

MetroGIS

Business Object Modeling Session

Final Turn Around Document

October 30 - 31, 1996
St. Paul, Minnesota

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Opening Comments

General:

Randall Johnson, Metropolitan Council GIS Department and staff to the MetroGIS, welcomed the participants.

Rick Person, St. Paul, and Chair of Data Content Advisory Team said the primary task of the team is to identify core GIS data sets that are of regional significance.

The Process:

Steve Clowse, with Advanced Strategies, Inc., described the process that is being used in the project. It started with the development of mission and focus statements. The first session identified information needs. Today's session will create a business object model. The next step will be to rank data needs. After December 4, the Data Content team will select datasets for sharing and for the development of standards. It will also identify important queries.

The Focus StatementSM:

Steve described the focus statement. The focus is on the physical characteristics of areas, locations, features, and the characteristics of other items "organized" or "analyzed" by area, location, or feature. {See the focus statement for definition of the geographic scope, the business perspectives sought, and for universality statements.}

Steve described two additions to the original focus statement. First, we are interested in a sufficient level of generality so that the models and resulting systems will achieve use among the widest array of participating organizations. Second, we are seeking sufficient detail to be able to identify commonly needed data sets of geo-referenced data.

There was a question about the balance between generality and detail. Steve noted that the components of the model (e.g. entities, relationships) should be general. However, the level of detail in the focus statement addresses the degree to which we will define each component. At this time, we only need enough detail for the model to help us identify commonly needed data sets.

Joint Development Approach:

Steve used viewgraphs to describe the Joint Development Approach (JDASM), saying that the goal of the session is to produce a work product that reflects the informed consensual decision of the group. The results will reflect the best judgment of a variety of perspectives. JDASM is comprised of 7 components, group, work product, structure, facilitation, instrument, consensus and process.

This group is larger than the usual number for a JDASM session. Structure is a part of the room arrangement, the fact that everyone has a role and an agenda. For facilitation, Steve is the traffic cop and the layman terms will be used.

Steve outlined some ground rules, expectations, and roles of participants. The subject matter experts include those who make decisions based on geo-referenced data and those who provide the data, analyze the data, and develop and maintain the technology that supports the others. The experts should feel free to question each other as the process evolves. The main goal is the optimum use of everyone's time. Everyone should expect the following: hard work, to be heard, fatigue, vocabulary differences, frustration, learning and insight.

Richard Branton noted that the model to be developed should describe the physical world, not data about the world and not abstractions (e.g., streets, not center lines). The project will focus on data structures and abstract views of the world offline, later. He described the various roles (recording analysts, coach, facilitator, observers and subject matter experts). He also reminded the participants to wear their decision-maker hats and stated that the users are the ones we are trying to serve.

Focus StatementSM

Definition -- Geographical Characteristics: Physical characteristics of a geographical area, location or feature including those on, below, or above the surface of the land or water; and characteristics of other items of interest "organized" or "analyzed" by geographical areas, locations or features.

- ◆ Some examples of physical characteristics include:
 - ⇒ Area: The extent of a city.
 - ⇒ Location: The location of a street, waterfall, or a fire hydrant.
 - ⇒ Feature: The presence of minerals in an area, the width of a street, or the depth of a lake.

- ◆ Some examples of items “organized” or “analyzed” by geographical area include:
 - ⇒ The crime rate in a neighborhood.
 - ⇒ The pollution level at a specific location at a point in time.
 - ⇒ The species of wild flowers in a certain area.

Scope:

- ◆ We are interested in all geographical characteristics (as defined above) of the seven county Twin City Metropolitan area that is relevant to improving:
 - ◆ The effectiveness, efficiency, and/or completeness of results at participant operations (public and private),
 - ◆ The understanding of the dynamics of the area's people, places and things.

Perspectives:

Primarily, we want to include the point of view of:

- ◆ Individuals within units of government responsible for providing services within the Twin City Metropolitan area.
- ◆ Individuals in government agencies seeking to improve the quality of living and/or economic competitiveness of the Twin City Metropolitan area.
- ◆ Individuals making decisions about public policies servicing the Twin City Metropolitan area.
- ◆ Individuals responsible for operation of the governments of the Twin City Metropolitan area.
- ◆ Individuals concerned with improving government's effectiveness using geographical information.
- ◆ Individuals interested in maximizing sharing of geographical information.
- ◆ Individuals representing non-government organizations who might collaborate with government entities on geographical data of common interest.
- ◆ Individuals in non-government organizations who provide essential public services and who might benefit from geographical information.

Secondarily, we want to consider the point of view of:

- ◆ Individuals interested in geographical information within the Twin City Metropolitan area including:
 - ◆ Researchers
 - ◆ Educators
 - ◆ Private organizations (including utilities)
 - ◆ Private citizens
 - ◆ Non-profit organizations

At this time, we will not specifically address the needs of:
Individuals within business seeking to locate in the area.

Universality:

- ◆ We are interested in geographical information covering the Twin City Metropolitan area, extensible into impacts on and from neighboring areas.
- ◆ We are interested in a sufficient level of generality so that the models and resulting systems will achieve use among the widest array of participating organizations.
- ◆ We expect the models and resulting systems to be:
 - ◆ Stable for 6 months
 - ◆ Extensible for 24 months
 - ◆ Have a demonstrable life span of 60 months

Level of Detail:

- ◆ Sufficient detail to be able to identify commonly needed data sets of geo-referenced data.

Introductions/Participants

The participants introduced themselves, noting the following:

- Name
- Organization
- Their Focus Group on September 19th
- Whether they knew what a foreign key is and what a raster is.

This information is captured in the following table. Also, which days the participants attended is also indicated.

Focus Group Key:

HS = Human, Social, Educational Services; Public Health; Libraries

PS = Public Safety; Judicial

PR = Property Records

CD = Community Development; Planning; Demographics; Housing; Research

PW = Public Works, Transportation, Telecommunications

PEN = Parks and Recreation; Environmental Protection; Natural Resources

MG = MetroGIS Coordinating Committee

ID	Name	Organization/Role	Group	Ques	Wed	Thu
LH	Laurie Hestness	Ramsey County Research and Evaluation	HS	NY	Y	N
SS	Steve Schellenberg	St Paul Schools	HS	NN	Y	Y
DC	Dennis Carlson	Anoka-Hennepin School District Community Education	HS	NN	Y	Y
KT	Kent Tupper	Dakota County	HS		N	N
RHC	Roger H. Carlson	Hennepin County	HS	NN	Y	Y
RK	Randy Knipple	Dakota County Gis Specialist	PS	YY	Y	Y
BV	Bob Vandembroeke	Carver County	PS		Y	N
JC	John Connelly	St. Paul/Ramsey Co. Charter Commission	PR	NY	Y	Y
BL	Brian Larson	Regional Multiple Listing Service	PR	NY	Y	Y
BM	Bob Moulder	Hennepin County Surveying	PR	NY	Y	N
DD	Dave Drealan	Carver County	PR	NY	Y	Y
OS	Orlin Schafer	Carver County Assessors Office	PR	NN	Y	Y
MK	Mark Kotz	MetCouncil GIS Technician	PR	YY	Y	Y

ID	Name	Organization/Role	Group	Ques	Wed	Thu
DC1	David Claypool	Ramsey County Surveyor	PR	NY	Y	Y
RLC	Roger L. Carlson	Minneapolis Assessors Office	PR	NN	Y	Y
WC	Will Craig	Univeristy of MN CURA	CD	NY	Y	Y
PL	Paul Leegard	Anoka County	CD	YY	Y	Y
JH	Jane Harper	Washington County Physical Development	CD	NN	Y	Y
FO	Fritz Ohnsorg	State health Department	CD		N	N
KC	Kurt Chatfield	Dakota County Planning	CD	NY	Y	N
DW	David Windle	City of Roseville GIS Coordinator	CD	NY	Y	Y
LL	Laura Lambert	Minneapolis Planning Department	CD	NY	Y	Y
TZ	Tim Zimmerman	Hennepin County Planning/GIS	CD	NY	Y	Y
MJ	Marcel Jouseau	MetCouncil Environmental Services	PEN	NY	Y	Y
EO	Ed Olsen	City of St. Paul Parks and Recreation	PEN	NY	Y	Y
NR	Nancy Read	Metropolitan Mosquito Control	PEN	NY	Y	Y
TE	Tom Eiber	Department of Natural Resources	PEN	NY	Y	Y
GF	Guy Fisher	City of Minneapolis	PEN		N	N
TM	Tim Morehead	US West Forecaster	PW	NY	Y	Y
TK	Tim Kirchoff	Anoka County Public Transportation	PW	NY	Y	Y
JV	Jan Vanderwall	Roseville Area Schools Transportation/Technology Coor.	PW	NN	Y	Y
RG	Roger Gustafson	Carver County Engineer	PW	NN	Y	Y
RP	Rick Person	City of St. Paul Public Works/Mapping	PW	NY	Y	Y
RR	Randy Rosvold	MetCouncil	PW		N	N
KR	Kevin Roggenbuck	MetCouncil Planning/Forecasting	PW	NN	Y	Y
DA	David Arbeit	Land Mgmt Information Center	MG	YY	Y	Y
R/G	Rick Gelbmann	MetCouncil GIS	MG	YY	Y	Y

Support Team

Name	Organization	Role
Steve Clowse	Advanced Strategies	Facilitator
Richard Branton	Advanced Strategies	Coach
Karl Olmstead	Mn/DOT	Data/Recording Analyst
Bruce Abbott	DNR	Data/Recording Analyst
Chris Cialek	LMIC	Data/Recording Analyst
Robert Maki	DNR	Data/Recording Analyst
Michael Baker	LMICI	Data/Recording Analyst
Randy Johnson	Met Council	Project Manager
Jim Chiquist	Met Council	Observer
Tanya Mayer	Met Council	Observer
David Vessel	Met Council	Observer
Heidi Welsch	Met Council	Observer

Information Needs

Steve distributed index cards and asked each subject matter expert to identify the one business question that is most important to them. If they are a GIS data person they should put their customer hat on and answer the question.

These information needs were identified:

#	Business information need	ID
1	Utility/facility location and maintenance history in St. Paul	RP
2	Accurately record location & characteristics of our residences and businesses	DW
3	Place to keep our district residents census (related to property)	JV
4	Primary characteristics and functional classification of regional roadways	KR
5	Where are wetlands and ditches in the metro area relative to streets, right now	NR
6	Current land use and where it has changed	MK
7	Locate any address in the seven-county metro area	R/G
8	Everything a home-buyer would like to know about a property and the neighborhood and community in which it lies	BL
9	Which communities could benefit most from technical and research assistance from the University	WC
10	How are property values changing in the metro area (by parcel)	TZ
11	A common parcel ID	OS
12	Where young children would likely be exposed to lead dust	RHC
13	Ability to locate all parcels in the 7-co. area and attach attribute data	LL
14	Where development can occur where it minimizes public cost and impact on land	DA
15	Who lives in our 13 communities?	DC
16	Real property, persons and personal property for policy, planning and budgeting	JC
17	The natural and cultural attributes of parcels	DD
18	Land ownership and associated parcel attributes	DC1
19	Characteristics of individuals in neighborhoods/communities for planning and evaluation of service delivery (prefers aggregate data to parcel data for data privacy reasons)	LH

#	Business information need	ID
20	Mapping student residences according to attributes of students (race, socio-economic status)	SS
21	Water pollution levels generated by any land area	MJ
22	Accurate parcel map of the county	RG
23	Relationship between tax forfeitures and hazardous waste (at parcel level?)	BM
24	Identify location of occurrences or characteristics of a location in three-dimensional space	RLC
25	Land use by parcel, including the number and types of residential units, size and type of retail, industrial business, number of employees	TK
26	Crime incident and current demographic information to understand relationship between crime and social trends	RK
27	Locations of active subdivisions and impending development	KC
28	Current land use in the county and how it has changed over the past 5 decades	JH
29	Location and condition of natural resources in the metro area	EO
30	Where homes and businesses are being built by specific address and latitude and longitude	TM
31	Street address ranges	TK

Additional Information Needs and Uses

These additional information needs and associated uses were stated during the course of the modeling session. They were not recorded on flip charts during the session as a part of a formal activity.

Day 1:

#	Information Need	Model Fragment	Anticipated Use	Src ID
1	We need to account for homeless population within the model. The existing constructs do not adequately describe their circumstances	Household/ Dwelling Unit/ Person	Providing services to homeless people and correlating other information sources with homeless occurrences	RHC
2	Need common parcel identifiers to integrate data	Earth/Space/ Parcel	Land Records applications across jurisdictional boundaries	OS
3	Need contact information for permission/approval to access parcels	Parcel/Structure	Land treatments (in this case for mosquito control)	NR
4	Need to extend land perspective to water bodies (regarding land records)	Earth/Parcel	Land transactions of flooded parcels	TE
5	Resource managers subdivide the land into areas using the attributes of the entity "earth".	Earth/Space	Natural resource management	WC, DA, TE
6	Need specific information related to business vs. industry designations that can be combined with information on property tax wealth and income levels generated for people. This is a general need to understand the relationships between industrial base, wages, community, tax base, job classification, skill level, organization income, and livable wages classifications.	Legal Entity/ Person/ Organization/ Job/Industry	Analysis, policy development, school funding policy, economic wealth of community analysis, city planning and economic development	DC
7	Need information on locations of mentally ill and disabled persons, including residence patterns.	Network/ Location/Person	Providing service for disabled and mentally ill persons	LH

#	Information Need	Model Fragment	Anticipated Use	Src ID
8	Need information on school progress outcomes, especially from school districts	Attributes of Person	Analyzing the relationships between trends in juvenile crime, teen pregnancy (and other social problems) and school outcomes.	LH
9	Need information on lead levels and exposure	Attributes of Person	Analysis of lead exposure relative to social problems	RK

Day 2:

#	Information Need	Model Fragment	Anticipated Use	Src ID
1	Need to know skill level, job status, industrial base, and capital investments	Asset/Legal Entity/Person/Organization	Unknown	RHC
2	Need to know ways that data are expressed in terms of GIS feature classes and associated scales	Location	A basic data analysis requirement	PL
3	Property wealth data, housing history, income history, property tax history	Organization/Person/Industry	Impact of land use (e.g. industry vs. low-income housing) on changes in property tax wealth that in turn provides support for low-income housing. Who will live there? Potential of a piece of land for raising revenues for providing services.	DC
4	Capital investment records, job classification by location and wage	Asset/Legal Entity/Organization	Analysis of the relationships between investment and community health expressed by quality of jobs	RHC

#	Information Need	Model Fragment	Anticipated Use	Src ID
5	The session is wandering out of scope with regards to the geographic framework component of the “scope” session of our effort. There is a wide variety of issues that although important, clearly extend outside the scope of the effort (e.g. modeling economic systems).	Legal Entity/Asset	Variety of social analyses	DA
6	Aerial photography and floor plan (of building) information	Response	911 response, emergency response	RK
7	Need the capability to define “segments” into a form consistent with common dynamic segmentation data models	Network/Segment	Network modeling	RK
8	Need to consider how to incorporate information on access to (things at) physical locations	General requirement, esp. for networks	Unknown	NR
9	Need to address specific locational information needs-especially related to utility networks. Detailed information is required on relative location of pipelines within the physical network infrastructure.	Network/Features/Location	Network facilities maintenance	RP

Discussion of the Process at the End of Day 1

Richard Branton reviewed the process of which we are in the middle. He said that Advanced Strategies had classified the information needs identified at the first session into several categories. He said that he has been using that list to verify that those categories have been successfully covered in the model we developed today. He also reported that Steve came into the session with a “straw” model that reflects his view based on the information needs. The group developed its own today (and therefore owns it). It was likened to an architect developing a house plan for a new home. Richard said that overnight, the staff would check to ensure that all major areas in the straw model were covered in the model we developed today. He also said that after tomorrow’s session, Advanced Strategies would incorporate some additional pieces from other models it has developed and they will be brought in as pertinent.

He explained that the effort to brainstorm attributes was done for two reasons. First, because the group had made faster progress across the entire scope of the problem. Second, it was a good exercise to do during the low energy time in the mid-afternoon. He congratulated the group for making fast progress today.

A question from Jane Harper, Data Content Advisory Team: does Advanced Strategies have a method for helping the data content team to select the “core” data? Answer from Richard: yes, we’ve been recording uses and understand which data is interesting across more of the groups.

Opening - Day 2

Steve Clowse opened the session at 8:40. He welcomed the participants and described the agenda. Examination of the diagrams elicited these questions and comments:

- Please put a legend on the diagram for the next distribution.
- Question about the definition of an associative entity. The modeling rules prevent having a relationship participate in a relationship. Consequently, we create an associative entity when a relationship between one relationship and an entity is discovered. The example in the model is the relationship Organization responds to Occurrence via Network which is modeled as an associative entity Response. The Response associative entity participates in the Response Type classifies Response relationship.
- Richard Branton explained the notion of classification relationships where a “generic” entity classifies a “specific” one. For example: Response Type classifies Response. He said readers should expect the final model to show a number of relationships of this type.
- Question from Rick Person: Will we be getting to priorities today? Richard Branton answered not today. Later we will transform the model into English statements and the subject matter experts will determine priorities in part through an examination of those statements.
- Question: What does an “M” mean on a relationship? M at the end of a line at a relationship indicates that an occurrence of the entity at the other end of the line can participate in more than one of these relationships. An M at the end of a line at an entity indicates that an occurrence of the relationship involves multiple entity occurrences.
- Question: Does Supertype and Subtype indicate level of priority? No, super- and sub-typing is a modeling construct, but it doesn’t indicate a level of priority.
- Question from RK: How do we know where the process is going and what our role will be in it? After this session, we will have a 1-day follow up session on December 4th. At that session, we will further develop and refine the business object model. We still have to do a ranking activity to identify cross-jurisdictional datasets. That may start on December 4th, but it more than likely will involve an offline survey. We will definitely need your expertise to complete the model and to do the ranking.

Day 2 Brainstorming What is Left to Cover in the Model

During the day, we did brainstorming exercises to identify parts that might still be missing from the model. At a specific time, the facilitator invited participants from one subject matter expert group to identify items which need to be addressed from their area.

Group Key:

HS = Human, Social, Educational Services; Public Health; Libraries

PS = Public Safety; Judicial

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CD = Community Development; Planning; Demographics; Housing; Research

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Group	Src ID	Items that might still be missing from the model
CD		Travel time, routing, distance==>side sheet on Routes..., attributes of Segment
CD		Address match in a vague way--neighborhoods==>for this afternoon
CD		What divides neighborhoods, e.g., freeways?==>Segment {dividing} Locations
CD		Modes of transportation==>side sheet on Route....
CD		Loosely associated groups and social structures ==>side sheet on Legal Entity, Person, Organization, Informal Association or Group
CD		cultural resources==>will be dealt with later
CD		Jobs, rates, requirements==>covered already by attributes caught yesterday
CD		Capital improvements==>side sheet on Legal Entity, Asset....
CD		Where is employment located?==>covered already by <u>Person is employed by Legal Entity at Location</u>
CD		Noise contours, service areas, jurisdiction areas==>a side sheet on Location, Area, Parcel was started, but not then tabled for later in the day
CD		Transportation and other linear features==>side sheet on Route, Segment....

Group	Src ID	Items that might still be missing from the model
PS	RK	Characteristics of an area==>attributes of area
PS	RK	Time of occurrences and changes in characteristics of areas over time==>dynamic attributes and locations
PS	RK	Vehicle tracking==>resulted in side sheet on Response Unit
PS	RK	Person tracking==>resulted in addition of Person to the <u>is at</u> Location
PS	RK	Transportation network==>done this morning
PS	RK	Use of transportation network--factors which impact (road closed, traffic flow, congestion)==>attributes of segment at particular times
PS	RK	Hydrants--Size of mains, which mains serve which hydrants==>resulted in Network <u>has</u> Access Point; mains are Segments that have capacity attributes
PS	RK	Aerial photos of areas and floor plans--parked
PS	RK	Storage of hazardous materials==>deferred for natural resources

Group	Src ID	Items that might still be missing from the model
PEN	TE	Recreation facilities==>Organization <u>manages</u> Facility sidesheet
PEN	NR	Storm water drainage network==>added new network subtype
PEN	MJ	Sewer system==>added new network subtype
PEN	TE	Non-point source pollution==>sidesheet on Substance
PEN	MJ	Water and air quality==>sidesheet on Substance
PEN	LL	Fish counts==>sidesheet on Species
PEN		Lakes , bodies of water
PEN	TE	Visual intrusion==>sidesheet on Views
PEN		Watersheds==>sidesheet on watersheds
PEN		Sites of special interest (beehives, endangered species)
PEN	MJ	Aquifers
PEN	NR	Weather

Group	Src ID	Items that might still be missing from the model
PEN		Rain gauge network
PEN		Chemical use and storage
PEN		Well locations
PEN	LL	Goose population
PEN		Landfill
PEN		Brown fields
PEN		Incinerators
PEN		Aquifer recharge area
PEN		Flood plain
PEN	RHC	Waterflow characteristics in aquifers
PEN	MJ	Endangered species
PEN	NR	Caves
PEN		Forests
PEN	JC	Chains in water supply for a community
PEN		Hydrologic network
PEN		Water flow rates
PEN		Noise
PEN		Feedlots, orchards, slaughter plants, other agricultural use
PEN		Abandoned tires
PEN		Discharge permits
PEN		Disease

Closing - Day 2

Richard Branton thanked the participants, noting that the group included many perspectives and that, by-and-large, all agreed on the contents of the models.

He said that at the next session, much of the time will be spent working through the models that are put together after the session for confirmation of it. He said that its success will depend in large part on attendance by many at today's session.

David Arbeit concluded the session by thanking the participants and saying that he looked forward to the next steps in the process and hoped that they would bring some clarity about the complex model developed in the last two days.

Randy Johnson said he will aim to distribute the turnaround document a week or so before the next session. He asked for an indication of whether the participants would attend on December 4. Most of the participants indicated they intended to return for the next event.

“Parking Lot” Issues

During the course of the session, these issues were identified and put in the “parking lot” for addressing later (in the follow up meeting on December 4th).

#	Parking Lot Issue	Src ID
1	Homeless persons in temporary shelter, prison populations, dormitories, transitional housing, tourists, visitors....how do these fit with dwelling units and households?	
2	Land rights that don't always coincide with ownership	
3	Jurisdictional boundaries	LL
4	Dumping contaminants	
5	Productivity of the soil	
6	Tax base questions	
7	Roads and utility networks	
8	Facilities (such as tennis courts, other recreation facilities)	
9	Recreation	
10	Oil spill incident in the Mississippi river (do we get at this through location or through land....) The incident affects _____.	
11	Other types of structures (garages, skyways..)	JV
12	Are transportation points (ex. airport, rail terminal) part of transportation network.?	
13	Transportation mode	
14	Where do boat launches fit in model? (side sheet)	
15	Are facilities (tennis courts) or trails (snowmobile) part of recreation network?	
16	Time	
17	Boat on a lake	
18	Structure -- bench ?, utility poles, hydrants...	
19	Organization unit - Who is the response unit?	
20	Feature - subtypes (ex. access point)	
21	Changes to networks, structures, facilities...	

Issues

The following issues were brought up during the session, but were deemed outside of today's scope:

#	Issue	Src ID
1	Data privacy--particularly issue of identifying individuals with person, household, or dwelling unit level of granularity	LH, SS, (Group)
2	Determining whether and how much to charge for distribution of data	BM
3	The variety of parcel types	(done)
4	Need to know if public safety cares about utility network -- eg. water main off at point	
5	Legal rights -- check with counsel.	BL

Miscellaneous Design Requirements

During the session, various design requirements which came up which cannot be represented in the business object model. However, they are recorded here to ensure that these ideas are not lost:

#	Design Requirement	Src ID
1.	Photos of persons	
2.	Aerial photo for public safety	
3.	Floor plans of structures for public safety	

Participant Debriefing - Day 1

The participant debriefing is a mechanism for the team to gather feedback from the participants about the session:

Brainstorming “do betters” - things we want to improve upon tomorrow or in future sessions:

1.	Cookies available afternoon break	BL
2.	Mineral water with refreshments	JV
3.	Introduction took too long	NR
4.	Could have used information about how the model is developed in a drawing	DW
5.	Should have had discussion of the scope at the outset.	WC, EO, LL
6.	Move along more quickly	TM
7.	Cut off the attribute listing earlier	JH
8.	Terminology/dictionary might have helped (others suggest that facilitator might have said here’s a possible term, let’s move on)	DC
9.	Try to use first session to start this session	DC
10.	Make diagrams readable tomorrow.	DA
11.	Agenda with more detail of what we will do (do for tomorrow!) would have helped.	LL

Brainstorming “Did wells” - things we want to retain for tomorrow and future sessions:

1.	Good job recording all the details	KR
2.	Facilitator patient	DC
3.	Many breaks good, keeping them to time was done well.	JH
4.	Introductory questions helped	NR
5.	Reading back fragments in English helped	DA
6.	Debriefing session was good	JH
7.	Facility was better than Kelly Inn/ (music was good)	DA
8.	Liked the attribute listing; exhaustive list was good	RHC
9.	Nice guys	JV

Actual Agenda - Day 1

Time	Activity
8:00	Refreshments
8:30	Opening Comments
	Introduction/Review
	Review the Agenda
	Introductions of the Subject Matter Experts
9:25	BREAK
9:35	Discuss Information Needs
10:05	Develop Business Object Model
10:40	BREAK
10:50	Develop Business Object Model
12:00	LUNCH
1:00	Develop Business Object Model
2:05	BREAK
2:15	Brainstorm Attributes
3:15	BREAK
3:25	Develop Business Object Model
4:15	Review/Discuss the Process
4:30	Debriefing
4:40	END OF DAY

Actual Agenda - Day 2

Time	Activity
8:00	Refreshments
8:40	Review the Agenda
	Review the Day 1 Turn Around Document
10:00	BREAK
10:15	Develop Business Object Model
11:15	BREAK
11:25	Develop Business Object Model (Networks)
12:10	LUNCH
1:00	Develop Business Object Model (Public safety)
2:05	BREAK
2:15	Develop Business Object Model (Natural resources)
3:20	BREAK
3:25	Develop Business Object Model (Location, Earth, Space)
4:00	Review the Process
4:15	END OF DAY