



CITY OF BURLINGTON, VERMONT
CITY COUNCIL TRANSPORTATION, ENERGY & UTILITIES COMMITTEE

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Transportation, Energy and Utilities Committee

DRAFT MEETING MINUTES:

Wednesday, November 12th - 2014 at 4:45 PM

**Burlington Public Works Department – Front Conference Room
645 Pine Street – Burlington, VT**

Members present: Chair, Maxwell Tracy (TEUC)
Tom Ayres (TEUC)
Chip Mason (TEUC)

Others present: Chapin Spencer, DPW
Guillermo Gomez, DPW
Nicole Losch, DPW
Charlene Wallace, Local Motion
Karen Walton, CCTA
Andy Montrell, CCRPC
Resident of Rose Street

Chair Tracy called the meeting to order at 4:50 pm.

1. Agenda

Chair Tracy moved to approve the agenda.

All in favor

2. Public Forum

3. Minutes of 11/12/14

Motion to approve the minutes from the 11/12/14 TEUC Meeting.

All in favor

4. Snow and Ice Fighting – Rob Green, DPW

Green: The Snow Fighting Plan for the City has been developed with guidance from a list that the American Public Works Association (APWA), which includes all the elements that a good snow and ice removal plan should have.

(Mr. Green went over the main aspects of the plan. For more detail, refer to the Snow Fighting Plan document, included as supporting material for this meeting)

Green: We have approximately 95 miles of roadways and 127 miles of sidewalks. We have a plan for snow and ice removal. This plan is flexible. It is a work in process, based on the things we see we can improve and based on feedback from the public.

We generally track storms using a weather subscription service that provides us detailed information and even access to communication with a weather specialist. Whenever we have an snow event coming, we use multiple channels of communication to inform the public (Facebook, Twitter, Front Porch Forum, etc.). Additionally, in the City website there is a service called "gov delivery", where residents can opt to subscribe to get information via text messages.

For snow removal, we have 18 full time employees and 2 seasonal employees. For major snowfall these employees work long shifts and we can also request help from additional staff. Additionally, a fleet manager needs to be available for repairs. We typically use salt for the roads, but this year we are experimenting with a liquid (magnesium chloride).

Our crews have a lot of experience in snow removal. Routes are assigned to cover the entire City. We have 10 truck routes for road snow removal and 9 tractor routes for sidewalk snow removal. A considerable effort goes towards snow removal on sidewalks. It takes a lot of effort and money to keep the sidewalks clear of snow. We go a lot further than most municipalities in the snow removal effort. Recently, we started plowing bike lanes also, given the importance of bicycle transportation in the City.

Damages do happen occasionally, typically from mail boxes or other things. Plantings in the Right-of-Way are a problem.

Cars are also a challenge for snow removal. We sometimes have to declare parking bans. These have to be declared by 3 PM. Despite our efforts to inform people about parking bans, there are always some cars left on the roads and we have to tow these cars left behind to clear snow from the roads.

Rose Street Resident: It is really interesting to see how the whole snow removal plan works. One comment that I have is that in the Old North End, sometimes we feel we are the last ones

to get the snow removed. One thing that would really help us out is if the information about the snow removal routes was made available to the public.

Green: As I have become more experienced in my current position, we have made changes where we have noticed that there is room for improvement. As I mentioned before, the plan is flexible, so I appreciate your feedback. If we hear from people that something is not working, we can see if we can make changes to improve. Specifically in the Old North End, we have noticed that one of the snow removal routes is very long, which led to some streets waiting more time to get the snow removed. We have recently made adjustment to this route, breaking it into two different routes, so you should be noticing some improvement.

Mason: In terms of the budget, how are we doing this year?

Green: We are on target right now. This winter hasn't been as extreme as the last one. As I mentioned, we are experimenting with the salt/liquid mix.

Ayres: How is this applied?

Green: Trucks have tanks that are controlled by computer.

5. Discussion of Projects for the Unified Planning Work Program – Nicole Losch, DPW

Losch: Every year we list projects where we ask assistance from the Chittenden County Regional Planning Commission (CCRPC), under the Unified Planning Work Program (UPWP). We have been working together with other City Departments on this list and today we have an opportunity to discuss the projects on this list. The projects are:

- Circulation and Corridor Study for the entire length of Winooski Avenue
- Intersection Scoping Study for the Colchester/Riverside/Barrett intersection.
- Identify improvements for the Development Review Process.
- An update on Urban Forestry Management.
- Evaluation of Downtown traffic and circulation.
- Scoping for a bike/pedestrian bridge between Burlington and Winooski.
- Define next steps in the parking management district.
- Transportation Demand Management for the City (so far we have worked on this for City Employees)
- Assessment of new parking developments.

We will be working to prioritize this list, in case there is limited funding.

Montrell: It will really help the CCRPC if the City's priorities are known early on in the process.

Mason: For is it is really hard to know the priorities without access to the project list in advance

Losch: The list is a work in progress.

Montrell: I suggest the City includes as many projects as feasible in the list. It is always easier to remove a project from the list than to add one later on.

Ayres: What is involved in the decision making process?

Montrell: We need to make sure the proposed projects qualify for funding. Then the number of projects depends on the total funds available. The last thing we look at is whether these are projects that the CCRPC has the ability to work on.

Tracy: The Winooski Avenue project is one that stands out to me as a priority.

6. North Avenue Corridor Study Task Force – Nicole Losch, DPW

Losch: One of the projects where we have been working with the CCRPC is the North Avenue Corridor Study. The UPWP has a mid-year adjustment. Through this adjustment, we have been able to start convening a task force to move the pilot project for North Avenue forward. We have been contacting stakeholders to start selecting representatives for the taskforce. We should hear from the majority of them by the end of January. The members of the taskforce need to be appointed by the Mayor. We should have this all by March. The first meetings from the task force will focus on studying other pilot projects (case studies).

We will also be working with the CCRPC and the Task Force on developing the best way to keep the TEUC and the City Council up to date.

Ayres: I think it is incumbent on Councilors to stay updated. Have you heard from the NPAs?

Losch: Only from Ward 3.

Ayres: I am concerned about all the misinformation circulating around and I think the sooner we have the Task Force selected, the sooner we can tackle all the rumors and start the public process to keep this project moving.

Losch: We are hopeful that the taskforce will be as diverse as possible.

7. Development of Asset Management Plan – Chapin Spencer, DPW

See "Draft Overview and Scope of Work/Deliverables" in Item 7 in the supporting documents.

Spencer: Public Works is all about Asset Management. There is always the issue of funds availability for capital investments. The goal of developing an asset management plan is to know as much information as possible about the city owned assets and shift from reactive

mode of operation to a more proactive approach of maintaining our assets. This will allow us to save money in the long run by reducing the number of times we have to react to emergency and more costly repairs. This asset management plan will be a multi-year effort. We have ongoing efforts getting inventories of all the city-owned assets. Our goal is to have a software solution that will help us track all of our assets. With this information and software we will be able to make more informed decisions of where our funds should be invested to get the best return. If you have any comments to this scope of work, we can make changes in the next two weeks.

8. Update on Employee-Management Relations – Chapin Spencer, DPW; Karen Walton, CCTA

Spencer: We want to know what if you have any specific questions or areas of concerns for CCTA.

Tracy: We would like to get an introduction from the new CCTA General Manager, Karen Walton. We would like to know about her background and goals, and learn about her philosophy.

Walton: I started out as a Social Worker. Management, and especially in transit, it's all about people. In my view, we are all in one team; it's not drivers on one side, administration on the other side. Prior to Burlington I spent some time in multiple transit agencies. In Sioux Falls, I have dealt serious issues between the union and management. From what I have seen in my short time here, union stewards are very sharp, they understand the big picture. We have been meeting every other week.

Ayres: I have received positive feedback from drivers about what is happening in CCTA.

Walton: We have now divided our operations into urban and rural operations.

Tracy: I am really happy to hear that this collaboration is happening. This will pay huge dividends in the future.

9. Speed Radar Feedback Signs on Major Thoroughfares – Nicole Losch, DPW

Losch: We have received multiple requests for installing these speed radar feedback signs. Most recently, this request came during the North Avenue Corridor Study. The biggest challenge we have is that we don't have a dedicated funding source. We currently rely on grants. The challenge we face with funding is that these signs are expensive for us without having a dedicated funding source, but their price is pretty low for the grant thresholds. Also, grant applications score better when all the improvements are focused in one particular location vs. improvements at multiple locations. In the past few months we started meeting on a regular basis with the traffic department with the goal of having more collaboration. I believe we are on the right track to get funding to get some of these signs installed. We are exploring all the different options.

Ayres: There has been mention about some of these signs being portable in the past. Is that an option?

Losch: Unfortunately, the portable signs we were using in the past came through the police. The portable signs are currently not offered by the police. Besides this, the locations we have currently identified would really benefit from having a permanent installation.

10. Sidewalk Inventory Update – Guillermo Gomez, DPW

Gomez: Sally Swanson Architects (SSA) is the name of the firm that was retained to do the sidewalk inventory for the entire city. There are two components to this project. The first one is the sidewalk inventory and prioritization. The second one is the Transition Plan, which will identify all the existing barriers for compliance with ADA requirements and will develop a long term approach to eliminate these barriers. Staff members from SSA were able to complete the data collection before the first snowfall. They are currently working on applying the different criteria to categorize the different sidewalk segments. Sidewalk segments will be categorized depending on their current condition, proximity to pedestrian generators, commercial development, educational institutions, senior population, etc. In the next few weeks, Sally Swanson will complete a first draft of the inventory and prioritization. Their categorization methodology will be a mix of what we have provided and what they have used in inventories at other locations. We will be able to make adjustments to this first draft. This information will put us in a better position to make informed decisions about where our investment should go. After this inventory is completed, SSA will be working on the Transition Plan, and will train City Staff in the use of the inventory and in the necessary protocol to keep the inventory up to date.

Tracy: Is this something that can be revisited in the upcoming TEUC meeting?

Spencer: Yes. Additionally, there will be some funds that can be allocated to boost the investment in sidewalk repairs, as was done last year.

Tracy: That is very good. The additional investment last year was noticeable.

11. Bicycle Master Plan Resolution – Max Tracy, TEUC

Tracy: I am looking to get some feedback to the draft resolution presented to the Committee for Bicycle and Pedestrian Master Planning.

Ayres: What is the timing for the feedback on this resolution?

Tracy: I would like to get it in front of the Council for the first meeting in February.

Ayres: I am not ready to provide feedback at this time, but I can provide comments in the next 48 hours.

Spencer: Please get these comments to Nicole Losch.

Ayres: We need to make sure the pedestrian component is part of the equation as well.

12. Councilors' Updates

Date of the next TEUC meeting is yet to be determined.

13. Adjourn

Meeting was adjourned at 6:30 PM

DRAFT



BURLINGTON PUBLIC WORKS

SNOW AND ICE CONTROL PLAN

SNOW AND ICE CONTROL PLAN

The purpose of this plan is to define the operational procedures and best management practices (BMP's) for storing and utilizing snow and ice control materials, and for performing winter maintenance activities. It defines the level of service that Burlington Public Works will strive to provide on our 95 miles of streets and 127 miles of sidewalks.

Since storms vary dramatically and occur during a variety of traffic conditions, this Snow and Ice Control Plan is intended to be flexible. It is a guide structured to fit average conditions, but able to accommodate the wide variety of conditions that will be encountered by maintenance crews who are working to maintain safe roads and conditions.

STORM WARNING NOTIFICATION

The Department of Public Works Right of Way uses the online weather service MxVision Weather Sentry Online. The service provides up to the hour weather predications and forecasts up to 15 days out. The program is password protected and available to all supervisors.

DPW will issue storm related public service announcements via the local media, Facebook, Twitter and Front Porch Forum. Additionally, anyone can sign up for an

e-mail or text alert by going to the govdelivery icon
Burlington website, <http://www.burlingtonvt.gov/>



on the City of

PERSONNEL SCHEDULING

Our Right of Way crew of (18) full time Street Maintenance and (2) seasonal employees maintain the streets and sidewalks. Large storms may require around the clock coverage. This will require help from outside work groups and departments. The Street Maintenance Foreman will find volunteers during the normal workday and create a plan based on the available manpower and weather conditions. The plan will be reviewed by the Assistant Director of Right of Way before implementing.

MOBILIZATION

When the decision has been made to react to a storm, the Right of Way Foreman will mobilize the crew. Since all trucks, tractors and routes are assigned, all the employees need is the call to deploy. If a storm event is predicted after normal business hours, the personnel will be put “on-call” per the union contract. All on-call employees will make themselves available by telephone.

While DPW Right of Way is tasked specifically with the staffing snow and ice control operations, the employees of the Equipment Maintenance group have a responsibility to assist with equipment repairs. Once the decision has been made to respond to a storm event, during normal working hours the Right of Way Foreman will notify the Fleet Manager. The Fleet Manager will then schedule his employees to provide maintenance assistance. After normal working hours the foreman in charge will call the “on-call” maintenance team.

SNOW AND ICE CONTROL MATERIALS

Road salt (NaCl) is the primary snow and ice control material. The salt is purchased under the State of Vermont contract. FY15 the contract was awarded to Cargill, the local distributor is Barrett's Trucking in Burlington @ 863-1311. DPW uses approximately 3500 tons of road salt per year. The Street Maintenance Foreman is responsible for the ordering and inventory of the salt. The entire salt inventory is stored at 645 Pine Street. Liquids like magnesium chloride (MgCl₂) are being used on a small scale until we further understand their benefits. Safety Data Sheets (SDS) are available in a binder in every truck and in the MSDS binder located in the Street Maintenance area.

EQUIPMENT INSPECTION

All City equipment; to include all plow trucks, loaders, and sidewalk tractors will be operator level inspected before any snow operations. Immediately following a storm on the next regular business day, all equipment will be cleaned, greased, fluids levels checked, and a proper preventive maintenance check per the manufactures operator manual. All deficiencies will be reported immediately to DPW Fleet Services.

EQUIPMENT CALIBRATION

Every November, all truck spreaders and computerized spreader controls will be calibrated with salt (NaCl) per the manufactures operation manual. After every storm event, each truck will have the mileage and pounds per lane mile recorded. This task will be assigned to a working foreman and one other street maintenance worker.

TRAINING OF PERSONNEL

Training is a key part to our snow plans success. All operators are properly trained before using any equipment utilizing operator manuals, manufacturers trainers, our in house trained employees, and on the job training. All employees will be able to properly operate, and maintain the equipment before actually plowing snow. Before the first snow storm, all operators will drive their route, getting familiar with obstacles such as high manholes, trees, narrow roads, mailboxes, etc. Any reported obstructions will be reported to the Right of Way Inspector for further action. Every truck has a binder with all route maps, bike routes, CCTA emergency routes, and the list of dead end roads.

SNOW ROUTE ASSIGNMENT

All operators will be assigned a route, whether it is in a truck or a sidewalk tractor. Continuity is important in assigning routes and equipment. Operators will learn the best way to battle snow and ice if they are doing the same streets every storm and will know areas that need special attention such as bridges, on and off ramps, hills, curves, and school zones. The same with the equipment, the operators in the same truck or tractor will know how it handles and what the vehicles limits are.

The sizes of the routes are designed for the City's fleet of trucks and tractors. There are 10 large trucks, 1 small truck for dead ends and narrow streets, and 11 tractors. Of the 10 large trucks, 1 is a spare in case of a break down. With the 11 tractors, 2 are spares. It takes an operator with a large truck approximately 5 hours to plow their route once. An operator on a sidewalk route will take approximately 6 hours to plow their route, if they are salting at the same time it will take 8-9 hours to complete once.

LOADING PROCEDURES

The loading of salt in all trucks will be by the oldest loader in the fleet. The operation will be conducted by qualified City employees only. The trucks will be loaded to their max GVWR and not overloaded. A scale is located in the loader and will be calibrated before the winter season. The loader will have operator level preventive maintenance after every storm event and all loading procedures will be supervised by an assigned working foreman.

SPREADING AND PLOWING PROCEDURES

Salting Operations

Streets will be salted during light storms where minor accumulations of snow are expected. This requires the use of 6 large trucks that will salt the primary streets with priorities going to the routes coming into and exiting the City, primary roads leading into neighborhoods, school zones, downtown, and intersections. Not every street is salted unless there is a prediction of ice.

Plowing Operations

Plowing of the streets is the same regardless of the amount of snow predicted. The City owns (10) large plow trucks with (1) being used as a spare in case of break down and (1) small truck for dead ends and narrow streets. We can add plows to our (2) front end loaders for additional help in major storms.

The (9) large plow trucks are assigned a route and each route starts with its primary street, leading to its secondary main, and then into the neighborhood streets. The (1) small plow truck is assigned a list of narrow and dead end streets.

Sidewalk Plowing and salting

There are (9) sidewalk routes and are plowed during the day concurrently with street plowing. Extra attention is given to the downtown, Old North End, areas around schools and school crossing guard locations.

During a night time snow push back or any night time plowing operation, sidewalk plowing usually starts around 4 a.m. so that the sidewalks are open when school begins. This time could vary depending on the size of the storm.

If the storm exceeds 12" of snow and there are snow banks along the sidewalk, we will have to snow blow every sidewalk. This will take considerable time and manpower. This operation could take up to 24 hours or more. Again the priorities are downtown, Old North End, and school zones. We normally have many equipment failures while snow blowing, so having fleet services available is key.

We routinely plow, scrape, and sometimes salt the sidewalks during the day to maintain a safe environment.

Bike lanes

Burlington has 7.75 miles of dedicated bike lanes throughout the City. They are all on major truck routes and the lane will be plowed to the curb. After the roads and sidewalks are cleared, DPW will dispatch a sidewalk tractor with a snow blower attached and clean the bike lane free of snow.

(Appendix A)

CCTA Bus Routes

Burlington is a major hub for public transportation. Many of the priority routes are also major routes for the CCTA public transportation system. The operators are familiar with their routes and understand the importance of the public transportation system. We routinely review the routes with the DPW Drivers.

Performance Capabilities

As stated earlier, Burlington has 95 miles of roads and 127 miles of sidewalks. During the average year we receive 80 inches of snow. Of course this is only an average and what really matters is when it falls, and how many snow events we have to deal with. Generally speaking, the length of the storm rather than the amount of snow determines how we deal with it. Our plans are built around these capabilities.

Street plowing routes	10
Hours to plow every street once	5 to 7
Hours to salt all streets @ 500 lbs. mile	4
Sidewalk plow routes	9
Hours to plow every sidewalk once	8
Hours to snow blow every sidewalk once	24
Hours to salt every sidewalk	12

SNOW STORAGE

Snow removed from the City streets, greenbelts, parking lots, and parking meter spaces will be stored at 702 Lake Street in Burlington. This area is for the storage of City removed snow and not for any private contractor, unless contracted by a City department. This site is a former oil tank farm near the waterfront and has been an ideal storage area as the berm keeps contaminants from reaching the lake. This storage area will be cleaned of any trash and debris every spring.

SNOW OPERATION DAMAGES

1. Mailboxes and other structures within the Right-of-Way

Occasionally mailboxes and other property may be damaged by snow plowing operations due to poor visibility, the mailbox being buried in a snow bank or the weight /volume of snow being plowed. The damage is not deliberate and in most cases unavoidable. Burlington Public Works is not responsible for damage and does not repair, replace or re-erect mailboxes that are located within the right-of-way unless physically struck by a DPW plow truck. In these cases, the property owner shall submit a claim to the City for reimbursement. All mailboxes must be installed to the USPS standards.

Many residents have basketball nets in the right of way, these not only interfere with plowing to the curb, but during inclement weather the plow operator may not see the basketball net and damage City equipment. If any basketball nets are found in the right of way, the DPW Right of Way inspector will be notified and will have it removed.

2. Accident Protocol

Plowing snow in a large truck with a wing plow takes a special skill. Public Works employees are highly skilled and properly trained before they operate any commercial vehicle. Vehicle accidents will happen, and when they do, the following must happen:

- a. Stop vehicle in a safe area.
- b. Check all people involved for injuries. Call 911 if needed.
- c. The DPW employee will call their supervisor either by cell phone or by 2-way radio and inform him of the situation.
- d. Supervisor will call the Burlington Police Department. A police report will be taken, the DPW employee will receive a copy of the report, if the report is not available, you are required to obtain the incident number.

- e. If the vehicle is able to be driven, it must report to DPW Fleet Services for an evaluation before continuing on with snow plow operations.
- f. All accidents must be reported to the Right of Way Assistant Director and the insurance company. The Foreman or Assistant Director will report all the proper information on the Travelers Insurance Portal.

3. Plantings in the right of way

Snow removal from the sidewalks is a challenging task and there are many obstacles that the operators have to maneuver around, and the major items being trees and shrubs. While great care is taken not to damage the tree or shrubbery, the property owner must maintain the vegetation so it does not impeded the sidewalk. While the tractor may damage the vegetation, the trees and shrubbery may also damage the tractor. The department will not be responsible for any damage to any plantings encroaching on the right of way.

PARKING LIMITATIONS

Burlington does not have a seasonal parking ban like most towns in our region. It is the responsibility of the Public Works Director to declare a winter parking ban. Parking bans are declared on a case by case basis. Criteria for a parking ban include length of storm, amount of snow during the storm and how much snow is already on the streets and has not been plowed to the curb. By City ordinance **20-56** the ban must be declared by 3p.m. in order to be in effect by 10 p.m. that evening until 7 a.m. the following morning.

Parking Ban Notification

Parking bans are warned in the following manner:

1. Using the City maintenance light system
2. Sending a press release to all local radio and television stations, and the Burlington Free Press
3. Posting alerts on social media, such as Facebook, Twitter, and Front Porch Forum.
4. Sending out text messages and e-mails via GovDelivery
5. An up to date recording on 658-SNOW

Once the Director calls a ban, the street maintenance foreman will notify the parking enforcement supervisor, who is responsible for the enforcement of the winter parking ban. Second, he will activate up to 90 plus flashing parking ban lights. These lights are located at the entrances of the City, important intersections, and throughout the City's neighborhoods. They are a visual warning to the residents that a parking ban is in effect.

The DPW foreman in charge of the plowing crew will meet with the parking enforcement crew at 9:30 p.m. at the police department to review and cover any last details.

Vehicles must be off of the streets during these hours if a ban is declared or they will be towed. While parking bans make it easier to plow snow, it is difficult for some people to find alternative parking. DPW does offer free parking in the City owned parking garages as an option. Parking is available in the Marketplace Garage and the Macy's Garage on the lower decks only. Vehicles must be removed by 7:30 am or they will be charged the full day's rate. Additional information can be found at <http://www.burlingtonvt.gov/>.

While a winter parking ban is not called for every storm, if residents have access to off street parking, we urge them to use it. Additional information can be found at <http://www.burlingtonvt.gov/Police/Winter-Parking>.

The City has 4 designated tow areas.

Lake St. boat launch: Vehicles towed from the Old North End and west of Willard St. from Pearl St. to Maple St.

Grove St. Shamanski Park parking lot: Vehicles towed east of Willard St. from Maple St. to the New North End.

Gosse Court, North Ave to the end: Vehicles towed from the New North End.

Oakledge Park parking lot: Vehicles towed from the south end and west of Willard St. from Maple St. south.

When the lots are full, vehicles found on the street could also be towed to the nearest street the Public Works Department designates as a drop-off point. This would be a street that has been cleared of snow. For car owners to find their vehicle, please call (802) 540-2380.

AFTER STORM RESPONSIBILITIES

It is expected that 12 hours after a snow storm that every City street will have been plowed. The Street Maintenance Foreman will inspect every City street to ensure that the streets are cleared and passable. The department will continue to patrol the streets and maintain them until they are bare pavement. It is possible that the downtown and some narrow streets may have to have the snow removed. If this service is needed, it will happen approximately 24 hours after the storm using City owned equipment. Snow removal downtown usually happens in the early morning hours. For the narrow and dead end streets, we will post the streets for “no parking” and remove the snow during the day.

SNOW RELATED CITY ORDINANCES

27-84 Throwing snow into street prohibited.

No person shall throw or put, or cause to be thrown or put, snow or ice in the part of the street known as the travel portion nor on a sidewalk of a street.

(Rev. Ords. 1962, § 4303; 1969 Cum. Supp., § 4303)

27-2 Enclosing highway; erecting fence or encroachment; nuisance.

No person shall enclose a part of the highway or street, or erect a fence, building or other encroachment, or make **obstructions**, or create a nuisance on a highway or street, or continue such enclosure, fence, building, encroachment or nuisance on a highway or street.

(Rev. Ords. 1962, § 4209)

Appendix A - Bike Lanes

- 1. South Winooski Ave. 6’-** West side, Maple St. to Howard St.- 2250 Linear Ft.
- 2. Pine Street** – West side, Flynn Ave. to Maple Street. – 5750 Linear Ft.
- 3. South Union Street 6’ lane** - East side, Main Street to Pearl Street. – 11440 Linear Ft.
- 4. North Union Street 6’ lane** - East side, Pearl Street to North Winooski Ave. – 1980 Linear Ft
- 5. North Winooski Ave. 7’ lane** - West Side, Decatur Street to North Street - 700 Linear Ft.
- 6. North Winooski Ave. - 7’ lane** - West side – North St. to Pearl St. 1380 Linear Ft.
- 7. South Willard Street** – East side, Main Street to Pearl Street. – 1500 Linear Ft.
- 8. North Willard Street** – East side, Pearl Street to North Street. – 1260 Linear Ft.
- 9. Mansfield Ave.** – East side, Colchester Ave. to North Street. – 1440 Linear Ft.
- 10. East Ave. 4’–** West side, Colchester Ave. to Carrigan Drive. – 2260 Linear Ft.
- 11. Main Street** – South side, University Hts. to City line. – 1421 Linear FT.
- 12. Main Street** – North side, City line to University Hts. – 1421 Linear Ft.
- 13. North Ave.** – East side, North Street to Institute Road. – 4600 Linear Ft.
- 14. North Ave.** – West side, Institute Road to Berry Street. – 3300 Linear Ft.

DRAFT Overview and Scope of Work/Deliverables – Phase I ASSET MANAGEMENT PLAN DEVELOPMENT
(v2, 12-19-2014)

For discussion with all City asset stakeholders

Drivers:

- Long standing issue of insufficient funding for capital investments
- Few mechanisms for capturing data regarding our work efforts that can be analyzed in a way to inform our future work
- Culture of reactivity
- Desire from the administration/public to have improved metrics/performance measures for all that we do.
- High customer expectations/ customer expectations disconnected from the funding conversation
- Increased interest and attempts at development in the recent years of a computerized maintenance management system/work order/customer complaint system

Tentative Goals (to be refined as part of the Asset Management Planning process):

- Shift from reactive modes of operation (where assets are often only dealt with at failure or near failure) to a more proactive approach
 - Utilize risk analysis as a way of prioritizing our annual capital improvements
 - Improve transparency of our decision making process to increase public's trust of City financial decisions
- Better data collection and prioritization mechanisms to inform capital planning and sustainable funding conversation
- Better management of public's expectations through the creation of "levels of service" and discussions relating cost to specific levels of service, giving the public a "choice" in what they are paying for
- Acquisition of a computerized maintenance management system (CMMS)
 - Improve ability to gather/analyze performance metrics data
 - Tracking of workflows/responsibility
 - Improve customer service

In our conversations with other public utilities and individuals in the asset management field, it has become clear that addressing these drivers and goals does not simply involve purchase of a piece of software (CMMS). It will require an organizational self- evaluation and a wholesale cultural shift. In studying municipalities which appear to have been successful in making this shift, many have undertaken a comprehensive **asset management planning process** which results in the production of an actual written plan outlining the organizational, workflow, levels of service/performance measures and technological elements of the asset management program. These provide the foundation for a

successful implementation and continued operation the asset management and capital planning programs.

Because of the growing concern regarding our subsurface assets, the DPW Enterprise funds (Water, Wastewater, Stormwater) have allocated funding for the development of the Water Resource Asset Management Plan in FY 16 and possible acquisition of a CMMS in FY 17. However, we recognize that it is a much larger organizational issue and believe that our ultimate success will be enhanced by the inclusion of other asset related workgroups throughout DPW and the rest of the City. We want to ensure that our selection of a CMMS is informed by other workgroup needs such that we may be able to select a tool that has a more universal appeal, while still supporting our needs. Thus, we are proposing that Phase I of this effort would include a larger group of stakeholders and would attempt to address the following questions for all stakeholders:

- Where we are? (Existing asset inventories, data collection methods, workflows, metrics)
- Where do we want to go? (Formalize our Departmental/Citywide Goals)
- How will we get there? (Develop Roadmap for various functional groups for developing their own Asset Management Plans and implementation of AM and a CMMS)

The second portion of Phase I (Phase IB) would involve the creation of a scope of work specific to the Water Resources asset classes based on the evaluation of the Water Resources asset classes in Phase 1A. Water Resource will fund a portion of Phase IA and all of Phase IIB, but is seeking other funding sources to include the other stakeholders.

Proposed Scope of Work

Phase IA: City Asset Stakeholders

Consultant shall advance the following efforts for the Asset Stakeholders:

- Development /Refinement of OVERALL goals
- Provide training/introduction of concept of asset management
- Initial documentation of existing practices/workflow/asset inventory/asset data collection practices for each “functional group”
- Gap analysis by function
 - Initial outline of target levels of service (outward –customer focus) and performance measures (inward focus)
 - *This will feed the types of assets that may need to be inventoried and workflows developed*
- General “Roadmap” for each functional group
 - Readiness assessment
 - **Critical next steps** for other areas to be doing while Water Resources does pilot
 - Outline/group which functional areas are high priority for advancement , e.g.
 - *Group A – Water Resources*
 - *Group B – High priority functional area (s) that could reasonably be ready*

- *Group C – High priority functional area (s) which might have more gaps to close*
 - *Group D – Lower priority functional area (s) which can wait*
- Recommendations for immediate gap closures
- Recommendation re: City wide organizational support for this effort in short, mid and long term time periods
- Recommendation regarding the formation of “teams” as necessary for keeping ball moving forward on “next steps”
- Gather enough information such that Water Resources could move forward with Phase IB procurement of CMMS in Phase II that meets the needs of the larger group

Phase IB: Specifically for Water Resources

Consultant shall advance the following efforts for the Water Resources Asset Stakeholders:

- Based on Phase IA – identify which areas of water resources should move forward in Phase II
 - Collection System
 - Distribution System
 - Water Treatment
 - WW Treatment Plants
- **Prepare RFP** for Phase II Asset Management Plan Development and probable cost estimate , that could include items such as:
 - More detailed training for Water Res staff – formation of teams
 - DETAILED workflow documentation
 - DETAILED Level of service review (and/or specific levels of service creation)
 - DETAILED Performance measures creation/review
 - Immediate gap closure – inventory needs, data collection needs (forms)
 - Organizational support necessary for Water Resources Asset Management
 - Scope of work/bid specifications for CMMS purchase and implementation
 - Probable cost of CMMS

Tentative Schedule

Spring FY15 – Phase I

FY 16

- Phase II for Group A (Water Resources AMP)
- Group B continues working on any immediate gap closures/next steps to prepare themselves for AMP

FY 17

- Release CMMS bid/implementation for Water Resources/Group 1
- Group B – AMP development/implementation

FY 18

- Group B – implementation in CMMS
- Group C – AMP development/implementation

FY 19

- Group C – implementation in CMMS
- Group D – AMP development/implementation

FY 20

- Group D – implementation in CMMS

WHEREAS, the city of Burlington possesses the compact patterns of development, the mix of commercial, institutional, and residential uses, and the interconnected street grid that, in older communities like ours, are inherently conducive to travel by foot and by bike; and

WHEREAS, Burlingtonians enjoy walking and biking and do so regularly, as evidenced by Burlington's exceptionally high 20% walking commute mode share and 5.5% bicycling commute mode share as of 2012; and

WHEREAS, Burlington offers infrastructure for walking throughout many parts of the city, but the Department of Public Works has identified a significant gap between the current and desired condition of our sidewalk network; and

WHEREAS, the city of Burlington has a valuable recreational, transportation, and economic asset in the form of the Lakeshore Bike Path, but lacks comparable bicycle infrastructure or a comprehensive bicycle network throughout the rest of the community; and

WHEREAS, Burlington residents strongly desire additional investment in infrastructure for safe and convenient walking and biking, as evidenced by the prominence of walk- and bike-related comments in PlanBTV and other similar initiatives; and

WHEREAS, the City of Burlington has signaled its commitment to reaching a much higher level of walk- and bike-friendliness via the Mayor's leadership of the Go for Gold initiative, which has been meeting since mid-2014 to explore strategies for securing gold-level recognition for Burlington as a Walk- and Bicycle-Friendly Community; and

WHEREAS, PlanBTV identified "Transportation Choice" as one of seven themes that "reflect the character and spirit of the City of Burlington," with major sections of the plan calling for substantial improvements to walkability and bikeability; and

WHEREAS, the City of Burlington's Climate Action Plan notes that half of Burlington's carbon footprint is transportation-related, and that reaching our goals therefore will therefore require a shift in transportation patterns towards less energy-intensive forms of travel such as walking and biking; and

WHEREAS, becoming a highly walkable and bikeable community would enhance health and quality of life for Burlington residents by creating opportunities for daily physical activity as well as improve the functioning of our transportation system by diversifying our options for mobility; and

WHEREAS, walk- and bike-friendliness have emerged in recent years as key economic drivers for cities of all sizes, strengthening the local economy by attracting business investment and skilled workers that have the option to locate anywhere;

NOW, THEREFORE, BE IT RESOLVED that the City Council establishes a collaborative public-private Walk-Bike Master Planning Initiative with a vision of rapid transformation of Burlington into the best small city for walking and biking on the East Coast; and

BE IT FURTHER RESOLVED that the mission of the Walk-Bike Master Planning Initiative is to launch a process of creative and flexible planning and experimentation that honors and acts on the desire held by a strong majority of Burlington's residents for streets that make walking and biking easy and safe for everyone; and

BE IT FURTHER RESOLVED that the Walk-Bike Master Planning Initiative shall be guided by the following principles:

1. Creation of a blueprint for dramatic improvement in conditions for walking and biking citywide through a coordinated series of changes to infrastructure, policies, and programming
2. Adoption of the most innovative approaches and designs from communities worldwide so as to position Burlington for decades of leadership in walk-bike friendliness
3. Establishment of specific targets for increased walking and biking, improved safety, and other key metrics and creates mechanisms for tracking progress over time
4. Inclusion and engagement of all city residents, workers, and businesses in both planning and implementation of improvements
5. Rapid implementation of demonstration projects and pilots as part of the planning process that are coupled with careful performance monitoring and adaptive management so as to maximize the ratio of results to planning; and

BE IT FURTHER RESOLVED that a Working Group shall be established to closely manage the Walk-Bike Master Planning Initiative, that consists of representatives of the following entities:

- The Department of Public Works
- The Department of Planning and Zoning
- The Department of Parks, Recreation, and Waterfront
- The Community and Economic Development Office
- Local Motion; and

BE IT FURTHER RESOLVED that a broad-based Advisory Committee shall be established to provide strategic direction, that includes representatives from the following entities:

- An owner, manager, or official of a Burlington-based business, as selected by the Burlington Business Association
- One resident from each of the 8 wards with demonstrated interest and expertise in walking and/or biking, as selected by the city council delegation from each ward
- A representative of the Burlington Walk-Bike Council, as selected by the Council chair
- A representative of the Burlington Police Department, as selected by the Chief of Police
- A Public Works commissioner, as selected by the Chair of the Public Works Commission
- The chair of the Transportation, Energy, and Utilities Committee of the City Council
- A Regional Planning Commission official, as selected by the Executive Director of the CCRPC; and

BE IT FURTHER RESOLVED that the Advisory Committee shall vote to elect a Chair and Vice Chair at its first meeting (to be held no later than April 1, 2014; and

BE IT FURTHER RESOLVED that the Advisory Committee shall meet at least quarterly from April 2015 until the completion of the Walk-Bike Master Plan and undertake the following tasks:

- Provide input to the working group on short-term demonstration and pilot projects and review data on performance of such projects
- Provide policy guidance on key issues that arise as part of the development of the Bike Master Plan

- Have members serve as liaisons in outreach and communication efforts, including regular updates to the Neighborhood Planning Assemblies
- Send the Bike Master Plan to the City Council once a majority of the Advisory Committee members vote affirmatively that the plan is ready for adoption; and

BE IT FURTHER RESOLVED that the Burlington Walk-Bike Master Plan will be presented to the City Council for adoption no later than June 2016.