



## **Summary**

# **Existing Land Use Priority Common Information Need Peer Review Forum**

**April 17, 2003  
1:00 p.m. to 4:30 p.m.**

**John Rose Skating Facility  
Roseville, MN**

*Prepared by: Paul Hanson (Metropolitan Council-GIS Unit)  
and Randall Johnson (MetroGIS),*

***In Brief:** On April 17, 2003, MetroGIS hosted a Peer Review Forum to launch work to address the MetroGIS community's Existing Land Use Common Information Need. The goals of the forum were to share the results of the 1996 MetroGIS Business Information Needs Project pertaining to Existing Land Use and refine and confirm that preliminary work. A packet of information was sent to each applicant prior the forum, which included the original information needs and questions that each member was asked to think about prior to the forum<sup>1</sup>. Fourteen individuals participated, representing a variety of professional organizational perspectives, including local communities, counties, regional and state agencies.<sup>2</sup> Participants evaluated the value of the forum in terms of providing new and informative information and ideas and, on a scale of 1 to 4 (4 being the highest), gave it an average rating of 2.71. On the same scale, participants rated their understanding of MetroGIS's objectives at 3.00 prior to the forum, and at 3.21 after the forum<sup>3</sup> (Note: Each speaker's presentation slides are available upon request.)*

## **WELCOME**

At 1:15 p.m., Victoria Reinhardt, Chair of the MetroGIS Policy Board, welcomed the participants, provided context as to the importance of the Forum to achieving the mission of MetroGIS. She provided an overview of the day's agenda and commented that the outcome of the forum will lead to action by MetroGIS.

At 1:20 p.m., Jane Harper, Chair of the MetroGIS Coordinating Committee, provided an overview of MetroGIS's vision and core functions to facilitate widespread sharing of commonly needed geospatial data among organizations that comprise the MetroGIS community. She then explained the concept of common information needs, expressed how these needs are distinguishable from datasets and that upon defining the needs, applicable datasets that fulfill the needs are identified. She closed her comments with a summary of the common information needs that have been addressed to date.

At 1:25 p.m., Paul Hanson outlined the general goals of the Forum:

- a) Clarify the needs identified in 1997
- b) Make sure no land use needs are missing
- c) Give direction to a workgroup, which will define the 3 deliverables of the common information needs process: data specifications, regional and primary custodian(s), and custodian roles and responsibilities.

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<sup>1</sup> See Attachment A for the packet of information sent prior to the forum.

<sup>2</sup> See Attachment B for a list of the forum participants and their organizational affiliations.

<sup>3</sup> See Attachment C for a summary of the forum evaluation.

## FOUNDATION

At 1:30 p.m., Paul summarized several key background elements to provide a foundation for the desired discussion among the forum participants.

- a) History:
  - 1) 1997 activities in defining information needs
  - 2) North Metro I-35W Corridor Coalition Pilot study
- b) Key Concepts:
  - 1) Focus on the information need, not products or data
  - 2) Focus on what is important to the breadth of stakeholders
  - 3) Focus on Existing Land Use as opposed to land cover, planned land use, or zoning
  - 4) Overview of American Planning Association's (APA) Land-Based Classification Standards (LBCS) scheme and how it relates to MetroGIS's goals. It was noted that the five elements of the LBCS correlate directly with MetroGIS's goal of several framework data themes working together and that all five elements are covered by at least one of the thirteen common information needs identified by the MetroGIS community. It was also noted by Bart Richardson, from his experience as the lead staff for the regional land cover dataset, that the group should keep in mind that the data solutions for each of the five APA elements probably will not share the same polygon boundaries. As a result, the group should focus on the need, not the solution.
- c) Procedures:

Participants were asked to think about several aspects of land use as they reviewed each information need as a group:

  - 1) What is existing land use?
  - 2) How are existing land use needs currently being met?
  - 3) What are the shortcomings of the data you are using - What could make it better?
  - 4) What level of detail do you need?
  - 5) Who needs the data – different needs at different scales?
  - 6) What do you need to know about your neighbors?
  - 7) What unit of measure is needed?

The following quote from David Arbeit was adopted by the group for use in the afternoon's discussion "*The 'you' in the discussion is important to achieve a solution valuable to all*".

# INTRODUCTIONS

## Participant Introduction Comments

<b>Name</b>	<b>Organization</b>	<b>What they would like to get out of participation</b>
David Windle	City of Roseville – GIS Coordinator	Improved data for planning
David Arbeit	MN Land Management Information Center (LMIC)	Harmonize regional and state schemes  Co-sponsor of MetroGIS since inception. Interested in seeing how the proposed scheme might be used to by LMIC in its responsibility to monitor land use activity throughout the state.
Jim Hafner	Minnehaha Creek Watershed District – Senior Technician	?
Bill Byers	Met. Council: Research	Land availability data
Tim Zimmerman	Hennepin County: Public Health Dept.	Public Health; Where facilities are located
Jane Harper	Washington County – Principle Planner	Better data for evaluating policy and taxation impacts
Barbara Senness	City of Plymouth – Planning Supervisor	Resolve inaccuracies in regional data - want better data useful to local and regional government
Mark VanderSchaaf	City of St. Paul - PED	Measure impacts; Redevelopment operations
Dick Carlstrom	TIES – GIS Consultant	Better more consistent data from community to community from which to measure growth impacts on schools
Thomas Paschke	City of Roseville – City Planner	?
John Mertens	Dakota County	Transportation Modeling
Karen Jensen	Met. Council – Environment Services	Hydrologic modeling. Interested in transportation uses to measure and model runoff; locate and monitor polluted land; determine sewer capacities
Paul Buschmann	Hennepin County – Senior Planning Analyst	Service locations
Dave Pehoski	MnDOT: Office of Environmental Services - PCCC	Land use / cover for traffic forecasting; boundary patterns (?)  Looking for uniformity in data across numerous jurisdictions, a uniform coding scheme that permits like to like comparisons is the only viable alternative.
Rick Gelbmann	Metropolitan Council: GIS Manager	Land use is fundamental to the Council’s development coordination, transportation, waste management, and Smart Growth Initiative responsibilities. Conduct land use inventory every 5 years for internal and external
Tim Benetti	City of Vadnias Heights – City Planner	Resolve inconsistencies; cooperate and coordinate with neighboring communities
Dave Drealan	Carver County – Director of Planning & Zoning	Land planning studies; water management; general space management & wetland evaluation  Member of MetroGIS Coordinating Committee since inception. As a producer and user of the planned land use data for minor civil divisions throughout the county supports efforts to develop a consistent coding scheme that permits like to like comparisons across multi-jurisdictions.

Observer Introduction Comments

<b>Name</b>	<b>Organization</b>	<b>Comment</b>
Deb Detrick	Met. Council: Research	Economic and ? information; redevelopment issues
Ron Wencil	USGS: National Mapping Liaison	National Land Cover - how to integrate between ? national?
Francis Harvey	Univ. of Minnesota: Dept. of Geography - Associate Professor	How do local governments share land use data and how are differences being resolved.

Staff Introduction Comments

<b>Name</b>	<b>Organization</b>	<b>Comment</b>
Randall Johnson	MetroGIS Staff Coordinator	
Steve Fester	MetroGIS Technical & Admin Support	
Robin Caufman	Met. Council: Planning & Technical Asst. - Senior Planner	Asst. in recording information
Bart Richardson	DNR: Central Region - GIS Coordinator	Lead staff for MN Land Cover Classification System LCCS; Asst. in recording information
Paul Hanson	Met. Council: GIS Specialist	GIS Specialist and technical liaison to MetroGIS for land use and Existing Land Use project manager

**BREAK**

The group took a break from 2:20 to 2:35 p.m.

**GROUP DISCUSSION**

The exercise involved a group discussion about each of the initially stated existing land use information needs and obtaining direction from the participants as to how MetroGIS should proceed. Robin Caufman and Bart Richardson captured each of the participant's comments on flip charts. The "consensus" statement following each section is the specification desired by the group for a regional solution.

Paul Hanson (Metropolitan Council) facilitated discussion among the participants for each information need listed. A detailed listing of the comments and conclusion follows. The numbers (e.g., C60) refer to the original information need numbers assigned in 1996.

**C60. Current land use of the 7 county area standardized**

*How current is current? How current can we expect the data to be?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
Barbara Senness	City of Plymouth	Every 2 years for city use
Jane Harper	Washington County	Annually – County & tax assessment conducted annually
David Windle	City of Roseville	Update our community quarterly
Karen Jensen	Met. Council	Need major changes on regular basis – annual probably okay
	MNDOT	Theoretically, as changes occur but projects are started 2-3 before completion
Bill Byers	Met. Council	Every 5 years is okay for long rang planning
Barbara Senness	For Wayzata School Dist	Annually for school census projections
David Arbeit	LMIC	Recording time is mixed at state level. Annual would be desirable.
Mark VanderSchaaf	St. Paul	Annual is important for development

<b>Consensus</b>	<i>Annual update at minimum is necessary for the regional solution</i>
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**C20. Land use of the metro area a generation ago**

*Is this necessary? Sources?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
Bart Richardson ?	DNR	Natural Resource changes exist back to 1970's
		Used for development and residential trends
		And for research and legal functions
		Going back is important
Bill Byers	Met. Council	Parcel by parcel if possible, acknowledging parcels change

<b>Consensus</b>	<i>Annual snap shot archived in a compatible format. No need to go back and capture but use existing information where available</i>
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**C21. Land use succession history**

*How should changes be captured? Should data be maintained in separate layer?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
		Annual data should be archived
Bill Byers	Met. Council	Record land use succession changes parcel by parcel, if possible
Jane Harper	Washington Co.	Frustrated that data are destroyed after legal retention requirement is met. The regional solution should address this issue.

<b>Consensus</b>	<i>Data should be archived and kept separately</i>
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### **P6. The use of the property**

*What is the unit of measure? How detailed should designation be recorded in terms of space?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
		Need to distinguish varying activities within a parcel – “mixed-use” designations are not adequate.
		Coding at the parcel level may be too coarse for parcels with multiple uses

<b>Consensus</b>	<i>As detailed as we can get – the term “mixed use” means little when used to describe conglomerate of distinctive uses across a unit area.</i>	
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### **T140. Land use data tied to census data**

*Does land use need to be classified by census units? Or simply align with them?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
<b>Consensus</b>	<i>Needs to tie to census – should be able to associate with census units</i>	

### **C61. Land use inside a PUD**

*How detailed should designation be recorded in terms of space?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
<b>Consensus</b>	<i>Focus here is similar to that of P6: Unit of Measure</i>	

### **H10. Where is vacant land...**

*What is vacant land? If it does not exist, how should vacant property be dealt with?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
		“Vacant” information is used to define the level of development and determine where development can occur.
David Arbeit	LMIC	Follow American Planning Association (APA) lead to characterize land as something other than vacant.
Thomas Paschke	City of Roseville	“Vacant” is not an appropriate use category
Rick Gelbmann	Met Council	Is there a difference in describing “vacant” between urban, suburban, & rural?
Karen Jensen	Met Council	Impervious surface is key to describing the “vacant” land
Bart Richardson	DNR	Impervious surface is captured in land cover
Mark Vandershaaf	City of St. Paul	“No Activity” would be an appropriate description for “Vacant”
Jane Harper	Washington County	Need to attempt to assign a use from of some type from list of TBD options and then if use “no use” only as a last resort.

<b>Consensus</b>	<i>Agreed the term “vacant” is not appropriate but did not come to consensus on an acceptable term to describe land not being used. “No Use” seemed to be most likely option. May elect to use a different definition for different types of activity (i.e. urban, suburban, rural). Agreed needs more work to resolve.</i>	
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**C71. How property is occupied ----Not addressed at forum**

*Does occupancy determine use?*

Name (if known)	Organization	Comment
		Written comment: depends on the level of detail of use.
		Additional comment based on other Forum issues: thinking in terms of APA dimensions, and in terms of "Vacant" discussion, this need may be addressed de facto

**T2. Types of dwellings ----Not addressed at forum**

*What descriptive language is best to implement?*

**S61. Type of structure**

*Should stories of build be distinguished?*

Name (if known)	Organization	Comment
Mark VanderSchaaf	City of St. Paul	Look to market data for appropriate use.

<b>Consensus</b>	<i>None</i>
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**C83. Housing Density ----Not addressed at forum**

*Intensity of use description? Should these be distinguished in existing land use?*

**T106. High Density Residential Locations**

*Should different types of high-density housing be distinguished? Are there other sources?*

Name (if known)	Organization	Comment
<b>Consensus</b>	<i>Distinction of types is available with other datasets &amp; therefore does not need to be included with existing land use</i>	

**C44. Location of home occupations**

*Should these be distinguished? Are there other sources?*

Name (if known)	Organization	Comment
<b>Consensus</b>	<i>These are accessory uses and many are not tracked. Does not need to be included.</i>	

**P11. Use of features of geographic locations in 3-D Space**

*How is mixed-use data recorded?*

Name (if known)	Organization	Comment
		Record uses by square footage and number of units and stories in each building.
		Number of units is obtainable from assessor data
David Windle	City of Roseville	Suggested developing guidelines for how to use related databases in relation to general mixed-use categories. Metadata records could point users to other data that would have more specific information about the uses, floors, floor space, etc.

<b>Consensus</b>	<i>Windle’s idea worth investigating: If feasible, primary and secondary mixed use categories may be sufficient as existing land use designations</i>
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**C33. Where jobs are**

**S34. Need to know businesses by type**

**T78. Location of Grocery stores, etc**

**H15. Location of Daycare centers**

*Are these variants of existing land use or is this information obtainable in other data?*

Name (if known)	Organization	Comment
		Important to reconcile between land use and building use
		A third level of detail may be appropriate to capture some of these distinctions.
David Drealan	Carver County	These potentially are addressed in another solution.

<b>Consensus</b>	<i>No clear consensus. Need to consider how other priority info needs may address some of these needs.</i>
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**S20. Location of emergency services**

**S36. Location of schools, correctional facilities, etc**

*Are these variants of existing land use or is this information obtainable in other data?*

Name (if known)	Organization	Comment
Jane Harper	Washington Co.	Need as much detail as possible. Don’t assume data is available in other datasets.
		A third level of detail (beyond that provided in the Planned Land use coding scheme) may be appropriate to capture some of these distinctions.
		Create a scheme as a container to allow for population when the data are available
Rick Gelbmann	Metropolitan Council	Land cover data may be best source of detailed “use/activity” data in rural areas.

<b>Consensus</b>	<i>Multi-level classification for different types of commercial, emergency services, etc. uses where appropriate/possible.</i>
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**C81. Off-street parking spaces by parcel ----Not addressed at forum**

*Should be designated in existing land use? Commercial vs. public use?*

**C109. Location of Gravel pits**

**R67. Location of compost sites**

**R68. Where landfills and dumps are located, both old and new**

*Should these be distinguished?*

Name (if known)	Organization	Comment
Consensus	<i>Yes, include.</i>	

**C94. Location of Rights-of-Way**

*How much should be addressed in existing land use?*

Name (if known)	Organization	Comment
David Arbeit		Paved roadway is the use.
Bill Byers		Whole ROW should be included because of land availability questions. ROW are not available land, not just paved roadway
		Seems to be a question of paved roadway equals "land use" and ROW equals "ownership"
		ROW may contain separate use such as utilities
		Additional comment: distinction may be addressed with APA concepts?
Thomas Paschke	City of Roseville	The road's functional classification is the use and important information

Consensus	<i>Unclear. Location of roadway and not ROW seems to provide most distinction between land uses. ROW has restriction of uses (Rights to Property priority Info Need) attached to answer land availability concerns.</i>	
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**T92. Location of abandoned railroad property**

Name (if known)	Organization	Comment
		Part of railroad ROW
		If abandoned and developed into trail, then use is trail.
		Active or inactive rail designation may be viable solution

Consensus	<i>Unclear. If included in ELU, having distinction of activity may be helpful</i>	
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**S15. What types of utilities are in a certain area ----Not addressed at forum**

*Should these be addressed in existing land use?*

**C118. Cemetery locations w/ remaining capacity ----Not addressed at forum**

*Where does qualitative information get stored?*

**C119. Location and types of chemical storage ----Not addressed at forum**

*Should this be a land use distinction?*

**R69. Location of Feedlots ----Not addressed at forum**

*Should this be a land use distinction?*

**C94. Location of Recreational facilities**

*Should locations of tennis courts, ball fields, playgrounds, etc be part of ELU?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
Jane Harper	Washington Co.	Need to connect county with city facilities- need for a hierarchy to address the continuum
		Need to be able to identify active park vs. passive parks

<b>Consensus</b>	<i>Unclear. Potential hierarchy system</i>
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**T35. Trails, paved bike paths ----Not addressed at forum**

*Should locations of tennis courts, ball fields, playgrounds, etc be part of ELU?*

**T73. Public Parks ----Not addressed at forum**

*Distinguish in ELU between public & private parks?*

**C53. Significant natural habitats and wetlands**

**P48. Location of lakes, streams, & wetlands**

*Best handle as overlays rather than in ELU?*

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
		Need to be included in land use
		Land cover doesn't "cover" everything
David Arbeit	LMIC	Prefer to classify for nothing more than mapping
		Important to show water and to avoid overestimating land availability.
David Arbeit	LMIC	Suggest utilizing similar categories as implemented in MetroGIS planned land use coding scheme.
David Drelean	Carver Co.	Use overlays to show protected wetlands but also need to be cautious about misrepresentation of non-lake areas

<b>Consensus</b>	<i>Incorporate a category that defines water or hydrologic feature and put more thought into the topic of overlays</i>
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**Anything missing?**

<b>Name (if known)</b>	<b>Organization</b>	<b>Comment</b>
Karen Jensen	Met Council ES	Any consideration of land use data availability beyond the 7 county area?

Response	If MetroGIS community can demonstrate a need for this information it can be brought to the policy board for recommendation. It was also mentioned that the metro area may want to help facilitate and/or defer this need to the GCGI for state solution – Paul stated a similar integration situation occurring with hydrology between metro and state levels
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## **NEXT STEPS AND CLOSING**

Paul Hanson stated that the next step will be to form a workgroup that will evaluate the results of the forum and recommend strategies to address priority common needs. He encouraged the forum participants to state their interest on the evaluation form, to be sure to turn in their evaluation forms and thanked everyone for their participation.

The workgroup will develop a recommendation for MetroGIS consideration that identifies the desired characteristics of a regional dataset(s) to address the priority common information needs identified at the forum. This workgroup will also identify desired custodial roles and responsibilities, and identify candidate organizations with the resources and business need to assume these responsibilities on behalf of the broader community. The workgroup's recommendations will be shared with the forum participants for comment, and possibly further discussion. Lastly, the recommendations will be forwarded to the MetroGIS Coordinating Committee and Policy Board for consideration.

## ATTACHMENT A

Materials/Questions Mailed Prior to Forum



April 8, 2003

## MetroGIS Existing Land Use Forum

Thank you for agreeing to participate in the MetroGIS Existing Land Use Planning Forum on April 17. We value your opinion, and as a participant in this forum, you will help define the specifications for a regional solution to common existing land use information needs of the MetroGIS community.

In this packet, you will find a preliminary Forum agenda, a map with directions to the forum and four documents with advance information. Please review the advance information prior to the Forum to help expedite progress during the Forum.

The first document, "Clarification of Information Needs", has a list of fairly broad questions relating to existing land use. The questions are designed help you think about what constitutes existing? land use data, how you use it, what it should and shouldn't include, and what aspects of existing land use can/should be incorporated into a regional solution. Please use the space provided to track your responses, concerns, and/or comments. We will go through these questions during the Forum.

The second document, the "MetroGIS Information Needs Forum: Turn Around Document", includes 40 of the original Business Information Needs that potentially relate to existing land use (includes potential uses) as defined by MetroGIS at a forum in September of 1996. With each information need, specific question(s) about the need and/or solution are posed that focus on an aspect of the need that needs clarification. Space is available next to each need and at the back of the document to write your comments. We will address each of these needs individually during the Forum.

The final two documents, "APA's Land-Based Classification Standards (LBCS)" and the "MetroGIS Regional Planned Land Use Coding Scheme", are provided as background information. The LBCS provides a consistent model for classifying land uses based on their characteristics and is an update of the 1965 *Standard Land Use Coding Manual (SLUCM)*, a standard which was widely adopted for land-use classifications. The MetroGIS Coding Scheme, developed through the broad collaborative of MetroGIS for its Regional Planned Land Use data set, considered and implemented many of the LBCS strategies. It is likely that the Existing Land Use Workgroup will review these efforts and consider whether either methodology is appropriate for the existing land use solution.

Once again, we appreciate your contribution to this process, and look forward to seeing you next week.

Paul E. Hanson

A handwritten signature in black ink, appearing to read "Paul E. Hanson". The signature is stylized and cursive.

MetroGIS Existing Land Use Project Manager  
Metropolitan Council GIS Department  
230 East Fifth Street  
St. Paul, MN 55101-1626  
(651) 602-1812

CC: Randall Johnson



## Existing Land Use Information Need User Forum

April 17, 2003

1 p.m. to 4:30 p.m.

John Rose Skating Facility - City of Roseville

*Purpose: Ask how land use information is commonly used and clarify the land use information and priorities needed by the whole community.*

### Agenda

#### 1. Welcoming Comments, Overview of MetroGIS's Purpose and Core Functions, and Goals of Today's Forum – Expected Outcomes

*Victoria Reinhardt – Chair, MetroGIS Policy Board and Commissioner, Ramsey County*

*Jane Harper – Chair, MetroGIS Coordinating Committee and Principle Planner, Washington County*

*Paul E. Hanson, Metropolitan Council*

#### 2. Foundation of Today's Work

*Paul E. Hanson, Metropolitan Council*

- Key Concepts, Procedures, and Summary of Prior MetroGIS Activities

#### 3. Clarification of 'Common' Information Needs (Insuring Common Needs are Understood)

*Paul E. Hanson, Metropolitan Council*

##### A. General Considerations (see packet)

- Definition and Parameters of 'Existing' Land Use
- Implementation of Land Use (Current Procedures or Future Desires)

**Break** – 10 Minutes

##### B. Review of Originally Identified Needs (based on initial 1996 needs assessment, see packet)

- Are they still valid needs? What aspect of the need is fulfilled by Existing Land Use?
- What needs are missing?

**Break** – 10 Minutes

##### C. Open Discussion of Existing Land Use (Re-Address General Consideration)

- Definition and Parameters of 'Existing' Land Use
  - i.e. "What is Existing Land Use?; What is the detail of land use definitions? What is the taxonomy of a designation?; How current must data be to be considered existing?; etc.*
- Implementation of Land Use (Current Procedures or Future Desires)
  - i.e. "How do you use Existing Land Use data?; Are there different definition requirements at different scales? How does Existing Land Use need to relate to other data?; etc.*

#### 4. Next Steps and Closing Comments

*Potential solutions, information forms for workgroup volunteers, and evaluation forms*

April 17, 2003  
Planning Forum Participant

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# **MetroGIS**

## **Information Needs Forum**

Turn Around Document

September 19, 1996  
St. Paul, Minnesota

### *2003 Planning Forum Participants,*

The following is a list of 'Information Needs' relating to existing land use as stated by participants in the 1996 Forum. Participants also expounded upon how a specific 'Information Need' would be used ('Uses') in their business practices. Although 1996 Forum participants listed these needs as valuable information for their business practices, are they still valid? Which of these needs can be considered 'Common' needs for the majority of metropolitan wide users? In many cases, only a portion of the 'Need' is existing land use. For example, 'Public Parks' – park is definitely a land use, but is the distinction of public vs. non-public, a land use need/question? Are any needs better answered with other information (i.e. parcels, census, etc.)? Often, there are questions surrounding a specific need or its possible solution. The following list of needs have been group based on their association with common questions/concerns. These needs and questions/concerns will be addressed at the Planning Forum on April 17<sup>th</sup>, 2003. If you can, please consider each need (or group of needs) and how they relate to your business practices at both the local and regional level. Where appropriate, please make comments.

Where appropriate, please address the ‘Information Need’ and/or question(s) concerning the ‘Need’. More space is available at the end of the document. Please use the reference number in the left-hand column to track comments.

#	Original Information Need	Uses	Questions Concerning Need/ Solution	Your Comments	Related Need/Data
What is the duration for ‘Existing’?					
C60	Current (annual) land use of the 7 county area standardized. Updated more often than every 4-5 years	<ul style="list-style-type: none"> <li>• Direct comparison of cities, counties, and neighborhoods.</li> <li>• Base data for policy question</li> <li>• Produces maps which are effective with the public</li> </ul>	<p>How current is current? How current can we expect the data to be? How current do producers maintain?</p>		
How is historical data tracked?					
C20	The landuse of the metro area a generation ago	<ul style="list-style-type: none"> <li>• Developing urban history</li> <li>• Understanding succession cycle</li> </ul>	Source? Metropolitan Council?		
C21	Land use succession history	<ul style="list-style-type: none"> <li>• Potential contamination tracking</li> <li>• Trends indicate future problems</li> <li>• Identifies future policy areas</li> </ul>	<p>How should regional changes be recorded (ie. Quarterly, annual, etc. releases)? Should historical data be maintained with current data (ie. Each edition as a unique field)?</p>		
What is the unit of land use designation?					
P6	The use of the property.	<ul style="list-style-type: none"> <li>• Ability to determine if use is conforming to planning &amp; zoning.</li> <li>• For regional planning and analysis.</li> </ul>	Focus on the “Property” aspect of the need – What is the unit of measure for the use classification? Parcel? If so, are there multiple uses per property? (i.e. 1 acre res. Yard on 5 acre parcel)		
T140	Land use data tied to census data.	<ul style="list-style-type: none"> <li>• For all forms of public works projects, city planning, social service planning.</li> </ul>	Does land use classifications need to be designated by census units (ie. Block, tract, etc.)? Simply align to?		Census
C61	Land use inside, like planned unit developments - that tells you how that land is actually being used	<ul style="list-style-type: none"> <li>• See more detail land use</li> <li>• Help to determine reasons for specific land use</li> <li>• Answer questions about density and open space</li> </ul>	How do communities classify PUD’s in ELU?		Land Restrictions
Vacant property – What is vacant?					
H10	Where is vacant land located that can be converted into schools?	<ul style="list-style-type: none"> <li>• Fully developed area has no space and vacant land is hard to find. Some cases vacant buildings can be converted into school facility.</li> <li>• Also, don’t want to take economically valuable land.</li> </ul>	Vacant land is not a use: How do you want to deal with vacant property?		

#	Original Information Need	Uses	Questions Concerning Need/ Solution	Your Comments	Related Need/Data
Does occupancy determine use?					
C71	How property is occupied - owner occupied, renter occupied, type of ownership - by parcel	<ul style="list-style-type: none"> <li>• Planning for housing resources relative to need, understanding neighborhood change</li> </ul>	Does occupancy influence/determine use? If not, where is occupancy info recorded?		Ownership
How does residential need to be distinguished?					
T2	Types of dwellings/residential buildings	<ul style="list-style-type: none"> <li>• Plan transit routes</li> <li>• Wastewater service plans</li> <li>• Traffic modeling</li> <li>• School district planning</li> <li>• Determine lifecycle costs of housing stocks</li> </ul>	Single-Family, Detached: Single, Attached: Multi-Family; with density measures? OR Single, Detached: Duplex: Townhouse: Apartments – divided by units		
S61	What type of structure is located at a particular location? <b>single story vs. high-rise?</b>		Distinguish between stories for emergency services		?
Should residential be classified by density for existing land use?					
C83	Housing and population density by community Housing density on a parcel (expressed in number of units)	<ul style="list-style-type: none"> <li>• Determining effectiveness of regional investments and decisions to enhance and/or expand utilities</li> <li>• Determine Density</li> <li>• Health characteristics</li> <li>• Determine quality of life</li> <li>• Assist in the public service planning</li> </ul>	Intensity-of-Use Density part of PLU coding scheme Distinction of ELU type?		Census?
P54	The number of households on a parcel.		Same as housing units?		Census
Is it important to distinguish different types of 'high density' residences – including mixed-uses?					
T106	High density residential locations such as group homes, half-way houses, apartment buildings, townhouses, senior citizens' centers, day care centers		Need to distinguish types of high density housing?		Socio-Economics ?
S60	I need to know batter women shelters, foster care, and group home locations.	Allows analysis of services needed and success/failure of projects; foster home placement.	Mixed use - Residential/Institutional?; Same as #T106		Socio-Economics

#	Original Information Need	Uses	Questions Concerning Need/ Solution	Your Comments	Related Need/Data
C44	The location and type of home occupations	<ul style="list-style-type: none"> <li>Determine the capacity of telecommunications needs</li> <li>Input in the development of transit planning</li> <li>Develop appropriate zoning</li> <li>Relate daytime occupancy to school children</li> </ul>	Same as #S60		Socio-Economics
P11	Use of features of geographic location in three-dimensions: retail, office, residential; buildings/parcels.	<ul style="list-style-type: none"> <li>Classification of property assessment</li> </ul>	How is mixed-use data recorded?		Socio-Economics
Are general (or specific) land use designations necessary or are the needs better served by maintaining the specific business information elsewhere?					
C33	Where the jobs are and where people drive from to get there; employment centers	<ul style="list-style-type: none"> <li>Dislocation of workers from transit routes</li> <li>Location of incubator locations</li> <li>Alignment of skills and workers</li> <li>Identifying &lt;and developing&gt; clustered industries</li> <li>Plan highway facilities</li> </ul>	Do general (or specific) land uses fulfill this ELU portion of this need?		Socio-Economics
S34	I need to know businesses by type in a given area; Occupancy	<ul style="list-style-type: none"> <li>Land use and zoning types of businesses</li> <li>Target occupations</li> <li>Measure investment and disinvestment</li> </ul>	Are business types variants of land use? Do general (or specific) land uses fulfill this need? Or is this occupancy rates?		Socio-Economics
T78	The locations of grocery stores, pharmacies, liquor stores, restaurants w/ rating & sales		Commercial detail necessary?		Socio-Economics
H15	Where are the daycare centers located?	<ul style="list-style-type: none"> <li>Target library outreach facilities to daycare centers.</li> <li>Epidemiology and disease tracking.</li> <li>Track health issues relating to daycare sites near hazardous waste sites.</li> <li>School bus routing: many kids are routed to and from daycare center, not their homes.</li> <li>Tracking daycare licensing, and letting people know where convenient daycare centers are.</li> </ul>	Commercial distinction? Institutional? Info stored elsewhere – Parcels, etc/		Socio-Economics

#	Original Information Need	Uses	Questions Concerning Need/ Solution	Your Comments	Related Need/Data
Do 'Emergency Services' and other public service activities need to be distinguishable land uses? Or is this distinguishable obtainable elsewhere?					
S20	I need to know where the emergency services are located including hospitals, fire services, police, ambulance services.	Allows analysis of services needed and success/failure of projects.	Are these distinct land uses? Or simply Institutional, commercial, or the like? Are specific available elsewhere?		Socio-Economics
S36	What schools, correctional facilities and safehouses exist within specific areas?		Same as #S17		Socio-Economics
Should parking be a distinctive land use or is it better represented as an overlay due to the variance in ownership (free vs. pay)?					
C81	Off-street parking spaces by parcel	<ul style="list-style-type: none"> <li>Land use planning</li> <li>Automobile transportation planning</li> </ul>	Both Commercial and/or Institutional Uses. Distinguish in ELU? Qualitative data recorded where?		Transportation
Should rights-of-way be represented in land use? Which ones? To what extent?					
C94	Location of the right-of-ways	<ul style="list-style-type: none"> <li>Same as #93</li> </ul>	How much is an element of land use? Right-of-way? Roads: Major highways? Roadway? Utilities? Rail? Consider how data is being captured?		Rights to property; Transportation
T92	The locations of abandoned railroad property		Rail a ELU? Inactive use? Inactivity linked with ownership? Is rail ownership important?		Ownership; Transportation
S15	What type of utilities are provided in a certain area. I need to know where fire hydrants are located.	<ul style="list-style-type: none"> <li>Gopher One call (for location of everything before a dig).</li> <li>Impact analysis.</li> <li>Estimating costs (e.g. bringing in wire, pipe from long ways).</li> <li>Roadway construction.</li> <li>(Underground) Facility mngt.</li> <li>To plan emergency response and help in investigations.</li> <li>&lt;Coordination&gt; of all types of utilities will help in disaster planning (Who will turn the gas off? Who will respond to down electric lines, etc.?)</li> <li>It is important to know which telephone company services a particular location in order to trace a particular call, find an associated address, or perform an emergency interrupt.</li> </ul>	ELU inclusion? At what SCALE?		Rights to property

#	Original Information Need	Uses	Questions Concerning Need/ Solution	Your Comments	Related Need/Data
T107	Where all broadcast antennas (radio, TV, cellular) are.		Mixed use if public trail exist on land? (ie. Shoreview)		Rights to property
Are these distinctive land use? If so, where are they best represent classified?					
C109	Where gravel pits are and extent of gravel resources by county - location, ownership	<ul style="list-style-type: none"> <li>Determine impact on Economic resource</li> <li>Determine effects on groundwater resources</li> <li>Evaluate taxation for road maintenance</li> <li>Identify locations for redevelopment uses</li> </ul>	Do gravel pits need to be a distinguishable extractive type?		Natural Resources
R67	What are the locations of compost sites?		Is this a distinctive land use? Institutional?		Natural Resources?
R68	Where are land fills and dumps, both old and new, located?		Is this a distinctive land use? Institutional?		Natural Resources?
C119	Location and type of all chemical storage by parcel		Is this a distinctive land use or is it part of industrial? Or handled by TRI?		Natural Resources?
R69	Where are feedlots(?) located?		Is this agriculture or industry?		Natural Resources?
How should certain qualitative data get stored?					
C118	Cemetery locations, population, and remaining capacity		If cemeteries are ELU, where does qualitative data stored?		
Is it a priority to distinguish recreational activities within existing land use?					
C26	The location of recreational facilities, the areas each facility serves and the age profile of facility users (ie. Tenniscourts, ballfield, in-ground pools)	<ul style="list-style-type: none"> <li>Facility Planning</li> </ul>	Does this need demand a breakdown of recreation or is this info attainable elsewhere? – Do municipalities'/counties' park departments hold this info?		Recreation
T35	Trails, paved bike paths		Same as #C26. Are trails a transportation need? Easement/Rights of Way?		Recreation/ Transportation
Ownership					
T73	Public parks.		Provide distinction b/t rights to property?		Rights to Property
Overlays					
C53	Any significant natural habitats and wetlands	<ul style="list-style-type: none"> <li>Land use planning</li> <li>Suitability analysis</li> </ul>	Distinctive natural resource land uses? Overlays?		Hydro
P48	<The locations of> lakes, streams and wetlands.		Lakes Use? If not, what is the use?		Hydro





**Group 1: Community Development; Planning; Demographics; Housing; Research ( C)**

#	Original Information Need	Source	Uses	Source of Use	Related Need #
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top three information needs from their own perspective or their organization's perspective.

Information Need #	Voted casted by	Total Votes
C20	??, RJM	2
C60	??, JAL	2

**Group 2:Property Records (P)**

#	Information Need	Source	Uses	Source of Use	Related Need #
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**Group 3: Public Works; Transportation; Telecommunications (T)**

#	Information Need	Source	Uses	Source of Use	Related Need #
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**Group 4: Parks and Recreation; Environmental Protection; Natural Resources( R)**

#	Information Need	Source	Uses	Source of Use	Related Need #
R14	We want a basic inventory of the public infrastructure -- locations and conditions of parks, roads, sewers, etc.	DPY/ DJT	<ul style="list-style-type: none"> <li>• To do everything!</li> <li>• Model instances of pollution (sewers)</li> <li>• Determine capital improvement programs (where to target capital improvement money)</li> <li>• Plan and arrange growth</li> <li>• Determine public and private drainage system locations</li> <li>• Determine flood levels and monitor water quality (storm sewers)</li> </ul>	ELO/ MRJ/ DJT/ PJC	

**Group 5: Public Safety; Judicial (S)**

#	Information Need	Source	Uses	Source of Use	Related Need #
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**Group 6: Human, Social, Educational Services; Public Health; Libraries (H)**

#	Information Need	Source	Uses	Source of Use	Related Need #
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### 3. Clarification of ‘Common’ Existing Land Use related Information Needs

#### General Considerations and questions for discussion

*Consider the following existing land use related questions prior to the Forum in terms of your business needs or current procedures. If you like, record your comments to bring to the Forum. The goal of this exercise is to record the total breadth of divergent views, wants, and needs. This information will be used by a future workgroup to help draft a solution for the Existing Land Use Information Need.*

**Please keep in mind we are focusing on existing land use – not planned land use, zoning, or land cover, although many of the following questions are clearly associated with one or more of the latter.**

#### **A) What is Existing land use?**

- 1) How do you use existing land use information?
  - Is it a means to the end or an end in itself?
  - Does it simply serve as a base for other information?
  
- 2) How are your information needs currently being answered (i.e. Where is new development occurring? Location of occupied and vacant commercial land; Location of redevelopable land)?
  - What information does existing land use need to relate to?
  - What are the shortcomings in what you are using?

#### **B) What is the level of detail? Think of level of detail in terms of land use definitions – the ability to describe land use designation in extensive detail (i.e. ‘grocery store’) or with general types (i.e. ‘commercial’).**

- 1) What level of detail is needed in distinguishing land uses for your business needs?
  - Do you need site specific detail? Or general descriptions? (e.g. consider these: Commercial? Neighborhood Commercial? Grocery Store?)
  - Do you need both? – Do different business tasks require different level of descriptive detail? (e.g. consider these: Traffic analysis vs. market analysis of a specific commercial service).

- 2) What do you need to know about your neighbors?
  - What level of detail is needed in distinguishing their land uses for your business needs?
  - Typically, do you only need general land use categories or more specific information?

**C) What are the important information parameters connected to land use – the what, where, and how agreed upon land use definitions are implemented.**

- 1) What is the unit measurement for distinct land use designations?
  - Do you need to know land use of individual parcels? Or within a parcel?

- 2) Do Existing Land Use definitions need to match with Planned Land Use?

- 3) Is there a need to view neighboring communities in your land use definitions?
  - Or simply be able to view in a common definition?

**D) What is the duration for ‘Existing’?**

- 1) How current does the data need to be?

- 2) Do you want or need historical information tied directly to an Existing Land Use data?
  - Or simply have the information available?



**F) Other Concerns/ Comments/ Questions**

*For your information....*

*Anticipated April 17, 2003 Existing Land Use Planning Forum participants questions.*

**Can the APA's work fit into the MetroGIS effort?  
Can APA's LBCS work for the existing land use need?**

*Below is a brief description of the APA's Land-Based Classification Standards. The Existing Land Use Information Needs Workgroup will undoubtedly consider APA-LBCS as they draft a solution.*

## **American Planning Association (APA)**

**LAND-BASED CLASSIFICATION STANDARDS (LBCS) – [www.planning.org/lbcs](http://www.planning.org/lbcs)**

Land-Based Classification Standards provide a consistent model for classifying land uses based on their characteristics. The standards are based on a multi-dimensional land-use classification model.

LBCS updates the 1965 *Standard Land Use Coding Manual (SLUCM)*, a standard which was widely adopted for land-use classifications. Because many current applications and land-based data depend on SLUCM and its derivatives, this update includes tools and methods to migrate such data.

### *Executive Summary*

LBCS provides a consistent model for classifying land uses based on their characteristics. The model extends the notion of classifying land uses by refining traditional categories into multiple dimensions, such as activities, functions, building types, site development character, and constraints. Each dimension has its own set of categories and subcategories. These multiple dimensions allow users to have precise control over land-use classifications.

Classifying land uses across multiple dimensions, in database terms, means adding new fields to the land-use database. The total number of land-use fields in the database should equal the number of dimensions, that is, every record in the database is classified in not just one land-use field, but several ones for each dimension. The number of dimensions, in turn, will depend on the purpose of the data. When the purpose of the data changes, dimensions may be added or dropped as needed. For local planning purposes, LBCS calls for classifying land uses in the following dimensions: Activity, Function, Type, Site Development Character, and Ownership.

The underlying principle of the LBCS model is its flexibility. It addresses flexibility in adapting the model to a variety of planning applications, data collection methods, data-sharing and data-integrating methods, and color coding and mapping. The flexibility also makes it possible to assign new categories for new land uses, to accommodate new methods and technologies for analysis, and to customize the model for local needs without losing the ability to share data. Each of these aspects of LBCS calls for applying a variety of standards or conventions to maintain consistency in land-use classifications.

The principal purpose of the project is to ensure that a broad variety of land-based data now being collected and stored at local, regional, state, and national levels, in a variety of formats and classification systems, can be standardized so that such data would be compatible and, thus, easily transferable between jurisdictions, agencies, and institutions. While the use of such a revamped system would be voluntary, potential users would be strongly inclined to embrace such a system because it would increase opportunities for reciprocal data sharing, both horizontally, from geographic area to geographic area, and vertically, between local, regional, state, and national jurisdictions.

In addition, a new and revised classification system would broaden the subject matter of the original 1965 SLUCM, which addressed only matters pertaining to land use. Today, we find practitioners collecting, storing, and manipulating three broad categories of land-based information: (a) land-cover information related primarily to the existing natural environment; (b) land-use information related primarily to the existing built environment; and (c) land-rights information related primarily to fee and less-than-fee and to development rights, such as those prescribed by zoning and other regulatory measures. ***The purpose of the project would be to create a classification system capable of accommodating all three categories of land-based information and not just land use.***

# Land-Based Classification Standards

## Five Dimensions for Classifying Land-Use Data

*Consider MetroGIS Common Information Needs in terms of LBCS (Grayed headings in left-hand column)*

EXISTING & PLANNED LAND USE	<p><b>ACTIVITY</b>            1000: Residential activities            2000: Shopping, business, or trade activities            3000: Industrial, manufacturing, and waste-related activities            4000: Social, institutional, or infrastructure-related activities            5000: Travel or movement activities            6000: Mass assembly of people            7000: Leisure activities            8000: Natural resources-related activities            9000: No human or unclassifiable activity</p> <p><b>STRUCTURE</b>            1000: Residential buildings            2000: Commercial buildings and other specialized structures            3000: Public assembly structures            4000: Institutional or community facilities            5000: Transportation-related facilities            6000: Utility and other nonbuilding structures            7000: Specialized military structures            8000: Sheds, farm buildings, or agricultural facilities            9000: No structure</p>	<p><b>Activity</b> refers to the actual use of land based on its observable characteristics. It describes what actually takes place in physical or observable terms (e.g., farming, shopping, manufacturing, vehicular movement, etc.). An office activity, for example, refers only to the physical activity on the premises, which could apply equally to a law firm, a nonprofit institution, a court house, a corporate office, or any other office use. Similarly, residential uses in single-family dwellings, multi-family structures, manufactured houses, or any other type of building, would all be classified as residential activity.</p> <p><b>Structure</b> refers to the type of structure or building on the land. Land-use terms embody a structural or building characteristic, which suggests the utility of the space (in a building) or land (when there is no building). Land-use terms, such as single-family house, office building, warehouse, hospital building, or highway, also describe structural characteristic. Although many activities and functions are closely associated with certain structures, it is not always so. Many buildings are often adapted for uses other than its original use. For instance, a single-family residential structure may be used as an office.</p>
SOCIO-ECONOMICS	<p><b>FUNCTION</b>            1000: Residence or accommodation functions            2000: General sales or services            3000: Manufacturing and wholesale trade            4000: Transportation, communication, information, and utilities            5000: Arts, entertainment, and recreation            6000: Education, public admin., health care, and other inst.            7000: Construction-related businesses            8000: Mining and extraction establishments            9000: Agriculture, forestry, fishing and hunting</p>	<p><b>Function</b> refers to the economic function or type of establishment using the land. Every land use can be characterized by the type of establishment it serves. Land-use terms, such as agricultural, commercial, industrial, relate to enterprises. The type of economic function served by the land use gets classified in this dimension; it is independent of actual activity on the land. Establishments can have a variety of activities on their premises, yet serve a single function. For example, two parcels are said to be in the same functional category if they belong to the same establishment, even if one is an office building and the other is a factory.</p>
LAND COVER	<p><b>SITE</b>            1000: Site in natural state            2000: Developing site            3000: Developed site -- crops, grazing, forestry, etc.            4000: Developed site -- no buildings and no structures            5000: Developed site -- nonbuilding structures            6000: Developed site -- with buildings            7000: Developed site -- with parks            8000: Not applicable to this dimension            9000: Unclassifiable site development character</p>	<p><b>Site development character</b> refers to the overall physical development character of the land. It describes "what is on the land" in general physical terms. For most land uses, it is simply expressed in terms of whether the site is developed or not. But not all sites without observable development can be treated as undeveloped. Land uses, such as parks and open spaces, which often have a complex mix of activities, functions, and structures on them, need categories independent of other dimensions. This dimension uses categories that describe the overall site development characteristics.</p>
RIGHTS TO PROPERTY	<p><b>OWNERSHIP</b>            1000: No constraints--private ownership            2000: Some constraints--easements or other use restrictions            3000: Limited restrictions--leased and other tenancy restrictions            4000: Public restrictions--local, state, and federal ownership            5000: Other public use restrictions--regional, special districts, etc            6000: Nonprofit restrictions            7000: Joint ownership character--public entities            8000: Joint ownership character--public, private, nonprofit, etc.            9000: Not applicable to this dimension</p>	<p><b>Ownership</b> refers to the relationship between the use and its land rights. Since the function of most land uses is either public or private and not both, distinguishing ownership characteristics seems obvious. However, relying solely on the functional character may obscure such uses as private parks, public theaters, private stadiums, private prisons, and mixed public and private ownership. Moreover, easements and similar legal devices also limit or constrain land-use activities and functions. This dimension allows classifying such ownership characteristics more accurate.</p>

For your information...

**Does the MetroGIS Regional Planned Land Use coding scheme work with the existing land use? If not, should it?**

*Below is a brief description (Level 1) of the land use designations of the MetroGIS Regional Planned Land Use Coding Scheme. The coding scheme is a two-tiered, nested scheme that attempts to capture the generally adopted language of most communities' planned land use (comprehensive plan) designations. The coding scheme is flexible enough to incorporate additional levels of distinction. The Existing Land Use Information Needs Workgroup will undoubtedly consider the methodology implemented for the Regional Planned Land Use information need as they draft a solution for existing land use.*

**MetroGIS Planned Land Use Coding Scheme**

Endorsed by MetroGIS Policy Board on April 10, 2002 ([www.metrogis.org/data/datasets/planned\\_land\\_use](http://www.metrogis.org/data/datasets/planned_land_use))

Level 1 – Generalized land use classifications

Level 2 – Sub-Categorized land use classifications

Level 1	Level 2
Agricultural	Agricultural, Undifferentiated
	Farmstead
	Cultivation
	Agricultural Support, Other

**Agricultural** - Land used for agricultural purposes, including farming, dairying, pasturage, horticulture, floriculture, viticulture, and animal and poultry husbandry and accessory uses - provided that such accessory uses shall be incidental to the agricultural activities; may include farmstead or rural residence. Housing development across the land use designation should not exceed 1 housing unit per 40 acres.

Level 1	Level 2
Rural / Rural Residential	Large Lot Residential & Other, Undifferentiated
	Rural Residential

**Rural / Rural Residential** - Land containing a building or portion thereof used for residential purposes, including mostly one-family homes, but may include some two-family; may include land used for agricultural purposes and accessory uses. Housing development across the land use designation should not exceed 1 housing unit per 1 acre and no less than 1 housing unit per 40 acres.

Level 1	Level 2
Single-Family Residential	Residential, Undifferentiated
	Single Family, Detached
	Single Family, Detached and Attached
	Seasonal / Vacation
	Manufactured Housing

**Single-Family Residential** - Land containing a building or portion thereof used exclusively for residential purposes, including mostly one-family homes, but may include some two-family but not including hotels, motels, and boarding houses, nursing or elderly care facilities; may contain open space within or related to a residential development designed and intended for the common use or enjoyment of the residents of the development.

Level 1	Level 2
Multi-Family Residential	Residential, Undifferentiated (Density)
	Single Family, Attached
	Single Family Attached and Multi-Family Residential
	Multi-Family Residential

**Multi-Family Residential** - Land containing a building or portion thereof used exclusively for residential purposes, including two-family, and multiple-family dwellings, but not including hotels, motels, and boarding houses, nursing or elderly care facilities; or may contain open space within or related to a residential development designed and intended for the common use or enjoyment of the residents of the development.

Level 1	Level 2
Commercial	Commercial, Retail or Undifferentiated
	Neighborhood Commercial
	Community Commercial
	Regional Commercial
	Highway / Convenience Commercial
	Rural Commercial
	Marina
	Office

**Commercial** - Land use primarily engaged in the provision of goods or services. Principally distinguished by service area.

Level 1	Level 2
Industrial	Industrial, Undifferentiated
	Light Industrial
	Heavy Industrial
	Extractive
	Utility
	Water Navigation, Locks

**Industrial** - Land used primarily in the manufacture and/or processing of specified or unspecified products; could include light or heavy industrial land use, large warehouse facilities, or utilities land use.

Level 1	Level 2
Institutional	Institutional, Undifferentiated
	Religious
	Education
	Government
	Health

**Institutional** - Land used for primarily religious, governmental, educational, social or health care facilities excluding clinics.

Level 1	Level 2
Mixed Use	Mixed Use, Undifferentiated
	Residential & Other
	Industrial & Other
	Commercial & Other

**Mixed Use** - Land *containing* or potentially containing a building or buildings with significant amounts of **two or more of the following land uses**: residential, industrial, commercial and/or office uses. Think in terms of a single build with mixed use.

Level 1	Level 2
Multiple Use	Multiple Use, Undifferentiated
	Residential & Other
	Industrial & Other
	Commercial & Other

**Multiple Use** - Land potentially containing a building or buildings with a significant amount of **only one of the follow land uses**: residential, industrial, commercial and/or office uses. Think in terms of business park with multiple single use buildings or future development with optional single use development.

Level 1	Level 2
Park & Recreation	Community Park & Recreation
	Golf Course

Level 1	Level 2
Open Space	Open Space: Passive
	Open Space: Natural
	Open Space: Restrictive

Level 1	Level 2
Roadway	Transportation (Other)
	Vehicular Rights-of-Way
	Pedestrian Rights-of-Way

Level 1	Level 2
Railway	Railway Corridor
Airport	Airport, Undifferentiated

Level 1	Level 2
Vacant or Undetermined	Vacant Land
	No Data
	Uncertain

Level 1	Level 2
Water	Open Water

**Park & Recreation** - Land used primarily for public recreation activities improved with playing fields, playground or exercise equipment and associated structures. May include land containing a building(s) developed, used, and maintained primarily for recreational activities.

**Open Space** - Land used and maintained for: resource protection, amenity, or buffer; support unorganized public recreational activities and which may contain trails, picnic areas, public fishing/boating docks, etc; or preservation of unaltered land in its natural state for environmental or aesthetic purposes.

**Roadway** - Land area or strip of land, either public or private, intended to be reserved for vehicular rights-of-way; may include pedestrian rights-of-way or unspecified transportation land use.

**Railway** - Land area or strip of land, either public or private, intended to be reserved for railroad activities.

**Airport** - Land area or strip of land, either public or private, intended to be reserved for airport activities.

**Vacant or Undetermined** - Land not currently used for any defined purpose that may or may not contain buildings or other structures; or lacks a clearly defined land use.

**Water** - Permanently flooded open water not including wetlands, or periodically flooded area.

# ATTACHMENT B

## Evaluation Results

### MetroGIS Peer Review Forum Existing Land Use Information Need

<b>Outstanding</b>	<b>(4)</b>
<b>Good</b>	<b>(3)</b>
<b>Average</b>	<b>(2)</b>
<b>Poor</b>	<b>(1)</b>

#### Your Understanding Following the Presentations/Activities

1. Connection between this Forum and MetroGIS's Core Functions..... 3.29
2. Earlier MetroGIS activity related to this topic..... 3.18
3. Goals for a Regional Existing Land Use data solution..... 2.69

#### Was this Forum.....

1. A valuable use of your time / relevant to your job responsibilities?..... 2.71
2. Useful in providing new and valuable information and ideas?..... 2.71

#### Your Understanding of MetroGIS's Objectives

1. Prior to the forum..... 3.00
2. After to the forum.....3.21

#### Additional Comments:

- "Understanding time efficiencies - more time could have been given for greater discussion on topics and solutions."
- "Facilitator should talk less. He was a bit judgmental and dismissive of people's comments. However, he did do a good job of clarifying comments."
- "Ask Kathy Johnson [Metropolitan Council employee] to participate."
- "Interested in the relationship [of the Existing Land Use information need] with Hydrology, Emergency Preparedness and other efforts."
- "I liked the way [the facilitator] moved through the topic and took the initiative to skip unimportant items to get to the critical items."
- "Nice job!"

