Clay-Cicero Route 31 Transportation Study

APPENDIX A

Public Involvement Plan

I. Introduction

Engaging the public early and often in the planning process is critical to the success of any transportation plan or program, and is required by numerous state and federal laws. Such legislation underscores the need for public involvement, calling on Metropolitan Planning Organizations (MPO) such as the Syracuse Metropolitan Transportation Council (SMTC) to provide citizens, affected public agencies, businesses, local government, and other interested parties with a reasonable opportunity to comment on transportation plans and programs.

While public participation is mandated, it is also practical. No one organization has a monopoly on good ideas – they often germinate through an open exchange of information. It is the SMTC's intention to promote the shared obligation of the public and decision makers to define the goals and objectives of the **Clay/Cicero Route 31 Transportation Study**, to develop alternatives, and to evaluate the alternatives.

ll. <u>Goals</u>

The Public Involvement Plan (PIP) of the **Clay/Cicero Route 31 Transportation Study** is intended to:

- (1) 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; and
- (2) involve the public throughout the planning process.

III. Formation of Study Advisory Committee and Interested Stakeholder Group

The PIP includes the formation of two groups to assist the SMTC in the study effort. A Study Advisory Committee (SAC) consisting of representatives from affected organizations, local and state governments and agencies (including but not limited to the Towns of Clay and Cicero, Syracuse-Onondaga County Planning Agency (SOCPA), New York State Department of Transportation (NYSDOT), Onondaga County Industrial Development Agency (OCIDA), and selected community representatives) will meet regularly with the SMTC to assist in managing the project. The SAC's role will be to advise the SMTC on the technical content of deliverables and to provide needed input and guidance throughout the project.

It is anticipated that a minimum of five SAC meetings will be held throughout the course of the study. Securing a meeting location (facility), announcing the SAC meetings through mailings, running the SAC meetings (including preparation of agenda, materials, presentations, etc.), and preparing the minutes from each meeting will all be the responsibility of the SMTC.

In addition to the SAC, a list of interested "stakeholders" (a broader group of interested individuals with significant relations and interest in the study area) will be maintained by the SMTC. 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 **Clay/Cicero Route 31 Transportation Study.** If during the course of the study it seems warranted, a "stakeholder workshop"

may be held separately to further assist the study in gathering and processing public input.

The SMTC and project sponsors will determine initial representation on the SAC and Interested Stakeholders group. However, the SMTC will actively seek input at its "kickoff meeting" and throughout the course of the study regarding additional individuals who could participate in this planning activity and provide valuable input and perspective.

IV. <u>Meetings and Public Comment</u>

The SMTC will hold public involvement meetings/workshops at specific stages during the study. Securing a meeting location (facility), promoting the event through flyers, mailings and press releases, presenting the public meetings (including preparation of agenda, materials, presentations, etc.) and preparing the minutes of each meeting will be the responsibility of the SMTC.

The first public meeting will provide the opportunity to formally present the study to the public and will occur early in the study's time frame. Citizen input obtained from this meeting will be considered throughout the remaining stages of the study, and will be factored into subsequent reports, conclusions, and/or recommendations. At this meeting, some of the known and perceived issues and concerns will be identified and discussed.

The second public meeting will take place following the production and approval of *Technical Memorandum No. 1: Existing Conditions Report.* This meeting will serve to inform the public of the existing conditions, data analysis and forecasting reached in Technical Memorandum No. 1, as well as invite the public to speak out on the next phase of the study process, which will document relative transportation and mobility issues (in *Technical Memorandum No. 2*). A public meeting will be held to present *Technical Memorandum No. 2* at the appropriate time as well as to solicit input into the next stage of the project.

An additional public meeting will serve to present *Technical Memorandum No. 3: Recommendations and Implementation Plan* to the public. Alternative solutions, recommendations, and an implementation plan (developed and evaluated through the public and SAC process) will be discussed at this meeting. This will be the final opportunity for the public to make comment before a Draft Final Report is prepared and presented to the SMTC Planning and Policy Committees.

The SMTC will be responsible for the scheduling and preparation of all meetings and distribution of meeting documentation. SMTC will also be responsible for presenting at all SAC and public meetings (to include preparation of agenda, materials, presentations, etc.), preparing meeting minutes that document the discussions and decisions of the committees, including the documentation of public input; and the production of technical memorandums, reports, handouts, etc.

<u>Note</u>: All meetings (SAC and public) 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.

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

Introductory Flyer: The SMTC will be distributing a one-page introductory flyer throughout the study area that will serve to introduce the public to the **Clay/Cicero Route 31 Transportation Study**. This flyer will focus on the purpose, goals and objectives of the study. It will seek to educate, inform and encourage feedback and public comment. Additional flyers (to highlight specific study development or publicize public meetings) may be distributed as the study progresses if deemed appropriate.

Material Distribution at Locations Within Study Area: If deemed necessary (at the discretion of the SAC and/or other appropriate SMTC committees), the SMTC may distribute miscellaneous study-specific information at sites throughout the study area (e.g. gas stations, restaurants, convenience stores, etc.). This information may include one or more of the following: introductory flyer, meeting notice, comment card, and a pre-addressed survey on a particular study issue. It is also the SMTC's intent to work with and encourage other agencies to include this information in their publications or to assist in material distribution. For example, the SMTC will be working with the Towns of Clay and Cicero and community groups in the towns, seeking their assistance in "getting the word out" about the study, and helping to publicize public meetings.

All citizens (especially those who are not able to attend the public meetings or participate in direct contact with the SMTC staff) are encouraged to submit comments to the SMTC at any time. 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 **Clay/Cicero Route 31 Transportation Study** may be on the agenda as a discussion item.

V. <u>Press Releases/Media Coverage</u>

The SMTC will issue news releases announcing the details of all public meetings to all major and minor newspapers, television stations, and radio in advance. If necessary, the SMTC will also send additional news releases, or take the initiative to promote media coverage on pertinent developments pertaining to the **Clay/Cicero Route 31 Transportation Study**.

If possible, all media inquiries should be directed to the SMTC staff director or project manager. However, this is not always possible. If you (e.g. SMTC committee members, SAC members, and/or interested stakeholders associated with the study) are interviewed by the media, please limit your comments to your respective agency's opinion or involvement in the study. As for speaking to the media on specific issues and guestions regarding the **Clay/Cicero Route 31 Transportation Study**, its progress and development, this is the exclusive responsibility of the SMTC.

VI. <u>SMTC Publications</u>

The SMTC publishes a newsletter, DIRECTIONS, that offers news about its activities and particular studies. This newsletter is distributed to nearly 1,500 individuals, some of whom include the media; local, state, and federal agencies associated with the SMTC; municipal and elected officials; community agencies and representatives; and a large number of interested citizens. It is anticipated that articles on the **Clay/Cicero Route 31 Transportation Study** (e.g. study development issues or the announcement or coverage of a public meeting) will be published in subsequent issues of DIRECTIONS. Should the need arise for the production of a separate newsletter/flyer/report to convey a timely study development; the SMTC staff is prepared to perform this additional task. It is also important to note that the mailing list of the SMTC newsletter, DIRECTIONS, will be updated to include all members of the SAC, stakeholders, and others interested or involved in the **Clay/Cicero Route 31 Transportation Study**.

VII. <u>Miscellaneous Public Involvement Efforts</u>

To further its public involvement efforts, the SMTC will be asking the SAC members and interested stakeholders to assist them in better notifying citizens and community groups living and/or working in the study area about the public meetings and the study in general. 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 **Clay/Cicero Route 31 Transportation Study**, the SAC and interested stakeholders will serve to further promote public involvement in areas (and to individuals) that were not reached through the standard outreach.

Meeting notices and study-specific material previously mentioned may also be posted at libraries, local stores, shopping centers, and/or businesses.

Approved documents, such as the study's Final Report, may be made available at libraries within the study area. News releases will be produced to announce the availability of such items, as well as invite written comments to be submitted to the SMTC.

The SMTC web site [www.smtcmpo.org] will also serve as a resource for general information about the SMTC, the **Clay/Cicero Route 31 Transportation Study**, and any final approved reports.

If a certain need arises to get public perception/opinion on a particular topic/issue, surveys may be used at one or more of the public meetings.

VIII. <u>Conclusion</u>

It is important for the SMTC to understand public attitudes and values in the early stages of the **Clay/Cicero Route 31 Transportation Study**, 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. In such a study that pays particular attention to preserving and enhancing the pedestrian and transit-oriented nature of the neighborhoods, such involvement is paramount.

Clay-Cicero Route 31 Transportation Study

APPENDIX B

Public meeting summaries



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

Clay-Cicero Route 31 Transportation Study Public Meeting November 13, 2007 6:30 p.m.

Meeting Summary

Attendees

Study Advisory Committee members Dave Balcer, Town of Clay Dept. of Planning Megan Costa, SOCPA Bill Egloff, NYSDOT Pat Leone, Town of Cicero Planning Board Jay Seitz, Town of Cicero Dept. of Planning Jim Stelter, OCDOT

Elected officials

Jim Corl, Cicero Town Board Chet Dudzinski, Supervisor, Town of Cicero Bernie Kraft, Onondaga County Legislature Jim Rowley, Supervisor, Town of Clay Al Stirpe, New York State Assembly Charlotte Tarwacki, Cicero Town Board Jessica Zambrano, Cicero Town Board

SMTC staff James D'Agostino Jen Deshaies Nell Donaldson Meghan Vitale Citizens **Tony Borio** Jerry Bechard **Richard Carvel** Carolyn Cimino **Tony Cimino** Suzanne DeMay **Richard Dickson** Sarah Hall David Hess Richard Lobevero Charlie McDermott Carol Pardee Loomis Pardee Ed Roesch Jim Sharpe Chris Woznica Julie Raddell Mike Raddell

Total: 31 people (excluding SMTC staff)

Opening exercise: Where do you live?

As participants entered the meeting, they were asked to place a sticker on a large map of the study area to indicate where they reside. There were slightly more Town of Cicero residents than Town of Clay residents present. Overall, the participants were distributed throughout the study area, with no significant clustering of meeting participants in any one neighborhood.

Presentation

Ms. Vitale opened the meeting with a presentation. The presentation began with a description of the SMTC's role and duties, followed by project updates from Bill Egloff of the New York State Department of Transportation and Jim Stelter of the Onondaga County Department of Transportation. Ms. Vitale then continued the presentation with a discussion of the SMTC's

work-to-date on this project, including existing conditions inventory and a preliminary set of issues and goals that were developed in consultation with the Study Advisory Committee.

Issues brainstorming and prioritizing

Following the presentation, SMTC staff asked meeting attendees to provide input about issues in the study area. Participants were asked to state issues that they think are important for the SMTC to consider in this study. Ms. Vitale moderated the discussion while Ms. Donaldson recorded long-term issues and Ms. Deshaies recorded short-term issues. All issues were recorded on flip-chart pads. The final list of long-term issues was posted on easels. Participants were then asked to "vote" for the top three long-term issues using stickers. The results are listed below.

Short-term issues

- Lack of left-turn lanes (safety)
- Timing and phasing of signals for better traffic flow (coordination)
- Improved/more park-and-ride locations, possibly using existing commercial parking lots
- Speeding

Long-term issues

Issue	Votes
 Limited connectivity 	15
 Interstate access 	13
 Lack of parallel roads 	12
 Environmental impacts of development 	6
 Need for improved transit service 	6
 Preserving green space 	5
 Lack of non-auto options 	5
 Speeds/traffic calming 	2
• Lack of higher density development (possible hamlet)	2
 Limited walkability 	1
 Noise 	1
• Site plan modification (incorporate access management)	1
 Aesthetics/landscaping 	1
 Sustainability 	0
 Emergency vehicle access (exclusive lanes) 	0
 Potential for passenger rail service 	0
 Access management 	0
 Safety 	0
 Access to commercial areas 	0
 Lack of opportunity for public input 	0
 Interstate access to Clay Industrial Park 	0

Identifying goals

After participants finished voting on the long-term issues, the top three issues were announced. Each of these three issues was then written on a new sheet of paper and posted on an easel. Participants were then asked to write goals relating to the top issues on small "sticky" notes and to post their goals with the corresponding issue. The following goals were stated by the participants:

Issue: Connectivity

Goals:

- Find inter-neighborhood options possibly not acted upon but planned.
- All development from here out must connect and when possible encourage at existing.
- Define commercial connectivity and require businesses served to pay their share.
- Rear access to commercial development into residential areas.
- Connect residential subdivisions to commercial developments (i.e. mini-mart next to Pastures – walking access or local road to strip malls).
- Cicero is cut in half by I-81; build a bridge over I-81 to connect Route [11?] to South Bay Road.
- Don't just build/rely on local roads and arterials only make sure there is a network with a hierarchy of connected roads.
- Reduce stop signs to improve connectivity in residential areas.
- Reduce stop signs in developments.

Issue: Interstate access

Goals:

- DOT needs to decide on optimum location for 81 and 481.
- Full cloverleaf interchange at Route 81 & 31.
- Just develop better intersection to keep traffic moving at I-81 and Route 31 intersection during peak hours.
- Move 81 exits in Cicero further apart: would have been easy if State bought land where new Nice-n-Easy is.
- Provide 81 exit north of 31 which would connect via new road to Caughdenoy Road area.
- Add interchange off South Bay Road from Route 81.
- Mud Mill access on/off ramp. Mud Mill connectivity. East to Whiting, Whiting across South Bay, Whiting to collector road following power lines at least to Cicero Center.
- Add more lanes, total to include dedicated turning and/or on ramp lanes, roads, frontage.
 Ex: Soule Road.
- Need to have separate lanes for access to interstates that are located before traffic signals so that traffic can continue to ramps onto interstate without interruption.
- Concern: Land availability to construct additional interchange.
- Widen and increase lanes.
- Some cars don't move over for emergency vehicles!

Issue: Lack of parallel roads

Goals:

- More stringent direction from County Planning concerning connectivity design.
- Have better design for commercial development without re-routing traffic through residential developments to reduce the main arterial traffic.
- Add parallel road behind commercial development.
- Make sure new developments have a main parallel road connecting between developments.
- Develop direct routes (not many commercial surroundings) for cross-town commute alternatives.
- Improve north of Route 31 road to get on Route 81.
- Create the Mud Mill Road, Whiting Road, Route 31 (in Cicero) bypass to Verplank Road in Clay.
- Parallel service road along 81 north from 31 to Mud Mill south of 31 to Driver's Village.

- Develop Van Hosen Road and expand it so that it can be a good parallel road to Route 31.
- The speed of cars going too fast. They need to slow down for school zone.

Question and answer

Ms. Vitale asked the participants if there were any additional questions for SMTC, NYSDOT or OCDOT staff. There were no questions from the participants. Ms. Vitale reminded participants that they can submit additional comments by contacting the SMTC or returning the comment cards that were available at the sign-in table.

Wrap-up

Ms. Vitale concluded the meeting with a review of the next steps in the project. SMTC staff will summarize all comments received and review with the SAC. If necessary, the list of issues and goals will be refined before developing an initial set of alternatives. A second public meeting will be held to present the initial alternatives to the public; this will likely happen in early Spring 2008.

The meeting concluded at 8:15 p.m.

Public comments

The following comments were received after the public meeting (as of 11/26/07):

• Advertise the next meeting in the Pennysaver or through postal mailings.



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

Clay-Cicero Route 31 Transportation Study Public Meeting January 13, 2009 7:00 p.m. Cicero Elementary School

Meeting Summary

Attendees

Study Advisory Committee members Megan Costa, SOCPA Jim Stelter, OCDOT Mark Premo, OCDOT Mark Territo, Town of Clay Planning Mark Centore, NYSDOT Wayne Dean, Town of Cicero Planning Joe Snell, Cicero Police Sean Murphy, NYSDOT Elected officials and representatives Jim Corl, Cicero Town Board Chet Dudzinski, Supervisor, Town of Cicero Linda Losito (for Assemblyman Stirpe) William Meyer, Onondaga County Legislature Bill Purdy, Cicero Planning Board Charlotte Tarwacki, Cicero Town Board Damian Ulatowski, Supervisor, Town of Clay

Citizens Mark Antonello Ed Sweeting Maureen Matthews Bill Golembieski Tom Ruffrage Ed Szczesniak Bruce Johnson Tammy Salisbury Samantha Salisbury Ashley Hammond Brittany Burke Myrna Hendrix Deanna Oakes Mike Brimhall Lucy Lore Brandon Williams Charlie Cashier Jamison Sacco Doug Wickman James Fensken

John Fischer **Connie Fischer** Fred Spier Michael Hendrix Jessica Zambrano Antonette Johnson Chad Smith Don Jordan Chris Woznica Siva Jonnavithula Mark Antonello Ed Zaluski Cathy Wallon Paul Tennant Joanne Tennant Loomis Pardee Carol Pardee Gay Barnes William Murphy D. McLaughlin

Charles Eastwood John Gardner Sam Morrison Paul Torrey William Weaver Robert Edick Beverly Hill Dewey Schryver Doug Stansbury Nicole Raite Mike Fielding C. Rycraft Christopher Barksdale Sarah Hall Steve Wilcox Corey Erickson Mark Evers Tom Macera (58)

SMTC staff Mario Colone James D'Agostino Jason Deshaies

Nell Donaldson Ahmed Ismail Paul Mercurio

Meghan Vitale

Total: 72 people (excluding SMTC staff)

Opening exercise: Where do you live?

As participants entered the meeting, they were asked to place a sticker on a large map of the study area to indicate where they reside. There were about twice as many Town of Cicero residents than Town of Clay residents indicated on the map (although there were only 44 stickers on the map, so clearly not all attendees participated). The residents tended to be from the eastern part of Clay and the western part of Cicero, near the meeting location.

Presentation

Ms. Vitale opened the meeting with a presentation. The presentation began with a description of the SMTC's role and duties, followed by a discussion of the SMTC's work-to-date on this project, including the list of study goals that were developed based on the input at the first public meeting. Ms. Vitale then presented the Future Base scenario assumptions and analysis results in detail and gave an overview of each of the remaining alternatives.

Open house

Six "stations" were set up around the meeting room. Each station focused on a single scenario and included a poster showing the transportation and land use assumptions, an evaluation of the alternatives based on the study goals, and a map showing traffic volume differences. Maps illustrating link volume-to-capacity ratios, intersection volume-to-capacity ratios, and traffic volumes were also available. An SMTC staff member was available at each station and SAC members were also available at some stations. Meeting attendees were asked to visit the stations, review the graphics, discuss the scenario with staff, and provide feedback by voting "yes" or "no" with stickers and leaving comments on the poster. The following list summarizes the comments from the open house.

Future Base

- Upgrade: South Bay Rd, Island Rd.
- I don't understand the need for a parallel rd. between South Bay & Cicero Center Rd.
- Rt 31 ramp to 81 is not possible due to lack of space unless businesses (dentist and hairdresser) relinquish parcels. Parallel road doesn't alleviate Rt 31 western traffic entering Rt 81. This parallel road services low populated development – not a good cost objective.

Alternative 1

- Yes, if development of Rt. 31 west of 11 and east of mall.
- Will need this when Industrial Park develops.
- Waste of time seems very unlikely.
- Upgrade Island Rd. as you are for Verplank. Upgrade South Bay.
- Upgrade to South Bay/Rt. 31; more lanes; turn-only lanes.
- Alleviates lakeshore development residents from travelling to the Rt. 81/31 interchange. This does not alleviate residents from east and south of Rt. 31 needing to enter 81 south. They will still head to Rt. 81/Rt. 31 to make a right to get to the new interchange; traffic flow will not reduce unless more right turn lanes are added at Rt. 31 & Pardee Rd.
- OK to reduce Rt 31/Rt 81 congestion from Lakeshore residents. Does not alleviate traffic on residents from Rt 31 east and south trying to enter 81. This plan will need extra right turn lanes at Rt 31 and Pardee to move traffic flow.

January 13, 2009

Yes: 7 No: 4

Yes: 2 No: 7

Alternative 2

- Create an Autobahn
- Make Maple Rd. & 481 a full interchange. Traffic between 31 and Caughdenoy would be able to use it as opposed to using Rte. 31 & 81 Interchange or Rte 481 & 11 Interchange.
- Good option with full access at new 81 Interchange but looks least likely to happen.
- New interchange is great idea. It needs access <u>east</u> to connect to South Bay, also.
- Just a bridge over 81 at Pine Grove or Gillette would be less expensive and decrease traffic on 31.
- This alternative would do a <u>lot</u> to alleviate congestion on Rt. 11 and should be considered further. Caughdenoy should be extended to South Bay Rd.
- Limited relief of 81 and 31 congestion. This interchange too close to Bear Rd/81/481 interchange. This will cause more problems south of the Wegmans development. Waste of time and money!

Alternative 3

- Improve South Bay Rd. and/or Island Rd.
- Please consider the combination of Alternatives 3 & 5. That is better than just the alternative 3.
- Looks like it would be helpful to combine alternatives 3 & 4.
- Good option but seems to only address mall traffic & not rush hour concerns.
- Doesn't impact large traffic backup on western going traffic at 81 and 31 intersection.

Alternative 4

- Upgrade South Bay and Island Rd. for a Cicero Bi-pass.
- Good alternative if on/off to 81 south at Mud Mill.
- Perhaps consider changes at the intersection of Rt. 31 & Rt. 81 a significant bottleneck.
- Since the Clay Industrial Park may not develop due to the economy, I don't see the value in spending a lot on more development in that area.
- Doesn't alleviate Rt 31/Rt 81 congestion caused from residents in the Lakeshore developments, Rt 31 and South Bay development trying to enter Rt 81.

Alternative 5

- Upgrade Thompson Rd. and Island Rd. areas.
- Parts of several alternatives could be put together and perhaps alleviate traffic.
- Need to mix elements of several alternatives; eg. #5 but also Verplank. If Industrial Park develops will need new interchange on Rt. 81.
- This doesn't address the traffic jam mess at 31/81!
- May be worthwhile considering Alts. 3, 4, and 5 in some combination, concentrating development around changes in road network.
- Is it hard to implement this alternative? It must be combined with alternative 3 preferably or even alternatives 1 and 2.
- Improve Verplank Rd. access road from Clay Industrial Park and Rt. 81. Possible Rt. 81 exchange north of Rt. 31.
- This is needed but doesn't address the traffic problem at the Rt 31/Rt 81 interchange.
- Limits on where houses can be built doesn't seem to decrease traffic where it is the worst (31 and 81) even though the traffic volume differences appear to be less in many areas. This option doesn't seem to support alleviations of jams at 81 and 31 or along 31 in Cicero in general. Are there any plans for an alternate entrance/exit to the high school?

Yes: 9 No: 2

Yes: 11 No: 4

Yes: 6 No: 8

Yes: 18 No: 1

eetion.

Question and answer

Following the open house portion of the meeting, Ms. Vitale asked the participants if there were any additional questions. The following comments were expressed (paraphrased):

- Q: Traffic's been increasing. Route 31 is bad. The 31/81 Interchange is bad. What is being done now? Who do we talk to?
- A: NYSDOT is looking at Route 31 as it is part of their jurisdiction. Many projects are on the books right now. They will announce their projects and are already reaching out to businesses, the community and schools. Specifically, NYSDOT will be implementing safety improvements on Route 31 between the I-81 interchange and Cicero Center. They are looking for comments so please share your concerns with NYSDOT and your Town officials. Make sure to fill out comment cards and we will pass that information along, too.
- Q: Will some of these alternatives be combined?
- A: Yes. The alternatives will be combined and modified based on the feedback from this meeting.
- Q: Can you come up with costs for these alternatives and discuss implementing agencies?
- A: Relative cost comparisons will be provided for the alternatives at the next round. General recommendations for implementation will also be given.
- Q: Could the last public meeting be held in the spring since many people are on vacation in the summer:
- A: The traffic modeling requires a significant amount of time. It is unlikely that analysis results will be ready for a meeting in the spring. We will work with the SAC members to determine the best time for the next public meeting.

Wrap-up

Ms. Vitale concluded the meeting with a review of the next steps in the project. SMTC staff will summarize all comments received, review these with the SAC, and develop a second set of possible alternatives. The SAC will then have the opportunity to review the second set of analysis results and develop preliminary recommendations. A third and final public meeting will be held to present the preliminary recommendations; this will probably occur in Summer 2009.

The meeting concluded at approximately 8:30 p.m.

Other public comments

Comment forms were available at the public meeting. These forms could be returned to a staff member or the comment box at the meeting or mailed back after the meeting. The following general comments were received as of January 27 (paraphrased).

- Action is needed immediately at certain locations, especially the I-81/Route 31 interchange.
- Confusion as to where comments about short-term issues should be directed (Town, NYSDOT, or OCDOT) and frustration with a lack of clear response from these parties.
- Concerns about speeding vehicles.
- Desire for a full cloverleaf interchange on I-81 at Route 31.
- Desire for underground utilities to improve the aesthetics of Route 31 around the I-81 interchange area.
- Frustration that new commercial developments were built without off-site road improvements, such as turn lanes.
- Desire to restrict growth unless infrastructure improvements keep pace.



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

Clay-Cicero Route 31 Transportation Study Public Meeting September 1, 2009 7:00 p.m. Cicero-North Syracuse High School

Meeting Summary

Attendees

Study Advisory Committee members Dave Balcer, Town of Clay Mark Centore, NYSDOT Megan Costa, SOCPA Joe Flint, NYSDOT Sean Murphy, NYSDOT Jim Stelter, OCDOT Mark Territo, Town of Clay

Elected officials and representatives Jim Corl, Deputy Supervisor, Town of Cicero Chet Dudzinski, Supervisor, Town of Cicero William Meyer, Onondaga County Legislature Al Stirpe, New York State Assembly

Citizens

Tom Crowell Jessica Zambrano Don Kelly George Taylor Joe Tassone Ed Sweeting Tim Murphy Phyllis Covell Corey Erickson Sheri Mitchell Walter Lepkowski Jeffrey Franzen

SMTC staff Mario Colone

James D'Agostino

Jason Deshaies

Audrey Morrison Bill Morrison Siva Jonnavithula Nick Claps Mary Claps Don Jordan Lynn Jennings Betty Zaluski Edward Zaluski Betty Barling Dave Panbaro Victor Ianno

Jen Deshaies

Nell Donaldson

Ahmed Ismail

Warren Covell Mark Evans Charles Eastwood Judy Boyke John Pardee Frank Conover Joe Kowalewski Don Nims Greg Card

Paul Mercurio Meghan Vitale

(33)

Total: 44 people (excluding SMTC staff)

Opening exercise: Where do you live?

As participants entered the meeting, they were asked to place a sticker on a large map of the study area to indicate where they reside. The map showed four stickers in Clay, 30 in Cicero, and one outside of the study area.

Presentation

Ms. Vitale opened the meeting with a presentation. The presentation began with a description of the SMTC's role and duties, followed by a discussion of the SMTC's work to date on this project. Ms. Vitale

then presented the Future Base scenario assumptions and analysis results in detail and gave an overview of each of the remaining alternatives (Alternatives 5 through 10). (Note: Alternatives 1 through 4 were presented at the previous public meeting and were either eliminated based on public input or combined into the new set of alternatives.)

Open house

Seven "stations" were set up around the meeting room. Each station focused on a single scenario and included a poster showing the transportation and land use assumptions, an evaluation of the alternatives based on the study goals, and a map showing traffic volume differences. Maps illustrating link volume-to-capacity ratios, intersection volume-to-capacity ratios, and traffic volumes were also available. An SMTC staff member was available at each station and SAC members were also available at some stations. Meeting attendees were asked to visit the stations, review the graphics, discuss the scenario with staff, and provide feedback by voting "yes" or "no" with stickers and leaving comments on the poster. The following list summarizes the comments from the open house.

Future Base

- Do not need to connect South Bay Rd. to Cicero Center Rd.
- Too much residential development. Traffic would not be manageable. School district is already too big. Would require an unaffordable amount of school construction.
- Go from Lake Shore Rd. to Mud Mill Rd. north; build a ramp, north at Mud Mill and 81 N.

Alternative 5 (Alternative Land Use)

• No comments

Alternative 6 (Limited Growth)

- This limited growth plan takes into consideration the quality of life of existing residents while still allowing growth. If the Clay Business Park does develop fully it would create a lot of truck traffic. The effects of this traffic could be mitigated by a new exchange at Sneller Rd.
- What is the reduction in KSF of land use compared to the future base?

Alternative 7 (S. Bay Rd. upgrade & overpass + Alt. Land Use)

- Need bike & walking access.
- Yes, but we need to have walks & biking for seniors and school children.
- Better use of a Pine Grove overpass would be a walking bridge. Many people walk in the surrounding neighborhoods but are afraid to walk down South Bay towards Circle Dr. Car traffic over that bridge would be of limited use and would be very disruptive to the homes on Pine Grove.

Alternative 8 (New transit routes + Alt. Land Use)

• No comments

Alternative 9 (I-81 interchange north + new local roads in Clay Industrial Park area)

- We need bike access from post office to CNS on 31.
- Too much residential growth would add problems to an already overcrowded school district.

Alternative 10 (New local roads in Clay commercial and Industrial Park areas + Alt. Land Use) Yes: 6 No: 3

• No comments

Yes: 10 No: 4 (+1 maybe)

Yes: 2 No: 3

Yes: 2 No: 3

Yes: 4 No: 4

September 1, 2009

Yes: 6 No: 2

Yes: 9 No: 3

Question and answer

Following the open house portion of the meeting, Ms. Vitale asked the participants if there were any additional questions. The following comments were expressed (paraphrased):

- Q: These are drastic plans. What if there is no money to do these projects? What if things change from what you've stated here?
- A: It is up to OCDOT and NYSDOT to use this information as they see fit. Towns can also take this information and use it to change their comprehensive plans or spur the creation of a master plan.
- Q: Why hasn't Cicero's Comprehensive Plan been adopted?
- A: It was acknowledged, though not adopted. This was done because zoning needs to comply with a formally adopted Plan, which it wouldn't right now. Undertaking a zoning revision is a large and involved task and it is, unfortunately, quite common for towns to move slowly on this next step. However, this may actually create an opportunity since the town could choose to revise the Plan and incorporate some recommendations from the Route 31 Study prior to formally adopting the Plan.
- Q: The speed was recently dropped from 55 mph to 45 mph on Route 31 from South Bay Road to Route 11. But this slows down traffic! Why was this done?
- A: We were not involved in that decision; however, sometimes speeds are dropped for safety reasons.
- Q: How will the SMTC incorporate the feedback it has received tonight?
- A: SMTC will review all the feedback with the SAC and develop final recommendations for the study.

Wrap-up

Ms. Vitale concluded the meeting with a review of the next steps in the project. SMTC staff will summarize all comments received, review these with the SAC, and develop a set of recommendations to be included in a final report. This was the final public meeting for the study.

The meeting concluded at approximately 8:30 p.m.

Other public comments

Comment forms were available at the public meeting. These forms could be returned to a staff member or the comment box at the meeting or mailed back after the meeting. The following general comments were received as of September 11 (paraphrased here).

- Turn lanes and signal timing changes are needed at the Route 31/Thompson Road intersection.
- Suggestion for a bike path from Cicero to Syracuse.
- You can't just stop development when roads reach capacity we want growth, even if that means a new interchange.
- The I-81 interchange at Route 31 needs to be fixed.
- Development should be focused on Route 31 rather than Thompson Road or Island Road.
- The intersection of Lakeshore Road and Route 31 needs to be fixed.

This form can be returned to the comment box or to any SMTC staff member at tonight's meeting. You may also return this form via mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) or fax (315-422-7753). **Please return comment forms by January 20, 2009**.

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Name (optional) Address (optional) Email (optional)

Would you like to be added to the SMTC mailing list? Yes

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For additional information on the *Clay-Cicero Route 31 Transportation Study*, please contact Meghan Vitale at the SMTC by phone (315-422-5716) or email (mvitale@smtcmpo.org).

ALT 5=> THIS IS NEEDED, BUT DOESN'T ADDRESS THE TRAFFIC PROBLEM AT THE RTSI / RT 81 INTERGUANGE SMTC HAS PROPOSED A MAJOR INCREASE IN CLAY/CICERO AFFIC FLOW IN THE NEXT 20 YRS. THE BEST. SCANARIO REDUCES THE ESTIMATION BY ONLY 3%. IT SEEMS SMTC TRAT CIAY/CICERO TOWNS SHOULD LOOK AT RESTRICTING THE VOLUME OF NEW COMMERCIAL & RESIDENTIAL ENTERING THE AREA UNTIL THE INPRASTRUCTURE CAN CATCH OP WITH THE GROWTH.

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For additional inform	ation on the Clay-Cicero Route 31	Transporta	ation Study, pl	ease contact	Meghan Vit	ale at the
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This form can be returned to the comment box or to any SMTC staff member at tonight's meeting. You may also return this form via mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) or fax (315-422-7753). **Please return comment forms by January 20, 2009**.

MJ3 => DOSSNOT IMPACT LARGE TRAFFIC BACKUP ON WESTERN GOING TRAFFIC @ 819-31 INTERSECTION.

ALT 2 => LIMITED RELIEF OF 81 231 CONGESTION. THIS INTERCHARGE TOO CLOSE TO BEAR RD/81/481 INTERCHANGE, THIS WILL CAUSE MORE PROBLEMS SOUTH OF THE WEGMAN'S DEVELOPMENT WASTE OF TIME & MONEY!!

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Address (optional)

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Would you like to be added to the SMTC mailing list? Yes

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For additional information on the *Clay-Cicero Route 31 Transportation Study*, please contact Meghan Vitale at the SMTC by phone (315-422-5716) or email (mvitale@smtcmpo.org).

('M] Name (optional) Address (optional Email (optional) Would you like to be added to the SMTC mailing list? Yes V No For additional information on the Clay-Cicero Route 31 Transportation Study, please contact Meghan Vitale at the SMTC by phone (315-422-5716) or email (mvitale@smtcmpo.org).

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Thank you for attending the public meeting for the <i>Clay-Cicero Route 31 Transportation Study</i> on January 13, 2009. Please provide any additional comments in the space below. Comments on long-term (10-20 years) land use and transportation planning issues will be included in the final report for the <i>Clay-Cicero Route 31 Transportation Study</i> . Comments/questions on existing and short-term issues will be forwarded to the appropriate agency.
This form can be returned to the comment box or to any SMTC staff member at tonight's meeting. You may also return this form via mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) or fax (315-422-7753). Please return comment forms by January 20, 2009
The two biggest issues in my opinion in Cicero
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all aver the 31 area makes this area a very
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Name (optional)
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Would you like to be added to the SMTC mailing list? Yes No X
For additional information on the <i>Clay-Cicero Route 31 Transportation Study</i> , please contact Meghan Vitale at the SMTC by phone (315-422-5716) or email (mvitale@smtcmpo.org).

January 12, 2009

Meghan Vitale Syracuse Metropolitan Transportation Council 126 No. Salina Street Syracuse, NY 13202

Re: Clay-Cicero Rt. 31 Transportation Study

Dear Meghan:

Enclosed are copies of correspondence which I mentioned in our telephone conversation on Friday, January 9. I believe it is self-explanatory.

This correspondence was prompted by the enclosed article which appeared in the April 21, 2007 issue of the Post-Standard. Since the paper chose not to publish my letter, I sent copies only to Supervisor Rowley and Congressman Walsh and waited to see what the next development would be.

I acknowledge the need for traffic improvement along the Rt. 31 corridor. However, my main concern is the suggestion that a new off-ramp from Rt. 81 could funnel traffic onto Caughdenoy Rd. This plan would be detrimental to the residential development in the area.

Unfortunately, I will be unable to attend the public meeting on Tuesday. I hope you will take this 'input' from concerned citizens under consideration during the planning process.

Thank you.

Sincerely,

Enc.

back new I-81 exit

Federal, state officials say traffic, population warrant second Cicero exchange.

By John Doherty 4/21/07 Staff writer

A proposed Interstate 81 interchange in Cicero is getting some support from federal and state officials.

"This could take years; but things are starting to move forward — slowly," said Cicero Supervisor Chester Dudzinski.

Rep. James Walsh, R-Onondaga, will seek some federal funding for the project in the 2008 federal budget, said Dan Gage, Walsh's chief of staff.

"We can do our best to make a case, but it's very, very early in the process," Gage said. "We won't make the determination as to whether it gets funding. That will be done by the committees and we are in the minority now. All we can do is do our best to make the case and see how it goes."

Dudzinski said he has had several discussions with Walsh and his staff during his regular trips to Washington.

The interchange, proposed last fall, would serve Cicero's growing commercial district along Route 11 between Route 31 and Circle Drive. It also would provide a direct connection to Caughdenoy Road, a thorough-



fare serving residential and industrial areas in the neighboring town of Clay.

Currently, I-81 motorists can access the area via two routes — Interchange 29N to Route 481 and exit at Circle Drive, and at Interchange 30 to the north. But then they must travel through one of the most-congested stretches of roadway in Onondaga County, according to state Department of Transportation traffic counts.

Early estimates prepared by the town say a basic interchange could cost \$7 million to \$10 million. Cicero engineers have mapped out a tentative location for the interchange, west of the Darby Farms housing development, and a connector road linking the interchange to Caughdenoy Road and Route 11.

The road would open up several, currently landlocked, commercial lots to development. Much of the land is owned by the Mufale Family Partnership and the Widewaters Group.

"We're optimistic that the SEVERAL, PAGE B-6

Several commercial lots could be developed

SEVERAL, FROM PAGE 8-1

town can make it happen," said Joseph Scuderi, Widewaters' president. "Generally we see it as a positive."

State Sen. David Valesky, D-Oneida, said he also supports the interchange concept.

"It is something that absolutely needs to be given serious attention based simply on the population growth in the towns of Cicero and Clay," Valesky said.

Valesky said the proposal needs to be studied by the Syracuse Metropolitan Transportation Council and other agencies "When you look at the current transportation infrastructure, you can't help but ask yourself is it currently constructed to handle the traffic that is now using it?" Valesky said.

Assemblyman Al Stirpe, D-North Syracuse, said he has not talked with town officials about the project, but agrees something needs to be done to deal with the town's growing traffic problems.

"What the best thing to do is I'm not sure, but I do know they have to do something to alleviate the congestion." Stirne said.

RECEIVED ,IAN 1 0 PAR

April 29, 2007

The Post-Standard The Reader's Page Box 4915 Syracuse, NY 13221

Re: Route 81 Exit Ramp/Caughdenoy Rd.

To the Editor:

I have been following the various articles which have appeared in the local papers since last Fall, regarding the proposal by Town of Cicero Supervisor Dudzinski for a new Interstate 81 interchange. This new ramp would funnel traffic onto Caughdenoy Rd. in the Town of Clay. The recent article (April 21) indicating that federal and state "politicians" are supporting the idea has prompted this letter.

My husband and I have been residents of the Caughdenoy Rd. area for over 40 years. We were pioneers in one of the first developments, and our children were raised here. Over the years we have witnessed tremendous residential growth, with little or no commercial development. Part of this area is in the Town of Cicero, which also has residential growth.

Funneling excessive traffic into a predominantly residential neighborhood would be a nightmare of congestion, noise, polution and loss of property values. The connecting roads (Lawton, Stearns and Maple) would become "shortcuts". Route 481 borders Caughdenoy on the south and has an existing exit ramp onto Caughdenoy. The traffic noise at times can be distracting. Do we really need another one?

Although I recognize there is a traffic problem in the Town of Cicero Route 31 corridor, Mr. Dudzindki's plan to route the overflow onto Town of Clay residents is unacceptable. Solving one problem with another is not the answer. I am asking our federal and state representatives, the Town of Clay Supervisor and the Syracuse Metropolitan Transportation Council to take our concerns into account before allocating funds or allowing this project to go forward. It's time to go back to the drawing board. Route 81 Exit Ramp/Caughdenoy Rd.

To those residents of Caughdenoy, Lawton, Stearns and Maple road areas, if you care about your neighborhoods, please contact your representatives and let them know you do not want an Interstate 81 exit and connector road at Caughdenoy Rd. This may be in the early planning stages, but the time to stop it is now.

The young families moving into the new housing developments will bear the brunt of the traffic problems and the roads will have to be widened eventually. Have you heard of Eminent Domain?

RECEIVED JAN 1 3 2009

April30, 2007

Mr. James J. Rowley, Supervisor Town of Clay 4401 Route 31 Clay, NY 13041

Re: Rt. 81 Interchange/Caughdenoy Rd.

Dear Mr. Rowley:

For your information, enclosed is a copy of letter i have sent to the Syracuse Post-Standard regarding the above topic.

I am urging you to take into consideration our concerns pertaining to Mr. Dudzinski's plan to funnel traffic from Rt. 81 onto Caughdenoy Rd. Adding unnecessary traffic to the everexpanding neighborhoods will cause further congestion for the residents of the area. Local traffic is heavy at various times of the day.

Although the plan looks good on paper, and Congressman Walsh has agreed to seek funding in 2008, no one has asked for input from the people who would be adversely affected. This is wrong, and I would like to suggest a new study for an interchange that would be less intrusive to residential neighborhoods.

I would appreciate hearing from you regarding this matter. Thank you.

Sincerely,

. . . .

Enc,

James J. Rowley Supervisor

Town of Clay

4401 State Route 31, Clay, New York 13041-8707

Damian M. Ulatowski Deputy Supervisor Councilors: Joseph A. Bick Naomi R. Bray Robert L. Edick Clarence A. Rycraft William C. Weaver

May 14, 2007

Hon: James T. Walsh PO Box 7306 1340 Federal Building Syracuse, NY 13261

Chet Dudzinski, Supervisor Town of Cicero 8236 South Main St. Cicero, NY 13039

Dear Congressman Walsh and Supervisor Dudzinski:

Enclosed please find a letter from my constituent, , regarding recent news reports about a proposed Route 81 exit ramp onto Caughdenoy Rd. As of this date I have not been informed of any proposals for Route 81 that would affect the Town of Clay. I am requesting that my office be copied on all correspondence, proposed legislation, meeting notices, etc. on any proposal that would affect Clay concerning an exit ramp off of Route 81.

Thank you for your anticipated cooperation.

Sincerely James Rowley

James Rowley Supervisor

Encl.

May 2, 2007

Honorable James T. Walsh Member, House of Representatives 100 So. Clinton Street Syracuse, NY 13261

Re: Route 81 Interchange at Caughdenoy Rd.

Dear Congressman Walsh:

Enclosed is a copy of a letter I have sent to the Syracuse Post-Standard regarding the above topic, which is self-explanatory.

Y F . J Y

I am asking that you take into consideration our concerns pertaining to Mr. Dudzinski's plan, prior to requesting funding for a new interchange at this location. Although the plan looks good on paper, no one has asked for input from the people who would be most adversely affected. This is wrong, and I would like to suggest a new study for an interchange which would be less intrusive to the residential neighborhoods.

I know you have higher priorities; the war in Iraq, the budget, dealing with a Democratic congress, etc.. However, whatever you can do to help your constituents in the Town of Clay avoid a traffic nightmare will be greatly appreciated.

Very truly yours,

Enc.

RECEONES JAN I 3 2000

JAMES T. WALSH MEMBER OF CONGRESS 25TH DISTRICT, NEW YORK

CONGRESSIONAL HEARING CAUCUS

CONGRESSIONAL BIOFUELS CAUCUS

SAVING AMERICA'S CITIES WORKING GROUP

CONGRESSIONAL BIOMEDICAL RESEARCH CAUCUS

FRIENDS OF IRELAND

May 8, 2007

Congress of the United States

House of Representatives Washington, DC 20515–3225 COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEES:

LABOR, HEALTH AND HUMAN SERVICES, EDUCATION AND RELATED AGENCIES RANKING MEMBER

TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELATED AGENCIES

Dear Mrs.

Thank you for your recent correspondence regarding your concerns about Cicero Supervisor Chet Dudzinski's proposal to construct a new interchange for Interstate 81 in the northern suburbs.

I have discussed the concept with Mr. Dudzinski and have received some very preliminary materials describing his idea. I can assure you that the project is far from certain as appropriate public input and necessary traffic studies and area impact reviews by the Syracuse Metropolitan Transportation Council have yet to be initiated.

Please know that I will not work to secure needed federal resources for the project until these studies are conducted and the public has been able to fully consider the proposal.

Thank you for your interest in this issue and for taking the time to contact me directly.

Sincerely,

pines Twilch

James T. Walsh Member of Congress

2372 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515–3225 (202) 225–3701 (202) 225–4042 FAX E-Mail: rep.james.walshig mail house.gov

1340 FEDERAL BUILDING SYBACUSE. NY 13261 (315) 423-5657 (315) 423-5669 FAX PALMYRA TOWN HALL 1180 CANANDAIGUA ROAD PALMYRA, NY 14522 (315) 597-6138 (315) 597-6631 FAX 1-877-230-7532

PRINTED ON RECYCLED PAPER

Bill Meyer

From:Bill MeyerSent:Tuesday, January 13, 2009 8:15 AMTo:Bill Meyer

Subject: FW: Tomorrow's Cicero-Clay Route 31 Transportation Study Public Meeting Input

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From: Sent: Monday, January 12, 2009 8:30 PM

To: V

Subject: Tomorrow's Cicero-Clay Route 31 Transportation Study Public Meeting Input

To William H. Meyer, Jr., Onondaga County Legislator - 3rd District:

Thank you for today's invitation to tomorrow evening's Cicero-Clay Route 31 Transportation Study Public Meeting. I'd appreciate your entering into the record on my behalf the following two items specifically concerning the Route 31-I81 interchange:

1. Please consider the installation of cameras there for online internet broadcasts as a possible economic measure to aid evaluation of this situation. The ability to view it remotely might facilitate any studies needed.

2. All residents' suggestions for remedying this interchange should formally be evaluated for merit, regardless of how controversial they may appear upon first glance. As an example, the article below from the Financial Times April 21-2, 2007 House & Home section pl. This Hans Monderman, the Dutch engineer, or someone who shares his views on dealing with traffic congestion should be solicited for their advice.

Sincerely,

A civilising influence By Claire Dowdy

Parents screaming at their children to get out of the way of speeding vehicles, cars parked all over the kerbs and neighbours barely on nodding terms. It's a typical scenario in many of the world's cities, suburbs and even small towns. But if an enlightened band of planning experts, traffic engineers and community activists has its way, it's one that will soon be eradicated.

Take Mina Road in St Werburghs, Bristol, in the UK. The 45 families who live on it recently secured £12,500 to narrow the once busy road to a single running lane wide enough to let cars and bicycles pass

safely, to introduce parallel parking and to install planters to distract drivers into slowing down.

Resident Simon Groves, who also happens to be a member of the local county council's traffic management team, now describes his street as a little enclave. "It's much more chilled out," he says. "I know everyone by name and people are looking after the place."

He isn't sure whether the transformation has resulted in higher house prices but says the neighbourhood is now "desired by families with young kids because it's a safe place to be". Each planter has been adopted by a household; his only disappointment is that they haven't been filled with shrubs big enough to hide the parked cars.

The efforts of the St Werburghs residents are a shining example of an urban planning philosophy - often labelled Home Zone or Shared Space - that has developed over the past three decades and promotes sensitive street design as a way to create more people-friendly environments.

"We should learn to build villages in the way they were built in the past," says Hans Monderman, the Dutch engineer seen as the father of Shared Space. He is not advocating unpaved roads, horse-drawn transport and reinstating stocks - he just wants neighbourhoods that work for everyone, satisfying residents as well as moving traffic along. Cars, he argues, have been allowed to dominate residential areas, particularly in suburbs, for far too long, and quality of life has declined has a result.

The Home Zone approach tends to focus on a single residential street or neighbourhood. These zones are characterised by having no separate raised pavements but instead a variety of surface treatments: trees, planting and street furniture to define and screen car parking; bollards and street lighting to illuminate the space. "They look to extend the social domain by reducing the areas designed for traffic flow," says British urban design consultant Ben Hamilton-Baillie. "There is a variety and richness of detail because each community has been involved. And for areas where people don't have big gardens, they use the street for sitting and chatting."

Shared Space typically involves larger-scale projects in which many roads in a city or town are stripped back to their bare minimum to inspire a more harmonious relationship between drivers, pedestrians and cyclists. Measures are sometimes counter-intuitive, making roads more confusing so that drivers are forced to slow down. In a typical scheme, out go the all the road signs, traffic lights, kerbs and zebra crossings and in come narrower streets and new paving. The resulting ambiguity encourages eye contact and integrates cars into a "social zone".

The idea behind both strategies is the same, Monderman says. "Public space has always been the most important space in society" and traffic engineers must respect it. "We create context," he explains. "When you want people to behave as if they are in a church, you have to build a church." And when you want drivers to feel as if they are in a community, not just passing through it, roads must look like lanes, not thoroughfares.

Monderman has so far spearheaded more than 100 Shared Space schemes in the Dutch region of Friesland. In the village of Opeinde the division between road and pavement is now indistinguishable and road markings and signs have been removed. Traffic still flows - but at a leisurely pace of about 30km per hour - and the streets have been reclaimed by playing children, cyclists and barking dogs.

In Drachten, a town with 45,000 residents, junctions with traffic lights and roundabouts have also been

rejected in favour of "squareabouts", a Monderman signature feature in which cars flow through pedestrian squares. Owen Paterson, the UK Conservative party's transport spokesman, visited the Laweiplein intersection earlier this year as research for a policy paper on roads and, even when he stood in the middle of traffic, did not elicit a single act of road rage. Some people shook their heads but not one person honked or gestured menacingly.

"Removing traffic lights leads to the perception of danger [but] a little bit of risk should be part of life otherwise you get accidents," says Monderman, who is now in his 60s. "That's a difficult message. But when you give people responsibility and stop interfering, you can trust people. The cost is [also] lower because lights are expensive and you don't have to change the system. It's permanent."

Since traffic lights were ditched at Laweiplein in 2003, the number of accidents has dropped and, as Paterson's visit shows, it is now a mecca for engineers, planners and politicians. Results in the Swedish town of Norrköping, home to the country's first Shared Space scheme, have also been encouraging, says Christer Hyden, professor of technology and society at Lund University. Studies show that "the average speed [is now] 13km an hour, which more or less guarantees that there will be no severe accidents," he explains.

Larger communities have successfully used Shared Space principles to reclaim the public realm, too. These include the European cities of Copenhagen in Denmark, Barcelona in Spain, Lyon and Strasbourg in France and Freiburg in Germany; Portland, Oregon, in the US; Curitiba in Brazil; Córdoba in Argentina; and Melbourne in Australia.

Jan Gehl, professor of urban design at the School of Architecture in Copenhagen, has orchestrated the Danish capital's transformation, much of it focused on the humble bicycle. Cycle traffic lights are, for example, timed to turn green six seconds before those for cars. Most of the city's four-lane roads are gone, reduced to two with a waiting lane for cyclists in the middle. And downtown street parking is being axed, with car parks created on the outskirts instead.

Thanks to these measures, Copenhagen now has the lowest car use in any European city and 36 per cent of residents cycle, double the level of 10 years ago and six times higher than in London. "The more bikes there are, the safer it is to cycle because of the critical mass," Gehl says.

Melbourne has also made great strides in traffic management, three years ago introducing new, wider pavements in local bluestone and better quality street furniture and lighting. More recently it installed Copenhagen-like cycle lanes. According to Gehl, there are now 40 per cent more people walking the city's streets than a decade ago.

The trend doesn't stop at developed western countries either. Gehl is also working in the Jordanian capital of Amman, which has "a very active and idealistic mayor" in Omar Al Ma'ani. "He is eager that the city shouldn't develop into a big traffic jam like other Middle Eastern cities but many wealthy people are coming from Iraq in cars," Gehl says. So "we are using the concept of pedestrian priority streets, including Home Zones."

Hamilton-Baillie, who is also a consultant to UK conservation body English Heritage, thinks that these schemes serve to reintroduce civility into communities. "The whole system of conventional urban traffic planning is the systematic removal of civility," he explains.
Gehl agrees. "In a traditional city public spaces were for meeting, marketing and moving. But in the past century the moving has taken over."

Although northern Europe has led the way in the Home Zone and Shared Space movements, the latest spin-offs can be found in the UK. The busy shopping area of High Street Kensington in London has been refurbished to try to reduced traffic speeds, and Sustrans, the green transport charity, has launched a new project called DIY Streets and is on the hunt for 10 neighbourhoods with residents who want to redesign their roads into being better places to live. Meanwhile, in Kent, the unprepossessing town of Ashford might soon become the biggest Shared Space scheme in the world.

Ashford is set to double in size in the next 30 years, with 31,000 new homes and 28,000 new jobs. As developments rise on its outskirts there are worries that its 1970s four-lane ring road will grow increasingly congested, making it untenable for cyclists and pedestrians and strangling life in the town's historic centre. In a bid to head such problems off, the county authority is spending £11.3m to reduce a third of the 2km road to a two-way, slowed-down "quality street", jointly designed by sculptors, artists and engineers.

RKL Consultants, which is handling the involvement of artists including John Atkin, Nayan Kulkarni and Simeon Nelson, envisages way-marking water channels, musical stepping-stones and south-facing terraces. "It will put Ashford on the map and I can see visitors coming from all over the world, like Drachten," says Richard Stubbins, the Kent county councillor who has championed the scheme. Accidents are predicted to decline by 30 per cent after the makeover but he thinks the effect will be even more dramatic.

Hamilton-Baillie, who is advising on Ashford, also thinks it could be "a very important scheme". "It's on a scale for people to take notice and it tackles a general problem of 1960s ring roads [in] dozens of towns from Nottingham [in the UK] and Rotterdam [in the Netherlands] to many large French cities".

The Shared Space and Home Zone philosophy is indeed a rejection of prevailing mid-20th century wisdom. The 1933 Athens charter, for example, said that residential, work, transport and recreation should never be mixed. By the 1950s, modernist ideas of the vertical city were being realised and public spaces began to deteriorate. Critics such as Jane Jacobs, author of The Life and Death of Great American Cities, railed against what they saw as short-sighted planning.

But by the 1970s, in both cities and suburbs, especially in the US, Canada and the Middle East, "there was just a sea of asphalt and not a single reason for being out in the public realm", Gehl says. He cites Miami, where street lights were removed "because everyone has head lights". "It's a spooky environment. Sometimes you can hear joggers panting in the dark."

It was in the 1980s that mainstream attitudes began to change. "We started to gather in cities to meet with our fellow man again and develop our culture, rather than just to get from A to B, and there were attempts to turn this super-tanker around," Gehl says.

Now the theories espoused by those pioneers have "generally become an established component in broader urban policies". And, although momentum in northern Europe has died down, it seems to be gaining in other parts of the world.

Advocates have no doubts about why. "Predictions that vehicles are going to be part of our economic

and social systems for some time mean we will need to find some better way of accommodating them in towns," says Hamilton-Baillie. Concerns over health and depleting fossil fuels will also factor in, Gehl says. "More and more cities will compress themselves and try to organise themselves differently."

'Who has the right of way? I don't care,' said Hans Monderman, a traffic engineer. 'People here have to find their own way, negotiate for themselves, use their own brains.'

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States -

Thank you for attending the public meeting for the *Clay-Cicero Route 31 Transportation Study* on September 1, 2009. Please provide any additional comments in the space below. Comments on long-term (10-20 years) land use and transportation planning issues will be included in the final report for the *Clay-Cicero Route 31 Transportation Study*. Comments/questions on existing and short-term issues will be forwarded to the appropriate agency.

This form can be returned to the comment box or to any SMTC staff member at tonight's meeting. You may also return this form via mail (SMTC, 126 N. Salina St., Suite 100, Syracuse, N.Y. 13202) or fax (315-422-7753). **Please return comment forms by September 11, 2009**.

500 un arton) an into 10 Daral Name (optional Address (optional) Email (optional) Would you like to be added to the SMTC mailing list? Yes No For additional information on the Clay-Cicero Route 31 Transportation Study, please contact Meghan Vitale at the SMTC by phone (315-422-5716) or email (mvitale@smtcmpo.org).

Clay-Cicero Route 31 Transportation Study

APPENDIX C

Demographic maps

















Clay-Cicero Route 31 Transportation Study

APPENDIX D

Results from Town of Clay Travel Demand Modeling Task

Introduction

This document summarizes the results of a technical analysis task completed by the Syracuse Metropolitan Transportation Council (SMTC) at the request of the Town of Clay. The purpose of the analysis was to evaluate the transportation impacts of proposed land uses changes and roadway improvements in a portion of the Town of Clay west of Henry Clay Boulevard and south of Verplank Road (Figure 1 shows the boundary of the Area of Interest).

Background

The SMTC initiated a study of the Route 31 corridor through the Towns of Clay and Cicero in 2005 (Clay-Cicero Route 31 Transportation Study). The purpose of that study is to examine land use and transportation issues in the Town of Clay and the Town of Cicero with a focus on the Route 31 corridor. However, progress on the Route 31 Transportation Study has been slower than anticipated while the towns updated their Comprehensive Plans. Meanwhile, there has been significant development activity in the Town of Clay and the Town requested that the SMTC analyze the impacts of specific land use and roadway changes. The SMTC agreed to use its travel demand model to undertake this analysis and contracted with a consultant – Cambridge Systematics – to complete the work.

Analysis Overview

This technical analysis task was focused on short-term impacts and solutions, while the Route 31 Transportation Study has a long-range outlook. To that end, the goals of this analysis were to:

- Quantify the impacts of proposed land use changes and roadway improvements on the transportation system within the study area.
- Estimate the expected change in traffic volumes on roadway segments due to the proposed land use and roadway modifications.

The analysis did not include detailed intersection capacity analysis. However, capacity analysis completed as part of a prior study in this area (Route 31 & Route 57 Corridor Study, FRA Engineering, 2006) indicates that the Route 31 corridor experiences periods of congestion with intersections from Carling Road to the Route 481 interchange at or near capacity, especially during the PM peak hour.

Three scenarios – base, land use changes, and land use changes with roadway improvements – were considered for year 2003 and year 2027 conditions.

The proposed land use changes that were included in the analysis consist of the following:

- 220,000 square foot (SF) Walmart
- 200,000 SF Lowe's Home Improvement store
- 13,000 SF drugstore
- 50,000 SF other retail
- 80 townhouse units
- 500 apartment units

The analysis of the land use changes also included some "given" roadway changes that are required in order to provide access to the proposed development (in contrast to the proposed roadway improvements, listed below, which are improvements beyond the minimum necessary to provide access). These given roadway improvements consist of a driveway on Route 31 for the Lowe's store, a driveway on Route 31 to access the proposed apartments, and a new Town road connecting to Route 31 and Route 57 that will provide access to the Walmart and the townhouses.

The proposed roadway improvements included in the analysis consist of the following:

- New north-south collector road between Verplank Road and Route 31, east of the railroad tracks.
- Extension of Dell Center Road to Verplank Road.

- Upgrade of Verplank Road (from Route 57 to Morgan Road) from a local road to a minor arterial. This would involve structural improvements and lane and shoulder widening, although no additional travel lanes would be added.
- New connection between Verplank Road and Great Northern Mall.

The roadway improvements were jointly determined with input from the Town of Clay, the New York State Department of Transportation, and the Syracuse-Onondaga County Planning Agency and agreed upon prior to initiating the modeling task. The analysis did not consider the incremental impact of each of the roadway improvements (i.e. this was an "all or nothing" analysis). Since this was a planning level analysis, specific alignments for the new roadway connections were not determined.

Figure 1 illustrates the proposed land use changes and roadway improvements analyzed under this modeling task.

Results

The attached memo from Cambridge Systematics describes the results of the technical analysis. Figures 2 through 5 provide additional details of the analysis results. The expected changes in traffic volumes due to the land use changes and roadway improvements for all links in the study area by direction are shown on Figures 2 and 3 for the 2003 and 2027 analysis years, respectively. The total two-way traffic volume on select links is shown on Figure 4 for the 2003 analysis year and on Figure 5 for the 2027 analysis year.

Conclusions

Based on the analysis results described in the attached memo, the following conclusions are reached:

- The proposed new land uses will draw traffic from outside the study area and increase overall study area vehicle miles traveled (VMT).
- The additional traffic will exacerbate existing congestion in the study area. Intersections that are already operating at or near capacity will experience increasing vehicle delay.
- The proposed road improvements will increase overall VMT while decreasing traffic volumes on some roadway segments. Traffic operations on Route 31 will be similar to existing conditions if the roadway improvements are implemented along with the proposed land use changes.

In summary, the travel demand modeling and analysis requested by the Town of Clay indicates that the proposed land use changes will increase traffic volumes in the study area, which is already experiencing congestion. The proposed roadway improvements will enhance mobility and offer more travel choices, both for drivers traveling through the study area and drivers destined to the new developments within the study area.













Memorandum

TO:	Jim D'Agostino, SMTC
FROM:	John Lewis, CS
CC:	Peter Faith, E&K John Duesing, CS
DATE:	March 15, 2007
RE:	SMTC – Town of Clay Modeling and Analysis Project: Task G Deliverable

This memo is composed of two main sections. The first section summarizes the planning analysis to date and briefly discusses methods and results associated with each Sub-Task. The second section provides an executive summary or conclusion statement of the findings of this work effort to be used as a basis for the upcoming workshop to prepare for meetings with the Town of Clay.

I – Planning Analysis Summary

Base and Future Year Models (Sub-Tasks A&B)

The main focus of Sub-Tasks A/B was to perform a brief test of the SMTC travel model to determine its appropriateness as an analysis tool for this study. This section summarizes the analysis steps and results. More detailed information including summary tables and graphics can be found in a memo describing Sub-Tasks A&B dated January 12, 2007. The main components and conclusions are described here.

Installation of the SMTC model and replication of results provided by SMTC. The base and future year models were run and results were found to be consistent with those provided by SMTC.

Comparison of Base year (2003) assigned volumes to ground counts where available within the study area. A comparison of traffic volumes between available ground counts and the base year 2003 model estimates was conducted for Route 31 and for NY 481. In general, the model overestimates traffic within the corridor. In all locations except for the segment of Route 31 between Route 57 and NY 481, the model estimates higher traffic volumes than what has been observed. Likewise, model estimated PM peak hour traffic volumes are higher in these same locations.

Comparison of Base year (2003) estimated volume-to-capacity (V/C) ratios to field observations. A review of the V/C plots indicates that, consistent with field observations, the roadways in and around the intersection of Soule Rd/NY 481 On-Ramp & Route 31 are at or near capacity in the PM peak hour. Other areas of concern are the western edge of the study area near River Road and the eastern edge of the corridor near Morgan Road.

Review of future year (2027) forecasts within the study area. On a county-wide basis, trip making increased by 10.6% over the base year model from about 1.68 to 1.85 million trips per day. Traffic volumes, on the other hand, increased by about 15% within the county. This trend is consistent with what we have seen in other areas of the country as VMT has increased at a faster pace than population and/or employment.

Base and Future Models with Proposed Land Use Projects (Sub-Tasks C&D)

The main focus of Sub-Tasks C&D was to quantify the effect that proposed changes in land use would have on the transportation system within the study area. With that in mind, the following summarizes the results of that analysis. More detailed information was provided earlier in a memo dated January 26, 2007.

Network modifications to the base and future year models based on the results of Sub Tasks A&B. One recommendation that came out of the results of Sub Tasks A&B was to modify the way the zones within the study area accessed the roadways by moving and adding centroid connectors. The modifications were intended to improve the model's accuracy with regard to the existing conditions and to lay the foundation for making the land use changes related to the proposed projects. The models were then re-run with the recommended network changes and the results again checked for consistency with the counts. There were no significant changes in traffic volumes as a result of these modifications.

Modifications to trip generation model inputs associated with proposed land use projects. The proposed land use changes within the study area were provided by SMTC. Table 1 below lists these projects and identifies which TAZ they are located in. The table also shows the trip generation calculations used to develop the model inputs. Trip rates for residential land uses were consistent with the current SMTC travel model trip generation procedures. ITE trip rates were used for the proposed non-residential projects.

The trip generation models were then applied with the updated model inputs. For both the 2003 and 2027, trips increase by about 28,500 a day. This is slightly lower than the manual calculations that appear in the table and is due to model rounding and other statistical "model noise" related to the disaggregate nature of the trip generation procedures.



Table 1 – Trip Generation

				Model Inputs		SMTC Rates	ITE Rates		
		ITE		Households (Single	Retail Trade		Average Vehicle trips/1000	Persons per	
TAZ	Land Use	Category	Units	Family)	Employees	Trips/Emp	sf	vehicle	Trips/Day
				-					
578	Apartments	N/A	500	500			n/a	1.0	3,300
575	Town Houses	N/A	80	80			n/a	1.0	528
575	Walmart	820	220,000	0	697	24.81	n/a	1.4	12,326
575	Retail (5 @ 10k)	820	50,000	0	268	24.81	n/a	1.4	4,731
561	Drug Store	820	13,000	0	112	24.81	n/a	1.4	1,971
573	Lowes	812	200,000	0	346	24.81	30.6	1.4	6,120
	Total								28,977

Comparison of Base model volumes to Updated Land Use model volumes. The models were run with the updated networks and land uses to produce traffic volumes for the daily model and for the PM Peak Hour. As expected, traffic volumes increased on many of the roadways within the study area and especially along Route 31. Overall, traffic volumes on Route 31 increased by about 12% in the PM Peak Hour in the base year and by about 8% in 2027. Figures 1-2 at the end of this memo show the estimated differences in traffic volumes between the two alternatives.

Base and Future Models with Proposed Roadway Improvements (Sub-Tasks E&F)

The main focus of Sub-Tasks E&F was to quantify the effect that the proposed roadway improvements would have on the transportation system within the study area. The following describes the network changes made and briefly discusses the results in terms of the estimated traffic volumes. More detailed information was provided earlier in a memo dated February 14, 2007.



Network modifications to the base and future year models based on the proposed roadway improvements. A set of roadway network improvements were made to the base and future year models based on the materials received from SMTC at the beginning of the project. These include:

- A new collector road was added between Verplank Rd and Route 31 west of Route 481 to provide access to the proposed new land uses in TAZ 578 as well as to provide an alternative route for trips within the corridor. The new road was coded as a major collector with one lane each way with a capacity of 1000 vehicles per hour.
- The existing Dell Center Road was upgraded to a major collector roadway, added to the model network and extended to Verplank Rd. The new and upgraded portions were coded as a major collector with one lane each way with a capacity of 1000 vehicles per hour.
- The segments of Verplank Rd that are within the study area were upgraded from local roadway to minor arterial, which increased the capacity from 4,500 vehicles per day to 12,000 vehicles per day.

Comparison of Updated Land Use model volumes to Roadway Improvement model volumes. The roadway improvements modeled provide alternative routes for trips within the corridor and have the desired effect of lowering traffic volumes on Route 31. Overall, traffic volumes during the PM Peak Hour in the base year 2003 are estimated to decrease by about 11% on Route 31 within the study area and by about 12% in 2027, (see Table 2). Traffic volumes are, however, estimated to increase slightly west of Route 57 as the new "excess" capacity further east draws new trips into the corridor. Traffic volumes are also estimated to increase significantly on the improved Verplank Road as traffic diverts from the more congested Route 31. Figures 3-4 at the end of this memo show the estimated differences in traffic volumes between the two alternatives.

Comparison of Base model volumes to Combined Land Use/Roadway Improvement model volumes. The net result of the new land use developments and the proposed roadway improvements combined is a slight decrease in overall traffic volumes of about 3% on Route 31 within the study area in the PM Peak Hour in 2003 and by about 5% in 2027, (see Table 2). The sections of Route 31 that are showing the largest decreases are generally east of Route 481 while sections to the west of Route 57 are estimated to increase as a result of the proposed changes. Figures 5-6 at the end of this memo show the estimated differences in traffic volumes between the two alternatives.



II – Conclusions

Base Year Model Validation. Based on the comparison of the base year 2003 model estimates to ground counts within the study area, we feel that the models are, in general, behaving accurately and consistently and are therefore suitable for assessing the impacts of the proposed developments within the corridor. This conclusion is based on the fact that the model, although it tends to slightly overestimate traffic volumes within the corridor, is consistent and therefore a stable tool from which to conduct analyses and make conclusions.

Year 2003 Base Conditions. Although no detailed traffic operations analysis was conducted as part of this study, field inspections and prior Synchro analyses (Route 31 & Route 57 Corridor Study, FRA Engineering, 2006) have indicated that Route 31 experiences periods of congestion at various times during the day, especially during the PM peak hour. In particular, intersections on Route 31 east of Carling Road, including Soule Rd/NY 481 On-Ramp & Route 31, are at or near capacity in the PM peak hour.

Year 2027 Base Conditions. The 2027 base alternative was compared to the 2003 base year. As expected, traffic increases significantly within the corridor. VMT within the study area is estimated to increase by about 17% from 27,810 to 32,570 and much of this is focused on Route 31 which is estimated to increase by 21%, (see Table 2). These increases will result in further degradation of traffic operations along Route 31. For example, traffic on Route 31 between Route 57 and NY 481 is estimated to increase by about 300 vehicles per hour (2-way) in the PM peak hour, (see Table 3).

Effects of Proposed Land Use Projects. The effects of adding the proposed land use projects on traffic volumes within the study area are significant and will exacerbate the current operational issues within the corridor. As most of the proposed land uses are major attractors, traffic is drawn from outside of the study area, which has the effect of increasing traffic volumes on all of the links entering/exiting the study area. Figures 1 & 2 below illustrate the effect of adding the proposed land uses on traffic in the study area. Significant changes in traffic flows include:

- VMT within the study area is estimated to **increase** by 8.1% over the base condition in 2003 and by 6.5% in 2027, (see Table 2).
- Average PM peak hour traffic volumes on Route 31 are estimated to **increase** by 9.7% over the base condition in 2003 and by 8.2% in 2027, (see Table 2).
- Traffic volumes on individual roadways within the study area are estimated to **increase** substantially. Table 3 shows the estimated traffic volumes on key links for the base and future years. These include:
 - Traffic on Route 31 between Route 57 and NY 481 is estimated to increase by more than 500 vehicles per hour (2-way) in the PM peak hour in both the base and future years; and



• Traffic on Route 57 north of Route 31 is estimated to **increase** by about 600 vehicles per hour (2-way) in the PM peak hour in both the base and future years.

Table 2 – Route and Study Ar	ea Statistics – PM Peak Hour

	Year	Statistic	Base	Land Use Updates	Land Use & Roadway Improve- ments	Land Use vs. Base	Roadway Improvements vs. Land Use	Land Use & Roadway Improvements vs. Base
Route 31								
	2003	Average Volume	2,790	3,060	2,710	9.7%	-11.4%	-2.9%
		VMT	10,250	11,120	10,030	8.4%	-9.8%	-2.1%
	2027	Average Volume	3,300	3,570	3,140	8.2%	-12.0%	-4.8%
		VMT	12,420	13,310	11,880	7.2%	-10.7%	-4.3%
Study Area								
	2003	Average Volume	1,270	1,390	1,380	9.4%	-0.7%	8.7%
		VMT	27,810	30,080	31,600	8.1%	5.0%	13.6%
	2027	Average Volume	1,480	1,590	1,580	 7.4%	-0.6%	6.7%
		VMT	32,570	34,700	36,260	6.5%	4.4%	11.3%

Effects of Roadway Improvements. The proposed roadway projects as described in section I have significant effects on traffic volumes within the study corridor. In general, the upgrade and improved access to Verplank Road makes this route more attractive and much of the traffic generated in the study area zones as well as traffic passing through the study area is diverted to Verplank Road from the more congested Route 31. The net effect of these roadway improvements is to provide alternative routes for traffic to/from and through the study area corridor, which will significantly improve traffic operations along Route 31. One unintended side effect of the improved capacity along Verplank Road is the attraction of new through, trips which has the overall effect of increasing VMT within the study area. Figures 3 & 4 below illustrate the effect of adding the Roadway Improvements on traffic flows in the study area. Significant changes in traffic flows include:



- VMT within the study area **increases** by 5.0% over the Land Use scenario in 2003 and by 4.5% in 2027 (see Table 2);
- Traffic volumes on some of the roadways within the study area are estimated to **decrease** substantially. Table 3 shows the estimated traffic volumes on key links for the base and future years. These include:
 - PM Peak hour Traffic volumes along Route 31 east of Route 57 **decrease** by as much as 13% in 2003 and by 14% in 2027, (see Table 3);
 - PM Peak hour traffic volumes along Route 57 **decrease** by about 13% in 2003 and by 9% in 2027 north of Route 31;
 - Traffic volumes on Morgan Road between Verplank Road and Route 31 are estimated to **decrease** in 2003 by about 35% and by about 26% in 2027.
- Traffic is diverted to Verplank Road which shows an **increase** of more than 800 vph (2-way) in 2003 and more than 900 vph (2-way) in 2027 during the PM peak hour.

Cumulative Effects of Land Use and Roadway Improvements. The net effect of adding the proposed land use projects and roadway improvements on traffic volumes in the study area is illustrated in Figures 5 & 6 below. These figures show the net change in traffic volumes on links in the PM peak hour for the base and future years. Table 3 also shows the net effect on traffic volumes by listing the volume change and percent change in estimated traffic flows on key links in the study area. In general, the figures and table show that some of the traffic along Route 31 associated with the land use projects is diverted to the improved Verplank Road. This is especially true east of Carling Road, whereas west of Carling and Dell Center Roads, Verplank Road as an alternative to Route 31 becomes more circuitous and therefore less attractive.





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Table 3 – Estimated Traffic Volumes on Study Area Roadways

Year 2003 - Base Year

	Base	Land Use Updates (LU)	Roadway Improvements (RI)	Land Use	vs Base	Road Improverr Land	way ients vs Use	Land Use & Improvem Bas	Roadway ents vs e
Location	Volume	Volume	Volume	Difference	Percent	Difference	Percent	Difference	Percent
Average Daily Traffic (ADT)									
Rte 31 west to Rte 57	21,551	23,044	23,477	1,493	6.93%	433	1.88%	1,926	8.94%
Rte 31 RT57 to NY481	28,633	33,097	28,334	4,464	15.59%	(4,783)	-14.39%	(299)	-1.04%
Rte 31 NY 481to Morgan Rd	22,053	24,111	19,770	2,058	9.33%	(4,341)	-18.00%	(2,283)	-10.35%
NY481 south of RT31	32,336	33,064	32,969	728	2.25%	(98)	-0.29%	633	1.96%
NY481 north of Rte 31	26,394	26,223	25,425	(171)	-0.65%	(288)	-3.04%	(898)	-3.67%
Rte 57 - north of Rte 31	3,741	10,620	8,759	6,879	183.88%	(881)	-8.11%	6,018	160.87%
Rte 57 - south of Rte 31	10,565	14,616	14,309	4,051	38.34%	(307)	-2.10%	3,744	35.44%
VerPlanck Rd - west of Morgan Rd	2,017	2,280	9,688	263	13.04%	7,408	324.91%	1/9/7	380.32%
VerPlanck Rd - east of Rte 57	591	715	2,946	124	20.98%	2,231	312.03%	2,355	398.48%
Morgan Rd - north of Rte 31	87.78	9,894	7,502	165	1.70%	(2,392)	-24.18%	(2.227)	-22.89%
PM Peak Hour									
RT 31 west to Old RT 57	2,508	2,675	2,730	167	6.66%	55	2.06%	222	8.85%
RT 31 Old RT57 to NY481	3,374	3,904	3,385	530	15.71%	(519)	-13.29%	11	0.33%
RT 31 NY 481to Morgan Rd	2,586	2,770	2,228	184	7.12%	(542)	-19.57%	(358)	-13.84%
NY481 south to RT31	3,662	3,805	3,769	143	3.90%	(36)	-0.95%	107	2.92%
NY481 RT31 to north	2,804	2,782	2,715	(22)	-0.78%	(87)	-2.41%	(88)	-3.17%
Rte 57 - north of Rte 31	747	1,072	833	625	139.82%	(139)	-12.97%	486	108.72%
Rte 57 - south of Rte 31	1,145	1,487	1,408	342	29.87%	(28)	-5.31%	263	22.97%
VerPlanck Rd - west of Morgan Rd	108	137	286	29	26.85%	850	620.44%	6/8	813.89%
VerPlanck Rd - east of Rte 57	35	39	333	4	11.43%	294	753.85%	298	851.43%
Morgan Rd - north of Rte 31	1,127	1,102	720	(25)	-2.22%	(382)	-34.66%	(407)	-36.11%

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Table 3 – Estimated Traffic Volumes on Study Area Roadways (cont.)

Year 2027 - Future Year

	Base	Land Use Updates (LU)	Roadway Improvements (RI)	Land Use	vs Base	Roadv Improvem Land L	vay ents vs Jse	Land Use & Improvem Bas	Roadway ents vs e
Location	Volume	Volume	Volume	Difference	Percent	Difference	Percent	Difference	Percent
Average Daily Traffic (ADT)									
Rte 31 west to Rte 57	25,568	26,991	27,511	1,423	5.57%	520	1.93%	1,943	7.60%
Rte 31 RT57 to NY481	31,923	36,273	30,496	4,350	13.63%	(5,777)	-15.93%	(1.427)	4.47%
Rte 31 NY 481to Morgan Rd	26,564	28,281	23,373	1,717	6.46%	(4,908)	-17.35%	(3,191)	-12.01%
NY481 south of RT31	36,372	36,588	36,652	216	0.59%	64	0.17%	280	0.77%
NY481 north of Rte 31	32,486	32,167	31,461	(319)	-0.98%	(206)	-2.19%	(1,025)	-3.10%
Rte 57 - north of Rte 31	5,530	12,064	11,335	6,534	118.16%	(729)	-6.04%	208'9	104.97%
Rte 57 - south of Rte 31	12,260	15,538	15,220	3,276	26.72%	(316)	-2.03%	2,960	24.14%
VerPlanck Rd - west of Morgan Rd	2,156	2,517	9,961	361	16.74%	7,444	295.75%	208'2	382.01%
VerPlanck Rd - east of Rte 57	888	1,036	3,705	148	16.67%	2,669	257.63%	2,817	317.23%
Morgan Rd - north of Rte 31	11,839	11,783	6,067	(28)	-0.47%	(2,716)	-23.05%	(2.772)	-23.41%
PM Peak Hour									
Rte 31 west to Rte 57	3,026	3,196	3,266	170	5.62%	70	2.19%	240	7.93%
Rte 31 RT57 to NY481	3,793	4,317	3,698	524	13.81%	(619)	-14.34%	(92)	-2.50%
Rte 31 NY 481to Morgan Rd	3,063	3,268	2,620	205	6.69%	(648)	-19.83%	(443)	-14.46%
NY481 south of RT31	4,112	4,206	4,216	8	2.29%	6	0.24%	104	2.53%
NY481 north of Rte 31	3,419	3,410	3,341	(8)	-0.26%	(66)	-2.02%	(78)	-2.28%
Rte 57 - north of Rte 31	029	1,234	1,123	604	95.87%	(111)	-9.00%	493	78.25%
Rte 57 - south of Rte 31	1,344	1,618	1,551	274	20.39%	(87)	-4.14%	207	15.40%
VerPlanck Rd - west of Morgan Rd	136	152	1,089	16	11.76%	937	616.45%	898	700.74%
VerPlanck Rd - east of Rte 57	66	69	388	3	4.55%	319	462.32%	322	487.88%
Morgan Rd - north of Rte 31	1,332	1,346	686	14	1.05%	(357)	-26.52%	(343)	-25.75%

CAMBRIDGE SYSTEMATICS fransportation leadership you can trust. Figure 1: Year 2003 PM Peak Hour Traffic Volumes Changes with Proposed Projects - Compared to Base



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Figure 2: Year 2027 PM Peak Hour Traffic Volumes Changes with Proposed Projects – Compared to Base





Figure 3: Year 2003 PM Traffic Volume Changes with Roadway Improvements - Compared to Land Use Scenario





Figure 4: Year 2027 PM Traffic Volumes Changes with Roadway Improvements – Compared to Land Use Scenario





Figure 5: Year 2003 PM Traffic Volumes Changes with Land Use Changes and Roadway Improvements -Compared to Base



 Figure 6: Year 2027 PM Traffic Volumes Changes with Land Use Changes and Roadway Improvements -**Compared to Base**





Clay-Cicero Route 31 Transportation Study

APPENDIX E

Detailed discussion of travel demand modeling inputs

FUTURE BASE CONDITIONS

Introduction

"Future Base" represents the conditions that are expected to exist in the year 2027 if the Town of Clay and Town of Cicero land use plans are fully implemented without any modifications.

Prior to this study, the SMTC travel demand model had included the household and employment estimates for 2027 shown in Table E-1. Note that the "existing base year" for the SMTC travel demand model is 2003.

Томр		Households		Employees			
TOWIT	2003	2027	Change	2003	2027	Change	
Clay	21,864	24,848	2,984	17,559	21,363	3,804	
Cicero	10,358	13,000	2,642	7,135	9,071	1,936	

 Table E-1: Household and Employment Growth Summary from

 Current SMTC Model, 2003 and 2027

The numbers in the table above were developed through meetings between SMTC staff and Town planning staffs prior to November 2006 and are based on historic development trends and future development predictions from the municipal staffs. These numbers were developed prior to the completion of the Town of Clay Northern Land Use Study and the Town of Cicero Comprehensive Plan Update.

SMTC staff compared the 2027 household and employment projections in the current SMTC model to the information contained in the Town of Clay Northern Land Use Study and the Town of Cicero Comprehensive Plan Update and found that the Town plans indicate a more intense level of development. Since one of the goals of the Route 31 Transportation Study is to use the SMTC travel demand model to evaluate the transportation impact of the Towns' land use plans, the 2027 household and employment figures in the model were modified to reflect the information in the Town of Clay Northern Land Use Study and the Town of Cicero Comprehensive Plan. SMTC staff consulted with the Town of Clay Department of Planning and Development and the Town of Cicero Department of Zoning and Planning on the household and employment projections during the development of the Full Build-out conditions.

Town of Clay Development

Residential

The Town of Clay Northern Land Use Study calculated the total number of buildable residential lots available in the study area (north of Route 31 and Route 481) based on recommended zoning. Existing lots less than 5 acres in size, more than 50 percent DEC wetlands or 100-year flood plain, or currently zoned industrial or commercial were considered undevelopable. No time frame was specified for the residential build-out. The SMTC determined, in consultation with the Department of Planning and the Supervisor's Office, that the full build estimate should be used as the 2027 Full Build-out condition for this modeling effort.

The Northern Land Use Study divided the study area into nine sections. SMTC staff matched the sections in the Northern Land Use Study to the transportation analysis zones (TAZs) in the travel demand model and allocated the residential units accordingly for the developable area (avoiding major environmental constraints) north of Route 31/Route 481, in consultation with the Town of Clay Department of Planning. The previous allocation of households to TAZs (in the current SMTC model) in the southern part of the Town was not modified.

Commercial

The Northern Land Use Study did not include estimates of future non-residential development. However, the Route 31 & Route 57 Corridor Study included five-year build-out estimates for retail and office development in that study area (Route 31 from the Seneca River to Henry Clay Boulevard, Route 57 from the Oneida River to Redwing Drive). Based on the existing level of development in that area, it is reasonable to assume that the 5-year development estimate represents full build-out. Additional retail development was included based on proposals that had been submitted to the Town at the time of the Route 31 Transportation Study.

The location of future office and retail development was identified in the Route 31 & Route 57 Corridor Study. SMTC staff generally followed these assumptions when assigning the commercial development to the TAZs (one minor modification was made to account for a zoning change that had occurred since the completion of the Route 31 & Route 57 corridor study).

Industrial

The Clay Industrial Park consists of 1,156 acres of land currently zoned industrial (I-2). This includes 250 acres owned by the Onondaga County Industrial Development Agency (OCIDA). OCIDA is marketing this site for a large-use facility. The remaining 906 acres are still privately-held. Based on input from OCIDA, it was assumed that the entire OCIDA site would be fully developed by the year 2027, but that the remaining acres in the Clay Industrial Park would be developed at more modest levels. The Clay Industrial Park is located in three different TAZs. Parcel data were used to determine the share of total land area located in each TAZ.

Table E-2 summarizes the development assumptions for the Town of Clay.

Land Use	Additional development, 2003-2027	Notes/source		
Desidential	6,370 buildable lots	Maximum buildable lots from Northern Land Use Study (north of Route 31/Route 481).		
Residential	1,604 additional households	Previously included in the SMTC travel demand model (south of Route 31/Route 481).		
	1,000,000 SF retail	For the Route 31 & Route 57 Corridor Study area (Route 31 from		
Commercial	360,000 SF office	Oneida River to Redwing Drive).		
	280,000 SF retail	Existing proposals outside of Route 31 & Route 57 Corridor Study area.		
Inductrial	250 acres	Currently owned by OCIDA.		
muusinai	906 acres	Remaining land in the Clay Industrial Park (land zoned I-2).		

 Table E-2: Future (2027) Development – Town of Clay

Town of Cicero Development

Residential

The Town of Cicero Comprehensive Plan Update included 10-year and full build-out projections for residential, commercial, and industrial development. For consistency with the Town of Clay analysis, the full build-out figures were used as the 2027 Full Build-out condition. According to the Comprehensive Plan, the potential future full build development was determined based on the size of parcels and previous development trends within the Town.

SMTC staff met with the Town of Cicero Department of Zoning and Planning to allocate residential development to individual TAZs based on existing development proposals, future land use as identified in the Comprehensive Plan, and existing aerial photographs.

Commercial

The Comprehensive Plan included 4,000,000 square feet of commercial development at full build-out. As part of the traffic analysis included in the Comprehensive Plan, commercial development¹ was allocated to general areas within the Town. This information was provided to the SMTC by the Town's engineer (O'Brien and Gere Engineering). SMTC staff allocated commercial development to specific TAZs based on this information along with parcel data and existing aerial photographs.

Industrial

Full buildout projections from the Town of Cicero Comprehensive Plan include 328 acres of industrial growth in the area of Pardee Road. The Plan assumes that 82 of these acres will be developed by 2016. For modeling purposes, future industrial development along Pardee Road was divided between two TAZs based on the amount of developable land in each TAZ (identified through parcel data and aerial photographs).

The future land use diagram in the Comprehensive Plan also showed industrial use along Northern Boulevard, north of Route 481, which totals approximately 330 acres (based on GIS data). The industrial development along Northern Boulevard was included in the SMTC's previous 2027 model development.

Table E-3 summarizes the development assumptions for the Town of Cicero.

¹ Note that O'Brien and Gere's traffic analysis for the Comprehensive Plan assumes 4,090,296 square feet of commercial development. This development figure, although higher than that cited in the Comprehensive Plan, was used for this analysis.

Land Use	Additional development, 2003-2027	Notes/source
Residential	3,160 additional households	Full build-out from Comprehensive Plan Update.
Commercial	4,090,000 SF	Full build-out from Comprehensive Plan Update (per O'Brien & Gere).
Inductrial	328 acres	Pardee Road area (from the Comprehensive Plan).
muusinai	330 acres (approx.)	Northern Boulevard area.

Table E-3: Future (2027) Development – Town of Cicero

Employment calculations

The travel demand model requires as an input the number of employees in each TAZ. Therefore, SMTC staff needed to determine the expected number of employees associated with the commercial and industrial development in each TAZ. This was accomplished by estimating the amount (square feet or acres) of new development in individual TAZs, then calculating the associated number of new employees using a series of rates. These rates and their sources are described below.

Commercial

After consulting numerous sources to determine an appropriate ratio of employees to square feet (or acres) of development, SMTC staff decided to use the ratios provided by the TMODEL Corporation for office and retail development, as follows:

Shopping Center (less than 100 KSF)	2.19 emp
Shopping Center (100-500 KSF)	1.75 emp
General Office	3.51 emp

2.19 employees/KSF 1.75 employees/KSF 3.51 employees/KSF

Industrial

OCIDA has estimated that 1,500 employees could be expected for a single-user, hightech manufacturing facility on its 250-acre site in the Clay Industrial Park. Likewise, the Town of Cicero's Comprehensive Plan estimates that, by 2016, approximately 600 people will be employed on 82 acres of industrial land developed on Pardee Road. These estimates reflect similar employment rates, between 6 and 8 industrial employees per acre.

Because more modest levels of employment are expected on the remaining industriallyzoned land in Clay and Cicero, a more conservative rate was used to develop employment estimates for these areas. This rate was based on employment assumptions from OCIDA for the 906 privately-owned acres in the Clay Industrial Park (750 employees – or half the number employed on the OCIDA site – on 906 acres, or 0.83 employees per acre).

Industrial employment estimates are shown in Table E-4.
-								
	Total land	Industrial development assumed			Remaining industrial zoned			Total
	zoned	in existing studies*			land			industrial
Town	industrial	Acres	Employees	Rate	Acres	Rate	Employees	employees
Clay	1,156 acres	250 acres	1,500	6/ acre	906	.83/	750	2,250
Cicero	328 acres**	82 acres	600	7.3/ acre	246	acre	204	804

Table E-4: Future (2027) Industrial Employment – Clay and Cicero

* Including OCIDA's projections for their Clay Industrial Park site and the Town of Cicero Comprehensive Plan.

** Pardee Road area only. Employment figures for the 330 acres of industrial land on Northern Boulevard are already captured in the model.

There were a number of TAZs in both Towns that showed an increase in employment in the SMTC's current 2027 model but that did not have new development allocated to them based on the Towns' planning documents. Generally, the increases in employment shown in the current 2027 model for these TAZs were minor and could be considered normal "background" growth; these employment increases were maintained for the Route 31 Transportation Study modeling. For TAZs that had new development allocated to them based on the Towns' planning documents, the employment change shown in the SMTC's current model was replaced by the new estimate based on the procedures described above.

Employment calculations are summarized in Table E-5.

Table E-5: Employment changes, 2003-2027					
	New emplo	oyees from	"Background"	Total	
Town	development	in Town plans	employment	additional	
	Commercial*	Industrial	growth	employees	
Clay	3,579	2,250	1,971	7,800	
Cicero	8,030	804	1,835	10,669	

Table E-5: Employment changes, 2003-2027

* retail and office

Figure E-1 illustrates the household and employment projections for the Future Base scenario.

Figure E-1: Future Base household and employment projections





Denotes development that was redistributed to different locations within each town for the Alternative Land Use scenario (Alternative 5)

Future Base Transportation Network

The following transportation network changes were included in the Future Base transportation network. These changes are also shown on the Figure 5-2. This list was developed with input from the Town planning departments, the New York State Department of Transportation and the Onondaga County Department of Transportation.

Town of Clay

- Waterhouse Road extension to Fairway East and signalization of the Fairway North/Morgan Road intersection.
- New connection from Route 57 to Route 31 (northeast quadrant of that intersection) with extension to residential area on the south side of Route 31.
- Carling Road extension to Soule Road and reconfiguration of the Route 481 southbound on-ramp.
- Connection from Caughdenoy Road to Stearns Road south of Route 31.
- Two additional travel lanes (one in each direction) plus a two-way center left-turn lane on Route 31 from Morgan Road to Henry Clay Boulevard. (Note: this project is included in the SMTC's current 2027 model.)

Town of Cicero

- Capacity improvement at the existing I-81 interchange on Route 31.
- Upgrade Thompson Road from Northern Boulevard to Route 31.
- Connection from South Bay Road to Cicero Center Road on the north side of Route 31.
- Addition of a two-way center left-turn lane on Route 31 from Legionnaire Drive to Route 11 and from Lakeshore Road to Cicero-North Syracuse High School. (Note: Although a two-way center left-turn lane currently exists between Lakeshore Road and Cicero-North Syracuse High School, this is not included in the 2003 Existing model and, therefore, this was added to the 2027 Future Base.)
- Addition of a westbound travel lane on Route 31 from Lakeshore Road to Cicero-North Syracuse High School.
- Addition of a second travel lane in each direction on Route 31 from Cicero-North Syracuse High School to just east of Thompson Road.
- Connection from Sneller Road to Mud Mill Road, parallel to I-81.
- New access road from Route 31 to Pine Grove Road, west of I-81.

Two-way center left-turn lanes are not explicitly modeled in the SMTC's travel demand model. In order to account for the effects of the two-way center left-turn lanes noted in the list above, the capacities of those road segments were increased by 25 percent for the Future Base scenario.

ROUND 1 ALTERNATIVES ANALYSIS

Future alternative scenarios were analyzed in two rounds. Round 1 consisted of four transportation alternatives and one land use alternative that were developed by SMTC staff and SAC members. The Round 2 alternatives were developed after the Round 1 alternatives were presented to the public. The Round 1 Alternatives are listed in Table E-6 below.

Alternative	Land Use	Transportation Network
1: I-81 interchange (north)	Full Build-out, as shown in town plans	 Future Base plus: Connect Sneller Road east and west of I-81 New diamond interchange at Sneller Road. Upgrade Verplank Road and Mud Mill Road to current design standards for a collector road (no widening).
2: I-81 interchange (south)	Full Build-out, as shown in town plans	 Future Base plus: Extend Caughdenoy Road to South Bay (east and west of I-81) New diamond interchange at Caughdenoy Road
3: Expanded local road network (Clay commercial area)	Full Build-out, as shown in town plans	 Future Base plus: Upgrade Verplank Road and Mud Mill Road to current design standards for a collector road (no widening) Connection from Verplank Road to Great Northern Mall Connection from Verplank Road to Route 31 at a location between the railroad and Route 481 Connection from the COR Center/Route 31 intersection to the Carling Road extension
4: Expanded local road network (Clay Business Park area)	Full Build-out, as shown in town plans	 Future Base plus: Upgrade Verplank Road and Mud Mill Road to current design standards for a collector road (no widening) Extension of Burnet Road to Mud Mill Road Extension of Van Hosen Road to Oak Orchard Road Extension of Verplank Road to Burnet Road Connection from Burnet Road to Route 11
5: Alternative Land Use Scenario	Same amount of development as Full Build-out, but with different spatial distribution	Future Base (no additional changes)

<u>Alternatives 1, 2, 3, and 4</u> used the same household and employment data as the Future Base model. The Caughdenoy Road extension (Alternative 2) was entered into the travel demand model as a major collector; all other new road connections and extensions included in the Round 1 alternatives were entered into the travel demand model as local roads.

The land use pattern for <u>Alternative 5</u> was developed by SMTC staff based on aerial photography, tax parcel data, site visits and communication with the Town planning staff. This alternative was reviewed by the full SAC prior to modeling. The following goals guided the development of Alternative 5:

- Encourage the creation of mixed-use nodes (hamlets) containing retail, office, and multi-family residential units.
- Discourage development of single-family residential districts north of Route 31 unless adjacent to a hamlet area.

- Encourage infill development south of Route 31.
- Cluster regional-scale commercial uses near existing areas with similar use; encourage infill on commercial sites.

Once the general land use pattern for Alternative 5 was determined, SMTC staff assigned households and commercial square footage to specific TAZs. Employment was calculated using the rates previously discussed. Modeling Alternative 5 required splitting some large TAZs into multiple smaller TAZs to capture the effects of denser, mixed-use areas. Generally, each hamlet area spanned multiple TAZs. SMTC staff divided the housing units and commercial square footage among the selected TAZs based on the approximate availability of land and location of nearby development (determined using aerial photography). The new TAZs were given household size and vehicle ownership characteristics similar to existing denser, "village-like" areas of the SMTC model (such as the Village of North Syracuse).

Note that only the *new* households and commercial development were redistributed for Alternative 5 (with "new" defined as the households and commercial development projected in the Town plans, i.e. not including the "background" employment growth from the current SMTC model as previously discussed).

The actual procedure used for inputting household and employment data into the model for Alternative 5 was as follows:

Population

- Reverted Town of Cicero and Town of Clay population numbers to 2003 base. (Except area south of 481 in the Town of Clay, which was not included in the Town of Clay Northern Land Use Study. Growth in this area was allowed to remain the same as what was shown in the current SMTC 2027 model. This also met the goal of discouraging new development north of Route 31.)
- Added new households as shown on Alternative Land Use Plan (assigned to specific TAZs by SMTC staff).

Employment

- Calculated number of employees in each mixed-use and commercial area using the commercial square footage shown on the Alternative Land Use Plan and the rates (emp/SF or emp/acre) described above.
- For TAZ's where we previously added jobs (for full build), reverted to 2003 numbers.
- Added employees for commercial development shown on Alternative Future Development Pattern graphic.
- "Background" employment growth remained the same.

ROUND 2 ALTERNATIVES ANALYSIS

The Round 2 alternatives were developed based on the Round 1 analysis results and the input received from the SAC and the public. Table E-7 lists all the Round 2 alternatives.

Alternative	Land Use	Transportation Network
6: Limited development + Alternative land use pattern	Follows same general pattern as Alternative 5 (Alternative Land Use), but with a reduction in the total amount of development	Future Base (no change)
7: South Bay upgrade with I- 81 overpass	Same as Alternative 5. (Same amount of development as Full Build-out, but with different spatial distribution.)	 Future Base plus: Upgrade South Bay Road (center turn lane and intersection turn lanes at Pine Grove and Route 31) Create a new I-81 overpass (no access to the interstate) at Pine Grove Road
8: Increased transit usage	Same as Alternative 5. (Same amount of development as Full Build-out, but with different spatial distribution.)	 Future Base road network with new or modified transit routes: East-west service on Route 31 Express service from hamlet areas to downtown Syracuse
9: New interchange with new local roads in Business Park area	Full Build-out, as shown in Towns' plans	 Future Base plus everything in Alternatives 1 and 4: Connect Sneller Road east and west of I-81 New diamond interchange at Sneller Road. Upgrade Verplank Road and Mud Mill Road to current design standards for a collector road (no widening). Extension of Burnet Road to Mud Mill Road Extension of Van Hosen Road to Oak Orchard Road Extension of Verplank Road to Burnet Road Connection from Burnet Road to Route 11
10: Expanded local road network (Clay commercial + Business Park)	Same as Alternative 5. (Same amount of development as Full Build-out, but with different spatial distribution.)	 Future Base plus everything in Alternatives 3 and 4: Upgrade Verplank Road and Mud Mill Road to current design standards for a collector road (no widening) Connection from Verplank Road to Great Northern Mall Connection from Verplank Road to Route 31 at a location between the railroad and Route 481 Connection from the COR Center/Route 31 intersection to the Carling Road extension Extension of Burnet Road to Mud Mill Road Extension of Van Hosen Road to Oak Orchard Road Extension of Verplank Road to Burnet Road Connection from Burnet Road to Route 11

Table E-7: Round 2 Alternatives

<u>Alternative 6</u> required modifying the household and employment data from Alternative 5. There were three "guiding principles" used to develop this alternative:

- the amount of development should be reduced, but the spatial pattern of development should be consistent with Alternative 5 (maintain hamlet areas);
- 2. the total amount of development should be closer to the figures that were developed for the current SMTC 2027 model (which were based on input from Town planning staff for "reasonable" 20-year development); and
- 3. the remaining capacity of the road network should be used to guide the location of future development.

To address the last point, SMTC staff identified 6 road segments that showed significant congestion (V/C ratio greater than 0.62) in the 2027 model for the Alternative Land Use Plan (Alternative 5). These segments were:

- Thompson Road from Route 31 to South Bay Road;
- Route 31 from I-81 to Lakeshore Road;
- Verplank Road from Caughdenoy Road to Mud Mill Road;
- Morgan Road from Route 481 to Wetzel Road;
- Route 31 from Henry Clay Boulevard to Caughdenoy Road; and
- Route 298 from Taft Road to Route 31.

For each segment, SMTC staff calculated the number of trips that would need to be removed to achieve a volume-to-capacity ratio less than 0.62. A select link analysis (SLA) was then completed for each of these segments. The results of the SLA analysis were used to identify the TAZ (or TAZs) that were contributing the most traffic to that particular segment. A SLA was then performed for the centroid connector for each TAZ and the result was used to calculate the percent distribution of traffic from the selected TAZ. SMTC staff then used the TAZ trip distribution and standard trip generation rates to calculate the amount of development (households or square footage) that would need to be removed from the selected TAZ to result in the desired traffic volume reduction (to achieve V/C < 0.62).

The development reductions determined from the SLA were then used as a guide for Alternative 6. In some cases, existing traffic volumes were so great that the calculated reduction in development exceeded the projected new development for that TAZ. In other cases, the SLA for the road segments showed that a significant amount of traffic on that segment had an origin or destination outside of the current study area. In still other cases, the SLA showed that many TAZs contributed to the traffic volume on a selected road segment, so that the percentage of traffic from any single TAZ was small (and therefore, the reduction in development necessary to achieve the desired decrease in traffic was unreasonable large).

SMTC staff examined the land use pattern from Alternative 5 and made some assumptions about development reductions for Alternative 6, using the results from the SLA as a guide, with a focus on reducing large-scale retail developments and large-lot residential developments while maintaining density and mixed-use development in the proposed "hamlet" areas. SMTC staff also tried to achieve a total level of development for Alternative 6 that was more comparable to the current 2027 model than to the Future Base (Full-Build out) condition. As compared to the 2003 Existing model, the current 2027 model shows 19% growth in households, 23% growth in employment, and a 19% increase in 24-hour VMT for Clay and Cicero, cumulatively. The final figures for Alternative 6 resulted in 15% growth in households, 55% growth in employment, and 25% growth in 24-hour VMT as compared to the 2003 conditions.

<u>Alternative 7</u> included the same household and employment data as Alternative 5. The capacity of South Bay Road in the travel demand model was increased by 25 percent to account for the addition of a center turn lane between Route 31 and I-81 and intersection turn lanes were added at Pine Grove Road and Route 31. The Pine Grove Road overpass was entered into the travel demand model as a collector and the existing segment of Pine Grove Road was upgraded from a local road to a collector in the model.

<u>Alternative 8</u> included the same household and employment data as Alternative 5. This alternative included a new "cross-town" bus service on Route 31 between Moyers Corners and the Whiting Road/Cicero Center hamlet area. Two new express bus routes were also added in the Town of Clay: Three Rivers – Moyers Corners – downtown (via Route 481 and I-81) and Verplank Road – Euclid – Great Northern Mall – downtown (via

Route 481 and I-81). One existing route in the Town of Clay (Route 148: Great Northern Mall – Euclid – downtown via Morgan Road) was added to both the Future Base and Alternative 8 (this route currently exists, but was not included in the base model when SMTC's travel demand model was initially created). In Cicero, Route 388 (Central Square to downtown) was modified to travel on I-81 between downtown and Route 31 and on Route 11 from Route 31 to Brewerton with an additional stop in the Brewerton hamlet area (this route currently travels on Route 11 from Circle Drive to Brewerton). Also in Cicero, Route 88 was modified to travel from the Cicero Center hamlet to downtown via South Bay Road to I-81 (this route currently travels on Route 11 north of Mattydale). All new and modified bus routes were modeled with a headway of 20 minutes and a fare of \$1.00, consistent with the Future Base scenario. No additional changes to the transportation network were included (i.e. the road network was the same as the Future Base).

<u>Alternative 9</u> included the same household and employment data as the Future Base. All new road connections and extensions were included in the travel demand model as local roads.

<u>Alternative 10</u> included the same household and employment data as Alternative 5. The Carling Road extension was modeled as a major collector (consistent with the current classification of Soule Road); all other new road connections and extensions were included as local roads in the travel demand model.

Clay-Cicero Route 31 Transportation Study

APPENDIX F

Travel demand modeling results






























































































Clay-Cicero Route 31 Transportation Study

APPENDIX G

Bicycle and pedestrian resources

RESOLUTION SYRACUSE METROPOLITAN TRANSPORTATION COUNCIL POLICY COMMITTEE

March 14, 2005

- *WHEREAS*, Walking and bicycling are important modes of transportation which benefit the quality of life for the SMTC Region's communities, businesses, residents and visitors, and;
- *WHEREAS,* Walking and bicycling are part of the solution for key regional issues including Safety, Health, Environment, Mobility and Economy, and;
- *WHEREAS,* Federal and New York State policy guidelines provide a model for the integration of walking and bicycling into plans, programs, policies and projects, and;
- *WHEREAS,* Recent trends for the SMTC Transportation Improvement Plan (TIP), allocate 5% to 10% of TIP money to bicycle and pedestrian related projects.

NOW THEREFORE BE IT RESOLVED,

That the SMTC Policy Committees hereby adopt as the following policy:

- 1. Bicycle and pedestrian ways should be established in new construction and reconstruction projects in all urbanized areas unless one or more of three conditions are met:
 - Bicyclists and pedestrians are prohibited by law from using the roadway.
 - The cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use.
 - Where sparsity of population or other factors indicate an absence of need.
- 2. In rural and suburban areas, paved shoulders should be included in all new construction and reconstruction projects on roadways used by more than 1,000 vehicles per day.
- 3. Highway and transit facilities should be designed, constructed, operated and maintained so that all pedestrians, including people with disabilities, and

bicyclists can travel safely and independently.

- 4. The design and development of the transportation infrastructure should improve conditions for bicycling and walking through the following additional steps:
 - Planning projects for the long-term. New facilities that meet the criteria in item 1) above should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements.
 - Addressing the need for bicyclists and pedestrians to cross corridors as well as travel along them. Even where bicyclists and pedestrians may not commonly use a particular travel corridor that is being improved or constructed, the design of intersections and interchanges should accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.
 - Designing facilities to the best currently available standards and guidelines. The design of facilities for bicyclists and pedestrians should follow design guidelines and standards that are commonly used, such as the AASHTO *Guide for the Development of Bicycle Facilities*, AASHTO's *A Policy on Geometric Design of Highways and Streets*, the NYSDOT Highway Design Manual and the ITE Recommended Practice "Design and Safety of Pedestrian Facilities".
 - Local codes and ordinances. Local communities should adopt, where appropriate, codes and ordinances for sidewalks, shared-use paths, bikeways, bicycle parking and related improvements.
- 5. The SMTC should attempt to continue TIP funding at current levels (for bicycle and pedestrian projects) when possible.

1. Call a. Swatte

Dale A. Sweetland Chairperson SMTC Policy Committee

March 14. 2005

Carl F. Ford Secretary SMTC Policy Committee

3/14/2005

Date

Date

IV - 7

Adopted: 4/23/79 Amended: 9/21/81, 6/6/83, 9/6/88 7/17/96 and 5/3/00 TOWN OF PENFIELD SIDEWALK POLICY

Purpose

It is the intent of the Town of Penfield to install sidewalks along all Minor Arterial, Major Collector and Minor Collector roads to develop safe pedestrian mobility and enjoyment. This policy encourages the installation of sidewalks along all local streets, including but not limited to new subdivisions. This network of sidewalks is intended to provide a safe linkage of major residential developments to commercial, civic, recreational, educational and employment centers for residents and visitors.

Primary Sidewalk System

The primary goal of this policy is to install sidewalks along Minor Arterials, Major Collectors, and Minor Collector roadways in the Town of Penfield. These are further defined as follows and are shown in Exhibit 1:

<u>Urban Minor Arterials</u> are highways that move high volumes of traffic from intermediate to long distances within the town and connect the town with other major arterial highways in the metropolitan area. They provide a lower level of travel mobility than principal arterials. The highways that meet this classification and are to be developed with sidewalks along one or both sides include the following:

- □ Bay Road
- □ Browncroft Boulevard/Atlantic Avenue (NY Route 286)
- Carter Road
- □ Empire Boulevard (NY Route 404)
- □ Five Mile Line Road (County Road 18)
- □ Nine Mile Point Road (NYS Route 250)
- Depander Panorama Trail (Route 441 to Pittsford Town Line)
- □ Penfield Road (East of NYS Route 441)
- Plank Road

<u>Rural Major Collectors</u> are roads that serve to link areas of major development with the arterial highway system. They generally carry medium to low traffic volumes within the town and connect the town with adjacent communities. The highways that meet this classification and are to be developed with sidewalks along one or both sides include the following:

□ Salt Road

<u>Rural Minor Collectors</u> are roadways that connect major residential developments to the major collector and arterial highway system via short vehicle trips. They may also connect Penfield with minor collectors and local streets in other towns. The highways

that meet this classification and are to be developed with sidewalks along one or both sides include the following:

- Baird Road
- Blossom Road
- □ Creek Street
- Jackson Road
- □ Jackson Road Ext.
- D Panorama Trail (Route 441 to Route 286)
- □ Penfield Road (West of NYS Route 441)
- □ State Road
- Whalen Road
- Watson Road

<u>Local Roads</u> are roadways that primarily provide direct access to abutting land and provide access to the higher order systems. They provide a lower level of mobility. The highways that meet this classification and are to be developed with sidewalks along one or both sides include the following:

- □ Allen Road
- Beacon Hills Drive
- Carter Road
- Clark Road
- Daytona Avenue
- Dublin Road
- □ Embury Road
- □ Fellows Road
- □ Gebhardt Road
- Gloria Drive
- Huntington Meadow
- Harris Road
- □ Hatch Road
- □ Hermance Road
- Hogan Road
- □ Huber Road
- □ Kennedy Road
- Liberty Street
- □ Linden Avenue
- Marchner Road
- □ Northrup Road
- Penfield Center Road
- Qualtrough Road
- Scribner Road
- □ Shoecraft Road
- Sweets Corners
- Watson Hulburt Road

Secondary Sidewalk System

The secondary goal of this policy is to require the installation of sidewalks along all residential subdivision roadways and other areas of concentration of residential and commercial development. All new development approved by the Town of Penfield is required to install sidewalks along both sides of all local roads not previously noted.

Annual Sidewalk Program

The Town of Penfield supports the installation of sidewalks along the Primary Sidewalk System through its annual program of sidewalk construction. This program is funded by the Town Board through the allocation of funds from the town's General Fund, grants, and development sidewalk fees collected in accordance with this policy and the plan provided in Exhibit 1, as well as other priorities established by the Town Board.

Sidewalk Policy

The Town of Penfield anticipates full compliance with this policy by all new development and redevelopment. However, the Town Board may grant a waiver to the Sidewalk Policy where the installation of sidewalks is not prudent at this time, their installation may interfere with other pending projects, or other factors as determined by the Town Board. The developer must request a waiver from this policy, in writing, for consideration by the Town Board. These waivers must be requested prior to final site plan or subdivision approval is granted by the Planning Board and/or any other authorized town official. In lieu of the installation of sidewalks, the developer shall submit the unit fees to the Town of Penfield prior to receipt of any Building Permit, as defined herein. A sidewalk easement is required for all projects, whether a waiver is granted or not, as determined by the Town Sidewalk coordinator. All earthwork required for the future installation of sidewalks shall be completed, with or without the sidewalk installation, and provided for in the letter of credit.

All definitions and land uses shall comply with the descriptions provided in the Town of Penfield Zoning Ordinances.

Residential Development is Residential Districts: \$500.00 per dwelling unit

Where a new lot(s) has been created and no site plan approvals is granted, this policy shall require the granting of sidewalk easements across the frontage of public dedicated roads. The above fees apply only to the number of new units granted site plan approval.

Non-Residential Development in Residential Districts: \$4,000.00 per lot

The determination of non-residential development shall be established by the board granting approval or other authorized official in the Town of Penfield.

Commercial and Industrial Districts:

Fees shall be equal to the cost to install sidewalks along all roadway frontages for the lands owned by the developer for projects where sidewalks do not currently exist. For projects where sidewalks are already in place, either partially or in their entirety, the Sidewalk Coordinator shall determine the extent of sidewalk repair or replacement that shall be completed by the developer, in addition to filling in any missing sidewalk links along the roadway frontages in the vicinity of the development.

The determination of fees for significant redevelopment or renovation shall be at the discretion of the board having jurisdiction or other authorized town official. Whenever the square footage of the redevelopment or renovation work exceeds more than 20% of the current square footage of the property, the redevelopment or renovation would be considered significant and sidewalks would be required in accordance with this Policy.

All fees collected pursuant to any waivers granted by the Town Board shall be placed in the Sidewalk Capital Account specifically for the installation of sidewalks in locations identified by the Town Board.

Waiver Procedures

The waiver procedure shall be as follows:

- Applicant or individual requesting a waiver shall submit a letter to the Director of Building & Planning Services, prior to receiving final site plan or subdivision approval.
- The Director of Building & Planning Services shall consult with the Project Review Committee (PRC) and the Penfield Sidewalk Coordinator for a recommendation to the Penfield Town Board.
- The waiver request, along with any staff recommendations, shall be forwarded to the Penfield Town Board for review in a Town Board worksession.
- Upon review of all information, the Town Board shall determine if a waiver is appropriate and establish the associated fees and/or sidewalk installation that are necessary to comply with this policy.

Easements

The Town of Penfield shall require a minimum seven (7) foot wide easement along all roadways for the construction, replacement, and maintenance of sidewalks along publicly dedicated roads. The Sidewalk Coordinator shall determine where additional easement widths may be required. The easement shall be in a format acceptable to the Town Attorney and shall be recorded at the Monroe County Clerk's Office.

Maintenance

The Town of Penfield shall be responsible for the maintenance, replacement, and snowplowing of all sidewalks constructed along publicly dedicated roads classified as Minor Arterial, Major Collector, and Minor Collector within the Town of Penfield. Those classifications have been previously identified in this policy and are shown on Exhibit 1.

The Town of Penfield encourages the installation of sidewalks within residential subdivisions or other roadways not designated in Exhibit 1. Along these roadways, the costs associated with the installation, maintenance, replacement and/or repair of sidewalks shall be borne solely by those residents directly benefiting from the sidewalks installed within their particular subdivision. These costs shall be assessed through an additional tax levy to the parcels located in an Intensified Sidewalk District encompassing the properties benefited. The required annual levy shall be based on a recommendation by the Town Sidewalk Coordinator and the Director of Finance to the Town Board.

Where an Intensified Sidewalk District has been formed, the town's policy is to install, maintain, replace and/or repair sidewalks as required. However, at this time, the Town of Penfield will not provide snow plowing service to sidewalks within the Secondary Sidewalk System. If this practice should change in the future, the cost of plowing will be charged to those properties located in the Intensified Sidewalk District.

Intensified Sidewalk Districts

General

The Town Board shall require the formation of an Intensified Sidewalk District for the following reasons:

- Installation, replacement, and/or maintenance of sidewalks in an existing subdivision.
- Maintenance and/or replacement of sidewalks located in subdivisions or along localresidential roadways that were installed by others.
- Other projects or sidewalk installations as recommended by the town staff, Planning Board, or other advisory agencies.

The developer or a neighborhood representative must petition the Town Board to create an Intensified Sidewalk District. The property owners within the Intensified District that directly benefit from the sidewalks shall bear the cost of the improvement, replacement, and/or maintenance of the sidewalks.

The Town Board has established the annual charge, for the year 2000, for sidewalk maintenance and/or replacement to be \$25.00 per residential unit. The Town Board reserves the right to periodically update this charge as part of their annual budget process.

Non-residential development rates shall be determined by the Town of Penfield Sidewalk Coordinator and approved by the Town Board.

Process

NEW SUBDIVISION DEVELOPMENT

Prior to final Planning Board approval, the Town Board shall determine if an Intensified Sidewalk District is required for a development. If desired, the developer shall prepare a map, plan, and report showing the proposed Intensified Sidewalk District.

The cost to install sidewalks, handicap ramps, and crosswalks shall be borne by the developer and shall be covered in the Letter of Credit for the project.

Sidewalks installed along Arterials, Collectors, and Local Roads, as determined by the Town of Penfield Sidewalk Policy and shown in Exhibit 1, shall not be required to form an Intensified Sidewalk District. The installation and maintenance costs for these sidewalks will be funded through the General Fund.

EXISTING SUBDIVISION DEVELOPMENT

An existing neighborhood may petition the Town Board to install sidewalks along localresidential roadways not designated for sidewalk installations. The Town Sidewalk Coordinator will develop a report and preliminary layout of proposed intensified sidewalk facilities, including, but not limited to:

- Location of sidewalks
- Need for easements
- Relocation or replacement of utilities
- Relocation or replacement of landscaping
- Location and number of cross-walks
- Location and number of handicap accessible ramps
- Preliminary cost estimates
- District financing options

All sidewalk construction will be completed in conformance with the requirements contained in *Town of Penfield Design and Construction Specifications*, latest version.

The Town Board shall require that a minimum of 75% of all resident owners and 75% of assessed valuation within the proposed district shall be in agreement with the conditions set forth in this policy for the formation of the proposed district.

Clay-Cicero Route 31 Transportation Study

APPENDIX H

Example access management policies

§ 150-120

LIVONIA TOWN CODE

§ 150-120. Reimbursable costs.

Costs incurred by the Joint Planning Board for consultation fees or other extraordinary expense in connection with the review of a proposed site plan or inspection of required improvements shall be charged to the applicant. Estimated review fees shall be deposited into an escrow account when making application for preliminary site plan approval. Estimated inspection fees shall be deposited into an escrow account prior to Joint Planning Board endorsement of final site plan approval.

§ 150-121. Letter of credit.

No certificate of occupancy shall be issued until all improvements shown on the site plan are installed or an irrevocable letter of credit has been posted for improvements not yet completed. The letter of credit shall be in accordance with Livonia Design Criteria and Construction Specifications for Land Development and shall be approved as to form by the Municipal Attorney and as to amount by the Municipal Engineer. The member of the Joint Planning Board designated to sign site plans shall not sign until a letter of credit, if required, has been received by the Building and Zoning Department and approved by the governing board.

§ 150-122. Inspection of improvements.

The Code Enforcement Officer shall be responsible for the overall inspection of site improvements. The applicant shall be responsible for advance notice for inspection coordination with officials and agencies, as appropriate. The Code Enforcement Officer may retain the services of a qualified private consultant to assist with inspection of site improvements.

§ 150-123. Integration of procedures. [Amended 7-30-1998 by L.L. No. 6-1998]

Whenever the particular circumstances of a proposed development require compliance with either the conditional use procedure pursuant to § 150-10B of this chapter, or the requirements for the subdivision of land in Chapter 125, the Joint Planning Board shall attempt to integrate, as appropriate, site plan review as required by this section with the procedural and submission requirements for such other compliance.

ARTICLE XV Access Management [Added 7-8-1999]

§ 150-124. Intent.

The purpose of these access management standards is to provide safe and efficient travel along public streets. These standards are based on the goals and strategies of the Livonia Transportation and Access Management Plan. The standards balance public and private interests. Implementation of these access management standards is intended to reduce confusion, congestion and accidents by limiting conflict points. These standards are also

150:116

intended to guide development of a street network with sufficient linkages between uses. The standards will contribute to the long-term accommodation of growth and development while providing safe and convenient access to properties and preserving the visual character of area streets.

§ 150-125. Definitions.

As used in this article, the following terms shall have the meanings indicated:

ACCESS — A way or means of approach to provide vehicular or pedestrian entrance or exit to a parcel.

ACCESS CONNECTION, VEHICULAR — Any driveway, private street, turnout or other means of providing for the movement of vehicles to or from a public street.

ACCESS MANAGEMENT — The process of locating and designing vehicular access connections to land development to preserve the flow of traffic in terms of safety, capacity and speed.

CORNER CLEARANCE — The distance from an intersection of two or more streets to the nearest access connection.

CROSS ACCESS — The layout of circulation patterns and recording of a permanent enforceable right of access to allow travel between two or more contiguous parcels without traveling on a public street.

DRIVEWAY — Any entrance or exit used by vehicular traffic to or from land or building to an abutting street.

DRIVEWAY, SHARED — A driveway in common ownership or subject to a permanent enforceable right of access by those traveling to or from a use on another parcel.

FUNCTIONAL AREA (INTERSECTION) — The area adjacent to the intersection of two or more streets that encompasses required vehicle queuing areas and the decision and maneuvering area for vehicles using the intersection.

FUNCTIONAL CLASSIFICATION — A system used to group public streets into classes according to their purpose in moving vehicles and providing access to abutting properties.

NONCONFORMING ACCESS — An access connection existing prior to the date of adoption of these regulations which in its design or location does not conform with the requirements of this chapter.

PARCEL — A division of land comprised of one or more contiguous lots in common ownership.

PEAK HOUR TRIP (PHT) GENERATION — A weighted average vehicle trip generation rate during the hour of highest volume of traffic entering and exiting the site or the highest volume of the adjacent street.

§ 150-125

REASONABLE ACCESS — The minimum number and type of access connections, direct or indirect, necessary to provide safe access to and from a public street, as consistent with these regulations and other relevant plans and policies of the Town or Village of Livonia.

RESTRICTIVE MEDIAN — A physical barrier such as a metal or concrete structure or a grass or landscaped island within the street right-of-way that separates traffic by direction of travel.

STREET, COLLECTOR — Those portions of the Livonia transportation system providing important links between major streets or serving large residential or nonresidential developments. Collector streets must balance the desirability of the free flow of traffic and access needs. Additional collector streets may be designated by resolution of the municipal board and an up-to-date list shall be available in the Building and Zoning Department office.

A. Collector streets currently include the following streets which are under the jurisdiction of the Livingston County Highway Department.

Bronson Hill Road East Lake Road Federal Road Livonia Center Road Poplar Hill Road Richmond Mills Road (NYS 15A to Richmond Town line) South Lima Road

B. These regulations also designate as collector streets the following streets under town jurisdiction:

Stone Hill Road (from NYS 15 to Poplar Hill Road) Proposed New Road Big Tree Street/Road Cleary Road Summer Street Pennemite Road

C. Portions of these streets within the Village of Livonia are designated as local streets.

STREET, LOCAL — The primary functions of such streets are to move traffic between subdivisions as well as to provide access to individual lots.

STREET, MAJOR — Those portions of the Livonia transportation system under state or federal jurisdiction or designated as a major street by a local municipal board. A major street typically moves larger volumes of traffic over greater distances compared to other street types. This function of mobility or the free flow of traffic must be considered when defining

reasonable access to such streets. Access is a secondary function of such streets. The following lists the route numbers and names of streets wholly or partially under state or federal jurisdiction.

Route Number	Locations
NYS 15	Rochester Road, Big Tree Road, Big Tree Street, Main Street, Commercial Street, Conesus-South Livonia Road
NYS 15A	Plank Road and Bald Hill Road
NYS 256	West Lake Road
US 20A	Big Tree Road, Big Tree Street, Main Street, Richmond Mills Road, Plank Road, US 20A

STREETS, ACCESS and DEVELOPMENT — Streets not otherwise classified. The primary function of such streets is to move traffic within subdivisions and large developments and to provide access to individual lots.

TEMPORARY ACCESS — Provision of direct access to a street until such time as adjacent parcels are developed and planned access via a shared driveway or access development street can be implemented.

§ 150-126. Applicability.

These access management standards shall apply to all uses in all districts. More specifically:

- A. All land subdivisions receiving preliminary approval after the date of adoption of these regulations and all lots created by such subdivisions shall demonstrate conformance to the maximum extent practicable with the requirements and objectives of these regulations.
- B. Any construction, alteration or change of use on a lot existing prior to the date of adoption of these regulations which requires site plan approval shall demonstrate conformance to the maximum extent practicable with the requirements and objectives of these regulations.

§ 150-127. General requirements.

- A. Access and circulation shown on subdivision and,site plans developed under these regulations shall also conform to the requirements of other federal, state and local agencies responsible for transportation system elements proposed for modification. This includes but is not limited to Highway Superintendent standards, transportation agency standards for stopping and intersection sight distances, signal warrants and, if applicable, the subdivision regulations of Chapter 125 and other portions of this chapter, especially the district regulations of Article VI, the off-street parking and loading regulations of Article X and the site plan review regulations of Article XIV.
- B. Deviations from the standards outlined in this article for developments generating more than 150 peak hour trips must be based on documentation from a qualified traffic

engineer that an alternative access arrangement provides equal or greater safety and mobility and comparable or lower adverse environmental impacts. All such deviations must be in accordance with the procedures and requirements for obtaining an area variance as specified in § 150-17 of this chapter. The Joint Planning Board has discretion for approving deviation from the standards for uses generating less than 150 peak hour trips and reserves the right to require professional justification of deviation from standards for projects generating less than 150 peak hour trips.

- C. Parcels created after the effective date of these regulations do not have the right of individual access to existing abutting public streets. The number of planned access connections is to be the minimum necessary to provide safe and reasonable access. This may be less than the number of access connections which would be allowed based solely on minimum property width requirements.
- D. New public or private streets, shared driveways or cross access may be necessary to meet the requirements of these regulations. If access is to be provided by means other than direct access to a public street, a permanent recorded easement, which runs with the land, shall be executed. In addition, operating and maintenance agreements for all such facilities shall be recorded with the deed.
- E. Subdivision of a parcel with frontage on two or more streets may be required to provide access from all lots which result from the proposed subdivision to all such streets without traveling on the existing street network. In most cases, even if a vehicle connection is not provided, a pedestrian connection shall be provided.
- F. Parcels with frontage on more than one street may be limited to one access connection to the lowest class of street serving the proposed development.
- G. Unless otherwise specified, all distances shall be measured from centerline to centerline along the edge of the street right-of-way. Where street or intersection modifications are planned, all distances shall be from the proposed centerline along the edge of the proposed right-of-way.

§ 150-128. Access to subdivided lands and phased, full build-out and multi-owner development plans.

- A. Prior to subdivision or site Ian approval or approval of a zoning permit for any new or modified access or intersection, the applicant must provide a concept plan. The concept plan shall show the location of buildings, parking and circulation, including connections to preexisting streets, and alignments of any new streets necessary to accommodate full build-out as allowed by current zoning for all lands under single ownership as of the date of adoption of these regulations.
- B. Access to individual residential driveways within a subdivision should be obtained from an access or development street.
- C. Access to other uses in a proposed subdivision should be coordinated with existing, proposed and planned streets and driveways outside the subdivision and should consider providing cross access connections to abutting developed or undeveloped properties.

§ 150-128

ZONING

D. When the concept plan for access to lands planned jointly or under common ownership as of the date of adoption of these regulations shows development of an access or development street as part of eventual full build-out, the Joint Planning Board may allow temporary access directly to a public street while requiring that parcel layout be designed to provide future access only from the proposed access or development street. Furthermore, the Joint Planning Board may establish square footage or peak hour trip generation thresholds which govern when construction of the access or development street must take place.

§ 150-129. Driveway spacing standards.

A. Minimum recommended spacing between driveways on the same side of the street are as follows:

Street Type	Recommended Driveway Separation
• •	(in feet)
Major street	330
Collector street	220
Local street	80% of lot width
Access or development street	80% of lot width

- B. Access connections on opposite sides of the street not separated by a restrictive median shall be aligned or offset so as to eliminate left-turn overlap conflicts between vehicles traveling in the opposite direction.
- C. Access connections to development on opposite sides of the street with peak hour trip generation of 150 or more may be required to be aligned to enable installation of a traffic signal to serve both developments.
- D. On the advice of the municipal engineer, the Joint Planning Board may raise or lower the required driveway spacing standard based on the volume of site generated traffic, the impact of site generated traffic on the operation of the adjacent street or posted or operational speeds in the vicinity of the proposed site.
- E. The Joint Planning Board as part of site plan review will evaluate how proposed driveway location impacts opportunities to develop abutting properties. At a minimum, such evaluation shall identify any sight distance and alignment/offset constraints and indicate whether compliance with the recommended spacing standards is practicable for abutting properties based on the applicant's proposed driveway location.

§ 150-130. Corner clearance.

The following standards shall guide approval of driveway access on comer parcels:

A. Generally no driveways shall be allowed within the functional area of the intersection. If parcel boundaries or topography preclude location outside the functional area of the
intersection, access may be limited to right turns in and/or right turns out and/or left turns in, as determined by the municipal engineer, and the driveway shall generally be located as far from the intersection as possible and in the safest possible location.

- B. Development on corner parcels should be linked by cross access to abutting properties of the same type (i.e., residential or nonresidential).
- C. Driveways for corner parcels with frontage along a major or collector street shall be located no closer than 220 feet from the intersection. If no alternative reasonable access exists, partial (right-in/right-out) access that does not create safety or operation problems may be allowed if located a minimum of 110 feet from the nearest edge of existing or proposed pavement.
- D. Driveways for corner parcels with frontage solely along local streets or access or development streets shall be located no closer than 60% of the minimum lot width.
- E. Corner clearance is to be measured along the street fight-of-way from the centerline of the driveway pavement to the closest edge of the existing or proposed street pavement.

§ 150-131. Street and signal spacing.

Intersection spacing standards shall be applied, as development occurs, to preserve desirable location and alignment of streets, to serve future growth and to provide an efficient overall transportation system.

A. The following presents recommended cross street and signal spacing standards.

Recommended Street, Intersection and Signal Spacing (in feet)

		Minimum Intersection Spacing		
Street Type	Maximum Through Street Intersection Spacing	Signalized Intersection	UnSignalized Intersection	
Major	5,280	2,640	1,320	
Collector	2,640	1,320	880	
Local	1,320	NA	440	
Access or development	880	NA	440	

B. On the advice of the municipal engineer, the Joint Planning Board may raise or lower the required intersection spacing standards based on posted or operational speeds in the vicinity of the proposed site, the type and character of the development proposed to be served and the impact of projected traffic generation on the area street network.

§ 150-132. Nonconforming access.

Access connections in place prior to the effective date of these regulations which do not conform to the requirements of these regulations shall be treated as preexisting nonconforming access features which are allowed to continue subject to the standards of Article VIII, especially § 150-69B, regarding discontinuation, and the following:

- A. The feasibility of bringing nonconforming access connections into compliance shall be evaluated under the following conditions:
 - (1) When a new driveway access permit is requested.
 - (2) When proposed changes increase the square footage of a building or accessory use by 10% or more or make an investment that substantially increases traffic generation.
 - (3) When the proposed changes increase the peak hour or daily site generated traffic by 50 or more peak hour trips.
 - (4) In conjunction with state or county improvement projects.
- B. At the direction of the Joint Planning Board in consultation with the municipal engineer, the evaluation may be required to address the feasibility of the following:
 - (1) Elimination and/or consolidation of access connections.
 - (2) Realignment or relocation of access connections.
 - (3) Provision of shared driveways or cross access.
 - (4) Provision of rear access.
 - (5) Restriction of vehicle turning movements.
 - (6) Changes in the layout of on-site parking and circulation.
 - (7) Traffic demand management.
- C. The objective of the feasibility evaluation is to make recommendations to improve operational and safety characteristics of the access connection by bringing the number, location, spacing and design of access connections into conformance with these regulations.
- D. Existing driveway spacing along major and collector streets in developed portions of the Village of Livonia and the hamlets of Hemlock, Lakeville, Livonia Center, South Lima and South Livonia is as low as 50 to 100 feet. Such buildings are not expected to accommodate uses that generate more than 150 peak hour trips. Driveway spacing standards for expansion, change of use or intensification of use for buildings in these areas shall target driveway spacing of 125 feet if the posted speed is 35 mph or less and 220 feet if the posted speed limit is more than 35 mph. Peak hour trip generation above 150 may be appropriate if the driveway spacing standards of § 150-129 can be met.

E. The Joint Planning Board may require implementation of access changes that will improve traffic operations, safety or overall access.

§ 150-133. Design of driveways and internal circulation.

- A. Driveways and on-site circulation shall be designed so as to provide for the safe and efficient movement of traffic between the roadway and the site and to eliminate the potential for the queuing of vehicles along the roadway due to congestion in or at the driveway.
- B. Driveway location, width, radii, flare, throat length and other elements of the circulation system for developments generating more than 150 peak hour trips shall be based upon consultation with qualified traffic, engineering and design professionals. Alternatively, the Joint Planning Board may retain such a professional to review the design at the cost of the applicant.

§ 150-134. Required mitigation of traffic impacts.

- A. Any proposed residential subdivision or nonresidential development projected to generate more than 150 trips during any weekday or weekend peak hour may be required to mitigate the traffic impacts of such new development. Required mitigation shall be recommended by a qualified traffic engineer based on the assumptions and analyses included in a comprehensive traffic study completed in accordance with the procedures of the State Environmental Quality Review Act.
- B. Required mitigation may include but shall not be limited to the installation of signals, turning lanes or medians; the use of shared driveways, cross access or the construction of access or development streets; and/or other traffic demand management strategies.
- C. Phased mitigation may be allowed where phased development is proposed.

§ 150-135. Standards for estimating peak hour trip generation.

- A. The standards and methodologies for estimating peak hour trip generation shall be as follows:
 - (1) Trip generation rates shall be determined through application of the most recent Institute of Transportation Engineers Trip Generation methods and statistics.
 - (2) Trip generation shall be based on full build-out of the proposed parcel and/or abutting parcels.
 - (3) Peak hour trip generation shall be the peak hour of the proposed use or the adjacent street, whichever is greater.
- B. The following are examples of developments which would generate approximately 150 peak hour trips.

ZONING

	Use Single-family dwellings Low-rise apartments General office Medical office Industrial park Shopping center	Size 157 dwellings 268 dwellings 75,900 square feet 34,400 square feet 124,000 square feet 6,700 square feet	Peak Hour Trips Generated 150 Saturday 150 Saturday 150 weekday a.m. 150 weekday p.m. 150 weekday p.m. 150 Saturday
ş 150	-136. (Reserved)		
§ 150	-137. (Reserved)		
§ 150	-138. (Reserved)		
§ 150-	-139. (Reserved)		
§ 150-	-140. (Reserved)		
§ 150-	-141. (Reserved)		
§ 150-	-142. (Reserved)		
§ 150-	-143. (Reserved)		
§ 150-	144. (Reserved)		
§ 150.	145. (Reserved)		
§ 150-	146. (Reserved)		
§ 150-	147. (Reserved)		
§ 150-	148. (Reserved)		

TOWN OF VIRGIL

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ZONING LAW

Prepared with assistance from:

Cortland County Planning Department

Revised October 16, 2006

ARTICLE XV

ACCESS MANAGEMENT

SECTION 1500 INTENT

The purpose of these access management standards is to provide safe and efficient travel along public roads. Implementation of these access management standards is intended to promote full, reasonable development consistent with the social, environmental and economic objectives of the Comprehensive Plan; to reduce confusion, congestion and accidents; and to minimize unreasonable or unnecessary public costs that might otherwise result from development.

These standards are also intended to guide development of a road network with sufficient linkages between uses. The standards will contribute to the long-term accommodation of growth and development while providing safe and convenient access to properties and preserving the visual character of area roads.

SECTION 1501 APPLICABILITY

These access management standards shall apply to all uses in all zoning districts.

SECTION 1502 GENERAL REQUIREMENTS

- A. Access and circulation shown on subdivision and site plans developed under these regulations shall also conform to the requirements of other federal, state, and local regulations. This includes but is not limited to transportation standards for intersection spacing, signal warrants and, if applicable, the <u>Town of</u> <u>Virgil Subdivision Regulations</u> and other portions of this Law especially the zoning district regulations of Article V, the off-street parking and loading regulations of Article IX and the site plan review regulations of Article XIII.
- B. Deviations from the standards outlined in this Article for developments generating more than 150 peak hour trips must be based on documentation from a qualified traffic engineer that an alternative access arrangement provides equal or greater safety and mobility and comparable or lower adverse environmental impacts. All such deviations must be in accordance with the procedures and requirements for obtaining an area variance as specified in this Law. The Planning Board has discretion for approving deviations from the standards for uses generating less than 150 peak hour trips and reserves the right to require professional justification, at the applicant's expense, of deviations from standards for projects generating less than 150 peak hour trips.

- C. Parcels created after the effective date of these regulations do not have the right of individual access to existing abutting public roads. The number of planned access connections is to be the minimum necessary to provide safe and reasonable access. This may be less than the number of access connections which would be allowed based solely on minimum property width requirements.
- D. New public or private roads, shared driveways or cross access may be necessary to meet the requirements of these regulations. If access is to be provided by means other than direct access to a public street, a permanent recorded easement, which runs with the land, shall be executed. In addition, operating and maintenance agreements for all such facilities shall be recorded with the deed.
- E. Parcels with frontage on more than one road may be limited to one access connection to the lowest class of road serving the proposed development.
- F. Unless otherwise specified, all distances shall be measured from driveway centerline to driveway centerline along the edge of the road right-of-way. Where road intersection modifications are planned, all distances shall be from the proposed centerline along the edge of the proposed right-of-way.

SECTION 1503 ACCESS TO SUBDIVIDED LANDS AND PHASED, FULL BUILD-OUT AND MULTI-OWNER DEVELOPMENT PLANS

A. ACCESS CONCEPT PLAN

Prior to subdivision or site plan approval or approval of a zoning permit for any new or modified access or intersection, the applicant must provide a concept plan. The concept plan shall show the location of buildings, parking and circulation including connections to pre-existing roads and alignments of any new roads necessary to accommodate full build-out as allowed by current zoning for all lands under single ownership as of the date of adoption of these regulations. The Concept Plan shall address the following principles:

- 1. Access to individual residential driveways within a subdivision should be obtained from an existing or proposed road.
- 2. Internal roads in a proposed subdivision should be coordinated with existing, proposed and planned roads and driveways outside the subdivision and should consider providing cross access connections to abutting developed or undeveloped properties.

3. When the concept plan for access to lands planned jointly or under common ownership, as of the date of adoption of these regulations, shows development of a local road as part of eventual full build-out, the Planning Board may allow temporary access directly to a public road while requiring that parcel layout be designed to provide future access only from the proposed local road. Furthermore, the Planning Board may establish square footage or peak hour trip generation thresholds which govern when construction of the local road must take place.

SECTION 1504 SIGHT DISTANCES AND SIGHT DISTANCE PRESERVATION

A. SIGHT DISTANCE REQUIREMENTS

Driveways and intersecting roadways shall be located and designed in profile and grading to provide the following minimum sight distance measured in each direction.

Minimum Sight Distance Table

Required Sight Distance
(feet)
050
250
300
350
400
450
500
550

- B. SIGHT DISTANCE PRESERVATION
 - 1. No parking, fence, wall, sign, or other structure, or bush, tree or other vegetation which would impede the view of a driver entering the roadway shall be allowed within the sight distance triangle.
 - Trees, bushes, shrubbery and other vegetation in the sight distance triangle shall be maintained by the property owner so as to preserve sight distance for drivers entering the road. In the event that the property owner fails in such maintenance the Town may trim, prune, clip or otherwise clear such vegetation and may bill the owner for the costs of such actions. (See Section 603).
 - 3. The sight distance triangle shall be measured from a point three and one half (3.5) feet above the ground and ten (10) feet from the curb line or edge of shoulder for an intersecting driveway and three and one half feet (3.5) above the ground and twenty (20) from the curb line for an intersecting road.

SECTION 1505 DRIVEWAY SPACING STANDARDS

- A. The minimum recommended spacing between driveways to abutting properties on the same side of the road shall be 50% of lot width.
- B. Access connections on opposite sides of the road not separated by a restrictive median shall be aligned or offset so as to eliminate leftturn overlap conflicts between vehicles traveling in the opposite direction.
- C. Access connections to developments on opposite sides of the road with peak hour trip generation of 150 or more are required to be aligned to enable installation of a traffic signal to serve both developments.
- D. The Planning Board may raise or lower the required driveway spacing standard based on the volume of site generated traffic, the impact of site generated traffic on the operation of the adjacent road, or posted or operational speeds in the vicinity of the proposed site.
- E. The Planning Board may allow more than one driveway or a dual driveway system and reduce the required driveway spacing if the applicant can demonstrate that the driveway configuration improves traffic safety and operations on the road system.
- The Planning Board, as part of site plan review, will evaluate how F. proposed driveway location impacts opportunities to develop abutting properties. At a minimum, such evaluation shall identify any sight distance and alignment/offset constraints and indicate whether compliance with the recommended spacing standards is practicable for abutting properties based on the applicant's proposed driveway location.

SECTION 1506 STREET AND SIGNAL SPACING

Local

Intersection spacing standards shall be applied, as development occurs, to preserve desirable location and alignment of roads to serve future growth and provide an efficient overall transportation system.

A. The following represents recommended cross road standards.

Street Type Minimum Intersection Spacing (feet) Arterial 1.320 feet Collector 880 feet 440 feet

SECTION 1507 **REQUIRED MITIGATION OF TRAFFIC IMPACTS**

- A. Any proposed development projected to generate more than 150 trips during any weekday or weekend peak hour may be required to mitigate the traffic impacts of such new development. Required mitigation shall be recommended by a qualified traffic engineer, at the developer's expense, based on the assumptions and analyses included in a traffic study completed in accordance with the procedures of the State Environmental Quality Review Act (SEQRA).
- B. Required mitigation may include but shall not be limited to the installation of signals, turning lanes or medians, the use of shared driveways, cross access, or the construction of local roads and/or other traffic demand management strategies.
- C. Phased mitigation may be allowed where phased development is proposed.

Clay-Cicero Route 31 Transportation Study

APPENDIX I

Cost estimates

ROUTE 31 IMPLEMENTATION PLAN COST ESTIMATES

Note: none of these total project costs include right-of-way costs

VERPLANK/MUD MILL UPGRADE, MORGAN RD TO RT 11

Assume "highway reconstruction - complete replacement", rural (ditches and shoulders)

Segment length:	4.8 miles		
Lanes:	2 lanes		
Total lane-miles:	9.6 lane-miles		
Construction unit cost:	\$1.20 mil/lm		
Construction cost:	\$11.52 mil		
Other costs:			
Contingency	25% of construction cost	=	\$2,880,000
MPT	5% of construction cost	=	\$576,000
Engineering (inc. scoping, pre & final design)	15% of construction cost	=	\$1,728,000
Inspection	12% of construction cost	=	\$1,382,400
TOTAL:			\$18,086,400

TOTAL:

VERPLANK/MUD MILL UPGRADE, RT 57 TO MORGAN RD

Assume "highway reconstruction - complete replacement", rural (ditches and shoulders)

Segment length:	3.1 miles		
Lanes:	2 lanes		
Total lane-miles:	6.2 lane-miles		
Construction unit cost:	\$1.20 mil/lm		
Construction cost:	\$7.44 mil		
Other costs:			
Contingency	25% of construction cost	=	\$1,860,000
MPT	5% of construction cost	=	\$372,000
Engineering (inc. scoping, pre & final design)	15% of construction cost	=	\$1,116,000
Inspection	12% of construction cost	=	\$892,800

TOTAL:

\$11,680,800

CLAY COMMERCIAL AREA LOCAL ROADS

Assume "new highway", two lane suburban

Segment length:	3.3 miles		
Lanes:	2 lanes		
Total lane-miles:	6.6 lane-miles		
Construction unit cost:	\$3.75 mil/Im		
Construction cost:	\$24.75 mil		
Other costs:			
Contingency	25% of construction cost	=	\$6,187,500
MPT	5% of construction cost	=	\$1,237,500
Engineering (inc. scoping, pre & final design)	15% of construction cost	=	\$3,712,500
Inspection	12% of construction cost	=	\$2,970,000

TOTAL:

\$38,857,500

CLAY BUSINESS PARK AREA LOCAL ROADS

Assume "new highway", two lane rural

Segment length: Lanes: Total lane-miles:	4.5 miles 2 lanes 9 lane-miles		
Construction unit cost:	\$3.00 mil/Im		
Construction cost:	\$27.00 mil		
Other costs:			
Contingency	25% of construction cost	=	\$6,750,000
MPT	5% of construction cost	=	\$1,350,000
Engineering (inc. scoping, pre & final design)	15% of construction cost	=	\$4,050,000
Inspection	12% of construction cost	=	\$3,240,000
TOTAL:			\$42,390,000

SOULE ROAD REALIGNMENT

Assume "new highway", two lane rural

Segment length: Lanes: Total lane-miles:	0.64 miles 2 lanes 1.28 lane-miles		
Construction unit cost: Construction cost:	\$3.00 mil/lm \$3.84 mil		
Other costs: Contingency MPT Engineering (inc. scoping, pre & final design) Inspection	25% of construction cost5% of construction cost15% of construction cost12% of construction cost	= = =	\$960,000 \$192,000 \$576,000 \$460,800

TOTAL:

\$6,028,800