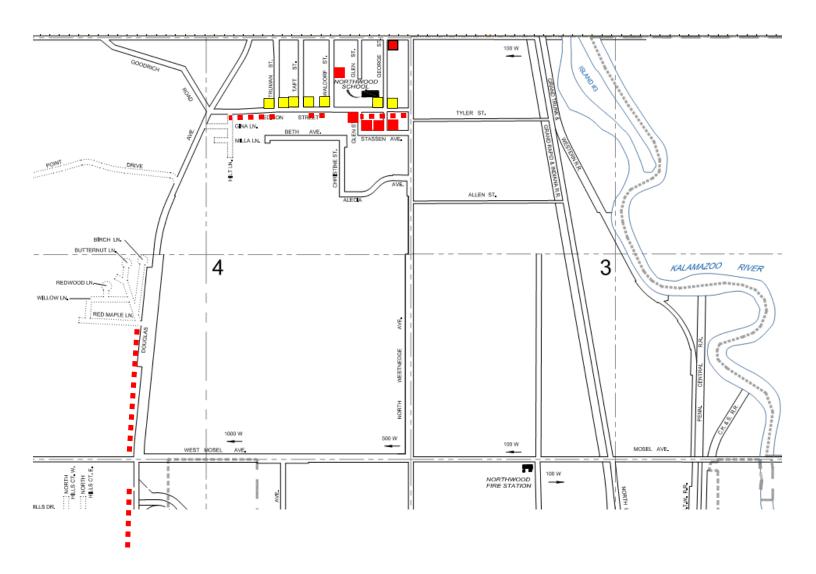
- = orphaned sidewalk
- = orphaned sidewalk or curb corrected with ADA ramps in 2017
- = = = = missing sidewalk
- = = = = sidewalk, recently installed





# Portion of Northwood Neighborhood (4/16/21 update)

□ = ADA ramps installed in 2017■ ■ ■ = missing, priority sidewalks



Note: Plan does not include all missing sidewalks.

## Portion of Lakewood Neighborhood (4/16/21 update)

= ADA ramps, recently installed
 = missing sidewalk
 = sidewalk, recently installed

= = existing

