APPENDIX 1

BIBLIOGRAPHY
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Binghamton Metropolitan Greenway Study: trail master plans, design guidelines and implementation strategies for riverbank trail development. Binghamton Metropolitan Transportation Study. 1999.


Community Health Assessments for Broome and Tioga Counties. Broome County, NY and Tioga County, NY. 2010-2013.


The National Household Travel Survey (NHTS). Federal Highway Administration. 2009.

New York State Department of Transportation. New York State Accident Location Information System. 2007-2011.


New York State Vehicle and Traffic Law.


APPENDIX 2

GLOSSARY OF TERMS
GLOSSARY OF TERMS

*American Association of State Highway Transportation Officials (AASHTO):* An organization of state departments of transportation which promulgates transportation design and operational policies.

*Americans with Disabilities Act:* 1990 federal legislation that resulted in significant improvements to make infrastructure accessible to all persons regardless of disability.

*Barriers:* In some areas, there are physical barriers to walking caused by topographical features, such as rivers, railroads, freeways or other impediments. In such cases, providing a facility to overcome a barrier can create new opportunities for walking.

*Bicycle:* A two or three wheeled vehicle ridden and propelled by a person or persons in combination with belts, chains or gears, and wheels (in tandem or tricycle) except devices intended for sole use on a sidewalk or by pre-teenage children (NYS Vehicle and Traffic Law).

*Bicycle and Pedestrian Facilities:* Infrastructure designed specifically to accommodate pedestrians and cyclists. Facilities can include sidewalks, parking, mapping, areas set aside specifically for pedestrian or bicycle use, and/or shared roadways not specifically designated for bicycle use.

*Binghamton Metropolitan Transportation Study:* The MPO for the Binghamton metropolitan region.

*Broome County Environmental Management Council (EMC):* Broome County citizens’ advisory board to Broome County government on local environmental matters.

*Class I, II, III Bicycle Facility:* The terms sometimes assigned to bicycle paths (Class I), bicycle lanes (Class II), and shared road facilities (Class III).

*The Federal Highway Administration (FHWA):* provides stewardship over the construction, maintenance and preservation of the Nation’s highways, bridges and tunnels. FHWA also conducts research and provides technical assistance to state and local agencies in an effort to improve safety, mobility, and livability, and to encourage innovation.

*Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA):* Legislation passed by the US Congress that authorizes all federal surface transportation funding programs for a six year period. Among many other factors, it required the consideration of bicycle and pedestrian needs, environmental concerns such as air quality and energy usage, and public participation in transportation planning.

*Multi-use trail:* Also known as a “Rail-Trail”, it is a facility shared by pedestrians and bicyclists that is separated from motor vehicles and has minimal cross flow by motor vehicles.

*Moving Ahead for Progress in the 21st Century Act (MAP-21):* Legislation passed by Congress in 2012 that funds surface transportation programs at over $105 billion for fiscal years (FY) 2013 and
2014. MAP-21 creates a streamlined and performance-based surface transportation program and builds on many of the highway, transit, bike, and pedestrian programs and policies established in 1991.

**Metropolitan Planning Organization (MPO):** Regional transportation planning organizations established by federal law for urban areas with more than 50,000 people.

**Manual on Uniform Traffic Control Devices (MUTCD):** defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public traffic

**New York State Department of Transportation (NYSDOT):** The New York State agency responsible for building and maintaining state roads. BMTS falls into NYSDOT Region 9.

**NYSDOT Highway Design Manual:** (1) to provide requirements and guidance on highway design methods and policies which are as current as practicable, and (2) to assure uniformity of design practice throughout the New York State Department of Transportation consistent with the collective experience of the Department of Transportation, the American Association of State Highway and Transportation Officials, and the Federal Highway Administration.

**Para-transit:** Public transportation offered on a demand-responsive rather than fixed route-fixed schedule basis. Para-transit is typically oriented to special populations including elderly persons with disabilities, and rural residents.

**Pedestrian:** A person on foot or in a wheelchair (NYS Vehicle and Traffic Law).

**Pedestrian Facilities:** Any features or elements used by disabled or able-bodied pedestrians to move from one point to another including sidewalks, crossings, refuge islands, pedestrian signs and signals, curb ramps, stairs, and general pedestrian areas such as plazas, public transit loading zones, and grade-separation structures. Pedestrian facilities also include call boxes, street furniture, etc.

**Sidewalk:** A smooth, paved, stable and slip-resistant, exterior pathway intended for pedestrian use along a vehicular way separated with a curb offset.

**State Environmental Quality Review Act (SEQRA):** The State Environmental Quality Review Act (6NYCRR Part 617) established a process that considers environmental factors early in the planning stages of actions that are directly undertaken, funded, or approved by local, state, or regional agencies (Jensen et al, 1992).

**Traffic Calming:** A technique of making streets safer for pedestrians and cyclists by slowing the flow of traffic. Methods to accomplish traffic calming include building pedestrian islands, slowing traffic through speed limits, narrowing and curving streets, installation of stop signs, and the planting of trees.

**Transportation Improvement Plan (TIP):** A five year schedule of federally aided highway, bridge, transit, and other improvements developed by MPOs for their regions.
APPENDIX 3

STATE AND LOCAL LAWS
ARTICLE 26: RIGHT OF WAY
§1146 Drivers to Exercise Due Care. Notwithstanding the provisions of any other law to the contrary, every driver of a vehicle shall exercise due care to avoid colliding with any bicyclist [or] pedestrian...upon the roadway and shall give warning by sounding the horn when necessary.

ARTICLE 27: PEDESTRIANS' RIGHTS AND DUTIES
§1150 Pedestrians subject to traffic regulation. Pedestrians shall be subject to traffic control signals as provided in §1111 of this title, but at all other places pedestrians shall be accorded the privileges and shall be subject to the restrictions stated in this article.

§1151 Pedestrians' right of way in crosswalks. (a) When traffic-control signals are not in place or not in operation the driver of a vehicle shall yield the right of way, slowing down or stopping if need be to so yield, to a pedestrian crossing the roadway within a crosswalk on the roadway upon which the vehicle is traveling, except that any pedestrian crossing a roadway at a point where a pedestrian tunnel or overpass has been provided shall yield the right of way to all vehicles.

(b) No pedestrian shall suddenly leave a curb or other place of safety and walk or run into the path of a vehicle which is so close that it is impractical for the driver to yield.

(c) Whenever any vehicle is stopped at a marked crosswalk or at any unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass such stopped vehicle.

§1151-a Pedestrians' right of way on sidewalks. The driver of a vehicle emerging from or entering an alleyway, building, private road, or driveway shall yield the right of way to any pedestrian approaching on any sidewalk.

§1152 Crossing at other than crosswalks. (a) Every pedestrian crossing a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right of way to all vehicles upon the roadway.

(c) No pedestrian shall cross a roadway intersection diagonally unless authorized by official traffic control devices; and, when authorized to cross diagonally, pedestrians shall cross only in accordance with the official traffic control devices pertaining to such movements.

§1156 Pedestrians on roadways. (a) Where sidewalks are provided and they may be used with safety it shall be unlawful to walk along and upon an adjacent roadway.

(b) Where sidewalks are not provided any pedestrian walking along and upon a highway shall when practicable walk only on the left side of the roadway or its shoulder facing traffic which may approach from the opposite direction. Upon the approach of any vehicle from the opposite direction, such pedestrian shall move as far to the left as is practicable.
ARTICLE 37: REGULATION OF TRAFFIC BY DEPARTMENT OF TRANSPORTATION AND OTHER STATE AUTHORITIES
§1621 Other traffic regulations on state highways and on Indian reservations. (a) The department of transportation with respect to state highways maintained by the state, the intersection of any highway with a state highway maintained by the state, and any highway intersecting or meeting a state highway maintained by the state for a distance not exceeding one hundred feet from such state highway maintained by the state, may by order, rule or regulation:
2. Prohibit, restrict or regulate the operation of vehicles on any controlled-access highway or the use of any controlled-access highway by any limited use vehicle, pedestrian, horseback rider or vehicle or device moved by human or animal power.
16. Designate a portion of a slope as a path for the use of bicycles.
17. Order signs or markings to identify the portion of the highway to be used for bicycle travel.

ARTICLE 39: REGULATION OF TRAFFIC BY CITIES AND VILLAGES
§1641 Additional traffic regulations on all highways except state highways maintained by the state in cities and villages. In addition to the other powers granted by this article, the legislative body of any city or village with respect to highways (which term for the purposes of this section shall include private roads open to public motor vehicle traffic) in such city or village except state highways maintained by the state, may by local law, ordinance, order, rule or regulation:
1. Prohibit, restrict or regulate the operation of vehicles on any controlled-access highway or the use of any controlled-access highway by any vehicle, device moved by human power or pedestrian.
5. Designate a portion of a slope as a path for the use of bicycles.
6. Order signs or markings to identify the portion of the highway to be used for bicycle travel.

ARTICLE 40: REGULATION OF TRAFFIC BY COUNTY SUPERINTENDENT OF HIGHWAYS
§1650 Traffic regulations on county roads. (a) The county superintendent of highways of a county with respect to county roads in such county, may by order, rule or regulation:
6. Order signs or markings to identify the portion of the highway to be used for bicycle travel.
7. Designate preferential use lanes for specified types or classes of vehicles.

ARTICLE 41: REGULATION OF TRAFFIC BY TOWNS
§1660 Traffic regulation in all towns. (a) The town board of any town with respect to highways outside of villages in any such town, but not including state highways maintained by the state except with respect to subdivisions six, eight, nine and ten, subject to the limitations imposed by section sixteen hundred eighty-four may by ordinance, order, rule or regulation:
12. Prohibit, restrict or regulate the operation of vehicles on any controlled-access highway or the use of any controlled-access highway by any vehicle, device moved by human power or pedestrian.
14. Regulate the crossing of any roadway by pedestrians.
21. Designate a portion of a slope as a path for the use of bicycles.
22. Order signs or markings to identify the portion of the highway to be used for bicycle travel.
EXHIBIT 2

TO: Rose Sotak, Chairperson
    Louis Caforio
    Laws & Legislation/Intergovernmental Committee

FROM: Peter A. Olevano
    Comm. of Public Works

DATE: September 24, 2007

SUBJECT: Pedestrian Policy

I hereby request a Public Hearing to consider amending Chapter A208 of the Town of Union Code as follows:

ADD:

ARTICLE V
PEDESTRIAN POLICY

A208-20 General

The Town of Union is a pedestrian–friendly community, and will provide and maintain facilities for pedestrians as an integrated part of its new development and redevelopment projects. Property owners and agencies are responsible to construct and maintain facilities in accordance with this policy. Pedestrian facilities include sidewalks, traffic calming features, crossing and accessibility features such as signals, curb ramps and signage.

1. Sidewalks: sidewalks will be installed in accordance with the community Pedestrian Plan. Minimum width of all walks shall be five (5’) feet with a four and one half (4 ½’) foot planting strip (or 9.5’ wide sidewalks in Central Business Districts) unless prohibited by documented environmental constraints. Sidewalks must be constructed continuously across all driveways.

2. Crossings: safe crossings shall be provided at all locations identified, in accordance with the Pedestrian Policy. All crosswalk, signal and curb ramp features shall comply with the minimum guidelines established in the NYS DOT Highway Design Manual and the Manual of Uniform Traffic Control Devices (MUTCD). Traffic calming features shall be provided where necessary to balance pedestrian safety with vehicular speeds and volumes.

3. Accessibility: all pedestrian facilities will comply with the Americans with Disability Act (ADA) guidelines.

4. Maintenance: Each owner or occupant of any house or other building, and any owner or person entitled to possession of any vacant lot, and any person having charge of any facility or public building shall be responsible for maintaining the pedestrian facilities adjacent to their property. During the winter season, this shall include keeping the sidewalk free of snow or ice and at all other times shall keep the sidewalk in good and safe repair in a clean condition, free from obstructions or encumbrances.

Respectfully submitted,

Peter A. Olevano, Comm. of Public Works

PAO/mb

Cc: Supervisor
    Board
    Attorney
    Clerk
    Board Secretary
EXHIBIT 3

THE COUNCIL OF THE CITY OF BINGHAMTON
STATE OF NEW YORK

Date: July 20, 2011

Sponsored by Council Members: Weslar, Webb, Collins, Massey, Rennia, Kramer

Introduced by Committee: Municipal and Public Affairs

RESOLUTION

A RESOLUTION ESTABLISHING A SUSTAINABLE COMPLETE STREETS POLICY FOR STREET AND TRANSPORTATION PROJECTS

WHEREAS, "Complete Streets" are defined as roadways that enable safe and convenient access for all users, including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation and seniors; and

WHEREAS, "Sustainable Complete Streets" are defined as Complete Streets with elements of design, construction and operation that also incorporate environmental sustainability; and

WHEREAS, streets that support and invite multiple uses, including safe, active and ample space for pedestrians, bicycles and public transportation, are more conducive to the public life and efficient movement of people than streets designed primarily to move automobiles and trucks; and

WHEREAS, promoting pedestrian, bicycle and public transportation travel as an alternative to the automobile reduces negative environmental impacts, promotes healthy living, and is less costly to the commuter; and

WHEREAS, the full integration of all modes of travel in the design of streets and highways will increase the capacity and efficiency of the road network, reduce traffic congestion by improving mobility options, limit greenhouse gas emissions and improve the general quality of life; and

WHEREAS, many studies show that when roads are better designed for bicycling, walking and transit use, more people utilize them for alternative modes of transit; and

WHEREAS, the design and construction of new roads and facilities should anticipate and provide for future demand for biking, walking and other alternative transportation facilities and not preclude the provision of future improvements; and

WHEREAS, Complete Streets are supported by the Institute of Traffic Engineers, the American Planning Association and many other transportation, planning and public health professionals.
NOW, THEREFORE, the Council of the City of Binghamton, duly convened in regular session, does hereby:

RESOLVE, that the City hereby establishes and adopts a Sustainable Complete Streets policy whereby all street projects, including design, planning, reconstruction, rehabilitation, maintenance or operations by the City of Binghamton shall be designed and executed in a balanced, responsible and equitable way to accommodate and encourage travel by public transportation vehicles and their passengers, bicyclists and other wheeled modes of transportation, and pedestrians of all ages and abilities, in accordance with established Best Practice Design Guidelines for Complete Streets and Sustainable Complete Streets and in consultation with the AASTHO Guide for Development of Bicycle Facilities and the AASTHO Guide for Pedestrian Facilities; and be it further

RESOLVED, the City of Binghamton shall strongly consider the needs of drivers, public transportation vehicles and patrons, bicyclists, wheelers, and pedestrians of all ages and abilities in all planning, programming, design, construction, reconstruction, retrofit, operations and maintenance activities and products; and be it further

RESOLVED, the City shall view all transportation improvements as opportunities to improve safety, access and mobility for all travelers in the City and shall recognize bicycle, pedestrian and transit modes as integral elements of the transportation system.

I hereby certify the above to be a true copy of the legislation adopted by the Council of the City of Binghamton at a meeting held on ____. Approved by the Mayor on ____. 
EXHIBIT 4 - TOWN OF CHENANGO – SNOW REMOVAL

From: Thomas Geisenhof [assessor@townofchenango.com]
Sent: Thursday, December 13, 2012 4:04 PM
To: Reigle, Scott E.
Subject: snow removal

Scott,

Below is our Town’s “Sidewalk Ordinance”. The definition spells out the commercial district. Letter C tells the property owners within that district that they will be assessed a fee (set by the Town Board: $.3548 per lineal foot) for the removal of snow. The plan works very well as the Town pools the property owners’ $ to buy equipment and fuel to get a great, consistent and timely service... A lot with a 200lf of frontage pays approximately $71.00 per winter, no matter how many times it snows...

TOWN OF CHENANGO SIDEWALK ORDINANCE


§ 60-4. Purpose.
These amendments to the Code of the Town of Chenango are enacted for the purpose of promoting the health, safety and general welfare of the community by imposing a duty on adjoining and abutting landowners to public sidewalks in the Town of Chenango to maintain, repair and keep them clear of snow and ice accumulations and other obstructions, and to provide for the assessment of an annual fee for seasonal snow removal from sidewalks located within a commercial district.

§ 60-5. Definitions.
For purposes of this article, the following words shall have the meanings indicated:
ABUTTING OWNER OR OCCUPANT -- The owner or occupant of any lands immediately adjoining any public sidewalk within the Town of Chenango.
COMMERCIAL DISTRICT -- Any properly constructed sidewalk areas (including driveways as part of the walking lane) abutting Route 11 (Upper Front Street) from the Town of Dickinson line to the intersection of Routes 11 and 12, and any properly constructed sidewalk areas abutting Route 12 continuing north from this intersection to the intersections of Route 12 and Theresa Boulevard, and any properly constructed sidewalk areas abutting Route 12A to the Town of Fenton line, and any properly constructed sidewalk areas abutting Kattleville Road from the intersection of Route 12A and Kattleville Road to the intersection of Kattleville Road and River Road. [Amended 1-4-2012 by L.L. No. 1-2012]

§ 60-6. General maintenance.
A. The owners or occupants of all lots and premises within the Town of Chenango abutting or adjacent to any public sidewalk shall be required to maintain, repair, replace and keep safe that sidewalk.
(1) At such time as knowledge of a required maintenance or repair of a defective sidewalk in the street right-of-way is brought to the attention of the Town, a written notice will be sent to the abutting property owner, ordering proper maintenance, repair or replacement of said sidewalks within 30 days from receipt of the notice. If, upon the expiration of 30 days from the receipt of the
notice, required work has not been done or is not in the process of completion, the Town may cause the same to be maintained, required or replaced, and the cost thereof shall be assessed to the property thereon.

(2) For purposes of this article, a "defective sidewalk" means any public sidewalk exhibiting one or more of the following characteristics: vertical separations equal to 3/4 inch or more; horizontal separations equal to 3/4 inch or more; spalling over 50% of a single square or panel of the sidewalk with one or more depressions equal to 1/2 inch or more; a single square or panel of sidewalk cracked in such a manner that no part thereof has a piece greater than one square foot (without a crack) or is cracked in such a manner that it constitutes a danger or a potential danger to the public; sidewalk with any part thereof missing to full depth; and deviation of the stacked and constructed grade equal to 3/4 inch or more.

B. Snow and ice removal. Between the months of November 1 to April 1 each year hereafter, all snow, ice and other obstruction upon any public sidewalk in the Town shall be removed by the owner or occupant of the adjoining land immediately after such snow, ice, dirt or other obstruction is deposited thereon. Whenever the owner or occupant of the adjoining land fails to remove snow, ice, dirt or other obstruction therein from the sidewalk adjacent to or upon their lots and premises in or along the public street and right-of-way in the Town within 24 hours from the time when such snow, ice, dirt or other obstruction has been deposited thereon, or within 12 hours after notice by the Ordinance Office of the Town to remove the same, the Town Board may remove said snow, ice, dirt or other obstruction from said sidewalk or cause the same to be done by its agents or employees and to clean or cause to be cleaned said sidewalk, and the expense thereof shall constitute and be a lien upon the adjoining premises and charged and assessed against the same.

C. Snow removal charge in Commercial District. Each property owner or occupant abutting public sidewalks with the Commercial District defined by this article shall be assessed an annual fee for seasonal snow removal by the Town Board based upon the number of linear feet of property abutting each sidewalk area (including driveways that are part of the walking lane).

D. Violations:

(1) Redeposits of snow caused by indirect weather-related events, such as by persons or agencies other than the Town of Chenango, either intentionally or unintentionally, will be considered a violation of this article.

(2) It is hereby unlawful for any person, partnership or corporation to park any part of a vehicle, to place, pile or accumulate any goods, wares, merchandise, boxes, containers, stands, commodities or article of any kind or nature on or above any part of public sidewalks within the Town, providing that nothing herein contained shall be construed to prevent any such items from being taken to or from any premises in the ordinary course of delivery or transportation.