Appendix A
Public Involvement Plan

Long-Range Transportation Plan (LRTP) 2004 Update

PUBLIC INVOLVEMENT PLAN

1. Goals

A. Create public awareness relative to the study's goals, objectives, and process, as well as publicize the public participation opportunities and activities available throughout the study;

B. Involve the public in the transportation planning process so that transportation plans, policies and investments embrace the concerns of the traveling public, rural and urban neighborhoods, economic development interests, and other societal concerns. All public involvement processes shall provide opportunities for greater public participation in decisions relating to human health and the environment. Outreach and involvement will be extended to all affected and interested groups and individuals – minority, elderly, low-income, tribal governments, and others (Environmental Justice).

2. Formation of Study Advisory Committee and Interested Stakeholder Group

The PIP includes the formation of two groups to assist the SMTC in this effort.

A. **Study Advisory Committee (SAC)** – The SMTC Planning Committee will be acting as members on the SAC. The project's process will require active and consistent involvement from the Planning Committee voting members, who have significant interest and responsibility in transportation planning and programming.

The SAC's role will be to advise the SMTC on the technical content of deliverables, and to provide needed input and decision-making throughout the project.

B. **Stakeholders –** A broader group of interested individuals with significant relations and interest in the LRTP Update process will be maintained by the SMTC. Because of the impact the LRTP Update has on the community, the entire SMTC database will be treated as the LRTP Update stakeholders group. The stakeholders will be sent pertinent study information, kept apprised of significant study developments, notified of all public meetings, and encouraged to provide feedback and comment regarding the **LRTP 2004 Update.**

3. Meetings, Public Presentations, and Public Comment

In contrast to its typical approach of holding three formal public information meetings during specific stages during the planning process, the SMTC intends to broaden the exposure and increase the outreach of the LRTP 2004 Update by participating in an indeterminate number of meetings, workshops and focus groups, at which the LRTP 2004 Update will be presented.

The SMTC will reach out to a wide variety of individuals and organizations in an effort to be added to a meeting agenda where the LRTP 2004 Update can be presented, and comments and feedback can be solicited. The SMTC anticipates working with various neighborhood associations, community groups, business associations, chambers of commerce, planning federations, the City of Syracuse's Tomorrow's Neighborhoods Today (TNT), FOCUS Greater Syracuse, Leadership Greater Syracuse, towns and villages throughout the MPO area, and more to effectively promote the LRTP 2004 Update.

Public Meeting (Winter 2003-2004)

The SMTC will hold one public information meeting, at which it will present the draft final **LRTP 2004 Update** to the public. This meeting will also mark the commencement of a 30-day public comment period. All comments received at the public meeting, and during this subsequent comment period will be considered for inclusion in the final **LRTP 2004 Update** that will be presented to the SMTC Planning and Policy Committees in the first quarter of 2004.

All substantive public comments will be included in report appendices. All SAC and public meetings will be held in a handicapped accessible facility in compliance with the Americans with Disabilities Act. The SMTC will make every effort to respond to those who need a sign language interpreter, assistive learning system, or any other accommodations to facilitate the public's participation in the transportation planning process.

4. Miscellaneous Public Involvement Efforts

To further increase its outreach to the public, the SMTC will be initiating and conducting a variety of public involvement activities:

A. **LRTP 2004 Update "UPDATE"**: The SMTC will consider producing and publishing a 4-page newsletter, solely dedicated to promoting the **LRTP 2004 Update** project in place of its regularly produced newsletter DIRECTIONS, or as a two-page insert that accompanies the DIRECTIONS newsletter.

In addition to providing informational updates on the issues, efforts and ongoing tasks of the project, the newsletter will include information on how to contact the SMTC to arrange for and schedule public presentations and workshops, as well as how the public can participate and submit comments.

B. **LRTP 2004 Update Project Web Site:** The SMTC will establish a project web site (a sub-web site, structured within the SMTC web site at www.smtcmpo.org) that will provide general information about the **LRTP 2004 Update** planning process, announce upcoming meeting dates, provide updates on the activities and progression of the project, and allow the public to participate, comment or ask questions (via the web site).

C. **Material Distribution at Locations/Events Within Study Area**: If deemed necessary (at the discretion of the SAC and/or other appropriate SMTC committees), the SMTC may distribute miscellaneous project specific information at various sites throughout Onondaga County or events (e.g., Onondaga Lake Parkway Sunday's, Corporate Challenge, Clinton Square events, Syracuse Lakefront/Inner Harbor). This information may include one or more of the following: newsletter, meeting notice, comment card, and/or public opinion surveys.

D. **Assistance from SAC, and Overall Community:** The SMTC will be asking the SAC members to assist them in better notifying citizens and the community about the LRTP Update. Such a request is imperative in order to get the "grassroots community" involved. By helping to distribute flyers/announcements, and speaking to the members of the community about the **LRTP 2004 Update**, the SAC will serve to further promote public involvement in areas (and to individuals) that were not reached through the standard outreach. As part of this effort, the SMTC will attempt to get articles published in newsletters and publications across Onondaga County, including the City of Syracuse.

E. **Outreach to Municipalities:** A direct outreach effort will be made to municipalities throughout Onondaga County. Newsletters, flyers, press releases, meeting announcements, etc. will be sent to all town supervisors, and village/city mayors, in an effort to keep the entire community informed and involved.

The SMTC may determine that it needs to schedule individual meetings with towns, villages, etc., and their respective planning representatives to discuss conditions and issues of interest, relating to the **LRTP 2004 Update**.

F. **Posting Information at Public Libraries:** Meeting notices and study-specific material previously mentioned will also be posted at all libraries in the Onondaga County Public Library system.

G. **Encouragement of Public Comment/Participation:** All citizens (especially those who are not able to attend public presentations or participate in direct contact with the SMTC staff) are encouraged to submit comments to the SMTC at any time (written correspondence or e-mail/web site communication). This message will be publicized and made clear throughout the study's project schedule, verbally, and on all study material and publications. The public is also welcome to attend any of the publicized SMTC Executive, Planning and Policy Committee meetings in which the **LRTP 2004 Update** may be on the agenda as a discussion item.

H. **Public Presentations:** The SMTC will pursue a variety of speaking engagements to share, promote, and publicize the efforts of the **LRTP 2004 Update** (e.g., TNT meetings; FOCUS core group meetings; Town and Village Board meetings, etc.). Such speaking engagements will be considered for full workshop presentations, as mentioned in Item 3 on page 2.

5. Press Releases/Media Coverage

The SMTC will issue news releases (announcing the details of all public meetings) to all major and minor newspapers, television stations, and radio well in advance. If necessary, the SMTC will also send additional news releases, or take the initiative to prompt media coverage on pertinent developments pertaining to the **LRTP 2004 Update**.

The SMTC will also explore new venues such as the Pennysaver in "helping get the word out." Press releases and articles prepared for the SMTC newsletter DIRECTIONS (pertaining to the LRTP 2004 Update) will also be submitted to widely distributed publications including, but not limited to, the Pennysaver.

6. Conclusion

It is important for the SMTC and its member agencies to understand public attitudes and values in the early stages of the **LRTP 2004 Update**, as well as solicit input from affected citizens and community representatives. It is the SMTC's belief that the public involvement plan set forth, one that solicits input frequently, will bring people inside and provide the opportunity for the public to develop greater awareness and active involvement. This public involvement plan is an all-encompassing guide that is intended to serve two purposes:

- To provide a documented process to guide the SMTC in involving the public;

- To guarantee to the citizens an open, fair, and equitable process; and

- To harmonize transportation plans, policies and investments with environmental concerns, reflecting an appropriate consideration of economic and social interests.

June 24, 2002

Appendix B
Public Involvement Plan Supporting Documents

DIRECTIONS

The Newsletter of the Syracuse Metropolitan Transportation Council (SMTC) ❖ Summer 2002

SMTC Begins Process of Updating the Area's Long-Range Transportation Plan

Planning for the Greater Syracuse Metropolitan Area's transportation future involves careful planning and visioning. How does transportation affect our air quality? What is the condition of our roads and bridges? What kinds of facilities and services are needed to support planned growth or improve the safety of our transportation system? These are just some of the questions that will be addressed as the Syracuse Metropolitan Transportation Council (SMTC) initiates work on the ***2004 Update*** to its 2020 Long-Range Transportation Plan (LRTP).

In January 1995, the SMTC published the 2020 Long-Range Transportation Plan (LRTP). The LRTP presents a vision of the transportation system and the projects that will bring that vision to reality over time. Central to that vision is the protection of the value of investments already made in developing the transportation system, while providing resources to pursue innovative solutions to mobility constraints, land development patterns, and travel choices available.

Updated every three years (1998 and 2001) to reflect changing conditions and new planning principles, the LRTP Update specifically looks at major urban transportation planning concerns as environmental/air quality; complete access to transportation; alternative transportation modes (e.g., air, rail, water, bicycle, pedestrian); the impact of land development on the transportation system; highway congestion; and maintenance of the existing infrastructure.

Throughout the production of the ***LRTP 2004 Update***, the SMTC will be reaching out to the community-at-large in an effort to gather the informed views of the public regarding preferences for future development and transportation needs. The SMTC encourages you to play a vital role in creating a vision for the area's transportation system. See pages 2-3 in this issue of DIRECTIONS for more information on how you can participate in the ***LRTP 2004 Update*** process.

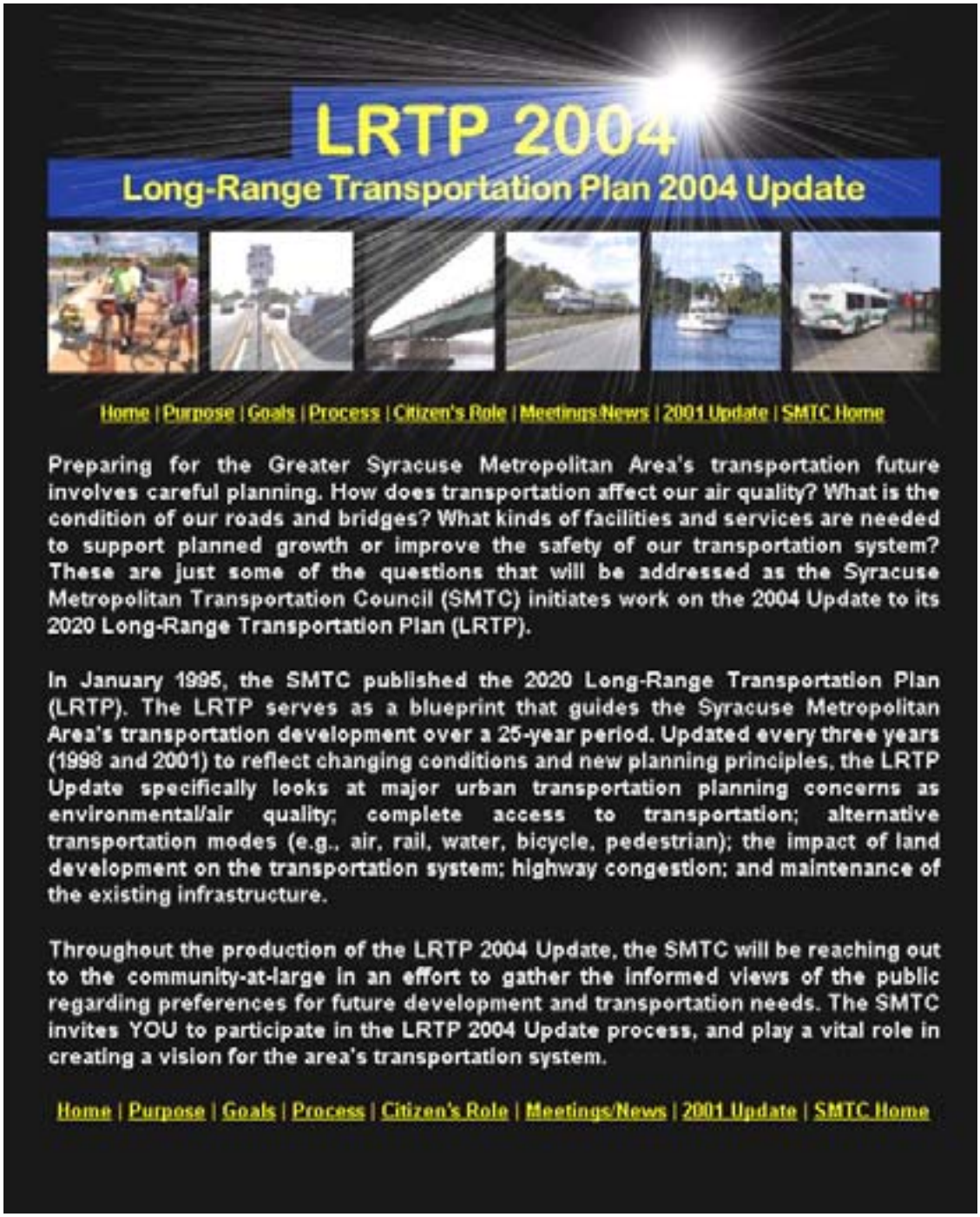
LRTP 2004 UPDATE

Bicycle and Pedestrian ***Vehicle Mobility*** ***Bridges & Pavement*** ***Multi-Modal Transportation (Air, Rail, Water)*** ***Public Transit***

Long-range transportation planning – A long-term vision that seeks to preserve the infrastructure, improve safety, provide system connectivity, improve mobility, increase access, protect air quality, and support economic growth.

Learn more about the *Long-Range Transportation Plan 2004 Update* and how **YOU** can participate.

www.smtcmpo.org/LRTP2004



Syracuse Metropolitan Transportation Council
126 N. Salina St., Suite 100, Syracuse, N.Y. 13202 ❖ (315) 422-5716; Fax (315) 422-7753
www.smtcmpo.org

Meetings, Public Presentations, and Public Comment

In contrast to its typical approach of holding three formal public information meetings during specific stages during the planning process, the SMTC participated in a number of meetings, workshops and focus groups, at which the LRTP 2004 Update was presented.

The SMTC reached out to a wide variety of individuals and organizations in an effort to be added to a meeting agenda where the LRTP 2004 Update was presented, and comments and feedback were solicited.

The LRTP 2004 Update was presented at the following meetings (see attached agendas):

10/10/02	National Association of Retired Federal Employees Syracuse, New York (Chapter 200)
10/18/02	FOCUS Greater Syracuse (volunteer core group)
1/28/03	Onondaga County Planning Federation Annual Meeting Lunch/Feature Speaker to municipal planning officials
3/12/03	Onondaga County Highway Superintendents Meeting Lunch/Feature Speaker to municipal Highway Superintendents
3/19/03	Citywide Council of Syracuse Low Income Housing Residents, Inc.

It is important to point out that the PowerPoint presentation that was made at each of the previously mentioned meetings was also posted to the LRTP 2004 Update web site, allowing the general public to view the presentation slide by slide.

Upcoming Public Involvement Activities

- One public information meeting, at which it will present the draft final **LRTP 2004 Update** to the public. (May 2004);
- A 30-day public comment period, prior to presenting the draft LRTP 2004 to the Policy Committee (May-June 2004);
- Web site maintenance and updates (post draft LRTP 2004 Update for 30-day comment period);
- Press Releases to announce meetings, public comment period, and availability of draft LRTP 2004 Update;
- Newsletter coverage to announce meetings, public comment period, and availability of draft LRTP 2004 Update; and
- Promotion at all SMTC meetings.

Note: SMTC made every attempt to include the participation of the Onondaga Nation in all of its public outreach efforts. Press releases, newsletters, public opinion surveys and direct letters of invitation were sent to the Nation throughout the process.

Citywide Council of Syracuse Low Income Housing Residents, Inc.

REGULAR MEETING

Wednesday, March 19, 2003, 5:30 PM

At the
Vinette Tower Community Room
947 Pond St.

Meeting Agenda

1. Call to Order
2. Roll Call of Board Members
3. Roll Call of Organizations
4. Special Guest Presentation Wayne Westervelt, Syracuse Metropolitan Transportation Council
4. Reading of Minutes from January 15 meeting
5. Correspondence
6. Treasury Report
7. Announcements- reschedule ROSS Capacity Building Committee Meeting
8. Resident Commissioners Report
9. Old Business
    A. Nominations and Election for Secretary
    B. Congressman Walsh Meeting update- David Leslie
    C. Community Development Block Grant Funding for Elderly Services- John DeVoe
    D. SHA Annual Plan Comment- David Paccone
10. New Business
    A. Dept. of Aging and Youth, Intergenerational Awards Banquet
    B. Camp 415 Scholarship and banquet
    C. Drawing for Resident Positive Recognition Award- Family Housing
11. SHA Management Report- Carol Shepperd
12. Introduction of SHA staff present
13. Selection of Site for May 21 meeting
14. Adjournment, 50/50 drawing

NEWS LETTER

MEETS SECOND THURSDAY EACH MONTH
EXCEPT JANUARY - JULY AND AUGUST

SEPTEMBER 2002
SYRACUSE, NY
NARFE CHAPTER 200

MEETING SCHEDULE 2002

October 10 November 14 December 12

OCTOBER PROGRAM

The October program wil be presented by Wayne Westervelt of the Syracuse Metropolitan Transportation Council The subject will be Long Range Transportation Plans for the area.

CONSUMER PRICE INDEX

The Consumer Price Index (CPI-W) rose 0.3% in August 2002,. August's index reading of 178.6 is 1.4 percent above the 2001 third quarter average base index of 174.1. September's inflation, the final

MEETING
12 NOON
THURSDAY
OCTOBER 10

Park West Restaurant
3380 Milton Avenue
Corner of Onondaga Road
And Milton Avenue

MENU
CHOICE
MEATBALL SANDWICH
or
FISH and FRIES
DESSERT
COFFEE, TEA OR MILK
$10 including tax and tip

Call Reservations and Choice to
BILL MASTERS or LENA LOBELLO
488-2211 474-3415

Call Reservations not later than Monday October 7

One thing we must stick to is In Making reservations for lunch. We need to have reservations NO LATER Than the Monday before our meeting on Thursday.

PRESIDENTS MESSAGE

Goodbye to summer and hello to fall. A beautiful season to look forward to and enjoy. It will also be a very busy season for all NARFE MEMBERS. We are looking to the "OPEN SEASON" of FEHP with changes very possible, also we will hear a great deal in regard to Long Term Care. In addition to these two important items there are many bills sitting in Congress that my have direct bearing on our incomes.

Now, after all that we will still have a good time at our meetings with great speakers

To the world, you may be one person. But to one person, you may be the world. Take time; make time; There may not be another time

Federal Health Premiums Rising 11.1%

Premiums will rise an average *11.1 percent next year*. The increase marks the third consecutive year that premiums have jumped by more than 10 percent.

Starting in January, *fee-for-service plans will raise premiums by an average of 10.5 percent; HMO organizations will raise premiums by an average of 13.6 percent.*

OPM held down the overall average increase through tough negotiations with insurance companies. OPM also urged plans to raise co-payments or add co-payments as a way to hold down the size of the premium increase.

Open season from Nov. 11 through Dec. 9.

Blue Cross will remain in the program as a waiver to accounting rules was granted by OPM

Rates for 2003 will be available at the October meeting. Some plans in this area are pulling out of FEHBP and some are changing their area of coverage.
When you get your plan be sure to study it with care , to seeif it still gives you the coverage you want. And follow the instructions on how to secure any other plans brochure Act immediately as the open season is short
One of the best sources of health plan information for retirees is the National Association of Retired Federal Employee's magazine, "Retirement Life".

LEGISLATION
Congress is behind schedule in passing bills. It looks like the government will continue to operate under a continuing resolution. This could be no action on Premium Conversion or any other NARFE legislation. One of the reasons for the reluctance to pass Premium Conversion, is that private sector employees would likely demand

ONONDAGA COUNTY PLANNING FEDERATION
1100 Civic Center
421 Montgomery Street
Syracuse, New York 13202

2003 Annual Municipal Training Program
Meeting Notice and Reservation Form

DATE: January 28, 2003 (Tuesday)
TIME: 8:00 a.m. – 4:00 p.m.
PLACE: Drumlins Country Club, 800 Nottingham Road, Banquet room entrance (map available upon request)
COST: $30.00 per person (full day); part day participation at a reduced price is available if requested in advance. **(Registration form enclosed)**

Note: To **Attorneys and Code Enforcement Officers:** Some of the following courses have been certified for continuing legal education (CLE) credits for attorneys or for in-service credit for enforcement officers. See registration form for details.

Program Schedule:

8:00 a.m. – 8:30 a.m. Registration, Continental Breakfast

8:30 a.m. – 11:30 a.m. Choice of one of two training sessions conducted by representatives from the New York State Department of State (NYSDOS):

A. Planning Board Overview (CLE: 2 hours; In-service credit; 2 hours)
B. Zoning Board of Appeals Overview (CLE: 2 hours; In-service credit 2 hours)

11:45 a.m. – 12:45 p.m. Lunch (LRTP 2004 Update) SMTC

12:45 p.m. – 2:45 p.m. Choice of one of two sessions conducted by representatives from NYSDOS:

C. How to conduct Effective Meetings and Hearings (CLE: 1 hour; In-service credit 2 hours)
D. Comprehensive Planning (CLE: 1 hour; In-service credit 1 hour)

3:00 p.m. – 4:00 p.m. Choice of one of two sessions conducted by NYSDOS or SOCPA:

E. Planning and Zoning Case Law Update (CLE: 1 hour; In-service credit 1 hour)
F. County Planning Board Referrals – A dialogue with Onondaga County Planning Board staff.

LRTP 2004 Update — Public Opinion Survey

Your input as a resident of the Greater Syracuse Metropolitan Area is vital in determining the future vision of the transportation system. Your opinions are essential in assisting the SMTC in the development of a long-range transportation plan, most specifically the ***LRTP 2004 Update***. Please complete the enclosed Public Opinion Survey, sharing your thoughts about the current and future needs of transportation throughout the Greater Syracuse Metropolitan Area.

1. What is your opinion of the existing bridge and road conditions in the area?
   Road conditions: Excellent ❑ Fair ❑ Poor ❑
   Bridge conditions: Excellent ❑ Fair ❑ Poor ❑

2. Do you experience any significant commuting issues (i.e., automobile access and movement) in the area?
   Yes ❑ No ❑ Explain:_____
   _____

3. Do you perceive there to be traffic congestion problems in the Syracuse Metropolitan Area? Yes ❑ No ❑
   If yes, where (what location)?_____
   When (what time of day)? _____

4. What do you believe is needed to stimulate more bicycle and pedestrian transportation? _____
   _____

5. In your opinion, is public transit serving the needs of the community? Yes ❑ No ❑
   What would encourage you to utilize public transit more often? _____
   _____

6. What would encourage you to use different forms of transportation more often?
   Air Transportation_____
   Bicycle/Pedestrian Transportation_____
   Rail Transportation_____
   Water Transportation_____

7. What activities would you participate in to improve air quality?_____
   _____

8. How does freight movement (air, rail, and truck) affect you and your community?_____
   _____

9. What growth (i.e. development) trends do you want (or not want) to see in the community? _____
   _____

10. Additional comments: _____
    _____
    _____
    _____
    _____

11. Name (optional)_____
    Address (optional)_____
    Address (optional)_____

Thank you for your interest and assistance! Please fax (315-422-7753) or mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) your completed survey to the SMTC. If you have any questions, please contact the SMTC's Public Information Specialist Wayne Westervelt at (315-422-5716), or e-mail: wwestervelt@smtcmpo.org

Visit the LRTP 2004 Update web site: http://www.smtcmpo.org/lrtp2004/

Syracuse Metropolitan Transportation Council

100 Clinton Square
126 N. Salina Street, Suite 100
Syracuse, New York 13202
Phone: (315) 422-5716
Fax: (315) 422-7753
www.smtcmpo.org

March 21, 2003

Chief Irving Powless, Jr.
Secretary, Onondaga Nation
Hemlock Road, Box 319-B
via Nedrow, New York 13120

Dear Chief Irving Powless, Jr.:

As you may or may not know, the Syracuse Metropolitan Transportation Council (SMTC) is currently working on the preparation of the 2004 Update to its Long-Range Transportation Plan (LRTP). While the LRTP is a 25-year blueprint for transportation development in the Greater Syracuse Metropolitan Area, the 2004 Update serves to address changing transportation related conditions and new planning guidelines.

The SMTC recognizes that technical analysis and policy support from local and state transportation decision-makers represent only part of the equation, and that the informed views of the public (including the Onondaga Nation) are necessary in any planning process. In contrast to the typical approach of holding multiple public information meetings during specific stages of the planning process, the SMTC has been reaching out to a wide variety of individuals, organizations and groups, seeking their input and opinions on the current conditions and future needs of the transportation system. Therefore, I would like to offer to deliver a presentation on the LRTP 2004 Update, whereby the SMTC can obtain any comments and feedback the Nation may have. If you are interested in hosting such a meeting, please contact SMTC's Public Information Specialist Wayne Westervelt at (315) 422-5716.

If you are not interested in the presentation, there is still another way you can participate in the process. The SMTC has created a Public Opinion Survey (as part of the LRTP 2004 Update) that is currently being distributed throughout the community to gauge public views, perceptions and preferences relating to the transportation system. We have enclosed several copies of the survey for you to distribute throughout the Nation. Your participation in filling these forms out is encouraged. All forms should be mailed or faxed back to the SMTC.

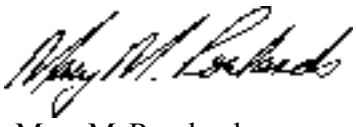
A project specific web site has also been established, giving the public an opportunity to get the latest LRTP 2004 Update news and information, as well as submit on-line comments right from their computer. The web site is located at: http://www.smtcmpo.org/LRTP2004.

Although the SMTC continues to keep the Onondaga Nation aware of the public participation opportunities and major studies and activities it conducts (through press releases, newsletters and meeting announcements), I am

enclosing a brochure that describes the purpose, roles and activities of the agency. In addition, I encourage you to visit the SMTC web site for more information – http://www.smtcmpo.org.

If you have any questions, or would like to schedule a personal one-on-one meeting at which I can further explain the role and responsibilities of the SMTC, please contact me or SMTC's Communications Specialist Wayne Westervelt at (315) 422-5716. Thank you and I look forward to your involvement in the 2004 Long-Range Transportation Plan Update.

Sincerely,



Mary M. Rowlands
Director

MMR:ww
Enclosures: *LRTP 2004 Update – Public Opinion Surveys*
SMTC brochure – A Citizen's Guide to Transportation Planning

cc: James D'Agostino, SMTC Program Manager
Wayne Westervelt, SMTC Public Information Specialist

Syracuse Metropolitan Transportation Council
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February 28, 2003

NEWS RELEASE

FOR IMMEDIATE RELEASE
Contact: Wayne A. Westervelt, Communications/Public Information
(315) 422-5716; e-mail:wwestervelt@smtcmpo.org

Council Seeks Public Opinion on Issues and Future Needs of Transportation in the Area

SYRACUSE, N.Y. -- Planning for the Greater Syracuse Metropolitan Area's transportation future involves careful planning and visioning. How does transportation affect our air quality? What kinds of facilities and services are needed to support planned growth? How can we all play a role in improving the safety of our transportation system? These are just some of the questions that will be addressed as the Syracuse Metropolitan Transportation Council (SMTC) continues work on the ***2004 Update*** to its Long-Range Transportation Plan (LRTP) – a "blueprint" that guides the area's transportation development over a 25-year period.

Updated every three years to reflect changing conditions and new planning principles, the Long-Range Transportation Plan (LRTP) specifically looks at major urban transportation planning concerns that include, but are not limited to air quality and environmental issues; complete access to transportation; alternative transportation modes (e.g., air, rail, water, bicycle, pedestrian); the impact of land development on the transportation system; highway congestion; and maintenance of the existing infrastructure.

Throughout the production of the ***LRTP 2004 Update***, the SMTC will be reaching out to the community-at-large in an effort to gather the informed views of the public regarding preferences for future development and transportation needs. "Technical analysis and policy support from our local and state transportation decision-makers represent only part of the equation," states SMTC spokesperson Wayne Westervelt. "The informed views of the public are necessary in any planning process."

In support of this claim, the SMTC has developed a project specific web site where interested citizens will have the opportunity to get the latest ***LRTP 2004 Update*** news and information. Log on to **www.smtcmpo.org/LRTP2004** and share your thoughts regarding the issues and needs surrounding transportation in the area. The site also has a ***Public Opinion Survey*** that can be filled out online and e-mailed back to the SMTC. This Survey seeks to gauge public views, perceptions and preferences relating to the transportation system.

-- more/over --

For more information about the ***LRTP 2004 Update***, or to obtain a Public Opinion Survey via mail or fax, contact Wayne Westervelt of the SMTC at (315) 422-5716.

# # #

What is the SMTC?

The Syracuse Metropolitan Transportation Council was formed in 1966 as a result of the Federal Aid Highway Act of 1962 and Urban Mass Transportation Act of 1964. Serving as the metropolitan planning organization (MPO) for the Syracuse Metropolitan area, the SMTC provides the forum for cooperative decision making in developing transportation plans and programs for Onondaga County. The SMTC is comprised of elected and appointed officials, representing local, state and federal governments or agencies having interest in or responsibility for transportation planning and programming.

Log on to the SMTC web site for the latest in transportation planning in the Syracuse Metropolitan Area: www.smtcmpo.org

Appendix C
Discussion on Sprawl

Appendix C
Discussion of Sprawl for LRTP 2004 Update

Definition: Sprawl is a term used to describe a suburban pattern of land development that is low density and separated into single use pods frequently accessed by cul-de-sacs or single use driveways. Despite trends toward smaller households, bigger houses on larger lots predominate. Long distances between destinations, lack of a network of thoroughfares (connected to other thoroughfares at both ends), and failure to permit construction of sidewalks makes suburban areas almost completely dependent on automobile travel.

The complex function of urban streets is vastly simplified in suburbia: single use functions of either land access or high speed traffic mobility are provided instead of the mixture of traffic mobility, parking, transit stops, sidewalks and other pedestrian amenities in addition to land access.

The quality of housing and private space is very high but urban designers note the disappearance of civic places and decreased quality of public spaces including the street which lacks connectivity, sidewalks and street trees.

Causes: The causes of sprawl are complex. Subsidized extension of water, sewer and highways in the 1960's and 70's to accommodate postwar population booms created cheap land that could be developed for urban uses; cheap fuel makes longer commutes affordable; increasing per capita wealth and the willingness to spend time and both public and private resources on transportation; an evolving value system favoring private spaces over civic spaces all contribute.

Demographic changes including more, smaller households for smaller families, larger numbers of single adults, including seniors, living alone create market demand. Preference of lending institutions for new, single use developments over older city neighborhoods, and decades of institutionalized redlining of cities and older suburbs shifted affordable housing demand to the urban-rural fringe.

Suburban zoning calls for "coarse grained" land use patterns (large areas of single land use, market value, and density) and strict separation of residential, retail, office and industrial land uses from each other.

Greenfields with large lots and utilities are faster and easier to develop than urban brownfields and obsolete buildings. Regulations at every level favor greenfields. Distribution of goods and services – by both the private businesses and public organizations – emphasizes economies of scale above all other values. A lack good urban design standards in town codes also contributes to the metropolitan product called sprawl.

Effects: Sprawl increases the geographic size of the urbanized area and infrastructure that must be maintained, despite decreasing population and household densities. This is true in Onondaga County, with a decreasing metro are population as well.

Strip retail developments along major arterials, concentration of high traffic generating uses including big box education, health care, and religious facilities, but particularly big box retail stores serve to concentrate trips to a few locations and peak time periods.

Very low density of trip ends and very long transit route effectively diminish a significant transportation forl for transit. The lack of a collector road and street network, sidewalks, and bicycle facilities requires near total dependence on automobiles and relatively few arterial roads to carry most traffic.

The futility of "the congestion/build cycle" of suburban arterials (congestion results in constructions of new highway capacity; increased capacity draws more intense retail development and traffic until the highway is again congested) is not well understood by municipalities charged with land use decisions.
The separation of municipal land use authority from state and county responsibility to fund, design and construct new highway capacity exacerbates the problem.

State highways, designed to carry traffic between regions, are lost in places to strip retail arterials where congestion, frequent traffic signals, and traffic cued for turns all but eliminate through traffic mobility.

Corporate site plans, signs, and architecture designed to compete for the attention of motorists form the visual character of "suburban main streets" – four to nine lane arterials lined with big-boxes.

Commute times increase as speed limits and average travel speeds are decreased. Trip lengths increase as more and more households seek to move beyond congestion. Per capita and total VMT, energy consumption, air pollution all increase.

Cities and older, first ring suburbs suffer depopulation, property abandonment and disinvestments, and loss of tax base to maintain aging infrastructure.

The community suffers the collective loss of institutions and civic places, a sense of place, a sense of community.

Appendix D
Conformity Analysis

SYRACUSE METROPOLITAN TRANSPORTATION COUNCIL

Regional Emissions Analysis

for

SMTC Long-Range Transportation Plan – 2004 Update
2003-2006 Transportation Improvement Program

Using EPA's MOBILE 6 Emissions Model

and

The Latest Emissions Control Programs
for Onondaga County per NYSDEC

Prepared by:

The NYSDOT Environmental Analysis Bureau

and

The Syracuse Metropolitan Transportation Council

April 2004

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Introduction

This regional emissions analysis is prepared to comply with the requirements of the Federal Clean Air Act Amendments of 1990 and the associated Federal and State Transportation conformity regulations. The regulations, both the Environmental Protection Agency's (EPA) transportation conformity rule (40 CFR Parts 51 and 93) and the New York State Department of Environmental Conservation's (NYSDEC) transportation conformity regulation (6 NYCRR Part 240) require that each time the Syracuse Metropolitan Transportation Council (SMTC) adopts or approves a Transportation Improvement Program (TIP), Long-Range Transportation Plan (LRTP) or an amendment to the TIP or LRTP, it be determined that the proposed action is in conformity with the applicable State Implementation Plan (SIP) for air quality prepared by NYSDEC.

The remainder of this report presents the results and documentation of the regional emissions analysis and the air quality conformity determination conducted for the SMTC's LRTP 2004 Update and the 2003-2006 TIP.

Status of Applicable SIP

The proposed 2003-2013 State Implementation Plan (SIP) for air quality for Onondaga County contains estimated existing and future emissions of carbon monoxide (CO) as part of the Clean Air Act requirement to produce a "Maintenance Plan" when the NYSDEC demonstrated to the EPA that Syracuse and Onondaga County had attained the National Ambient Air Quality Standards (NAAQS). This Maintenance Plan establishes a comparison between existing "base year" emissions, (per the Clean Air Act this year is 1990) and future estimated emissions. The Maintenance Plan must demonstrate that emissions of CO in future years will remain below the levels established in the base year when the standards are first attained, therefore assuring the continued maintenance of the standards, or NAAQS.

The Onondaga County SIP of 1992, which established the 1993-2003 Maintenance Plan, used a now outdated version of EPA's emissions model, "MOBILE" version 4.1. In addition, the NYSDEC changed some of the proposed future emission control programs, most notably the vehicle inspection and maintenance program that was anticipated in the Maintenance Plan. It has now been changed to a "gas-cap integrity test" to check for emissions leaks, as part of the New York State annual vehicle safety and emissions inspection program. It includes testing of the vehicle's emissions control equipment for evidence of tampering, and will include testing of new vehicle on-board diagnostic systems related to the vehicle's emissions control system.

The conformity analysis must use the latest planning assumptions and the latest emissions model,

both of which have changed significantly and are reflected in the Mobile 6 model and the 2003-2013 SIP. During the development of the new proposed 2003-2013 SIP the SMTC worked closely with the Interagency Consulting Group (ICG) consisting of representatives of the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), US Environmental Protection Agency (EPA), New York State Department of Environmental Conservation (NYSDEC), and the New York State Department of Transportation Environmental Analysis Bureau (EAB).

The involved Federal, State, and local agencies have agreed that the updated regional emissions analysis that incorporates the latest planning assumptions, latest future emissions control programs estimated by NYSDEC, and the latest EPA emissions model must be used to demonstrate conformity of the SMTC TIP and LRTP with the SIP.

Use of Latest Planning Assumptions

All conformity determinations must be based upon the latest available planning assumptions in force at the time of the conformity determination. Section 176(c)(1)(B)(iii) of the Clean Air Act (CAA) states that "...[t]he determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel, and congestion estimates as determined by the MPO or other agency authorized to make such estimates." The CAA requires that transportation investments be based on the most recent information that is available, in order to protect public health over the long-term.

The latest planning assumptions requirements apply to all assumptions used in demonstrating conformity, including assumptions that are used in transportation demand and emissions modeling. Examples of assumptions are land use, vehicle age and fleet mix, and the most recent information regarding the implementation of control measures in approved SIPs (e.g., inspection and maintenance (I/M) and fuels programs, transportation control measures).

Specific latest planning requirements are outlined in 40 CFR 93.110 (b)-(f):

"(b) Assumptions must be derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO or other agency authorized to make such estimates and approved by the MPO. The conformity determination must also be based on the latest assumptions about current and future background concentrations.

SMTC Action: *The data forecasts used in the model are derived from several sources. Current Population estimates were obtained via the 2000 census while future population estimates for the horizon year were forecasted by a working group of local professionals with experience in demographic analysis. This working group included the Syracuse-Onondaga County Planning Agency (SOCPA), New York State Department of Transportation (NYSDOT), SMTC, Central New York Regional Planning & Development Board (CNYRPDB), and others.*

Land use data in the model (e.g. type of employers and number of employees) was similarly calculated for both the base and future scenarios utilizing the above-mentioned working group

with the addition of key economic development agencies and personnel. Some of the key additions to the working group included the Director of the Onondaga County Industrial Development Agency and the CNYRPDB's Director of Economic Development.

Travel data for transit was included in the modeling, taking into account Central New York Regional Transportation Authority (CNYRTA) fixed route service, as well as bicycling and walking. CNYRTA's paratransit service is treated as shared ride trips.

The CO emissions estimates for Onondaga County were developed by NYSDEC using the latest EPA emissions model, MOBILE 6. These emissions estimates include an updated inventory of Daily Vehicle Miles Traveled (DVMT) produced by NYSDOT, based on the Highway Performance Monitoring System (HPMS) data produced for the USDOT FHWA, and updated future forecasts of DVMT produced for the historical trend of existing HPMS traffic counts.

(c) The conformity determination for each transportation plan and TIP [transportation improvement program] must discuss how transit operating policies (including fares and service levels) and assumed transit ridership have changed since the previous conformity determination.

SMTC Action: *The CNYRTA has not had a fare increase since 1995. In November 2002, service was added as part of a major restructuring of bus lines and service hours. As a result of that restructuring, CNYRTA ridership is up approximately 4% overall. Finally, CNYRTA will continue to pursue the service concepts proposed in the ReMAP Study completed in 1999 to the extent possible, given adequate funding. These concepts include small bus community circulators in suburban settings, express services between downtown and outlying locations and the development of key hubs. There has been limited success to date with some of those service concepts. Two new bus routes were added; one is doing moderately well, while the other was cancelled due to lack of sufficient ridership.*

(d) The conformity determination must include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.

SMTC Action: *The CNYRTA has not had a fare increase since 1995. According to the CNYRTA, there would be no fare increase in the foreseeable future as fares are raised only as a last resort. CNYRTA ridership is up approximately 4% overall over the previous year. CNYRTA will continue to pursue the improved service concepts proposed in the ReMAP Study. A goal of the Long-Range Transportation Plan is for increased utilization of transit. To achieve that goal SMTC will examine, as yet undefined projects, to implement that strategy.*

(e) The conformity determination must use the latest existing information regarding the effectiveness of the transportation control measures (TCMs) and other implementation plan measures, which have already been implemented.

SMTC Action*: Table 4 on page 11 presents the status of the official Transportation Control Measures (TCMs) contained in the original 1993-2003 SIP for Syracuse and Onondaga County. The referenced Federal and State air quality conformity regulations require that each time the SMTC adopts or approves a new TIP or LRTP, a determination that all required TCMs are*

being implemented in a timely fashion be made. As the TCM table shows, all of the required TCMs have been completed and are shown for informational purposes only. As required by law the TCM's were included in the model network run and the emissions analysis shows a continued reduction in CO emissions.

(f) Key assumptions shall be specified and included in the draft documents and supporting materials used for the interagency and public consultation required by §93.105.

SMTC Action: *The SMTC utilizes the Tmodel 2 travel demand modeling platform to generate VMT and speed data for peak and off-peak hours. Tmodel 2 incorporates the four-step modeling process (Trip Generation, Trip Distribution, Mode Choice and Assignment), and provides for future-year scenario modeling based on the horizon year roadway network characteristics as well as the previously mentioned land use and population projections that were developed for use in the modeling process. The 2000 Census, current employment data, and current road network conditions were used for the base year calibration.*

The future year (horizon year) of the modeling efforts are characterized by the inclusion of the following assumptions:

- *Future household growth by TAZ as determined by working group of local demographic experts.*
- *Future employment growth by TAZ as determined by local experts in the area of economic development.*
- *Future road network changes as determined by the Transportation Improvement Program and the Capital Plans of appropriate SMTC member agencies as well as the SMTC's LRTP Vision.*

In 2002, the SMTC spearheaded a statewide initiative to evaluate various modeling platforms available to MPOs to determine which was the most favorable for New York State MPO usage. Following the evaluation process, the SMTC purchased the TransCAD software, and is currentlyin the process of migrating their travel demand modeling activities to the TransCAD modeling/GIS platform, which is a more powerful, modern, and user-friendly software package than TModel 2. The new TransCAD model will have both a highway and transit network which more accurately depicts the SMTC planning area with respect to employment, housing and transportation system characteristics. As part of the process, training will be provided to both SMTC and member agency staff to allow for in-house utilization of the model, thus allowing for a faster turnaround time for modeling scenarios in a more cost effective manner. It is anticipated that the highway portion of the model will be completed by Fall 2004.

Interagency Consultation Process

The conformity process requires a high degree of coordination between Federal, State and local entities and therefore has rules for the establishment of formal procedures for Interagency Consultation to ensure that all groups are involved. Consultation also ensures that air quality concerns are addressed throughout the planning process so that the resulting conformity determinations meet federal criteria before presentation to FHWA/FTA for approval.

Procedures for the Interagency Consulting Group (ICG) in the State of New York are contained in 6 NYCRR Part 240.6. The ICG consists of representatives of the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), US Environmental Protection Agency (EPA), New York State Department of Environmental Conservation (NYSDEC), and the New York State Department of Transportation Environmental Analysis Bureau (NYSDOT-EAB) and was extensively consulted throughout the process working through the EAB staff.

The involved Federal, State, and local agencies have agreed that the updated regional emissions analysis that incorporates the latest planning assumptions, latest future emissions control programs estimated by NYSDEC, and the latest EPA emissions model must be used to demonstrate conformity of the SMTC TIP and LRTP with the SIP. The latest planning assumption requirement must be met before USDOT can make a conformity determination.

The consultation process is currently in progress.

Results of the Regional Emissions Analysis

The following attached pages show the complete results of the regional emissions analysis of the SMTC's LRTP 2004 Update and the 2003-2006 TIP, using EPA's MOBILE 6 model and the latest SMTC transportation demand model results. The existing and future estimated emissions are presented in Table 1 and Table 2, and the non-exempt transportation projects included in the analysis are presented in Table 3. This analysis demonstrates that with the adopted update to the SMTC LRTP and 2003-2006 TIP, CO emissions in future years will remain below the levels established for each applicable milestone year in the SIP Motor Vehicle Emissions Budget. Therefore, continued maintenance of the CO NAAQS is assured, and the SMTC LRTP 2004 Update and 2003-2006 TIP remain in conformity with the SIP.

Conclusions

In conclusion, the SMTC Long-Range Transportation Plan 2004 Update and 2003-2006 Transportation Improvement Program have complied with the requirements of the Clean Air Act, and are in conformity with the New York State Implementation Plan (SIP) for air quality. The following pages provide the documentation of the required regional emissions analysis conducted to determine air quality conformity. This analysis demonstrates that with the adopted update to the SMTC LRTP and 2003-2006 TIP, CO emissions in future years will remain below the levels established for each applicable milestone year in the SIP Motor Vehicle Emissions Budget. Therefore, continued maintenance of the CO NAAQS is assured, and the SMTC LRTP 2004 Update and 2003-2006 TIP remain in conformity with the SIP.

Table 1

SMTC LRTP 2025 MOBILE 6 Regional Emissions Analysis Summary
April 2004

Note: MVEB = DEC Proposed 11-2003
Note: Emissions with NYSDOT 12-2003 M6 Tables

1990 Base Year	VMT	CO Sum (g/day)				
Peak	3,902,845	227,077,991				
Off-Peak	8,596,519	501,759,084				
1990 Base Total	**12,499,364**	**728,837,075**	**=**	**803.39**	**tons per day**	**SIP N/A**

2005 Build	VMT	CO Sum (g/day)				
Peak	4,291,452	123,065,015				
Off-Peak	9,502,898	273,928,593				
2005 Build Total	**13,794,350**	**396,993,608**	**=**	**437.60**	**tons per day**	**MVEB = 495**
						PASS

2009 Build	VMT	CO Sum (g/day)				
Peak	4,345,210	77,393,203				
Off-Peak	9,622,815	172,318,870				
2009 Build Total	**13,968,025**	**249,712,073**	**=**	**275.26**	**tons per day**	**MVEB = 372**
						PASS

2013 Build	VMT	CO Sum (g/day)				
Peak	4,470,100	63,114,016				
Off-Peak	9,891,939	139,655,815				
2013 Build Total	**14,362,039**	**202,769,831**	**=**	**223.51**	**tons per day**	**MVEB = 357**
						PASS

2015 Build	VMT	CO Sum (g/day)				
Peak	4,532,548	59,384,882				
Off-Peak	10,026,484	132,651,740				
2015 Build Total	**14,559,032**	**192,036,622**	**=**	**211.68**	**tons per day**	**MVEB = 357**
						PASS

2020 Build	VMT	CO Sum (g/day)				
Peak	4,613,856	52,362,826				
Off-Peak	10,206,638	116,501,149				
2020 Build Total	**14,820,494**	**168,863,975**	**=**	**186.14**	**tons per day**	**MVEB = 357**
						PASS

2025 Build	VMT	CO Sum (g/day)				
Peak	4,707,573	51,410,838				
Off-Peak	10,415,115	114,439,348				
2025 Build Total	**15,122,688**	**165,850,186**	**=**	**182.82**	**tons per day**	**MVEB = 357**
						PASS

Table 2

SMTC LRTP 2025 + 2004-2006 TIP with MOBILE 6 + 2003 Registration Data
April 2004

1990 - Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	42.70	388,406	59.02	22,922,945.31
14	37.20	362,331	57.75	20,924,035.52
19	32.80	304,086	57.63	17,525,449.26
TOTAL PEAK HOUR		**1,054,823**		**61,372,430.09**
TOTAL PEAK PERIOD		**3,902,845**		**227,077,991.31**
			tons/day	**250.31**

1990 - Off Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	44.20	199,469	59.38	11,844,070.28
14	37.70	174,618	57.86	10,103,292.71
19	33.10	150,091	57.62	8,647,703.09
TOTAL PEAK HOUR		**524,178**		**30,595,066.08**
TOTAL PEAK PERIOD		**3,902,845**		**501,759,083.77**
			tons/day	**553.09**

2005 Build - Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	42.25	436,098	28.84	12,577,066.32
14	37.07	384,405	28.63	11,005,515.15
19	32.77	339,349	28.52	9,678,233.48
TOTAL PEAK HOUR		**1,159,852**		**33,260,814.95**
TOTAL PEAK PERIOD		**4,291,452**		**123,065,015.32**
			tons/day	**135.65**

2005 - Off Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	44.12	225,340	29.14	6,566,227.33
14	37.61	186,236	28.72	5,348,332.90
19	33.08	167,869	28.52	4,788,402.79
TOTAL PEAK HOUR		**579,445**		**16,702,963.02**
TOTAL PEAK PERIOD		**9,502,898**		**273,928,593.49**
			tons/day	**301.95**

2009 Build - Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	42.09	445,844	17.85	7,958,315.40
14	37.11	389,067	17.82	6,933,173.94
19	32.77	339,470	17.75	6,025,592.50
TOTAL PEAK HOUR		**1,174,381**		**20,917,081.84**
TOTAL PEAK PERIOD		**4,345,210**		**77,393,202.81**
			tons/day	**85.31**

2009 - Off Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	44.08	231,086	18.05	4,171,102.30
14	37.64	187,903	17.87	3,357,116.34
19	33.08	167,768	17.76	2,979,029.53
TOTAL PEAK HOUR		**586,757**		**10,507,248.17**
TOTAL PEAK PERIOD		**9,622,815**		**172,318,869.98**
			tons/day	**189.95**

2013 Build - Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	41.80	458,871	14.08	6,461,087.23
14	37.04	402,522	14.14	5,692,949.15
19	32.71	346,742	14.14	4,903,805.67
TOTAL PEAK HOUR		**1,208,135**		**17,057,842.05**
TOTAL PEAK PERIOD		**4,470,100**		**63,114,015.58**
			tons/day	**69.57**

2013 - Off Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	43.95	238,805	14.08	3,362,469.92
14	37.63	193,661	14.14	2,738,986.26
19	33.07	170,701	14.14	2,414,142.31
TOTAL PEAK HOUR		**603,167**		**8,515,598.49**
TOTAL PEAK PERIOD		**9,891,939**		**139,655,815.13**
			tons/day	**153.94**

2015 Build - Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	41.66	465,385	13.10	6,096,543.50
14	37.00	409,250	13.02	5,328,435.00
19	32.68	350,378	13.20	4,624,989.60
TOTAL PEAK HOUR		**1,225,013**		**16,049,968.10**
TOTAL PEAK PERIOD		**4,532,548**		**59,384,881.97**
			tons/day	**65.46**

2015 - Off Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	43.89	242,664	13.25	3,215,856.13
14	37.62	196,540	13.23	2,599,956.91
19	33.06	172,167	13.20	2,272,707.70
TOTAL PEAK HOUR		**611,371**		**8,088,520.74**
TOTAL PEAK PERIOD		**10,026,484**		**132,651,740.02**
			tons/day	**146.22**

2020 Build - Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	41.53	475,242	11.30	5,370,234.60
14	36.97	415,321	11.37	4,722,199.77
19	32.63	356,425	11.39	4,059,680.75
TOTAL PEAK HOUR		**1,246,988**		**14,152,115.12**
TOTAL PEAK PERIOD		**4,613,856**		**52,362,825.94**
			tons/day	**57.72**

2020 - Off Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	43.86	248,331	11.43	2,839,386.85
14	37.62	199,319	11.41	2,273,671.70
19	33.05	174,706	11.39	1,990,670.05
TOTAL PEAK HOUR		**622,356**		**7,103,728.60**
TOTAL PEAK PERIOD		**10,206,638**		**116,501,149.00**
			tons/day	**128.42**

2025 Build - Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	41.37	485,815	10.86	5,275,950.90
14	36.91	423,043	10.94	4,628,090.42
19	32.59	363,459	10.98	3,990,779.82
TOTAL PEAK HOUR		**1,272,317**		**13,894,821.14**
TOTAL PEAK PERIOD		**4,707,573**		**51,410,838.22**
			tons/day	**56.67**

2025 - Off Peak				
FC	Avg. Speed	VMT	CO (g/mi)	CO Sum
11	43.81	254,310	11.00	2,796,326.64
14	37.61	202,768	10.98	2,226,583.24
19	33.04	177,990	10.98	1,955,099.12
TOTAL PEAK HOUR		**635,068**		**6,978,009.00**
TOTAL PEAK PERIOD		**10,415,115**		**114,439,347.57**
			tons/day	**126.15**

Table 3

Non-Exempt Projects Included in the Analysis			
PIN	Project	General Scope	In TCM?
375285	Geddes/Genesee Sts Signal Interconnection	Upgrading of signals and inclusion in existing interconnect system.	
375272	Lodi St/North Salina St. Signal Improvements	Upgrading of signals and inclusion in existing interconnect system.	
375281	Kirkpatrick/Court/Solar	Realign Court/Kirkpatrick, expand Kirkpatrick to 4 lanes, rehabilitate Solar Street.	
303756	Rt. 31 Over Seneca River (Belgium Bridge)	Widening of Route 31 to reduce vehicle hours of delay and safety deficiencies.	
Source: Syracuse Metropolitan Transportation Council, 2003-2006 Transportation Improvement Program. "PIN" stands for project identification number; "TCM" indicates whether the project is a Transportation Control Measure.			

Table 4

Transportation Control Measures (TCMs) Update				
PIN	Project	1994-1999	1999-2004	Comments
303519	RT 57, phase IV, Gaskin to RT 31	Construction 11/96		Implemented
310412	RT 635, RT 5 to RT 298	Construction 11/94	Construction 6/98	Implemented
310413	RT 298, Syracuse to Carrier Circle	Construction 11/98	Construction 4/02	Implemented
375206	Harrison Street Traffic Signal	Construction 9/95		Implemented
375207	Buckley Road Improvements at Bear Road	Construction 11/95		Implemented
380272	Oncenter Signs	Construction 1/94		Implemented
380275	Downtown Syracuse Signal Interconnect System	Engineering 11/96	Construction 7/96	Implemented
380307	Connections Ride Sharing Program			Implemented
380312	AVL System	Construction 10/96		Implemented
382074	Fare Collection System	Construction 10/96		Implemented
382089	Shelter Schedule Panels	Construction 10/94		Implemented
Source: Syracuse Metropolitan Transportation Council, 1999-2004 Transportation Improvement Program.				

Table 5

Syracuse Metropolitan Transporation Council

Long-Range Transportation Plan 2004 Update

Tmodel 2 Vehicle Miles Traveled (VMT) and Speed Outputs for Base and Future Years

Road Type		2005		2009		2015		2020		2025	
		Peak	Off Peak	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak
Interstates, Ramps, Major Arterials	VMT's	436,098	225,340	445,844	231,086	465,385	242,664	475,242	248,331	485,815	254,310
	Avg. Speed	42.25	44.12	42.09	44.08	41.66	43.89	41.53	43.86	41.37	43.81
Arterials	VMT's	384,405	186,236	389,067	187,903	409,250	196,540	415,321	199,319	423,043	202,768
	Avg. Speed	37.07	37.61	37.11	37.64	37.00	37.62	36.97	37.62	36.91	37.61
Local Streets	VMT's	339,349	167,869	339,470	167,768	350,378	172,167	356,425	174,706	363,459	177,990
	Avg. Speed	32.77	33.08	32.77	33.08	32.68	33.06	32.63	33.05	32.59	33.04

Appendix E
Greenhouse Gas and Energy Plan Process

SMTC ENERGY and GREENHOUSE GAS ANALYSIS PROCESS

Detailed below are the steps that were taken in an effort to complete the energy and greenhouse gas analysis required for the Syracuse Metropolitan Transportation Council's (SMTC) Long-Range Transportation Plan (LRTP) 2004 Update. The detailed results of the analysis can be found in the following steps.

The steps that were followed are consistent with the guidance documents listed below, as amended through consultation with the New York State Department of Transportation's Environmental Analysis Bureau (NYSDOT-EAB).

- *Air Quality Analysis of Transportation Improvement Programs, Regional Transportation Plans, and Capital Project programs – Technical Guidance to Assist Metropolitan Planning Organizations and Department of Transportation Regional Offices Meet the Objectives of the 2002 New York State Energy Plan* (January 21, 2003);

- *Development of Revised NYSDOT Energy Analysis Guidelines (Draft), Subtask 12a: Energy Analysis Guidelines for TIPs and Plans* (June 21, 2002); and

- *Development of Revised NYSDOT Energy Analysis Guidelines (Draft), Subtask 12b: Greenhouse Gases (CO_2) Emissions Estimates for TIPs and Plans* (June 21, 2002)

Step #1 – Identification of all Non-Exempt and Regionally Significant Projects

The first step in this process was determining which projects would be subject to analysis. Since the SMTC LRTP does not contain specific projects, the 2003-2006 Transportation Improvement Program (TIP) project listing was utilized as the project list for this update. All of the projects were reviewed for their significance in affecting energy consumption as per the guidance provided in 6 NYCRR Part 240.6 (h)(2). In general, projects that maintain current levels of service or capacity, such as safety improvements, resurfacing, bridge repair, or bus replacements were considered exempt from the analysis. Similarly, projects that result in operations improvements, but without an increase in capacity (such as intersection widening) were also considered exempt and excluded from the analysis.

A Regionally Significant project is, according to 6 NYCRR Part 240.2 (38)**,** "a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from an area outside the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including, at a minimum, all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel."

Non-exempt projects include highway and road projects that increase capacity by at least one travel lane, and transit projects that change capacity on a fixed route system. The non-exempt determination was made if the project type is not found in the list of exempt projects derived

from "Table 2- Exempt Projects" in 40 CFR Part 93.126, 93.127 and NYCRR Part 240.27.

As mentioned above, the project list for the SMTC's conformity analysis consisted of the projects included in the 2003-2006 TIP. Based on this project list, the two projects noted below were categorized as non-exempt projects and were analyzed utilizing the indirect energy lane-mile approach, consistent with *Subtask 12a:Energy Analysis Guidelines for Tips and Plans*.

- Kirkpatrick/Court/Solar Streets (City of Syracuse) – Reconstruction
- Route 31 Over Seneca River – Belgium Bridge (NYSDOT) – Bridge Replacement, Road Widening.

In addition, the two additional projects listed below were also categorized as non-exempt, yet these projects were unable to be analyzed utilizing the above-mentioned method because the project entails signal improvements only, with no additional lane miles of construction.

- Geddes/Genesee Streets Signal Interconnection – Update signals and inclusion in existing traffic interconnect system.
- Lodi/North Salina Streets Signal Improvements – Update signals and inclusion in existing traffic interconnect system.

Although exempt projects are not required to be included in the analysis, the EAB specifically requested the inclusion of one project in the indirect energy analysis. This project is noted below and is included in the analysis.

- Routes 5 & 92 – Safety improvement and ramp widening.

Step #2 – Travel Demand Modeling

To determine the impact of future projects in the Syracuse Metropolitan Planning Area (MPA), the SMTC uses the traditional four-step gravity Travel Demand Model process incorporated within TModel 2 travel simulation software. Like most other programs of this type, the model consists of a road network, land-use and employment data, trip generation, trip distribution, and trip assignment. The results generated by the program are then compared to known travel counts to calibrate the model. The SMTC travel demand model is calibrated based on 2003 base year traffic conditions and 2000 Census information. Background documentation and technical information related to the SMTC Model are available at the SMTC.

The analysis includes a year 2025 No-Build scenario and a year 2025 Build scenario (as 2025 is the horizon year of the SMTC LRTP). The No-Build scenario includes the 2003 roadway network with 2025 land-use characteristics, while the Build scenario consists of the 2025 network and 2025 land-use characteristics. Additionally, the Build scenario incorporates two significant private development projects (Syracuse lakefront area redevelopment/Carousel Center expansion and the proposed industrial development in the Town of Clay) that are excluded from the No-Build scenario. Development of these projects may or may not occur regardless of the adoption of the LRTP. Inclusion of these projects in the Build scenario has led to an increase in VMT for that scenario that is not a result of the programs and policies set forth by the LRTP.

Projects that were unable to be modeled due to TModel 2's limitations were analyzed separately and then factored into the results from TModel 2 to represent a more accurate Build scenario. A detailed explanation of this process is provided in Step 3.

Step #3 – Off-Line Model Analysis

A quantitative analysis was also undertaken to account for the visions of the 2025 LRTP that could not be modeled in TModel 2. Inclusion of transit and bicycle/pedestrian transportation modes is beyond the capabilities of the software. Using information developed by the SMTC and its member agencies, the SMTC calculated the reduction of vehicle miles traveled (VMT) as a result of transit and bicycle and pedestrian system improvements envisioned in the LRTP, as well as implementation of the New York State Thruway Authority's (NYSTA) Truck Stop Electrification program at Thruway Service Plazas serving the greater Syracuse area. The LRTP assumes that in the horizon year, NYSTA will equip each of the four plazas servicing the region (Port Byron, Warners, DeWitt, and Chittenango) with 44 TSE stations each. According to NYSTA estimates, each truck using the facility could save the equivalent of 56 vehicle miles in diesel fuel per usage. The total capacity of trucks using these facilities per day is 528. Additionally, the SMTC accounted for reductions of carbon monoxide and oxides of nitrogen as a result of conversion of the Centro fleet to diesel-electric hybrid busses. These calculations incorporated emission factors provided by BAE Systems, the manufacturer of the hybrid propulsion systems.

These VMT reductions were then factored into the TModel 2 outputs to better demonstrate the build scenario provided for in the LRTP. This process differed from that used in the Air Quality Conformity determination where only the results of VMT from TModel 2 were utilized.

As the SMTC's LRTP is not a project-specific document, the VMT calculations were based on staff and member agency assumptions related to the long-term vision of the LRTP. The results can be found in Table 1.

Step #4 - Regional Emissions Modeling

As stated earlier, TModel 2 estimates the number of vehicle miles traveled (VMT) for various scenarios provided for in the planning process. To calculate the regional emissions that will result from the transportation system envisioned in the LRTP Build scenario, this VMT information is utilized in the latest emissions model, also known as the MOBILE6 regional emissions model. MOBILE6 was developed by the US Environmental Protection Agency (EPA).

Emission estimates were determined using the VMT data and MOBILE6. This process involves the utilization of traffic volume and speed data provided by the SMTC, the most recent vehicle fleet characteristics, and other traffic and meteorological parameters established by NYSDOT in cooperation with the New York State Department of Environmental Conservation (NYSDEC). MOBILE6 incorporates these parameters to develop estimated emission outputs.

The emissions modeling for the SMTC has traditionally been performed by NYSDOT–EAB during the conformity analysis process. For this analysis, however, the SMTC averaged emissions factors by road type and speed, and developed emission factors for Volatile Organic Compounds (VOC) and Nitrogen Oxide (NOx) for both the Build and No-Build scenarios. Carbon Monoxide (CO) was also calculated using the same methodology. The SMTC then calculated the number of grams of CO produced for each scenario. These results can be found in Table 1.

Step #5 – Direct Energy Analysis

Direct energy represents the energy consumed by vehicles using a transportation facility (for this analysis, "facility" is defined as the roadway segments in SMTC's regional travel demand model). Indirect energy represents the energy required to construct and maintain the transportation system. For this analysis, per EAB guidelines, only the energy used in construction activities for Regionally Significant or Non-Exempt projects, including new construction, reconstruction, rehabilitation, and widening were analyzed.

Direct vehicle energy was calculated using the VMT Fuel Consumption Method as described in *Subtask 12a: Energy Analysis Guidelines for TIPs and Plans*. The calculations were based on VMT (not seasonally-adjusted) reported by the 2025 No-Build and Build scenarios and a calculated vehicle type. Vehicle classification data was based on aggregating data obtained from NYSDOT's *Mobile 6 Region 3 1999 Summer Time Emissions Factors*. NYSDOT Region 3 includes the majority of the Syracuse MPA. Therefore, it was determined those factors would accurately reflect vehicle distribution for the model. The classification data in the MOBILE6 table is based on 28 vehicle classifications, determined by EPA, which is not directly comparable to the three vehicle types used in the direct energy analysis guidance. For this analysis, it was assumed that, taken together, vehicle classifications 1-5, 14-16, and 28 are equivalent to "light duty vehicles", classifications 6-9 and 17-20 are equivalent to "medium trucks", and classifications 10-13 and 21-27 represent "heavy trucks". Since the table lists percentages of type of vehicle by functional class, an average of all functional classes was calculated and then summarized to represent the percentage by the three vehicle types required for energy analysis. Each of the three vehicle types have a fuel economy rate per year based on the fuel type used.

Each scenario total VMT was multiplied by the percentage of each vehicle type to determine vehicle type VMT. That vehicle type VMT was then divided by the fuel economy rate to calculate the number of gallons of fuel used. These fuel consumption values were then converted to British Thermal Units (BTUs) by multiplying each gallon by 125,000. Finally, these total direct energy consumption (in BTUs) were summarized for all vehicles in either scenario. These results can be found in Table 2.

Step #6 – Indirect Energy Analysis

Indirect energy values are calculated for any non-exempt project where this calculation is relevant. Certain non-exempt projects, such as ridesharing, include no energy-consuming construction or maintenance activities, and therefore, an indirect energy calculation is not applicable. The intent of the indirect energy calculations is to measure the energy used in the

construction of the projects included in the 2025 Build scenario. The indirect energy value of the 2025 No-Build scenario is zero; therefore, it is not possible to compute the percentage difference between the two scenarios.

Indirect vehicle energy was calculated using the Lane Mile Approach as described in *Subtask 12a: Energy Analysis Guidelines for TIPs and Plans*. In Table 4 of *Subtask 12a,* there is a table that associates a rate of Construction Energy Consumed per lane mile based on several types of improvements. The SMTC staff identified the type of improvement for each of the non-exempt projects from the 2025 Build scenario. The number of lane miles for each project was then multiplied by said rate, and a rate of Construction Energy Consumed in BTU's was calculated. Results of this analysis are shown in Table 3.

Step #7 – CO_2 Emissions Estimates from Direct Energy Consumption

Carbon dioxide (CO_2) is a product of fossil fuel combustion, as well as other processes. It is considered a greenhouse gas, as it traps heat radiated by the Earth into the atmosphere and thereby contributes to the potential for global warming. Carbon dioxide emissions were calculated as described in *Subtask 12b: Greenhouse Gases (CO_2) Emissions Estimates Guidelines for TIPs and Plans*. The carbon dioxide emissions from direct energy consumption were based on the results calculated previously in Step 5.

Subtask 12b, Table 1 lists Carbon Emission coefficients based on vehicle type. The Direct Energy consumed (by vehicle type) was multiplied by the Carbon Emission Coefficients for both gasoline and diesel engines and then by a factor representing the amount of carbon that is oxidized. This process created a value representing total tons of carbon dioxide emitted. The results can be found in Table 4.

Step #8 – CO_2 Emissions Estimates from Indirect Energy Consumption

The indirect energy consumed as a result of the Build scenario was determined in Step 6 above. *Subtask 12b, Table 1* lists Carbon Emission coefficients based on vehicle type. Similar to Step 7 above, the indirect energy consumed was multiplied by the Carbon Emission Coefficients for diesel vehicles and then by a factor representing the amount of carbon that is oxidized. The results were the total tons of Carbon emitted. The results can be found in Table 5.

Step #9 - Documentation

A summary of the results of the quantitative analyses is presented in Table 6. These results indicate that the Build scenario of the 2025 LRTP will result in an increase in VMT, VOC, NOX, CO, and CO_2, and the amount of direct energy used by vehicles in the Syracuse MPA over the No-Build scenario. However, this is due to the inclusion of the two previously mentioned private development projects in the Build scenario that were not modeled as part of the No-Build scenario. Adoption of the LRTP's programs and policies without consideration for these two private development projects would result in a reduction of VMT in the Build scenario.

Table 1
Emission Analysis

Scenario		VMT	VOC (grams)	NOX (grams)	*CO* (grams)
2025 no-build	Peak	4,519,672	949,131	949,131	48,104,377
	Off-Peak	10,008,969	2,402,153	2,201,973	109,031,038
	Total	**14,528,641**	**3,351,284**	**3,151,104**	**157,135,415**

Scenario			VMT	VOC (grams)	NOX (grams)	*CO* (grams)
2025 build	Peak		4,707,573	988,590	988,590	50,104,269
	Off-Peak		10,415,115	2,499,628	2,291,325	113,455,319
	Total		**15,122,688**	**3,488,218**	**3,279,916**	**163,559,588**
2025 build with off-model transit, bike/ped, and TSE assumptions	bike/ped reduction*		-30,245	-7,127	-1,563	-17,035
	transit reduction	increased ridership**	-410,650	-96,770	-21,217	-231,295
		conversion to hybrid vehicles***	N/A	N/A	-16,509	-29,488
	TSE reduction****		-29,568	-6,483	-1,421	-15,495
	Total		**14,652,225**	**3,377,838**	**3,239,206**	**163,266,274**

Avg. Emission Factors*****			
	35 mph	40 mph	Subtractive******
VOC	0.21	0.24	0.24
NOx	0.21	0.22	0.22
CO	10.64	10.89	10.90

*bike/ped reduction assumes decrease of 2% VMT in 2025 build scenario
**transit reduction assumes 32,852 daily riders with 12.5 mile average trip length in 2025 build scenario
***NOX and CO reductions from Centro conversion to diesel-electric hybrid vehicles based on emission factor of 1.19 for NOX and 0.008 for CO as per EAB guidance
****Truck Stop Electrification (TSE) at local Thruway Service Plazas accounts for 56 miles saved per truck using the facilities, according to NYSTA estimates
*****Emission factors were determined by an average of factors by road type for each speed
******Subtractive emission factors were developed as a function of peak versus off peak emission factors

Table 2
Direct Vehicle Energy

Scenario	Total VMT	Light Duty Vehicles					
		% of Total	VMT	Fuel Economy*	Fuel Used (gallons)	Direct Energy Consumption (btu)	% Change
2025 no-build	14,528,641	91.94%	13,356,906	21.13	632,130	79,016,246,919	0.85
2025 build	14,652,225	91.94%	13,470,523	21.13	637,507	79,688,375,850	

Scenario	Total VMT	Medium Trucks					
		% of Total	VMT	Fuel Economy*	Fuel Used (gallons)	Direct Energy Consumption (btu)	% Change
2025 no-build	14,528,641	2.51%	364,185	8.58	42,446	5,305,719,822	0.85
2025 build	14,652,225	2.51%	367,282	8.58	42,807	5,350,851,399	

Scenario	Total VMT	Heavy Trucks					
		% of Total	VMT	Fuel Economy*	Fuel Used (gallons)	Direct Energy Consumption (btu)	% Change
2025 no-build	14,528,641	5.56%	807,550	5.96	135,495	16,936,877,354	0.85
2025 build	14,652,225	5.56%	814,420	5.96	136,648	17,080,946,020	

Scenario	Total VMT	All Vehicles					
		% of Total	VMT	Fuel Economy*	Fuel Used (gallons)	Direct Energy Consumption (btu)	% Change
2025 no-build	14,528,641	100.00%	14,528,641	n/a	810,071	**101,258,844,095**	**0.85**
2025 build	14,652,225	100.00%	14,652,225	n/a	816,961	**102,120,173,269**	

Notes:

*From Table 2 - Fuel Correction Factors NYSDOT Subtask 12a: Energy Analysis Guidelines for TIPs and Plans

%of total: Vehicle split was estimated based on aggregating the 27 vehicle types from the 1999 Summer Time Vehicle Distributions Region 3, April, 2004 NYSDOT and then averaging their percentages.

Vehicle Type VMT: Calculated by multiplying the percentage of each type vehicle by the total VMT.

Fuel Used: Calculated by dividing Vehicle VMT by the fuel economy.

Direct Energy Consumption: Calculated by multiplying the rate of 125,000 BTU per gallon by the fuel used .

2025 Build scenario includes off model transit and bike/ped assumptions.

Table 3
Indirect Energy

Roadway Construction Energy Consumed

Project Description	Type of Improvement	Distance (miles)	Lanes	Lane Miles	Urban / Rural	Constr. Energy per Lane Mile (rate)	Constr. Energy Consumed (BTUs)
Kirkpatrick/Court/Solar Streets (City of Syracuse)	Reconstruction	1.0	2	2.0	Urban	6	12,000,000,000
Route 31 Over Seneca River - Belgium Bridge (NYSDOT)	Bridge Replacement, Widen from 2 lanes to 5	1.5	5	7.5	Urban	15.24	114,300,000,000
Route 5 & 92 (NYSDOT)	Safety Improvement, Widen Exit Ramp	0.2	1	0.2	Urban	15.24	3,048,000,000
							129,348,000,000

Projects with no construction

Project Description	Type of Improvement
Lakefront Area Transportation Planning	Planning for DestiNY Project
Creekwalk Study, Kirk Park to Armory	Planning Study
Regional Ridesharing Program (Connections)	TDM Activities
City of Syracuse Bridge Painting	Maintenance
NYSDOT Bridge Painting 02/03	Maintenance
NYSDOT Bridge Painting 03/04	Maintenance
NYSDOT Bridge Painting 04/05	Maintenance

	Constr. Energy Consumed (BTUs)
Total	**129,348,000,000**

Notes:

Indirect energy analysis based on non-exempt construction projects in the SMTC 2003-2006 TIP

Indirect vehicle energy was calculated using the Lane Mile Approach as described in Subtask 12a: Energy Analysis Guidelines for TIPs and Plans. Table 4 of Subtask 12a provides a table that associates a rate of Construction Energy Consumed per lane mile based on several types of improvements. The number of lane miles for each project then multiplied that rate, and a rate of Construction Energy Consumed in BTU's was calculated.

Table 4
CO_2 Emissions From Direct Energy Consumption

Scenario	Direct Energy (BTUs)			Carbon Emission Coefficients *			Metric Tons Carbon Emitted			Total Metric Tons Carbon Emitted			Total Tons Carbon Emitted			
	Light Duty Vehicle	Medium Truck	Heavy Truck	Light Duty Vehicle	Medium Truck	Heavy Truck	Light Duty Vehicle	Medium Truck	Heavy Truck	Light Duty Vehicle	Medium Truck	Heavy Truck	Light Duty Vehicle	Medium Truck	Heavy Truck	All Vehicles
2025 no-build	79,016,246,919	5,305,719,822	16,936,877,354	19.34	19.95	19.95	1,528	106	338	1,513	105	335	1,667	115	369	**2,151**
2025 build	79,688,375,850	5,350,851,399	17,080,946,020	19.34	19.95	19.95	1,541	107	341	1,526	106	337	1,681	116	372	**2,170**
													Difference: 2025 no-build minus build			**18**

* For this analysis, all Light Duty Vehicles are assumed to use gasoline and all trucks are assumed to use diesel

2025 Build scenario includes off model transit and bike/ped assumptions.

Table 5
CO_2 Emissions Estimates from Indirect Energy Consumption

Scenario	Indirect Energy (BTUs)	Carbon Emission Coefficient	Metric Tons Carbon Emitted	Total Metric Tons Carbon Emitted	Total Tons Carbon Emitted
2025 build	129,348,000,000.00	19.95	2,580.49	2,554.69	**2,815.27**

* For this analysis, all Light Duty Vehicles are assumed to use gasoline and all trucks are assumed to use diesel

Table 6
Summary

Scenario	VMT	Energy		Greenhouse Gas (CO_2) Emissions	
		Direct (BTUs)	Indirect* (BTUs)	Direct (tons)	Indirect (tons)
2025 no-build	14,528,641	101,258,844,095	0	2,151	0
2025 build	14,652,225	102,120,173,269	129,348,000,000	2,170	2,815
Change (build-no build)	123,584	861,329,174	--	18	--
% Change (build-no build)	0.85%	0.85%	--	0.85%	--

** The intent of the indirect energy and greenhouse gas calculations was to measure the impact of the construction of the projects in the SMTC Long-Range Plan. The indirect energy used in the 2025 No-Build scenario is zero (as is the greenhouse gas emissions arising from the indirect energy used); therefore it is not possible to compute the percentage difference between the two scenarios.*

2025 Build scenario includes off model transit and bike/ped assumptions.

Appendix F
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Appendix G
Senior Facilities

Senior Facilities in Onondaga County by Facility Type
Appendix G

Appendix G- Senior Facilities

Name	Address	Town/Village	Telephone Number	Facility Type
H&R Enterprises	113 Josephine St	N Syracuse	452-1198	Adult Family-Type Homes
Latz Home	251 W Calthrop Ave	Syracuse	476-5076	Adult Family-Type Homes
Muhlegg Rest Home	929 W Onondaga	Syracuse	425-1306	Adult Family-Type Homes
Sedgwick Heights (Adult Home & Asst Living)	1100 James St	Syracuse	424-0316	Adult Homes
Greenpoint Special Needs	150 Old Liverpool Rd	Liverpool	451-4567	Adult Homes
Crossroads (Adult Supportive Residence)	120 Gifford St	Syracuse	472-6251	Adult Homes
Evergreen Manor Home for Adults	4181 Barker Hill Rd	Jamesville	492-0141	Adult Homes
Highland Home for Adults	212 Highland Ave	Syracuse	474-2563	Adult Homes
Kalet's Home for Adults	504 Delaware St	Syracuse	479-7514	Adult Homes
Manlius Adult Home	215 Pleasant Dr	Manlius	682-6725	Adult Homes
Eastside Manor Assisted Living Community	7164 E Genesee	Fayetteville	637-5127	Adult Homes
Westside Manor Adult Residence	4055 Long Branch Rd	Liverpool	451-3221	Adult Homes
Bellevue Manor Assisted Living Community	4330 Onondaga Blvd	Syracuse	468-5108	Adult Homes
Sunnyside Home for Adults	7000 Collamer Rd	E Syracuse	656-8606	Adult Homes
Alterra Clare Bridge	5125 Highbridge	Fayetteville	637-2000	Assisted Living Programs
Alterra Wynwood of Manlius	100 Flume Rd	Manlius	682-9261	Assisted Living Programs
Sedgwick Heights (Adult Home & Asst Living)	1100 James St	Syracuse	424-0316	Assisted Living Programs
Buckley Landing (Loretto Enriched & Asst Liv)	7430 Buckley Rd	N Syracuse	452-1207	Assisted Living Programs
Heritage Apts (Loretto Enriched & Asst Living)	750 E Brighton Ave	Syracuse	492-1329	Assisted Living Programs
Park Terrace at Radisson	2981 Town Center Rd	Baldwinsville	638-9207	Assisted Living Programs
ERIE at Toomey Abbott Towers	1207 Almond St	Syracuse	475-6181	Enriched Housing
The Nottingham	1301 Nottingham Rd	Jamesville	445-9242	Enriched Housing
Greenpoint Senior Living Community	150 Old Liverpool Rd	Liverpool	453-7911	Enriched Housing
Buckley Landing (Loretto Enriched & Asst Liv)	7430 Buckley Rd	N Syracuse	452-1207	Enriched Housing
Heritage Apts (Loretto Enriched & Asst Living)	750 E Brighton Ave	Syracuse	492-1329	Enriched Housing
Mahan-Gorham Manor	220 E Main St	Elbridge	689-0072	Enriched Housing
Bernardine Senior Apartments	417 Churchill Ave	Syracuse	469-7786	Enriched Housing
James Geddes	418 Fabius St	Syracuse	475-6181	Enriched Housing
Alterra, Villa Summerfield	100 Summerfield Village Ln	Syracuse	492-4041	Independent Living
Alterra Wynwood of Manlius	100 Flume Rd	Manlius	682-9261	Independent Living
Toomey Abbott Towers	1207 Almond St	Syracuse	475-6181	Independent Living
The Nottingham	1301 Nottingham Rd	Jamesville	445-9242	Independent Living
Greenpoint Senior Living Community	150 Old Liverpool Rd	Liverpool	453-7911	Independent Living
Old Erie Place Senior Building	20 Beaver St	Jordan	689-3172	Independent Living
Old Erie Place Family Units	20 Beaver St	Jordan	695-2347	Independent Living
Woodsboro Apts	3490 Meadowbriar Ln	Baldwinsville	635-6125	Independent Living
Meadows at Radisson	3490 Meadowbriar Ln	Baldwinsville	635-6125	Independent Living
Jewish Home of Central NY	4101 E Genesee St	Dewitt	446-9111	Independent Living
Clinton Plaza	550 S Clinton St	Syracuse	475-2141	Independent Living
Harrison House	80 Presidential Plaza	Syracuse	422-3226	Independent Living
Townsend Towers	500 Harrison St	Syracuse	478-2045	Independent Living
Cherry Hill	1700 E Genesee St	Syracuse	422-2029	Independent Living
Mount St James	338 Jamesville Ave	Syracuse	478-0731	Independent Living
Sunset Terrace	1813 E Fayette St	Syracuse	422-5694	Independent Living

Senior Facilities in Onondaga County by Facility Type
Appendix G

Rolling Green Estates	2005 E Fayette St	Syracuse	475-5027	Independent Living
Kennedy Square	929 E Fayette St	Syracuse	474-1051	Independent Living
Name	Address	Town/Village	Telephone Number	Facility Type
Onondaga Blvd Senior Apts	4624 Onondaga Blvd	Syracuse	422-0347	Independent Living
Greeley Apts	700 W Onondaga	Syracuse	424-1821	Independent Living
Providence House	1700 W Onondaga	Syracuse	471-8427	Independent Living
Solvay Senior Apts	200 Russet Ln	Solvay	475-6181	Independent Living
AHEPA-37 Apts	100 Ahepa Circle	Syracuse	475-3818	Independent Living
Bishop Ludden	817 Fay Rd	Syracuse	468-6043	Independent Living
Academy Court	1119 N Townsend St	Syracuse	479-8612	Independent Living
Bishop Harrison Apts	300 Pond St	Syracuse	476-8630	Independent Living
St Joseph Manor	900 Tyson Pl	Syracuse	437-7441	Independent Living
Nichols Brick School Terrace	311 North Ave	Syracuse	463-5881	Independent Living
Courtyard at James	708 James St	Syracuse	479-8612	Independent Living
Moses Dewitt House	212 N Townsend St	Syracuse		Independent Living
Ludovico Apts	340 Winton St	Syracuse	422-0475	Independent Living
Salina School	512 LeMoyne Ave	Syracuse	472-8234	Independent Living
Joslyn Court	4338-4344 S Salina St	Syracuse	424-1821	Independent Living
Willow Wood Gardens	Route 11	Lafayette	699-5204	Independent Living
Festival Garden Apts	6162 Rt 20	Lafayette	696-6883	Independent Living
Cobblestone Square	6112 South Bay Rd	Cicero	699-5204	Independent Living
Sacred Hearts Apts	8365 Factory St	Cicero	699-1509	Independent Living
Bay Shore North Apts	5580 Bartell Rd	Brewerton	428-9099	Independent Living
Long Manor	5500 Miller Rd	Brewerton	668-9871	Independent Living
Rogers Senior Apts	5490 Miller Rd	Brewerton	676-4174	Independent Living
Bessie Riordan School Apts	211 East Molloy Rd	Mattydale	424-1822	Independent Living
Malta House	212 N Main St	N Syracuse	454-0697	Independent Living
Maloney Manor	104 Parkway Dr	N Syracuse	451-9039	Independent Living
Centerville Court	Sandra Lane	N Syracuse	458-7867	Independent Living
Greenway	8664 Oberon Dr	Baldwinsville	638-4575	Independent Living
Mercer Mill	400 Land Rush Way	Baldwinsville	635-2338	Independent Living
St Mary's Apts	100 LaMadre Ln	Baldwinsville	638-2003	Independent Living
Union School Conversion		Camillus	635-6595	Independent Living
Applewood Manor	5554 W Genesee	Camillus	468-4556	Independent Living
Nine Mile Landing	3 Austindale	Marcellus	673-9326	Independent Living
Village Landings Apts	55 Jordan Ave	Skaneateles	685-5632	Independent Living
Gateway	79 Fennel St	Skaneateles	685-3088	Independent Living
Wedgewood Apts	RD #1	Kirkville	633-2735	Independent Living
Barrett Manor	4615 Southwood Heights Dr	Jamesville	469-1533	Independent Living
Bennett Manor	100 Bennett Manor Dr	E Syracuse	437-4864	Independent Living
St David's Court	99 Deerfield Rd	E Syracuse	434-9406	Independent Living
Barrett Dewitt Manor	1400 Kinne St	E Syracuse	424-1821	Independent Living
Springfield Gardens	76 Canton Dr	Dewitt	446-6140	Independent Living
Valley Vista Apts	122 Seneca Trnpk	Syracuse	469-4100	Independent Living
Villa Scalabrini	825 E Willow St	Syracuse	472-3142	Independent Living
YMCA Apartments	340 Montgomery St	Syracuse	474-6851	Independent Living

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Pompei North Apartments	143 Mary St	Syracuse	472-2614	Independent Living
James P McCarthy Manor	501 S Crouse St	Syracuse	475-6390	Independent Living
Andrews Brick School Terrace	818 Salt Springs Rd	Syracuse	463-5881	Independent Living
Name	Address	Town/Village	Telephone Number	Facility Type
Brighton Towers Inc.	821 E Brighton Ave	Syracuse	469-6919	Independent Living
Pitcher Hill Apartments	114 Elbow Rd	N Syracuse	469-0697	Independent Living
Fairmount Gardens Senior Apts	4913 W Genesee St	Camillus	488-1932	Independent Living
Edgerton Estates	501 Edgerton St	Minoa	656-7121	Independent Living
Redfield Village Apartments	380 Salt Springs St	Fayetteville	637-8280	Independent Living
Limestone Garden Apts Senior	7626 Highbridge Rd	Manlius	682-7001	Independent Living
Conifer Village Apartments	700 Conifer Dr	Baldwinsville	635-7515	Independent Living
Lord's Hill Apartments	2467 Rt 80	Lafayette	696-8115	Independent Living
One Franklin Square	460 N Franklin St	Syracuse	474-5774	Independent Living
Tully Senior Housing (the Meadows Apts)	1 Village View Dr	Tully	696-6883	Independent Living
Baldwinsville County Club Apts	101 Village Blvd, S	Baldwinsville	638-2313	Independent Living
Eastwood Heights	1025 Sunnycrest Rd	Syracuse	475-6181	Independent Living
Vinette Towers	947 Pond St	Syracuse	475-6181	Independent Living
Ross Towers	810-812 Lodi St	Syracuse	475-6181	Independent Living
Fahey Court	100 Pastime Dr	Syracuse	475-6181	Independent Living
Almus Olver Towers	300 Burt St	Syracuse	475-6181	Independent Living
James Geddes	312 Gifford St	Syracuse	475-6181	Independent Living
James Geddes	338 Gifford St	Syracuse	475-6181	Independent Living
James Geddes	427 Tully S	Syracuse	475-6181	Independent Living
The Hearth at Greenpoint	830 James St	Syracuse	422-2173	Independent Living
Loretto Daybreak Adult Medical Day Program	100 Malta Ln	N Syracuse	452-5800	Independent Living Services
Vivian Teal Howard Day Away RHCF	116 E Castle St	Syracuse	475-1641	Medical Model Adult Day Care
Connections: Jewish Home of Central NY	4101 E Genesee St	Dewitt	446-9111	Medical Model Adult Day Care
Mcauliff Health & Dental Center	700 E Brighton Ave	Syracuse	492-6430	Medical Model Adult Day Care
St Camillus Health & Rehabilitation Center	813 Fay Rd	Syracuse	488-2951	Medical Model Adult Day Care
Huntington Family Adult Rehab Services	405 Gifford St	Syracuse	476-3157	Medical Model Adult Day Care
St Josephs Continuing Day Treatment	742 James St	Syracuse	448-2700	Medical Model Adult Day Care
Loretto Daybreak Adult Medical Day Program	300 Catherine St	Syracuse	474-8226	Medical Model Adult Day Care
Loretto Daybreak Adult Medical Day Program	161 Intrepid Ln	Syracuse	498-4405	Medical Model Adult Day Care
Vivian Teal Howard Day Away RHCF	116 E Castle St	Syracuse	475-1641	Nursing Home
The Nottingham	1305 Nottingham Rd	Jamesville	446-0123	Nursing Home
Jewish Home of Central NY	4101 E Genesee St	Dewitt	446-9111	Nursing Home
Loretto Geriatric Center	700 E Brighton Ave	Syracuse	469-5561	Nursing Home
Syracuse Home Association	7740 Meigs Rd	Baldwinsville	638-2521	Nursing Home
St Camillus Health & Rehabilitation Center	813 Fay Rd	Syracuse	488-2951	Nursing Home
Birchwood Health Care Center Inc	4800 Bear Rd	Liverpool	457-9946	Nursing Home
Hallmark Nursing Centre Inc	217 East Ave	Minoa	656-7277	Nursing Home
Hill Park Health Center	4001 E Genesee St	Syracuse	446-8310	Nursing Home
Iroquois Nursing Home	4600 S Wood Heights Dr	Jamesville	469-1300	Nursing Home
James Square Health & Rehabilitation Centre	918 James St	Syracuse	474-1561	Nursing Home
Rosewood Heights Health Center	614 S Crouse Ave	Syracuse	474-4431	Nursing Home
Van Duyn Home & Hospital	5075 W Seneca Trnpk	Syracuse	435-5511	Nursing Home

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Summerfield Village	100 Summerfield Village Ln	Syracuse	492-4041	Retirement Community
Alterra Clare Bridge	5125 Highbridge	Fayetteville	637-2000	Retirement Community
Alterra Wynwood of Manlius	100 Flume Rd	Manlius	682-9261	Retirement Community
Lorretto Communities Sedgwick Heights	1100 James St	Syracuse	234-1100	Retirement Community
Name	Address	Town/Village	Telephone Number	Facility Type
The Nottingham Retirement Community Inc.	1301 Nottingham Rd	Jamesville	445-1531	Retirement Community
Greenpoint Senior Living Community	150 Old Liverpool Rd	Liverpool	453-7911	Retirement Community
Buckley Landing	7430 Buckley Rd	N Syracuse	452-1207	Retirement Community
McHarrie Towne	7740 Meigs Rd	Baldwinsville	638-1172	Retirement Community
The Oaks at Dewitt	18 Arbor Ln	Dewitt	449-3309	Retirement Community
Parkrose Estates Retirement Community	7251 Janus Park Dr	Liverpool	452-9500	Retirement Community
Jewish Community Center	5655 Thompson Rd	Syracuse	445-2360	Senior Center
Northeast Senior Center	716 Hawley Ave	Syracuse	472-6343	Senior Center
Salvation Army Adult Community Center	677 South Salina St	Syracuse	479-1309	Senior Center
Canton Woods Senior Center	76 Canton St	Baldwinsville	638-4536	Senior Center
Camillus Senior Center	25 1/2 First St	Camillus	672-3163	Senior Center
Carriage House Foundation	343 Green St	Syracuse	479-6681	Senior Center
Cicero Senior Center	5924 Lathrop Dr	Cicero	452-3298	Senior Center
Clay Senior Center	4492 Route 31	Clay	652-3800	Senior Center
Clover Corner Senior Center	401 South Ave	Syracuse	474-6823	Senior Center
Eastwood Senior Center	401 S Midler Ave	Syracuse	437-4011	Senior Center
Fayetteville Senior Center	584 E Genesee St	Fayetteville	637-9025	Senior Center
Ida Benderson Senior Center	205 S Salina St	Syracuse	473-4434	Senior Center
Manlius Senior Center	1 Elmbrook Dr	Manlius	682-7889	Senior Center
Onondaga Senior Center	4834 Velasko Rd	Syracuse	469-3464	Senior Center
Pioneer Homes Coffee House	1001 S McBride St	Syracuse	473-8431	Senior Center
Robert Cecile Senior Center	174 W Seneca Turnpike	Syracuse	473-2678	Senior Center
Salina Civic Center	2826 LeMoyne Ave	Mattydale	455-7096	Senior Center
Westside Senior Center	135 State Fair Blvd	Syracuse	466-5711	Senior Center
Kirkpatrick Program Alzheimer's Assoc of CNY	441 W Kirkpatrick	Syracuse	472-4204	Social Model Adult Day Care
Loretto Adult Day Community	700 E Brighton Ave	Syracuse	474-8226	Social Model Adult Day Care
Salvation Army Adult Community Center	677 South Salina St	Syracuse	479-1309	Social Model Adult Day Care
St Francis Adult Day Service	1108 Court St	Syracuse	424-1003	Social Model Adult Day Care

Appendix G- Senior Transportation Services

Name	Address	Town/Village	Telephone Number
Alzheimer's Association	441 W Kirkpatrick St	Syracuse	472-4204
Jewish Community Center	5655 Thompson Rd	Dewitt	445-2040 x104
Northeast Community Center	716 Hawley Ave	Syracuse	472-6343
Salvation Army	677 S Salina St	Syracuse	479-1309
Baldwinsville Sr Express, Sr. Center	76 Canton St	Baldwinsville	638-4536
St. Camillus Transportation Services	813 Fay Rd	Syracuse	488-2951 x242
A&E Transport	966 Spencer	Syracuse	422-1021
ABLE Medical Transportation	1543 S Salina St	Syracuse	472-3393
ADAM'S APPLE Services, Inc.	824 Court St	Syracuse	424-0781

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Affordable Medical Transportation	836 N State St	Syracuse	471-0007
ANTS (Area North Transportation Service)	Salina Civic Center, 2826 LeMoyne Ave	Mattydale	455-7096
Baldwinsville Volunteer Transportation	520 Oswego St	Baldwinsville	638-0251
Centro Call-A-Bus	PO Box 820	Syracuse	442-3434 (info.)
Disabled American Vets Transportation Program	800 Irving Ave	Syracuse	477-4549
Empire Transportation	PO Box 132	Baldwinsville	484-6261
I'm Smart	484 W Onondaga St	Syracuse	471-3251
F-M FISH	PO Box 272	Fayetteville	637-8158
Jim Johnston HomeBound Transportation	165 Martin St	Syracuse	455-9626 or 474-7011
Skaneateles FISH	26 Fennell St	Skaneateles	685-6679
Suburban Transportation	PO Box 236	E Syracuse	437-0058
TLC Medical Transportation	638 Burnet Ave	Syracuse	422-0211

Appendix H
Onondaga County Settlement Plan Transportation Policies

THE ONONDAGA COUNTY TRANSPORTATION POLICY

This section of the *Plan* describes the policies that will govern the County's planning of its own transportation infrastructure, and which are recommended for use by individual municipalities as well. It focuses upon the provision and maintenance of a transportation infrastructure that supports the health of neighborhoods, primarily by encouraging pedestrian life.

Land-use patterns and transportation policy are inextricably intertwined, and it is impossible to affect one without addressing the other head-on. Many of the changes in the American built environment over the past fifty years can be linked to transportation planning practices that unintentionally ran counter to the formation and preservation of community. These practices were not designed to undermine community life, but they were the result of transportation policies that could have produced no other outcome. By preferencing vehicular mobility over both accessibility and livability, transportation policy allowed the ever-increasing demands of the automobile to be the primary determinant of regional and neighborhood structure. The results include highways built atop previously viable communities, and standards for residential streets that induce speeds that are too high to support pedestrian life. While this outcome is universally criticized, the policies that created it still hold sway in professional circles, especially in the fields of transportation planning, road design, public works, and emergency services. For that reason, a policy statement is necessary to serve as a foundation for future public decisionmaking on transportation-related issues in Onondaga County.

The policies that follow draw from a collection of recent documents created to reintroduce the goal of community health into transportation planning. They include the *Traditional Neighborhood Code* included herein, the *Charter of the Congress for the New Urbanism*, and the Institute of Transportation Engineers' *Traditional Neighborhood Development Street Design Guidelines*, A *Recommended Practice*. The author of this third document, Chester Chellman, co-authored the Policies that follow. They are organized from general to the specific, beginning at the scale of the region, focusing next on the individual neighborhood, and finally addressing the detailing of the streets themselves.

In endorsing the *Settlement Plan*, Onondaga County will use this Transportation Policy as a guide to inform and direct its own transportation planning. Not all of these policies concern issues that are within the control of the County, however. These are included nonetheless in hope that the County's municipalities, developers, school boards, and other concerned parties might incorporate them into their own planning decisions. Indeed, municipalities that wish for a future in which transportation investments improve neighborhood livability should adopt this Transportation Policy into their local plans.

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I. THE REGION

The structure of the region and the livability of its neighborhoods is determined in significant measure by the structure of its transportation network. The policies below address those issues that must be considered when planning transportation at the regional scale.

I.1 Intermodal Balance

Transportation planning should seek to attain a healthy balance between transportation modes, including cars, transit, bicycles, and walking.

Like most places, Onondaga County has for many years focused on the private automobile as the primary means of transportation. More recently, the true costs of a car-dominant society have become apparent, as described in this *Settlement Plan*. While it is unrealistic to suggest that the car will soon cease to be necessary in Onondaga County, the costs of automotive orientation could be mitigated by focusing County policy on achieving a better balance among the full range of transportation modes. This focus on intermodal balance should underlie all regional-scale planning in the County.

I.2 Mobility vs. Accessibility -- The Role of Land Use

Transportation planning should maintain as its primary goal the enhancement of all people's access to their daily needs.

Transportation planning has for years focused primarily on *"automobility"*: the provision of roadways to allow easy automotive access to destinations. Lately, the emphasis has shifted from automobility to *mobility*, the provision of multiple modes of transportation to provide such access. But most recently, planners have come to realize that *mobility* is secondary to *accessibility*: the ability to access ones daily needs with the minimum amount of travel and cost. In many cases, access is best enhanced not through the provision of mobility but through the avoidance of single-use zoning in favor of a fine-grained mix of land uses. The first consideration should be how to enhance access without necessarily enhancing mobility.

I.3 Induced Traffic

All new roadbuilding and road-widening proposals should be evaluated in light of the phenomenon of Induced Traffic.

Induced Traffic is a recently-documented phenomenon acknowledged by transportation experts but often not considered in local planning decisions. It pertains to how most roadbuilding efforts intended to reduce traffic congestion fail to do so because the new roadway capacity is quickly absorbed by those drivers who were choosing not to drive because of the congestion. It was demonstrated in a study covering thirty California counties between 1973 and 1990 which found that, for every 10 percent increase in roadway capacity, traffic increased 9 percent within four years time. If Induced Traffic were fully considered as part of federal policy, many investments in new roadway infrastructure would perhaps be directed instead towards the repair of existing roadways or to other civic infrastructure. As a matter of policy, all new roadway construction designed to increase capacity should be studied in light of Induced Traffic.

I.4 The Highwayless Town

High-speed roadways should not be allowed to pass through neighborhoods.

Norman Bel Geddes, the designer of the U.S. Interstate system, declared in 1939, "Motorways must not be allowed to infringe upon the city." Where they do provide access to the city and other neighborhoods, highways must take on the low-speed geometries of avenues and boulevards, so as to not destroy pedestrian viability. As is evident, this rule was often forgotten throughout the United States, most obviously with the insertion of elevated interstates through city centers. Also quite damaging, though less obvious, has been the repeated widening of state and county roads to accommodate through-commuting to the detriment of local pedestrian life. This latter practice must be avoided -- and in some cases reversed, as in Liverpool -- if the County's neighborhoods are to thrive. High-speed roadways are often appropriate, but not within neighborhoods.

I.5 The Townless Highway

Rural highways should be kept free of roadside development.

As the highway should not enter the town, so should the town not allow itself to grow along the highway. Where high-speed roads pass through the countryside, roadside development should be discouraged, since it impedes through-traffic and blights the countryside. Roads intended for through-traffic should be acknowledged as such and protected from such use wherever possible. As discussed in the *Regional Plan*, any development along such roads should be concentrated in Hamlets at intersections. The *Plan* describes at length how such development can be encouraged.

I.6 Regional Facilities vs. Local Needs

Roads should be planned to serve regional transportation goals, but these goals should not be allowed to trump the local need for healthy neighborhoods.

As described in *The Highwayless Town* (I.5), regional transportation goals must be questioned if they cause high-speed roadways to pass through neighborhoods. Most often, the proper solution is not the victory of the neighborhood or of the regional roadway, but the placement of the roadway at the neighborhood edge such that all needs are met. It must be remembered that ease of movement is of little value in the absence of worthy destinations.

I.7 Transit vs. Parking

The provision of parking facilities in urban centers should be considered in light of the fact that ease of parking discourages the use of transit.

While large-scale parking lots and on-site parking requirements may be appropriate for certain urban locations, they should not be considered in ignorance of their effect on transit ridership. Clearly, any new large parking lot, roadway, or other facility which eases automotive commuting will reduce demand for transit. Where efforts are underway to increase transit ridership, and such transit indeed provides a viable alternative to driving, parking facilities should not be encouraged.

I.8 Park and Ride

Due to the ineffectiveness of park-and-ride programs, transit planning should focus on receiving riders as pedestrians.

A 1978 study found that park-and-ride lots in and near Syracuse reduced weekday vehicle-miles traveled by less than 1%. This is not surprising, as park-and-ride programs have rarely proven effective outside of the most heavily urbanized areas. In most places, for transit to be well-used, riders must start as pedestrians. The best way to achieve this end is to reinforce the neighborhood structure of areas around transit stops, such that they contain the widest possible range of uses in a walkable environment. Once again, transportation needs can best be addressed in the context of land-use practices.

I.9 Bicycle Network

Most destinations within the County should be accessible via bicycle in a thorough network of bike trails, bike lanes, and bike routes.

Bike *trails* are dedicated travel paths detached from high-speed roadways. Bike *lanes* are dedicated lanes within moderate-speed roadways. Bike *routes* -- the majority of thoroughfares -- are low-speed streets that bicycles share with other traffic. While not every thoroughfare can or should provide bicycle access, the bicycle network of trails, lanes, and routes should provide access throughout the County. *The emphasis need not be on creating many expensive bike trails and lanes; a few key routes, combined with low-speed neighborhood streets, can constitute an effective network.* This network should be supplemented by the provision of secure bicycle parking facilities at major civic, work, and retail destinations. While bicycle ridership is not widespread in Onondaga County, the County's transportation decisions should acknowledge that such ridership is unlikely to increase in the absence of an effective bicycle infrastructure.

I.10 Freight Movement

Rail and Canal shipment of goods should be encouraged for freight movement, and large trucks should be discouraged from within neighborhoods.

It has been calculated that shipping goods by rail requires one fifteenth the amount of fuel that is needed to do so by truck. Given the economic and environmental inefficiency of trucking -- and its contribution to traffic congestion -- alternative modes of shipping should be encouraged. To the contrary, the U.S. Government, primarily through the construction and maintenance of roads, subsidizes the trucking industry approximately $300 billion per year. Given the circumstances, the County should make efforts to make rail and barge shipment more attractive. For local truck deliveries, where the presence of large trucks can damage neighborhood walkability, municipalities can choose to demand the use of smaller vehicles by distributors.

II. THE NEIGHBORHOOD

Central to the Onondaga County Settlement Plan is a focus on the preservation and enhancement of neighborhoods. This objective in no way runs counter to the provision of an effective transportation network. However, to avoid undermining neighborhood health, transportation planning must be informed by a thorough understanding of the structure and function of neighborhood environments.

II.1 The Neighborhood Structure

Transportation planning decisions should be made based upon an understanding of the traditional neighborhood as the fundamental pattern of settlement.

Often, transportation decisions that damage neighborhoods are the result not of misplaced priorities -- regional facilities trumping local needs (1.7) -- but of an innocent misunderstanding of the neighborhood structure: the location of its center and edges. This is particularly likely in areas where that structure has already been undermined by previous planning efforts. To avoid this error, transportation planners working in settled areas should begin their investigations by mapping the locations of existing neighborhood centers and edges. Once this structure is fully apprehended, planners can work with confidence that their efforts do not compromise pedestrian viability. Indeed, the proper identification of a neighborhood edge could perhaps serve to justify the improvement of a roadway to a higher-volume standard.

II.2 School Transportation

School planning decisions within the County should be made with due consideration to the burden placed upon roadways by school buses and parental drop-offs.

One need only drive to work on a school holiday to recognize what a great percentage of commuting-time trips are the result of children not being able to walk to school. The traditional concept of the neighborhood school within walking distance has until recently been forgotten in a nationwide trend towards large-scale education warehouses. Decisions to consolidate schools at an anti-pedestrian scale are often made in ignorance of the cost of busing -- estimated at $400 per student annually -- and the undue burden that regional school commuting places on roadways. To the degree that the County is able to influence educational facility policy, it should encourage the preservation and creation of smaller schools within walkable neighborhoods.

II.3 Avoiding Cul-de-sacs

Cul-de-sac (dead-end) streets are to be discouraged, as they overburden adjacent roads, damage social capital, and limit emergency-vehicle access.

While cul-de-sacs provide an environment of minimal traffic, they create a larger system in which very few roads carry the majority of the traffic and quickly become overburdened. They also limit emergency vehicle access, since there is only one path to each destination, and add to the costs of policing, school busing, snow plowing and mail delivery. Finally, sociological studies have demonstrated conclusively that fewer neighborhood social ties are generated when pedestrian through-motion (from both ends of a street) is not possible. For these reasons, new thoroughfares within the county should connect to other thoroughfares at both ends unless prohibited by impassible site conditions.

II.4 Block Size

Within new developments, blocks should generally be small, typically less than 2000 feet in circumference.

Pedestrian activity is encouraged by a porous network of multiple paths between destinations. The most walkable towns and cities have small blocks; for example, Portland, Oregon has blocks 800 feet in circumference. While it is less expensive to build long blocks with fewer connections, these create inferior communities. Where long blocks are unavoidable due to natural conditions, mid-block pedestrian cut-throughs should be encouraged.

II.5 The A/B Network

Transportation planning should be made in light of an understanding of each thoroughfare's classification as Pedestrian Priority or Vehicular Priority.

As previously described, streets within neighborhoods should be designed primarily to support pedestrian life, while streets outside (and between) neighborhoods may be designed primarily as automotive corridors. Pedestrian-friendly thoroughfares can be classified as "A Streets", while automotive corridors can be classified as "B Streets." A large number of B Streets is possible, as long as the A streets form a continuous network of uninterrupted walkability. Once this A/B mapping is made, wise planning decisions can be made about which thoroughfares are able to accept vehicular-oriented or pedestrian-oriented improvements.

II.6 Traffic Calming

Traffic Calming should be considered to retrofit streets which are plagued by speeding, but new thoroughfares can avoid the need for such efforts by being designed to lower-speed specifications.

An entire discipline within transportation engineering has arisen in order to compensate for the widespread error of placing high-design-speed streets in otherwise walkable neighborhoods. Traffic Calming includes the construction of speed bumps, speed tables, chicanes, bulb-outs, roundabouts, and other impediments to through traffic in streets which are typically too wide. These expensive remedies are indeed useful in situations in which speeding is a problem, and should be considered fully. But greater efforts should be made to build and protect streets and intersections which result naturally in slower driving speeds. These are addressed more fully in Policies II.7 and III.1 - III.9.

II.7 Traditional Intersection Design

Traditional intersection design should be considered as a way to calm traffic in new neighborhoods.

Forks, staggered intersections, triangles, and other quirky traditional street configurations were once a mainstay of neighborhood design. More recently, with the prioritization of through-travel over walkability, these low-speed, low-volume intersections were ruled out in favor of a limited selection of simple configurations -- essentially right-angle crosses and T's. These intersections are indeed simpler, but their contribution to vehicular or pedestrian safety has not been proven. While it would be equally unjustified to discard such intersections in favor of quirky traditional configurations, traffic engineers should not rule out the latter as legitimate options within neighborhoods unless they can demonstrate a likelihood of increased risk.

II.8 Rear Lanes

In the construction of new neighborhoods of moderate density or higher, rear lanes should be built to avoid a streetscape of garage doors.

The city of Portland, Oregon recently outlawed "snout houses" -- houses whose front facade consists primarily of garage doors -- citing their contribution to an unfriendly, sociofugal environment Also common in Onondaga County, the garage-front house is the inevitable result of placing a 24'-wide garage on a 50' lot. While a larger lot can absorb a garage more easily, lots 50' wide or less should be accessed by a narrow rear alley (typically 12' of pavement in a 24' right-of-way) to avoid the snout-house syndrome.

II.9 Nature Preservation/Celebration

The trajectory of new thoroughfares should be based upon the preservation of natural features and the display of site amenities to their best advantage.

Too often, new streets are laid with inadequate consideration given to the preservation of natural topography, trees, and other site features. Instead of laying streets "lightly on the land," developers resort to mass grading, which kills trees and promotes erosion. Similarly, the beauty of a site is often hidden from view by, for example, placing the best views behind private houses rather than leaving them accessible to all. Builders that wish to maximize the value of their properties will place their new thoroughfares in a way that both preserves and celebrates nature.

II.10 On-Site Parking

While necessary in the auto-oriented suburbs, the on-site parking requirement can be harmful to downtown areas that wish to encourage pedestrian activity.

The renowned planner Neil Pierce has noted, "no great city has ever protected parking as an important right." As already discussed, the generous provision of parking discourages the use of alternative modes of transportation and also tends to create an unpleasant streetscape lined by parking lots. It also can result in empty sidewalks, since all visitors park directly adjacent to their destinations. In areas where transit and pedestrian activity are present but in need of enhancement, municipalities should consider eliminating requirements for on-site parking provision.

II.11 Reduced Parking Requirements

Reduced parking requirements should be considered for new developments that mix uses.

Suburban parking ratios of spaces-per-square-foot are necessary in areas where everyone drives, but they also tend to create environments in which no one will walk. Conversely, if one creates transit-viable environments in which walking is a pleasure, fewer parking spaces will be necessary. In encouraging pedestrian-friendly mixed-use areas, municipalities should lower these ratios to fully take into account shared parking (II.12), on-street parking, and reduced auto-dependence.

II.12 Shared Parking

Shared parking, the greatest contribution to reduced parking needs, should be taken fully into account.

As noted above, mixed-use areas benefit from shared parking, in which complementary schedules allow spaces to do double or triple duty. For example, a single space may serve an office worker during the day, a resident overnight, and shoppers during rush hour. Interestingly, in a truly urban environment, these could all be the same person, who then might not need to own a car at all. The parking efficiency of mixing complementary uses has been estimated as high as 170%, allowing the elimination of potentially three-fifths of the spaces planned. Municipalities should offer such reductions as an incentive for the creation of mixed-use environments. *The Settlement Plan's TND Code* includes a table for calculating shared parking ratios.

III. THE STREET

When one thinks of a neighborhood, one thinks first of its streets. Far from being simply conduits for vehicles, a neighborhood's streets are its public spaces. As such, their design must take into consideration the needs of all of their users, particularly pedestrians. The policies that follow address the design of streets within neighborhoods with the goal of enhancing neighborhood livability.

III.1 Vehicular / Bicyclist / Pedestrian Balance

Street design should reflect the goal of accommodating pedestrians and bicyclists as well as automobiles.

In recent years, streets have been designed by traffic engineers with the sole objective of moving cars. As a result, pedestrian and bicycle use suffered, as did the performance of businesses along them. It must be remembered that, in addition to being traffic ways, streets are also the location of American civic life. Within neighborhoods, streets should be designed with the interdisciplinary goal of supporting the widest variety of uses, not just driving. In most cases, this approach means providing narrow (slower speed) travel lanes, on-street parking, continuous tree cover, and ample sidewalks.

This policy, like many below, is reflected in the Thoroughfare Standards (Table B2) of the TND Code. Please refer to these for further illustration.

III.2 Design Speed

Thoroughfares accessible to pedestrians should have a design speed under 45 mph, and thoroughfares within neighborhoods should have a design speed under 30 mph.

Pedestrians do not feel comfortable walking where cars are speeding. Further, most drivers will not obey speed limits if a street is designed for higher speeds. The only sure way to control speeds in pedestrian environments is through the width, curvature, and detailing of the vehicular cartpath. While higher speeds should be allowed in strictly automotive environments, low-speed geometrics should be used to control speeds within neighborhoods.

III.3 Street Widths

The widths of new and reconfigured streets should reflect their desired design speed.

Far from increasing safety, wider driving and parking lanes ease vehicular motion and encourage speeding on residential streets. Within neighborhoods, driving lanes should not exceed 10' in width, and parking lanes should not exceed 7' in width (including the gutter). In certain conditions, 8' and 9' driving lanes should also be considered.

III.4 Shared Lanes

In limited-density residential neighborhoods, individual striped lanes should be replaced by a single shared lane that accommodates travel in both directions.

The standard highway engineers' manual, the AASHTO "green book," recommends shared lanes "where single-family units prevail," and describes them as containing a single 12' center lane flanked by parking lanes. By this measure, a roadway in a residential neighborhood should be 19' wide if it has parking on one side, 26' wide with parking on both sides. These measurements are often fought by fire departments, who demand a 20'-clear travel lane for their trucks, in order to speed response time. This objection was refuted by the recent Swift Report (of Longmont, Colorado), which demonstrated over an eight-year study how narrower streets increase public safety, and how fire response time was a statistically insignificant factor in this relationship. For this reason, new streets whose primary purpose is to provide access to single-family houses within neighborhoods should employ the single shared travel lane.

III.5 Curb Radii

Within neighborhoods, the radius of curvature of the curb at intersections should generally not exceed 15'.

Current roadbuilding ordinances tend to promote large curb radii, which ease large-vehicle access, but increase pedestrian crossing distances while allowing cars to speed around corners. For this reason, curb radii on new or rebuilt streets should be no larger than necessary to accommodate the largest vehicle that will typically use the street, which is most often a garbage truck. Within neighborhoods, where low-speed travel is encouraged, such vehicles can be expected to temporarily cross into the opposing travel lane in order to make a tight turn -- particularly fire trucks with sirens. As long as such access is provided, curb radii of 15, 10, and even 5' are often appropriate.

III.6 Parallel Parking

Except in rural areas, all new and rebuilt streets should contain parallel parking on at least one side.

Parallel parking protects pedestrians from traffic, causes cars to drive more slowly, reduces requirements for on-site parking, and increases pedestrian activity. Depending on the use and density of the neighborhood, parallel parking should be provided on one or both sides of the street, marked or unmarked. (Typically, when a shared travel lane (III.4) is used, the parking lanes are not marked.) All main streets in retail areas should of course have parking on both sides, and head-in parking may be justified in downtowns.

III.7 One-Way Streets

One-way streets should generally be avoided, particularly multiple-lane one-ways.

Like most American cities, Syracuse has reconfigured many of its downtown streets to one-way in order to speed through-traffic. The reversal of such reconfiguration is the first step that many American cities take in order to revitalize struggling downtown areas. Multiple-lane one way streets damage pedestrian life by encouraging speeding, and damage businesses by distributing evening traffic unevenly. One way streets are only justified when the paved surface (including parking) is too narrow to accommodate the level of through-traffic desired.

III.8 Curving Streets

Street curves, rather than being randomly imposed, should result from topography and not create undue disorientation.

Contemporary subdivisions tend to include randomly curving streets that disorient drivers. These are provided in order to terminate vistas, but that goal is better achieved through the use of traditional intersections, such that relatively straight streets aim at site features or notable buildings. On steep topography, however, curving streets are necessary to avoid mass grading, and these should be allowed to curve very tightly in recognition of design speeds as low as 10 mph.

III.9 Signal Timing

Most traffic signals within neighborhoods should be timed on cycles no longer than 60 seconds.

Current traffic management practice encourages the lengthening of traffic light cycles in order to limit interruptions to through traffic. While this approach is appropriate for highways, it causes great pedestrian and driver frustration in urban areas, discouraging walking and promoting speeding and "road rage." Just as maximum through-flow is not the only criteria for street design, it is not the only criteria for traffic management. Within neighborhoods, signal timing should be limited to encourage walking and ease driver frustration.

III.10 Skywalks

Skywalks and underground passages should not be provided when sidewalk access is safe and convenient.

A futuristic idea that has come and gone, skywalks and other sidewalk substitutes are only appropriate when no other safe passage is possible, as they create a redundant system than robs sidewalks of pedestrian life and undermines retail viability.

III.11 The Transect

New and rebuilt streets should be detailed in a manner that reflects their relative position in the Urban-Rural Transect.

Illustrated in the *Settlement Plan (page 13)*, the Transect describes how every aspect of the built environment changes as one moves from the country to the city. Sidewalks become wider, trees become more regular in their species and placement, open swales become closed curbs, parking spaces are striped, and building setbacks shorten as one nears a downtown area. Current subdivision guidelines tend to impose a universal standard that neglects these transformations, an error that should be avoided in new street construction.

III.12 Sidewalks

Within neighborhoods, most thoroughfares should include sidewalks on both sides.

In some cases, a low-traffic road can support both cars and pedestrians within the same paved area. Such a road is called a *Woonerf*, and is built with such a low design speed that such interaction makes sense. In other cases, low-density roads at the edges of neighborhoods, a one-sided sidewalk may be appropriate due to extremely light pedestrian load. But otherwise, all residential and commercial thoroughfares within neighborhoods need sidewalks on both sides. Sidewalks should normally be 5' wide in residential areas, increasing in width with residential density, and reaching a minimum 10' width on retail streets.

III.13 Crossings

All high-traffic areas expected to support pedestrian life should have marked pedestrian crossings.

While most intersections within downtown Syracuse are well marked, other heavily-used crossings within the County do not provide adequate indication of the pedestrian right-of-way. Any intersection that receives both heavy vehicular traffic and heavy pedestrian traffic should be striped; where crossing is deemed a hazard, they should be signalized. Bricked crosswalks may be appropriate in the most urban areas, but it is better to stripe many crossings than to brick only a few.

III.14 Street Trees

All streets should be lined with trees in order to enhance the experience of both pedestrians and drivers.

With the exception of very narrow urban streets and passages with inadequate space, all streets and paths should be lined on both sides with deciduous trees at an average spacing distance no greater than 30' on center. In suburban areas, such trees should be located in a continuous tree strip between the curb and the sidewalk; in urban areas, such trees should be planted in sidewalk grates. This suggestion is perhaps not compelling from a transportation-planning point of view, but it is very important from a livability and tourism point of view.

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III.15 Lighting

Streetlighting in pedestrian areas should respond to the Transect, and should achieve desired lighting levels through the use of smaller light standards.

While infrequent powerful lights are the most efficient way to provide night illumination, they create an environment that discourages pedestrian activity and can thus contribute to crime. The solution is to use small light standards -- typically 8' to 15' tall -- in a frequency appropriate to the urbanity of the location. In a city center, a 30' on-center spacing may be appropriate; in rural suburbs, lights may be limited to intersections; in the country, lights may be eliminated entirely. Only in strictly vehicular areas are large, powerful light standards appropriate.

III.16 Shielded Parking

Parking lots and structures should be shielded from view of sidewalk, by habitable building or, where this is not possible, by attractive walls or greenery.

There is little greater deterrent to pedestrian life than an exposed parking lot or structure. All new parking structures should be designed to face the street with habitable building -- typically retail -- on at least the ground story. Upper stories, when not lined by apartments or offices, should be detailed in a manner befitting occupied buildings. All new surface parking lots should be hidden behind at least a thin layer of buildings; where this is not possible, the inferior solution of a decorative wall or shrub is preferable to no edge at all.

III.17 Parking Lot Quality

Surface parking lots should contain trees in ratio adequate to provide significant shade.

While they are a detriment to street life, parking lots are still public spaces and should be detailed as such. The most efficient way to enhance the parking environment is to provide trees between parking rows as along a street, at a typical distance of 30' on center. An alternative solution places tree-lined pedestrian passageways at cross-grain to the parking rows. Either approach contributes tremendously to the parking experience.