

CanHUG Telemeeting Notes

February 20, 2013, 10:30 – 11:30

1-877-413-4790 conference ID 3381344#



@RiskAUG

Attendees

Kaitlin, Sarah North, Jean René Rivard, Joe Drechsler, Malaika Ulmi, Nicky Hastings, Maggie Wojtarowicz, Kris Holm, Dan Campbell, Jennifer Bancroft, Carol Wagner, Bert Struik

Introduction

The forum is the 16th of monthly opportunities to share knowledge about incorporating Hazus Risk Assessment into disaster reduction decisions in Canada. The NRCan Quantitative Risk Assessment Project of the Public Safety Geoscience Program supports the forum until March 2014 (or so, maybe longer).

Telemeeting program :

- 1 Introductions
- 2 news and views
- 3 Hazus Starter Kit - Infrastructure inputs for Hazus (will be recorded)
- 4 Discussion

News

Still space available in course for the Hazus Comprehensive Data Management System in March in Washington State. Contact Kelly.Stone@fema.dhs.gov for details.

Spots are often available in FEMA training programs at EMI in Emmitsburg, Maryland and other venues across the USA. Check the course schedules at <http://training.fema.gov/emiacourses/>

The courses are paid by FEMA, your travel expenses are up to you.

April 29-May 2, 2013, Basic Hazus, Emmitsburg

May 13-16, 2013, Flood module, Emmitsburg

June 22-25, 2013, Basic Hazus, Emmitsburg

June 24-27, 2013, Hazus for Risk Assessment, Emmitsburg

Aug 12-15, 2013, CDMS, data manager for Hazus, Emmitsburg

Sarah has registered for the CDMS course in March at Tacoma, Washington.

Dan was registering with FEMA to get clearance and went down a complicated time consuming path which, it turns out, was not necessary. Check with Kelly Stone about the best way to get the clearance.

Maggie thanked everyone who sent in comments on the proposed website headings.

CRHNet 2013 has extended its deadline for thematic session proposals to March 15. To make a proposal see the symposium website at <http://www.crhnet.ca> >Annual Symposium >Program >Thematic Sessions

Hazus Starter Kit - Infrastructure Asset Inputs for Hazus

by Bert Struik, Carol Wagner, Jean René Rivard, Nicky Hastings, Murray Journeay, Jorge Prieto, Maggie Wojtarowicz, Malaika Ulmi: Geological Survey of Canada, BC

Slide deck available at <http://www.usehazus.com/canadianhug> > Hug Resources

Recording available at <http://www.usehazus.com/canadianhug> >HUG Resources.

Discussion

C: Be sure to refer to the technical manual when setting up your data because each infrastructure type has different numbers of classes and different class criteria.

Q: How is a linear feature like a pipeline or road assigned a cost?

A: The cost is assigned per set length of linear feature. Total cost/segment = the cost/unit length * length. Each linear feature is entered into the database as segments and those segments are determined by the GIS nodes of your dataset.

C: For example: Road width, number of lanes and length are used to calculate costs, and each need to be considered by the user. Some of these attributes are entered into the databases directly, and some are taken into consideration as ancillary data when calculating costs aside. For example: Road width is a factor since a 4 lane road would be a different cost per linear length than a 2 lane road. Therefore, number of lanes and length are used to calculate costs, and the cost is calculated and entered by the user.

C: You would need to determine that cost yourself. It normally does not come with the database containing the feature.

C: Linear features are clipped to tracts. That way the losses for the segments can be attributed to the aggregated losses of that tract.

C: Functional losses are not covered by Hazus: for example the loss of use of a road covered by flood water is not included in the loss calculation. The losses would be if the road was physically damaged.

Q: Do all the infrastructure types listed in the presentation apply to all hazards.

A: No. The ones listed are for earthquakes only. Floods apply to bridges and a variable called "exposuretransportation". Bert's comments were wrong and the one's listed do not all apply to floods as well. Sarah had it right. Use ArcCatalog to view the list of features in the TRN.mdb and UTIL.mdb

Q: Which manual should be used to get this information for the data attributes.

A: We used mainly the Technical manual. The User manual has addition information.

Q: Does Hazus have default values for classes of structures?

A: For some at least, defaults can be selected from the manual and entered in the database, or you can use suggested defaults in CDMS when your data is structured. Hazus does not automatically insert defaults where no data exists. You have to enter the data of your choice. If you accept a default from the manual (a generalization) you are introducing greater uncertainty in the loss estimates. Hazus does not have default costs for structures.

A: The CDMS manual (CDMS Data Dictionary) references the tables.

C: linear structures cannot cross census boundaries. They need to have a segment node within the census boundary. Sometimes that is challenging when the GIS structure map does not coincide exactly with the census boundary map. This can be often true at the shoreline.

Q: what can you do about that?

A: for a structure in a water body that should be on land, the structure has to be moved into the census tract.

C: That creates issues with bridges across large water bodies because the water body would not be inside a census tract. For such a bridge, the location point would have to be located in one or the other census tracts at either end of the bridge. The implication is that bridge damage will be reported for just one of those census tracts that it lies in.

Q: Do you have to use census boundaries?

A: Hazus is designed, hard coded, to use census areas. To change that you have to change the syBoundary tables with the census boundaries to create your own boundaries. Once the new syBoundary divisions are made then you populate that data structure with your asset inventory for those areas. That also means you have to change the demographic data to correspond to your new areal divisions (assuming it is important to include human losses and disruption in the calculations). It has been done. For the Canadian flood module, smaller divisions are being created. The census boundary problem is acute in low population areas where the smallest census division covers a very large area that is mostly unpopulated and with no structures.

Q: Can you name the custom areal divisions you use whatever you want or does it have to use the census division names?

A: It has to use the census division names and numbers because those are hard coded in Hazus. The study region is chosen from the syBoundary file and the study region is looking for census divisions.

Q: What about user-defined facilities?

A: You can use that separately, though it would be good to also use aggregates. The individual structures still have to be in the study areas.