



**Notice**  
**City Commission and**  
**Downtown Development Authority Board**  
**Joint Study Session**

**7:00 PM**

Monday, September 12, 2016

Governmental Center, Commission Chambers, 400 Boardman Avenue

Traverse City, MI 49684

Posted and Published: 9-9-16

The meeting informational packet is available for public inspection at the Traverse Area District Library, Law Enforcement Center, City Manager's Office, and City Clerk's Office.

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At the request of City Manager Marty Colburn, City Clerk Benjamin Marentette has called this study session.

City Commission:  
c/o Benjamin C. Marentette, MMC, City Clerk  
(231) 922-4480  
Email: [tcclerk@traversecitymi.gov](mailto:tcclerk@traversecitymi.gov)  
Web: [www.traversecitymi.gov](http://www.traversecitymi.gov)  
400 Boardman Avenue  
Traverse City, MI 49684

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*The mission of the Traverse City City Commission is to guide the preservation and development of the City's infrastructure, services, and planning based on extensive participation by its citizens coupled with the expertise of the city's staff. The Commission will both lead and serve Traverse City in developing a vision for sustainability and the future that is rooted in the hopes and input of its citizens and organizations, as well as cooperation from surrounding units of government.*

### **Welcome to the Joint Study Session!**

Any interested person or group may address the Commission and the Downtown Development Authority Board on any agenda item when recognized by the presiding officer or upon request of any commissioner. Also, any interested person or group may address the Commission and Downtown Development Authority Board on any matter of City concern not on the Agenda during the agenda item designated Public comment. The comment of any member of the public or any special interest group may be limited in time. Such limitation shall not be less than five minutes unless otherwise explained by the presiding officer, subject to appeal by the Commission.

## **Agenda**

Pledge of Allegiance

Roll Call

1. Discussion regarding replacing the Tax Increment Financing (TIF 2) Plan. (Marty Colburn, Robert Bacigalupi)
2. Discussion regarding platform cafes. (Marty Colburn, Robert Bacigalupi)
3. Public Comment.

\*City Commission continued discussion  
(Downtown Development Authority is welcome to stay)\*

4. Presentation of the West Boardman Lake District Plan. (Marty Colburn, Russell Soyring)
5. Discussion regarding municipal utility bill disputes. (Marty Colburn, William Twietmeyer)

City Commission &  
Downtown Development Authority Board  
Joint Study Session Agenda

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September 12, 2016

6. Discussion regarding snow and ice control practices. (Marty Colburn, Dave Green)
7. Announcements from the City Clerk. (Benjamin Marentette)
8. Public Comment.
9. Adjournment.

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The City of Traverse City

## Communication to the City Commission

FOR THE CITY COMMISSION MEETING OF SEPTEMBER 12, 2016

DATE: SEPTEMBER 9, 2016

FROM: <sup>MAC</sup> MARTY COLBURN, CITY MANAGER

SUBJECT: SEPTEMBER 12 MEETING

Monday evening's meeting begins with a Joint Study Session with the Downtown Development Authority.

1. Discussion regarding replacing the Tax Increment Financing (TIF 2) Plan.

As you know, Tax Increment Financing Plan 2 expired last year. The City Commission asked that a new plan for Old Town be developed; and attached is a memo from Downtown Development Authority Executive Director Rob Bacigalupi regarding those efforts. Mr. Bacigalupi highlights projects funded by TIF 2 and identified future needs in the area that has comprised the TIF 2 District. One aspect of tax increment financing that is appealing is it allows for the costs of improvements to be spread regionally through the capture of the incremental increase in tax revenue from the date of adoption of the related plan.

Mr. Bacigalupi will make a presentation to the City Commission and DDA Board on this matter and we are seeking your input.

2. Discussion regarding platform cafes.

Attached is a memo from Downtown Development Authority Executive Director Rob Bacigalupi outlining a recommendation from the DDA Board for the City Commission to allow platform cafes. Platform cafes could be located in on-street parking spaces adjacent to a food service establishment. The attachments outline the general framework for providing for platform cafes. We are seeking your input on this concept and the general framework; and based upon your feedback, an ordinance would be developed through City staff for your future consideration.

3. Public Comment.

At this point in the agenda general public comment for the DDA Board will be held and the DDA Board is welcome to stay or depart.

4. Presentation of the West Boardman Lake District Plan.

The City partnered with Grand Traverse County for a public engagement process to lead us to the creation of the West Boardman Lake District. On Monday evening, the West Boardman Lake District Plan will be unveiled. Attached is a map that outlines West Boardman Lake District.

The plan will provide us with land use concepts, building on the previous studies and work. Stakeholders including residents, elected officials and staff have evaluated options in order to help guide the capital improvement process. Specifically, this plan will outline land use concepts for the development of Brownfield properties, transportation infrastructure, traffic calming for neighborhoods and streets as well as the integration of both the Boardman Lake Trail and Eighth Street corridor projects.

5. Discussion regarding municipal utility disputes.

Attached is a memo from City Treasurer/Finance Director William Twietmeyer regarding municipal utility disputes. As explained by Mr. Twietmeyer, under Traverse City Light and Power Board policy, electrical customers can dispute their bill and have a credit on a specific issue for up to three years later; conversely, if the electrical utility must discover a billing error within 12 months in order to correct it.

The water and sewer utilities do not have a policy covering how far back the customer or the City can correct a billing issue. Traverse City Light and Power General Counsel W. Peter Doren proposed an ordinance that would apply to electric, water and sewer utilities and compress the time frame for billing corrections to twelve months. We are seeking the input of the City Commission in order to develop an ordinance to bring back for your consideration.

6. Discussion regarding snow and ice control practices.

Attached is a memo from Director of Public Services Dave Green outlining his department's practices for snow and ice removal. Mr. Green will present to the City Commission and we are looking for questions and your comments.

MC/bcm

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copy: Tim Arends, Traverse City Light and Power Executive Director  
Karla Myers-Beman, Traverse City Light and Power Controller  
Rob Bacigalupi, Downtown Development Authority Executive Director  
Jean Derenzy, Grand Traverse County Deputy Director of Planning and  
Development  
Russ Soyering, City Planning Director  
William Twietmeyer, City Treasurer/Finance Director  
Dave Green, Director of Public Services



To: Marty Colburn, City Manager

From: Rob Bacigalupi, Executive Director

Re: A New Plan for Old Town

Date: Tuesday, September 6, 2016

Over the course of 30 years, the City invested over \$16.6 million dollars of public improvements in this district resulting in private investment that increased the state equalized value (SEV) from \$3 million to over \$48 million this year. Half of the public improvement investment was in the Old Town Parking Garage, which is now paid off and is generating positive cash flow such that it can pay for its ongoing costs. The balance of the investment includes a variety of improvements such as roadways, sidewalks, crosswalks, boardwalks, and more, all of which will someday need replacing. The City can either take that on itself or utilize tax increment financing to spread the cost regionally. Beyond replacing existing improvements, there are other issues that may demand investment including Union Street Dam improvements, and workforce housing to name a couple.

The TIF 2 Plan was about economic development. The promise and eventual execution of public investment through this plan spurred private investment that provided housing for 286 people, jobs for 600, parking for 522 cars and dozens of bikes, and a number of new restaurants and taverns. New TIF plan or not, the City and DDA need to have a strategy to continue the economic vitality of this critically important district.

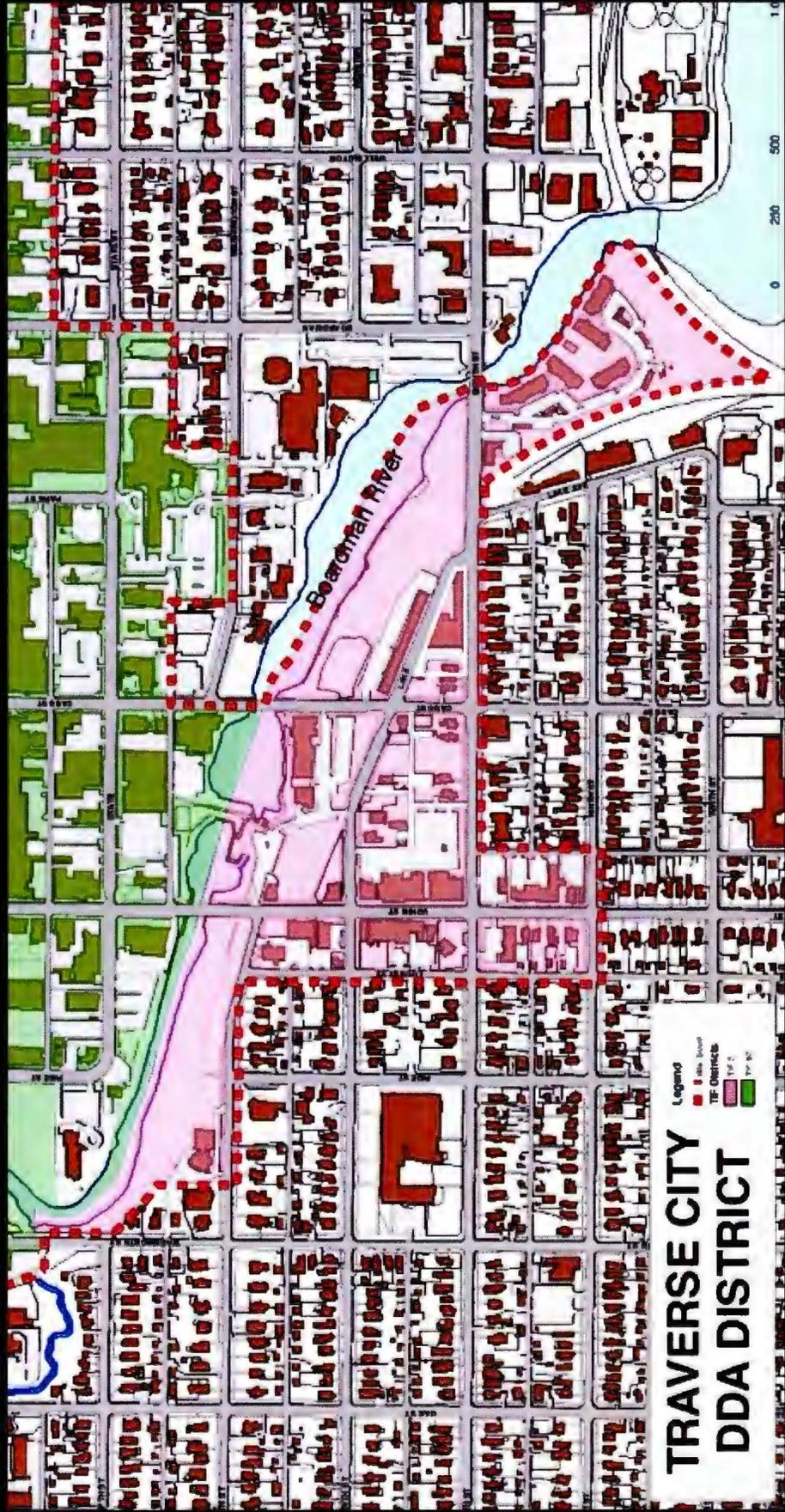
Attached is the slide show presented at the August 19 DDA Board Meeting. At Monday's City Commission/DDA Board Joint Study Session, I will present the an updated version of this report and look forward to your input.

AFTER TIF 2

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**A PLAN FOR OLD TOWN**

# TIF 2 DISTRICT



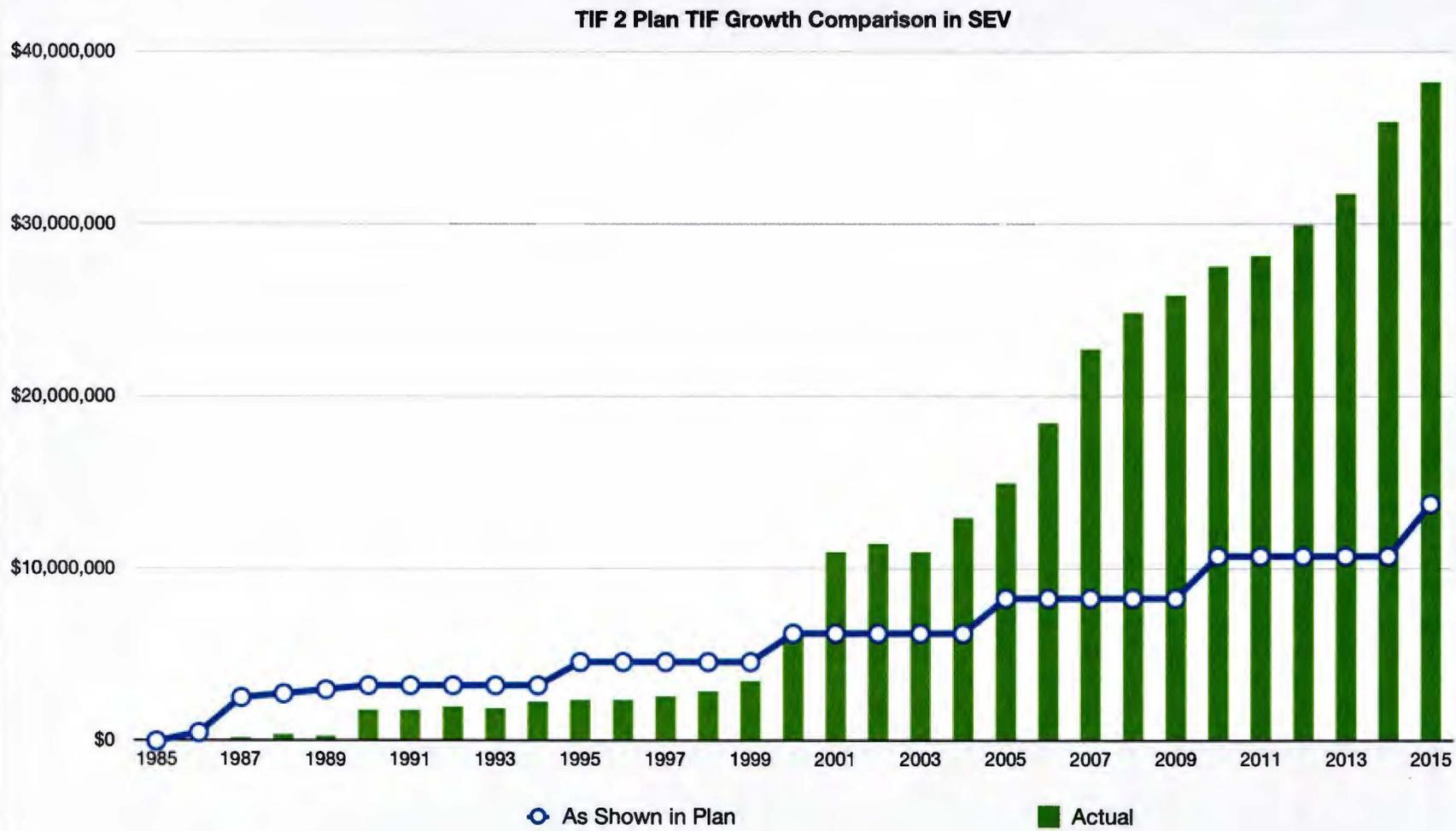
TEXT

## TIF 2 PLAN

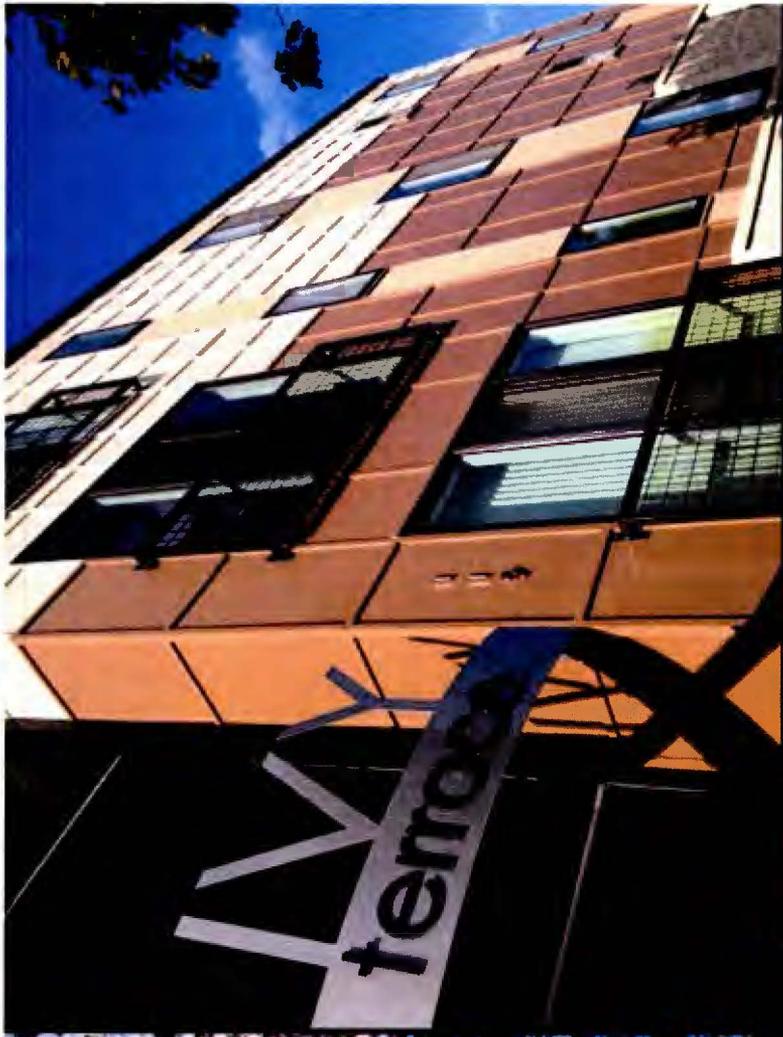
- ▶ Expired in 2015
- ▶ City and the DDA have agreement to finish up Lake Street Streetscapes, Carnegie Building improvements, Eighth Street Bridge, South Cass Street Bridge
- ▶ City Commission expressed interest in a new plan for the Old Town district



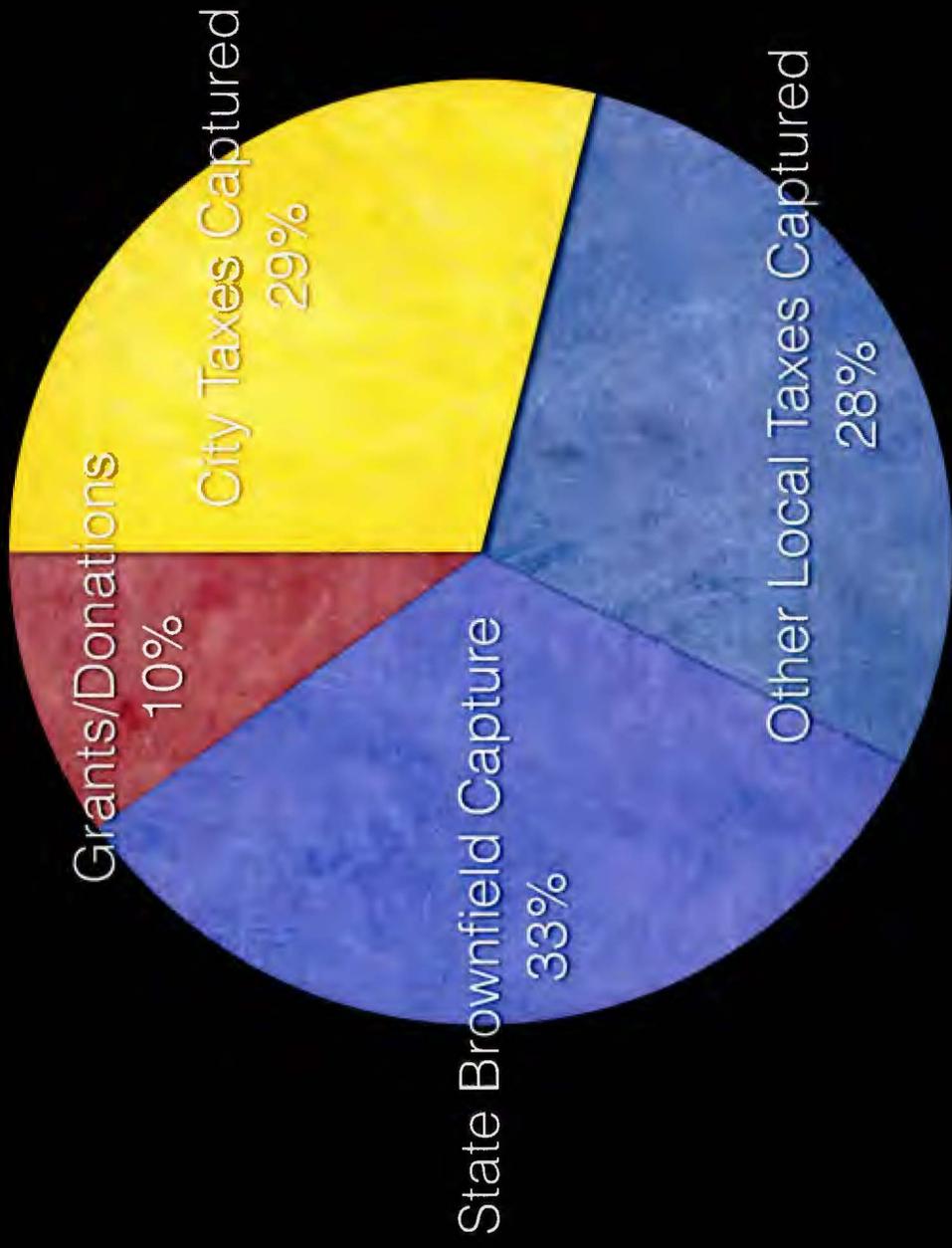
# TIF GROWTH







\$16,649,727 in Revenues Collected  
for TIF 2 Projects 1986 Thru 2015



# PROJECTS

- Union Street Streetscape Project in 1993/4
- Repaving of Eighth Street in 1996/7
- Cass Street streetscape/West public riverwalk in 1999/00
- Lake Street streetscape in 2001/2
- East (Midtown) public riverwalk in 03/4
- Additional Cass Street streetscapes in 08/9
- Old Town Garage in 2009
- Wayfinding/8th Street Trail in 2009/10
- Eighth Street bridge repair in 11/12
- Tree replacement in 11/12
- Public Wifi in 2014/15

TEXT

## PROCESS SO FAR

- ▶ Fall 2015 - Taxing Authority meeting
- ▶ Spring 2016 - Meet with DPS Director and City Engineer
- ▶ June 20, 2016 - Created new Development Area Citizen's Council
- ▶ June 16, 30 & July 1 - Neighborhood meetings
- ▶ July - Downtown Market Study complete



TEXT

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## **FUN FACTS**

- ▶ TIF 2 is 52.45 acres
- ▶ Over four and a half acres of surface parking
- ▶ In addition, there are two vacant parcels

TEXT

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## WHAT WE HEARD

- ▶ Know Needs
- ▶ Discussion Needs
- ▶ Concerns and Questions

TEXT

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## KNOWN NEEDS

- ▶ Midtown riverwalk - replace in 5-10 years
- ▶ Rivers Edge riverwalk - replace a.s.a.p.
- ▶ Additional parking - a.s.a.p.
- ▶ Union Street crosswalks replacement - a.s.a.p.
- ▶ Wayfinding sign maintenance



## DISCUSSED NEEDS

- ▶ Union Street Dam portage (ADA accessible)
- ▶ Union Street Dam betterment
- ▶ Boardman River bank stabilization
- ▶ Green infrastructure
- ▶ Bike sharing
- ▶ Workforce housing
- ▶ Carnegie Building (capital)
- ▶ Lay Park
- ▶ Hannah Park
- ▶ Eighth Street
- ▶ Boardman Lake Avenue





## Memorandum

To: Traverse City Commission  
From: Rob Bacigalupi, DDA Executive Director  
Subject: Platform Cafes  
Date: September 7, 2016

The Downtown Traverse City Association recently formed a committee to consider pursuing platform cafes. Changes made to the Sidewalk Cafe Ordinance in 2015, designed primarily to improve pedestrian traffic flow, made it more difficult to get an outdoor cafe permit resulting in a decrease in outdoor dining. Platform cafes are seen as a way to provide more opportunities for outside dining without impeding pedestrian traffic flow.

In 2015, the Sidewalk Cafe Ordinance was changed to require a 5' pathway versus the previous 4' pathway as well as a hard edged barrier. The 5' pathway must not include tree grates, which resulted in a decrease in the amount of outdoor dining options from 2014 to 2015 and now 2016. Twenty six permits were issued for sidewalk cafes in 2014 and nineteen permits were issued in 2015, with five requiring waivers. Nineteen permits were issued in 2016, with four waivers to the requirements.

The DTCA committee sought feedback from DDA Board Members, Harry Burkholder and Jeff Joubran, and City Commissioners, Gary Howe and Richard Lewis. Guidelines were reviewed by the DDA Board at the July 2016 meeting and the following motion was made; *Motion by Constantin, seconded by Burkholder that the DDA Board of Directors recommend to the City Commission adoption of an ordinance allowing outdoor cafes in designated on-street parking areas as outlined by Marketing & Deputy Director Colleen Paveglio in her July 12, 2016 memorandum. Motion carried unanimously.*

Attached is a summary of the recommendations and a slide show providing further explanation of the issue. We are seeking feedback from the City Commission regarding Platform Cafes and would like to move forward with drafting an ordinance for the City of Traverse City.

## **Outdoor Cafe Items of Interest**

### **Location:**

- City of Traverse City, excluding the 100 and 200 block of E. Front St.
- Limited to 10 total within the DDA District, maximum use of 2 parking spaces per location
- Unlimited outside the DDA District

### **Hours, Dates, & Fees:**

- Hours - Consistent with Sidewalk Cafe Ordinance and suggestion to extend until midnight
- Dates - May 1 through October 1
  - Discretion of Clerk's Office that the season extend prior to and/or after the suggested May-October 1 dates
- Fees - Application fee will be approximately \$360, Meter Bagging fees will apply, currently \$15 per space daily

### **The Physical Space:**

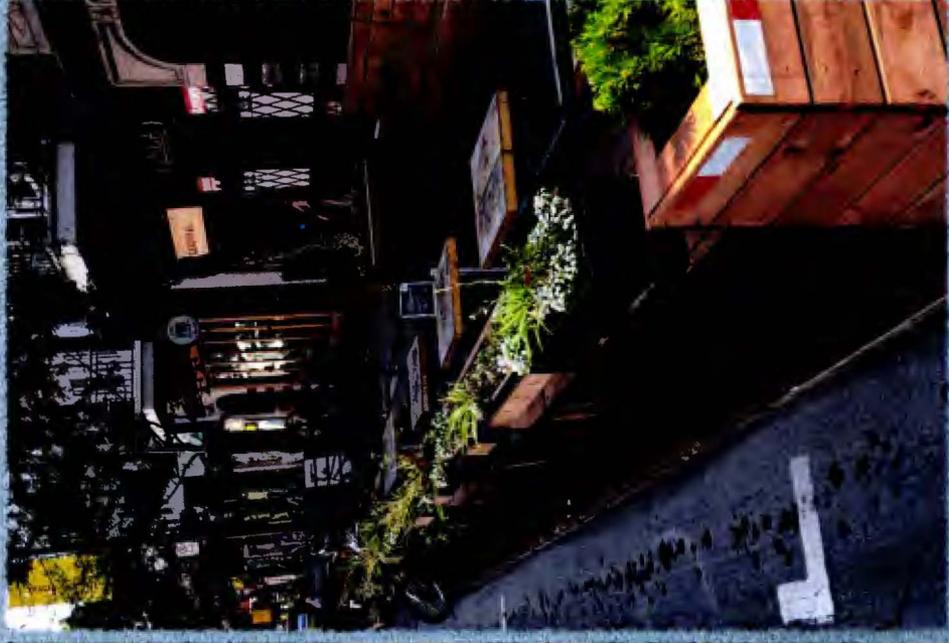
- Located in front of business based on building frontage
- If parking space encroaches upon neighboring business, it is required that 50% or more must reside in front of the permit holder
- Platforms are not to encroach upon adjacent parking spaces
- Platform Cafes may include the brick ribbon along the streetscape when applicable
- If a Sidewalk Cafe and Platform Cafe permit is issued, the Sidewalk Cafe must be adjacent to the Platform Cafe and not against the building

### **Public Versus Private:**

- Platform dining would be operated for private use by the restaurant due to the private investment made
- Dependent upon hours, it would be encouraged that owners leave the space for public use during non-business hours

### **Aesthetics:**

- Review and approval by City Planner, City Engineer, comply with Zoning, and building code
- Materials - Wood, metal, wrought iron, cast iron, steel, recycled plastic
- Requirement of planters to soften the edges
- Lighting - Restrictions apply
- Branded items i.e. logos on umbrellas, would not be permitted
- Furniture would not be required to be removed each night



# Platform Cafes

*Offering the Growth in Outdoor Dining Opportunities*

# What is a Platform Cafe?

- ◆ Platform dining is a constructed platform that occupies one or more parking spaces that are sponsored and maintained by a private business for the exclusive use of that business as a commercial resource for the extension of outdoor cafe dining space.



- ◆ The intent of platform dining is to increase pedestrian activity and use of outdoor space primarily in less active areas of downtowns.
- ◆ Platform dining expands outdoor dining opportunities for businesses in less active areas.
- ◆ Platform dining primarily benefits the sponsoring establishment from an economic standpoint.
- ◆ Platform dining is not appropriate in high pedestrian destination commercial areas. It is critically important to support a diverse mix of uses in the area, including retail, office, and professional services. Platform dining may have the effect of further encouraging concentrations of restaurants and inhibit the diversity of street uses.

# Location

- ◆ City of Traverse City
  - ◆ Unlimited number of permits outside of DDA District
  - ◆ Maximum of 2 parking spaces per permit holder
  - ◆ Exclusion of the 100 & 200 block of E. Front St.
- ◆ DDA District
  - ◆ Limited to 10 total within the DDA District (maximum of 2 parking spaces per permit holder)



# Hours, Dates, & Fees

## ◆ Hours

- ◆ Consistent with the Sidewalk Cafe Ordinance with suggestion to extend until midnight

## ◆ Dates

- ◆ May 1 through October 1
  - ◆ Discretion of City Clerk's Office that the season extend prior to and/or after the suggested May 1 through October 1 dates

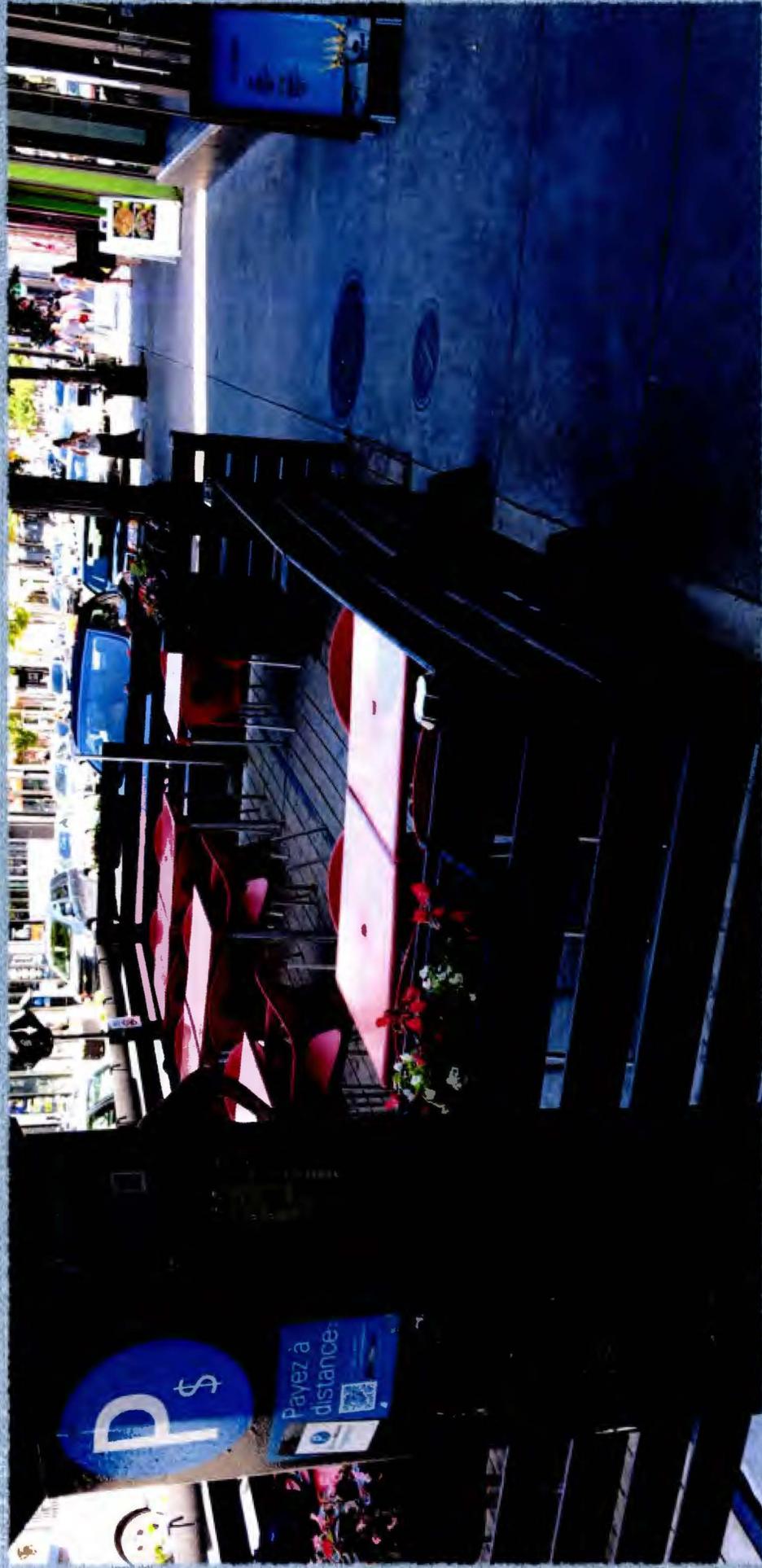
## ◆ Fees

- ◆ A \$360 application fee will be administered by the City Clerk's Office
- ◆ Meter bagging fees apply: \$15 per space daily
  - ◆ For example: Use of two parking spaces for a Platform Cafe May 1 - October 1, would result in \$4,980 in fees



# The Physical Space

- ◆ Located in front of business based on building frontage
- ◆ If parking space encroaches upon a neighboring business, it is required that 50% or more of the parking space must reside in front of the permit holder
- ◆ Platforms are not to encroach upon adjacent parking spaces
- ◆ Platform Cafes may include the brick ribbon along the streetscape when applicable
- ◆ If a Sidewalk Cafe and Platform Cafe permit is issued, the Sidewalk Cafe must be adjacent to the Platform Cafe and not against the building



# Platform Cafe

*Use of Parking Space and Sidewalk*

# Sponsoring a Platform Cafe

- ◆ Platform dining would be operated and reserved for private use by the restaurant due to private investment and fees applied
- ◆ Dependent upon hours, it would be encouraged that owners leave the space for public use during non-business hours



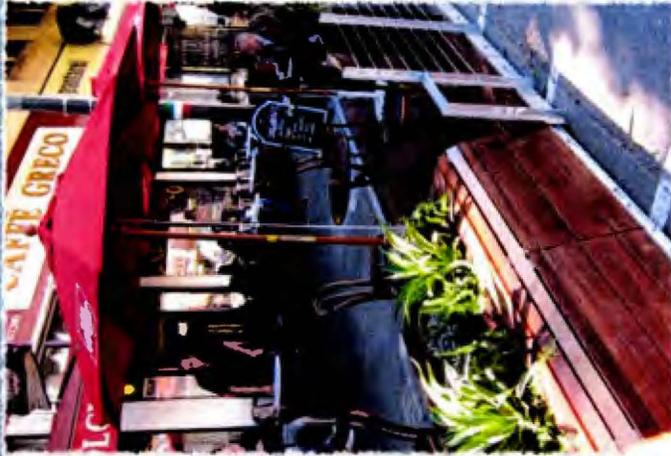
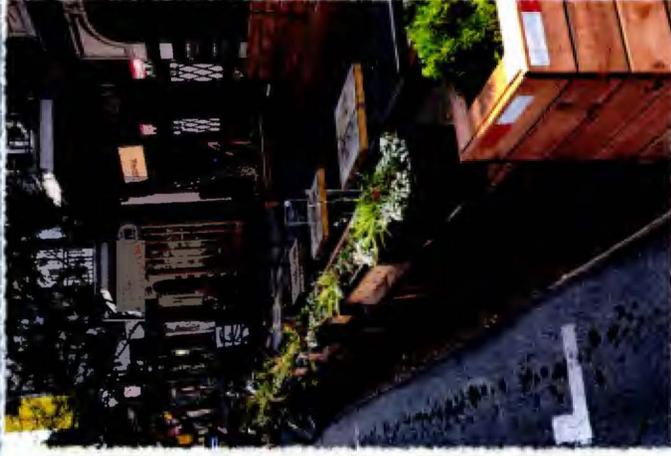
# Aesthetics

- ◆ Review and approval by City Planner, City Engineer
- ◆ Comply with zoning and building code
- ◆ Materials
  - ◆ Wood, metal, wrought iron, cast iron, steel, high quality recycled plastic i.e. trex
- ◆ Requirement of planters to soften edges
- ◆ Lighting restrictions will apply
- ◆ Branded items i.e. logos on umbrellas would not be permitted
- ◆ Furniture would not be required to be removed each night

# Safety

- ◆ Platform Cafes must be utilized in a safe manner. This includes providing buffering and fencing from lanes and maintaining a buffer distance from intersections and bus stops.
- ◆ Platform Cafes have the potential to lower speed limits by narrowing streets and operating similar to the “bumpouts” along the 100 and 200 blocks of E. Front St.





# Benefits of Outdoor Dining

*Enhances the Economy*

*Creates Vibrancy within a Downtown and Beyond*

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# Memorandum

The City of Traverse City  
Planning Department



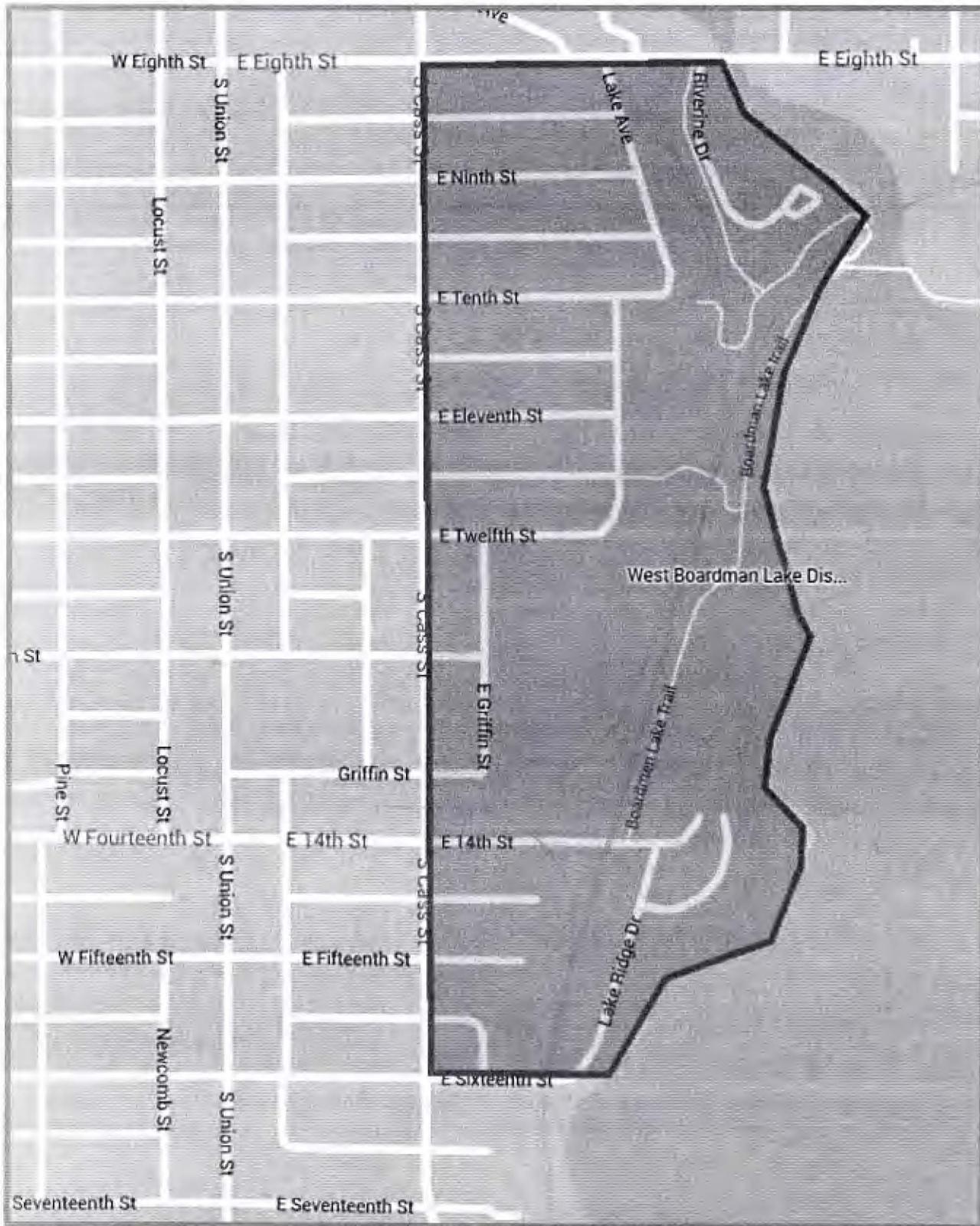
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TO: MARTY COLBURN, CITY MANAGER  
FROM: RUSS SOYRING, PLANNING DIRECTOR  
SUBJECT: WEST BOARDMAN LAKE DISTRICT  
DATE: SEPTEMBER 9, 2016

The City of Traverse City hired LSL Planning to study and develop a neighborhood design for west side of Boardman Lake. The study area includes the land between Eighth and Fourteenth Streets and Cass Street and Boardman Lake/River. Brownfield dollars are paying for the study. LSL is leading a team with assistance from CDM Smith and Smith Group.

LSL Planning on Monday night will present the a preferred alternative for the neighborhood that includes new development potential in various parts of the neighborhood and a new street running north and south just west of the rail line from 14<sup>th</sup> Street to 8<sup>th</sup> Street. This new street would connect with existing streets at 14<sup>th</sup>, 12<sup>th</sup>, 10<sup>th</sup> and 8<sup>th</sup> Streets.

The consultants have been working closely with a steering committee made of local business and residents in this part of our community and have held a number of public presentations and open houses for the general public. The consultants have had frequent contact with City staff and Farr Associates, the firm that is working on plans and designs for Eighth Street.



West Boardman Lake District

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# Memorandum

The City of Traverse City



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To: Martin A. Colburn, City Manager  
From: William E. Twietmeyer, City Treasurer/Finance Director *W.E.T.*  
Subject: Municipal Utility Bill Dispute  
Date: September 6, 2016

On occasion, over the years we will have a customer that has a billing or metering error that results in a refund or a back billing of the customer. Light & Power adopted a policy on July 28, 1998 that in a situation where the utility overcharges a customer due to a billing or metering error, the utility shall refund or credit the customer for not more than three (3) years immediately preceding the discovery of the error. If the utility undercharged the customer, the utility may back bill the customer the amount of the undercharge for a 12 month period immediately preceding the discovery of the error. It should be noted that the water and sewer utilities have no such policy and as a result the statute of limitations would be six years.

This past spring, the legal counsel for Light & Power, W. Peter Doren, submitted a proposed ordinance that would apply to electric, water, and sewer utilities and would tighten up the time frame. I have spoken with our City Attorney and we would like to move this forward. Attached is a draft copy of what we received from Mr. Doren and I would like to place this on the next City Commission study session agenda for a brief discussion concerning any issues they may have and any direction they would like to give.

Light and Power Department  
City of Traverse City, MI  
Adopted: July 28, 1998

**BILLING ADJUSTMENT FOR CUSTOMERS POLICY**

A. BILLING OR METERING ERRORS

1. If Traverse City Light and Power overcharges a customer due to a billing or metering error, the utility shall refund or credit the amount of the overcharge. The utility is not required to adjust, refund, or credit an overcharge for more than the three (3) years immediately preceding discovery of the error. Any refunds over three (3) years require Board approval.

If the utility undercharges a customer, the following provisions apply:

In cases that involve meter tampering or fraud, the utility may back bill the customer for the amount of the undercharge.

In cases that do not involve meter tampering or fraud, the utility may back bill the customer for the amount of the undercharge during the 12-month period immediately preceding discovery of the error, and the utility shall offer the customer reasonable payment arrangements for the amount of the back bill, taking into account the period of the undercharge.

*Jeffery W. Feldt*

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Jeffery W. Feldt  
Executive Director and Secretary  
Traverse City Light and Power Board

Ordinance No. \_\_\_\_\_

**Title: MUNICIPAL UTILITY BILL DISPUTES**

**CITY OF TRAVERSE CITY ORDAINS:**

That the Traverse City Code of Ordinances, at Chapter 1040, Utilities Generally, be amended to add new Section 1040.05, Municipal Utility Bill Disputes to read in its entirety as follows:

**§1040.05 MUNICIPAL UTILITY BILL DISPUTES**

- (a) A customer of a municipal utility who wishes to dispute any aspect of a bill must do so by filing a written billing appeal with the City Treasurer not later than 30 days from the bill's pay by date.
- (b) The City Treasurer shall decide the dispute within 30 days of submittal but may extend this time for an additional 30 days if circumstances warrant an extension.
- (c) Any retroactive adjustment to municipal utility bills is limited to the last three billing periods, or 90 days, whichever is longer.
- (d) The municipal utilities covered by this ordinance consist of City provided water, sewer, electric, and telecommunications and any new utility service hereafter provided by the City of Traverse City.

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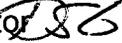
# Memorandum

The City of Traverse City  
Department of Public Services



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TO: Martin Colburn, City Manager

FROM: Dave Green, DPS Director 

DATE: September 2, 2016

SUBJECT: DPS Standard Operating Procedures for Snow and Ice Control

Back in early April of this year the City Commission requested that staff provide them a report or policy that would assure them that we as a Department are headed in the right direction as it relates to snow and ice control practices and how they overlap with the level of service the community desires as well as the environmental impacts such practices may cause.

The Streets Division has been using the attached Standard Operating Procedure for Salt/Sand Management as an internal guide during the past few years and will continue to do so knowing that the successes and limitations in snow and ice control are dynamic in nature and a blanket approach cannot work for all weather conditions. Reviews are being conducted annually after the season in order to improve and update our overall service based on new technology, best management practices, new tools and new equipment. By using this approach we feel we will be able to reach the best balance possible between the condition of the environment, the safety of the transportation network users and the fiscal constraints on our budget.

Also, because of the concerns mentioned at the meeting regarding Chloride concentrations increasing in the watershed we reached out to The Watershed Center to see if they had any pertinent data. According to their review of their water quality database out of the hundreds of samples (lakes, rivers, streams, storm drains) none of them had chloride values over 50 milligrams per liter and very few were even close to that. That threshold is a not to exceed value for the Great Lakes and connecting waters designated as a public water supply source.

One thing I do believe needs to be addressed is the level of service that we feel the City Commission and the community at large expect. Currently we strive to keep the State Highways and the streets that create our Primary/Emergency plow route system generally bare of ice and snow over the entire width of the roadway. On our local roads we allow a hard pack to form and just spot treat alley and street intersections. Is this an accurate assessment and should it be a discussion point with the City Commission. We plan on offering a PowerPoint presentation to the City Commission if they desire and will be available at the meeting for questions, feedback and comments.



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## Standard Operating Procedure – Salt/Sand Management

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### Standard Operating Procedure (SOP)

Date Prepared: September 12, 2013 Date Revised: August 31, 2016

In 2009, the City of Traverse City/City Commission approved the City of Traverse City MASTER PLAN. The Master Plan consists of numerous elements one being the Natural Resource Element. In this element, Objective 4: Manage the City's public land, right-of-ways and facilities to protect water quality. Contained in this objective is a bullet point that states the City will regularly review street cleaning and salt/sand application procedures for best management practices to protect water quality.

### **OBJECTIVE/PURPOSE:**

The objective and goal of this city wide Salt/Sand Management SOP is to provide a framework for the Streets Division to maintain a safe, efficient roadway system during winter storms in a cost effective manner while recognizing their obligation to do so in the most environmentally sensitive manner practicable.

The maintenance of Traverse City's streets is increasingly challenged in that higher public expectations and increasing traffic and parking issues are complicating operations. In order to maintain satisfactory levels of service, The City must strive for maximum effectiveness from its crews, equipment and materials. The snow and ice control program is no exception.

The City will strive to incorporate new products and techniques into snow and ice control. Increased training opportunities for snow and ice control personnel and improvements in equipment will maximize the utilization of provided resources while protecting the safety of the traveling public, maintenance personnel and the environment.

### **METHODS:**

City DPS has developed the following Best Management Practices that best fit our particular climate and typical storm pattern. They have been revised, modified and added to, centered on real time experience, research, training and peer input including MDOT, APWA, and the Grand Traverse County Road Commission.



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## Standard Operating Procedure – Salt/Sand Management

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### PROCEDURES:

#### Priority Routes

**1<sup>st</sup>** - State Trunk line within the City limits: The State Trunk line is the first priority to be maintained. The M-DOT (north region) level of service or goal is to provide a pavement surface over its entire width generally bare of ice and snow. This work is accomplished by using overtime as necessary and monitored and maintained 24-7 through the winter. (Map # 1)

**2<sup>nd</sup>** - Primary/Emergency Route: Consists of mostly major streets. The level of service or goal is to provide a pavement surface bare of ice and snow in the driving lanes and turn lanes. This work is accomplished by using overtime as necessary and is monitored and maintained 24-7 throughout the winter. (Map #2)





## Standard Operating Procedure – Salt/Sand Management

**3<sup>rd</sup>** - Local streets: The level of service is to remove the snow, allowing a hard pack/mat to form, and to spot sand at street intersections and alley intersections. Dangerous access conditions may dictate use of more material on entire length of street. Local streets normally will be maintained only on weekdays, overtime use when full call out is ordered at approximately 3 to 4 inches of snow accumulation. Wind conditions causing drifting could change the accumulation call out. Depending on snow accumulations on weekends local streets may be plowed and sanded if necessary. (Map #3)



**4<sup>th</sup>** - Alleys: Level of service is to remove the snow, allowing a hard pack/mat to form. Salt/sand will only be used during dangerous conditions or if alley is heavily traveled. Normally spring condition will call for salting of alley approaches to help remove ice pack.



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## Standard Operating Procedure – Salt/Sand Management

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### **Supervising and Training Staff:**

The following principles are included in staff training programs:

- The application of salt and salt alternatives should not be substituted for plowing.
- The best designed spreader equipment is employed to avoid scatter and waste.
- Proper calibration techniques and abilities.
- Ideally, the same crew member should be assigned to the same plow route to ensure efficiency in snow clearing and salt use.
- Identify sensitive areas near rivers and water courses and educate snow plow drivers to turn off spreaders when operating within these areas.

### **Maintenance of Equipment:**

- Proper equipment maintenance is critical to ensure proper operation and efficiency of conveyors and spreaders.
- Keeping a good inventory of critical spare parts in order to repair trucks assuring the correct calibration and volume of salt used during storm remains consistent.

### **SAFETY CONSIDERATIONS:**

#### **Snow Storage:**

- Direct depositing of snow into rivers or water courses is prohibited.
- Locate snow storage areas away from rivers and water courses in locations that have well drained, sandy soils suitable for filtering.
- Plan snow storage area cleanup a.s.a.p. after snow has melted in spring to reduce the potential release of contaminants from the site to surrounding areas.



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## Standard Operating Procedure – Salt/Sand Management

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### Salt/Brine Storage and Handling:

- All salt will be stored in salt barns that include concrete floors upon delivery. We no longer store salt outside covered by tarps.
- To keep handling area clean of spilled salt and/or chemicals we have a large concrete pad where mixing of salt and sand takes place, after mixing material it is put back into one of the two salt barns. The concrete pad is set up with a storm drain man hole and a sanitary manhole. When we have salt deliveries or the mixing and/or loading of salt occurs, we put a solid cover on the storm drain manhole and a perforated cover on the sanitary manhole so that any runoff is controlled and enters our sanitary sewer system and then treated at our Waste Water Treatment Plant. Once snow and ice control operations are complete for the year and the yard is cleaned up we switch the perforated cover back to the storm man hole. This helps prevent any salt from entering our storm system.
- We have improved our brine tanks to include an environmentally safe four foot high block wall to contain any brine if we were to have a leak.





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## Standard Operating Procedure – Salt/Sand Management

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### **Application Pattern:**

The proper spreading pattern is dependent upon traffic density and highway design. The type of storm dictates frequency of application, the type of de-icing compound, and the total amount of de-icing compound necessary. The following methods for salt application patterns have been proven to work best in our region based on experience, training and peer communications:

- Windrow application is typical of two-lane pavements with low to medium traffic. A 4 to 8 foot application down the center line allows for good traction under at least two wheels.
- Traffic flow will move the brine towards the shoulders, gradually melting the entire road width. Full-width spreading should be done on multi-lane pavements with medium to high traffic volumes. Care must be used in full width spreading not to waste or over-apply salt.
- A strong wind blowing across a street or highway can cause salt to drift into gutters or shoulders as it comes out of the spreader. Operators should be aware of wind conditions and spread accordingly on the up wind side.
- Salt brine will flow down and across a banked curve. Spreading salt on the high side of the road will allow gravity to pull the brine to the low side of the road.
- Ground speed controllers should be used for all spreaders.
- When using straight salt, spreader speed shall be set to 0 to help control salt from bouncing off the roadway.
- When using 50/50 mix of salt and sand driver will adjust spreader speed to ensure proper lane width coverage is achieved while minimizing salt bounce.
- All sanders are calibrated every season before use by testing the trucks on board computers along with performing corresponding weight testing.
- Review level of service and application rates for weather types and road types prior to winter on an annual basis. Use MDOT Winter Maintenance Application Rates as a base and adjust as needed.



## Standard Operating Procedure – Salt/Sand Management

### MDOT WINTER MAINTENANCE APPLICATION RATES: (SOLIDS)

Recommended Treatment Parameters	AIR TEMP	PAVEMENT TEMPERATURE	WEATHER CONDITION	POUNDS PER 2 LANE MILE		ACTIONS & APPLICATION RECOMMENDED
				PRE WET SALT *	SAND	
RISING	↑	ABOVE 30°	SNOW	150	NOT RECOMMENDED	PLOW, TREAT HAZARDS ONLY
			FREEZING RAIN	150	NOT RECOMMENDED	APPLY AS NEEDED
DROPPING	↓	ABOVE 30°	SNOW	150-300	NOT RECOMMENDED	PLOW & APPLY AS NEEDED
			FREEZING RAIN	150-300	NOT RECOMMENDED	APPLY AS NEEDED
RISING	↑	25° to 30°	SNOW	150-300	NOT RECOMMENDED	PLOW & APPLY AS NEEDED
			FREEZING RAIN	150-300	NOT RECOMMENDED	APPLY AS NEEDED
DROPPING	↓	25° to 30°	SNOW	150-300	NOT RECOMMENDED	PLOW & APPLY AS NEEDED
			FREEZING RAIN	300-350	400	APPLY AS NEEDED
RISING	↑	20° to 25°	SNOW / FREEZING RAIN	150-300	400	PLOW & APPLY AS NEEDED
DROPPING	↓		SNOW	225-300	NOT RECOMMENDED	PLOW & APPLY AS NEEDED
DROPPING	↓	20° to 25°	FREEZING RAIN	300-350	400	APPLY AS NEEDED
RISING	↑		SNOW	225-300	NOT RECOMMENDED	PLOW & APPLY AS NEEDED
DROPPING	↓	15° to 20°	FREEZING RAIN	300-350	500-750	APPLY AS NEEDED
			SNOW / FREEZING RAIN	350	500-750	PLOW & APPLY AS NEEDED
		BELOW 15°	SNOW	NOT RECOMMENDED	NOT RECOMMENDED	PLOW, TREAT HAZARDS AS NEEDED

FROST: 15° & RISING: TREAT BY ANTI-ICING (BRINE 20-40 GAL/LnMI) OR 15° & FALLING: PRE WET SALT @ 150#/LnMI.  
WIND CONDITION: PLOW, TREAT (TROUBLE SPOTS ONLY) @ 200-400#/LnMI.

\* Note: Pre wet with 7-10 gallons of a liquid chloride product per ton of untreated salt. Rates shown account for a 25 mph truck operating speed, but also apply for trucks properly equipped with a Zero Velocity or Slurry Generator, operating up to 35 mph.

Updated October 2013

- Use straight road salt (NaCl) only if the pavement temperature is over 15 degrees F° and rising. When temperature drops below that salt is replaced with a 50/50 mix of salt and sand. The sand will provide grit for traction and the salt will help melt some ice and will prevent the damp sand from freezing in the hopper. Hills/intersections are the main focus area.
- Review salt/sand ratios and location used on an annual basis, and recalibrate as needed.
- Maintain plow and spreading equipment according to established fleet maintenance program.



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## Standard Operating Procedure – Salt/Sand Management

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- After winter storm events, determine the amount of materials used, area covered & results gained.
- Explore alternatives and conduct trials as new chemical alternatives are introduced.

### **Data Collection and Analysis:**

Webtech Wireless is a Global Positioning System (GPS) Automated Vehicle Locator (AVL) Fleet Management Solution that helps the City optimize material usage, manage operating cost efficiently, meets internal and external accountability standards, and increases the level of service for winter operations. Webtech is a complete solution that encompass hardware installed on the trucks along with a software solution that is a web based portal for real time management and reporting. The hardware package installed includes equipment compatible with the trucks sander controls sensors. There is also an AT&T cellular device that transmits the data to the Webtech wireless cloud based solution.

The City has 10 plow trucks equipped with the Webtech solution. The information includes plow truck location, plow status, spreader status, and material used in a particular location. The data is compiled into a report that provides accurate accounting to improve plowing efficiencies along with reporting to the State of Michigan for reimbursement.

Prior to Webtech, Plow Truck Drivers needed to write down the salt use and the location that was plowed along with the amount of salt/sand mixture spread. The new Webtech system eliminated the need for the drivers to stop their truck and write information down on paper, improving safety and recording efficiencies. This system will also eliminate many hours spent collecting, transferring paper salt/sand slips to a spreadsheet format, and calculating salt/sand usage.

Webtech data is taken from the plow trucks every 10 seconds and uploaded via AT&T Wireless to Webtech's cloud, then is downloaded from the cloud and is compiled into a Day Based Winter Report. This report is used to quantify the amount of materials used in a certain location, such as State Trunk lines. The City is reimbursed for the materials used on State Trunk lines, so a monthly report is required to get the reimbursement from MDOT.



## Standard Operating Procedure – Salt/Sand Management

### Webtech Wireless Reports and Map

March 24<sup>th</sup>

Low Temp 27.0 F/High Temp 44.1 F

Snow Depth 5.9 Inches

Maximum Wind Gust 25.32 MPH

### Day Based Winter Operations

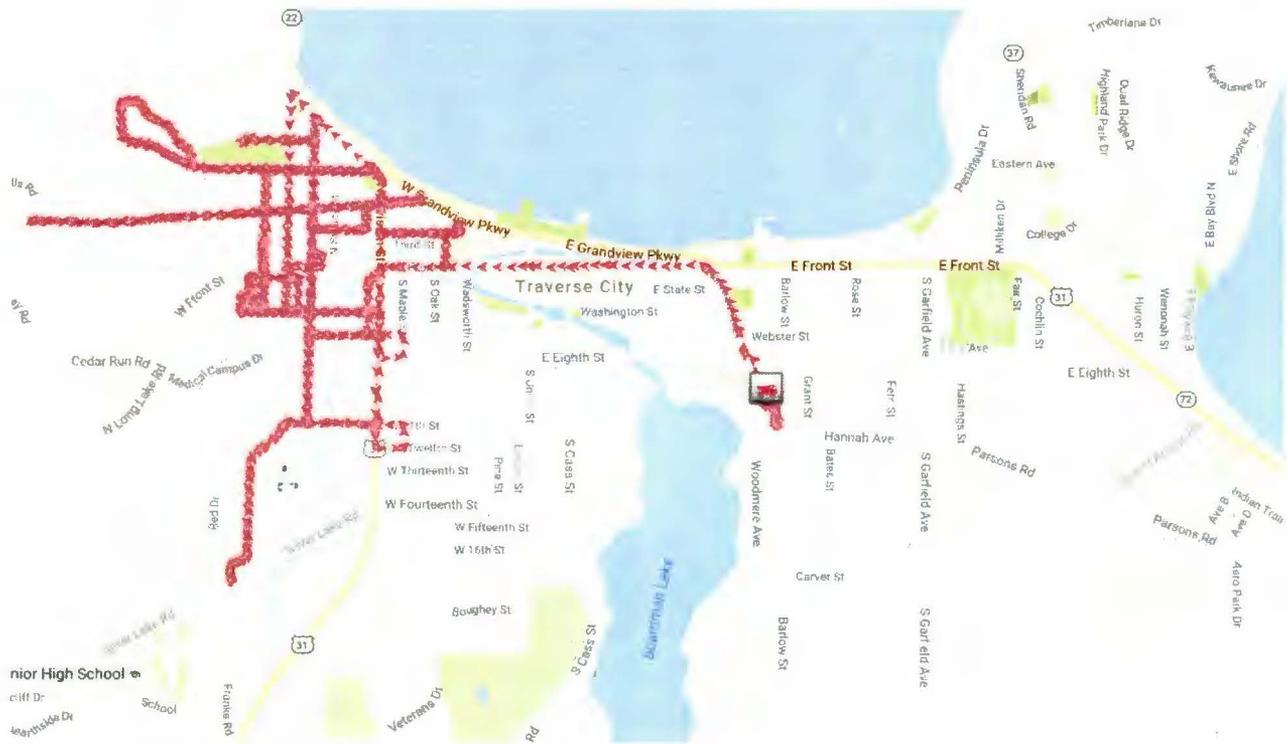
City of Traverse City

From 03/24/2016 12:00 AM to 03/24/2016 12:00 PM, Canada/Eastern

Summary

Detail

Vehicle/Date	Material Totals					Time	Distance
	Salt (lbs)	Sand (lbs)	Mix (lbs)	Prewet (Gal)	Anti Ice (Gal)	Total (HH:MM)	Total (Mi)
172	0	0	4,601	10	0	03:41	34.3
03/24/2016	0	0	4,601	10	0	03:41	34.3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>4,601</b>	<b>10</b>	<b>0</b>	<b>03:41</b>	<b>34.3</b>



# North Region Winter Level of Service for 2011-2012

## Guide for Snow and Ice Control

### Priority Level I (ORANGE)

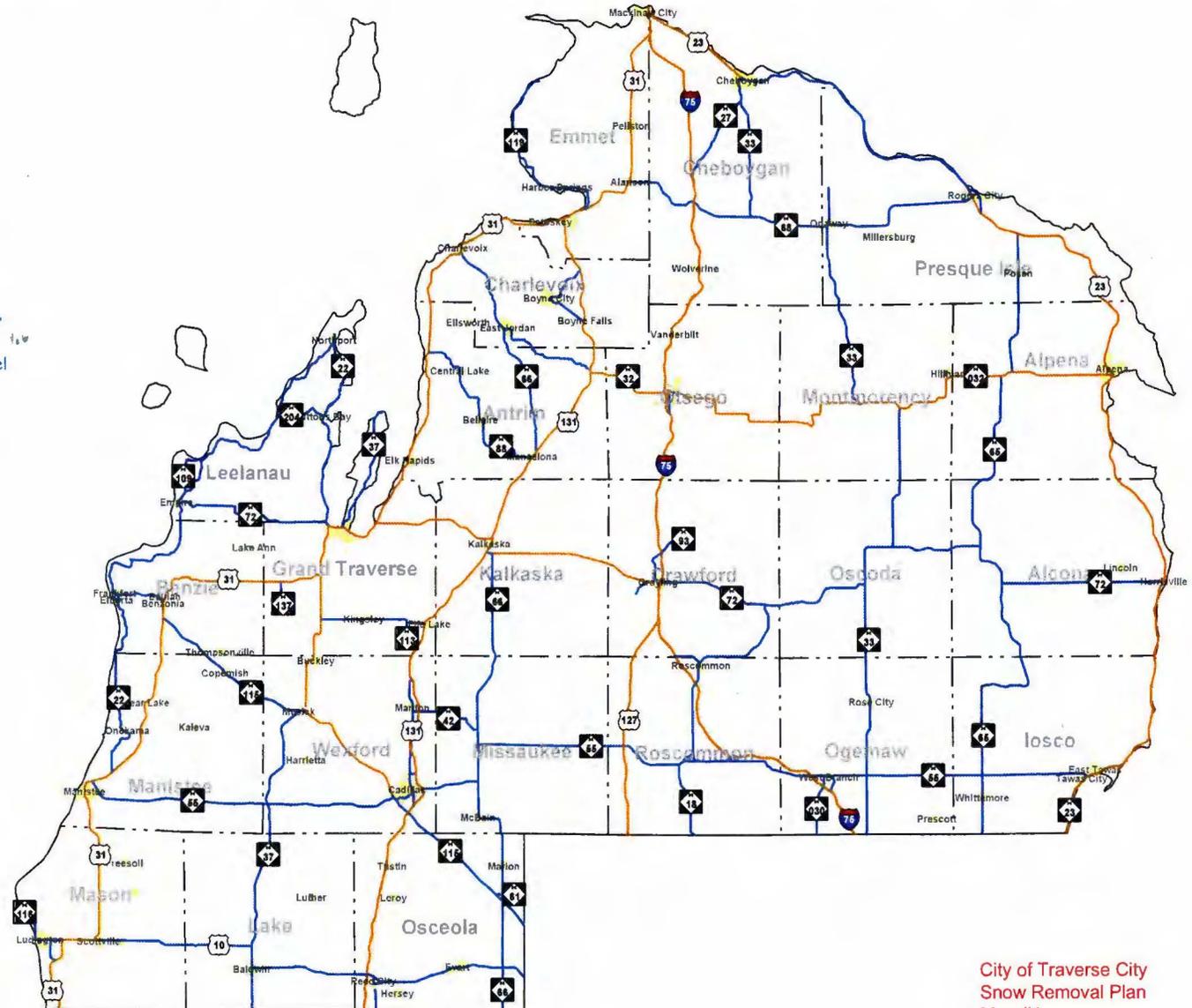
Provide maintenance service as appropriate under prevailing weather conditions, with a goal of providing a pavement surface over its entire width generally bare of ice and snow. This work may be accomplished using overtime as necessary.

Clearing the pavement bare of ice and snow over its entire width will be a continuous process during and after the snow event using overtime as necessary.

### Priority Level II (BLUE)

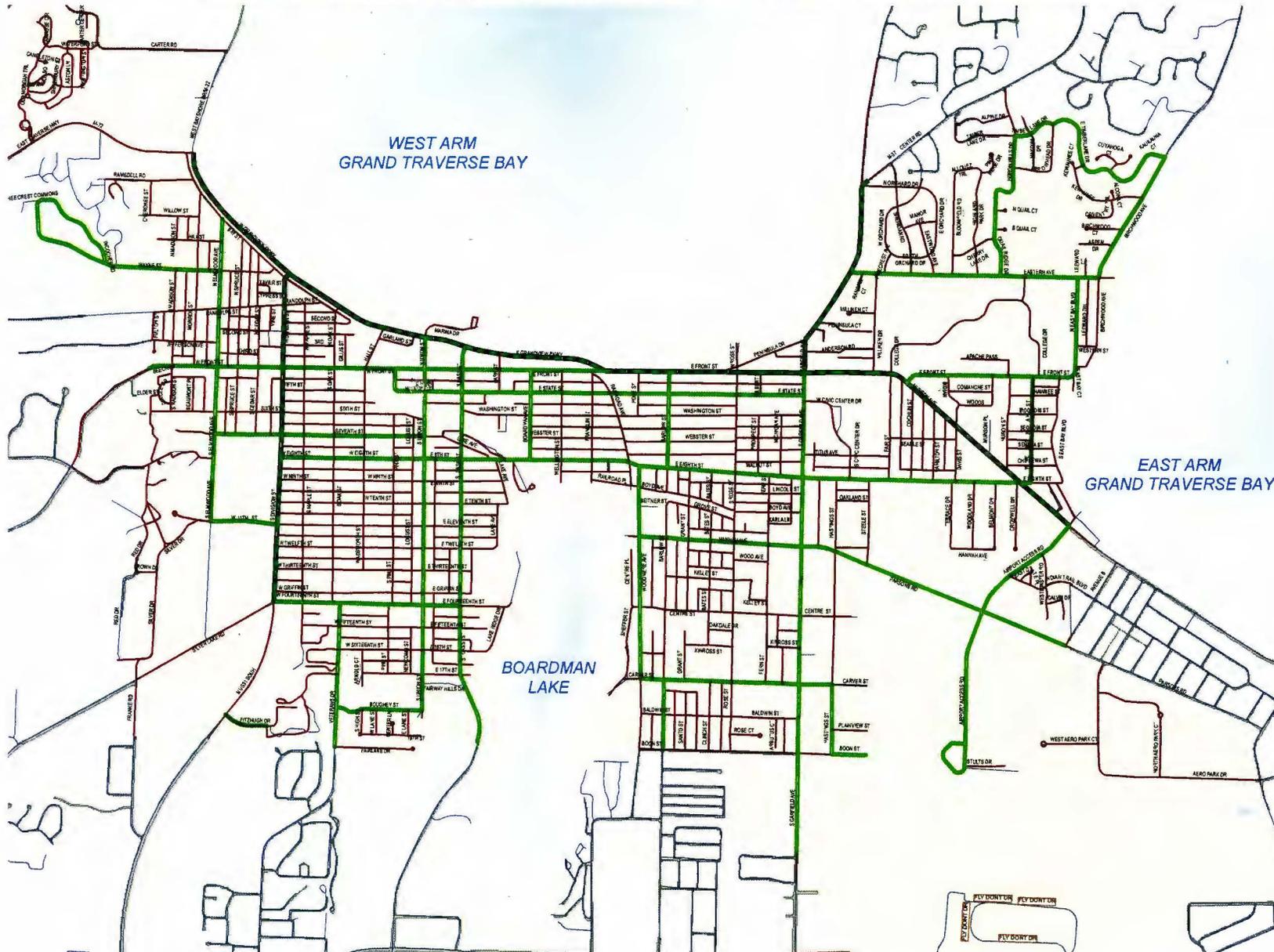
Provide maintenance service as appropriate under prevailing weather conditions, with a goal of providing a pavement surface generally bare of ice and snow in the center portion wide enough for one-wheel track in each direction. This work may be accomplished using overtime as necessary during a winter storm event.

Clearing the pavement bare of ice and snow over its entire width will be accomplished as soon as reasonably possible after the winter storm event, without working overtime.



City of Traverse City  
Snow Removal Plan  
Map #1

# 2016-2017 PRIMARY/EMERGENCY PLOW ROUTE MAP



Asset Management  
City of Traverse City

## Legend

### Green Plow Route

-  STATE TRUNKLINE
-  PRIMARY/EMERGENCY
-  other city streets

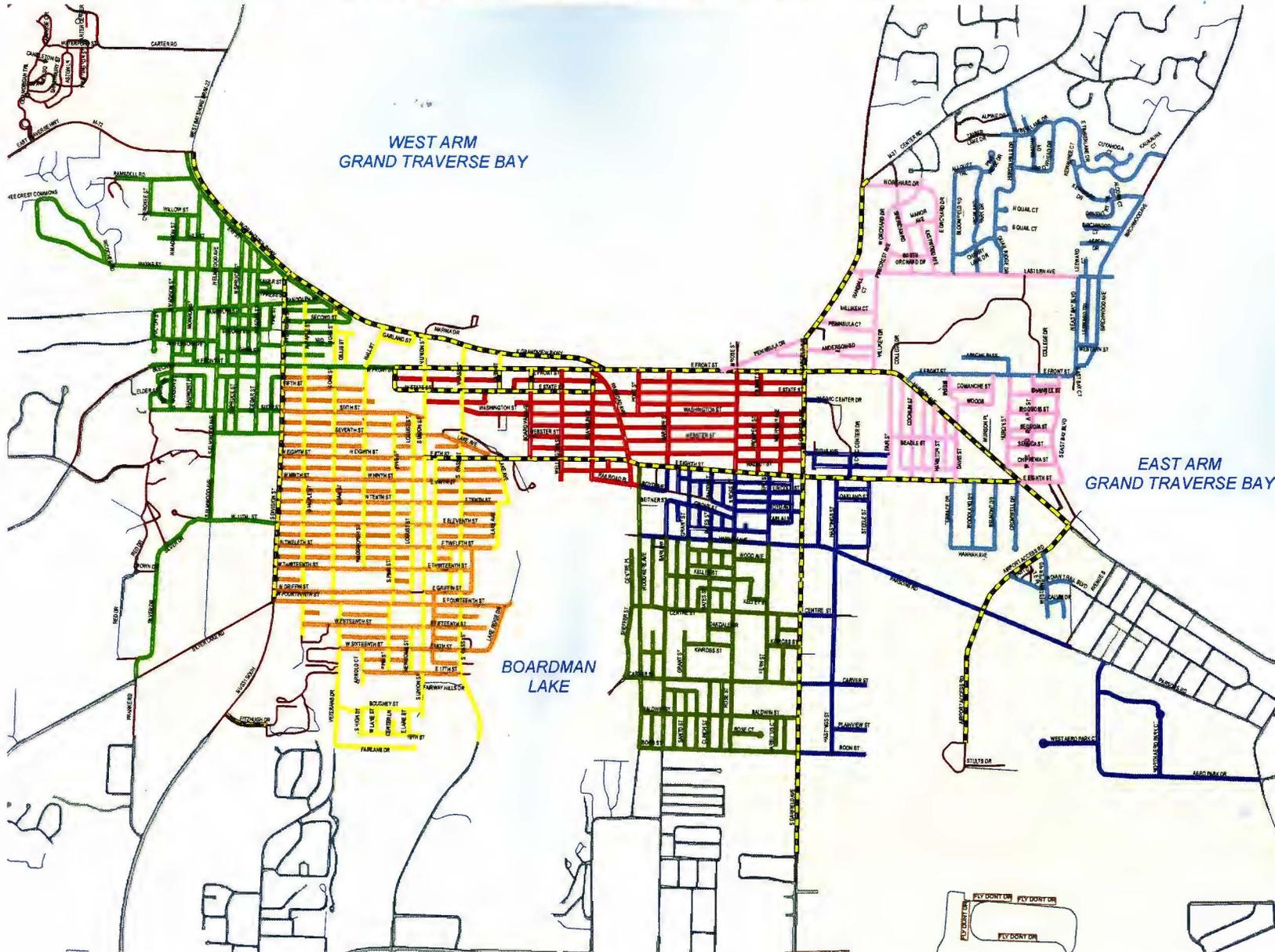
## SALT USE MANAGEMENT PLAN MAP #2



8-26-16 JPT

This map is based on digital databases from the City of Traverse City. Traverse City cannot accept any responsibility for errors, omissions or positional accuracy. There are no warranties expressed or implied.

# 2016-2017 CITY SNOWPLOW ROUTE MAP



Asset Management  
City of Traverse City

### 2016 / 2017 SNOW PLOW ROUTES

Plow Route	Truck No.
1	99
2	107
3	177
4	100
5	98
6	195
7	105
8	172
9	194

— other city streets

## SALT USE MANAGEMENT PLAN MAP #3



8-26-16 JPT

This map is based on digital databases from the City of Traverse City. Traverse City cannot accept any responsibility for errors, omissions or positional accuracy. There are no warranties expressed or implied.

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# Memorandum

The City of Traverse City



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TO: City Commission

FROM: Lauren Tribble-Laucht, City Attorney *LL*

CC: Marty Colburn, City Manager  
Benjamin C. Marentette, City Clerk

DATE: September 8, 2016

SUBJECT: *Taxpayers for Michigan Constitutional Government v State of Michigan et al*

You may be interested to know that on September 7, 2016 the above referenced lawsuit was filed against the State of Michigan in the Michigan Court of Appeals. This lawsuit relates to revenue sharing that has recently been a topic in the news. The basis of the complaint is the Headlee Amendment, which establishes a framework for revenue sharing between the State and local governments. The plaintiffs allege the State has inappropriately used unrelated expenditures within its calculations of the amount of State spending paid to local governments. Because the State is required to pay local governments a proportion of total state spending equal to 48.97% and has based its calculations on other unrelated expenditures, Plaintiffs argue it has improperly inflated the reported amount of state spending that is being paid to local governments in violation of Article 9, §25 and §30 of the Michigan Constitution. Specifically, the plaintiffs allege that the State has improperly included Proposal A spending, State spending to charter schools, State spending to maintain trunk line roads, and funded State mandates in its calculation, which results in local governments having been shorted billions of dollars over more than two decades and has contributed to the financial stress of many local governments in Michigan.

The Plaintiffs seek declaratory and injunctive relief finding that the method of calculating the spending cannot include these sources and an order to monetarily remedy past deficiencies in the constitutionally required proportion of spending in the form of aid that is paid to local governments. If you are interested in reading the complaint and/or brief that were filed please let me know and I can provide them to you via email.

Please let me know if there are any questions. Thank you.