



# CONTRA COSTA TRANSPORTATION AUTHORITY

## TECHNICAL BULLETIN

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**Date:** September 11, 2006

**To:** CCTA Model Users

**Through:** Martin R. Engelmann, P. E.  
Deputy Executive Director, Planning

**From:** Kym Sterner, Neelita Mopati, Dowling Associates, Inc.

**Re:** **Special Generator Patch for the CCTA Countywide Model**

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### Background

The Authority's Countywide travel demand forecasting model includes several special generators that were identified as part of the CCTA model development process to simulate the unique trip generation characteristics of various facilities such as hospitals, military bases, shopping malls, retirement homes and regional parks. The special generators are "tagged" to specific Traffic Analysis Zones (TAZs) that correspond with the geographic location of the facility.

Because the CCTA model uses MTC's Fortran programs for modal split and other functions it is necessary to maintain two sets of zonal "tags" within the model. First, the CCTA TAZ, which uses a five digit numbering system beginning with the 10,000 series for West County, through the 90,000 series for MTC zones outside of the study area and is applied throughout the TransCAD® model in the GISDK script. Second, a TCID, which is a sequential numerical assignment of zones 1 through 2656, generated by the Fortran programs and retained on a correspondence table in several locations throughout the model run stream. Recently, it was observed that the 4 digit TCID tag for special generators was not updating correctly. As a result, your CCTA TAZ and TCID correspondence table for special generators may include the correct 5 digit CCTA\_TAZs, but the incorrect TCID.

The corrected 4-digit to 5-digit correspondence table can be easily incorporated using the "patch" described below.

## Description of the Model “Patch”

The patch is simple. The TCIDs based on the land use file and correct correspondence between CCTA TAZ and TCID need to be updated in the special generator files, including:

SP\_GEN\_LIST.DBF  
SP\_GEN\_LIST25.DBF  
SP\_GEN\_LIST30.DBF

These files have been updated (see example for 2030 below) and have been uploaded in a zip file called **2006\_09\_11-SpecialGenerators.zip** in the CCTA directory on the Dowling Associates FTP site (<ftp://ftp.dowlinginc.com>).

TCID	CCTA_TAZ	NAME	CATEGORY	SIZE	SP_GEN_TRI	SP_GEN_EMP	TYPE_OF_EM	HBSH_RATE	HBSR_RATE	NHB_RATE
824	20010	Contra Costa Regional Medical Center	Medical	164	3954	373	SERVICE	0.866	0.7300	0.1606
965	20235	John Muir Medical Center	Medical	321	5518	731	SERVICE	0.609	0.7300	0.1606
955	20226	Kaiser Permanente Walnut Creek Medical Cen	Medical	229	4602	521	SERVICE	0.612	0.7300	0.1606
953	20043	Veterans Affairs Northern California Healt	Medical	143	3745	326	SERVICE	2.130	0.7300	0.1606
838	10118	Doctors Medical Center	Medical	233	4641	530	SERVICE	0.705	0.7300	0.1606
1081	20123	Mt. Diablo Medical Center	Medical	259	4901	590	SERVICE	0.803	0.7300	0.1606
1417	30129	Sutter Delta Medical Center	Medical	110	3416	250	SERVICE	2.958	0.7300	0.1606
311	50377	Valley Care Health System	Medical	142	3735	323	SERVICE	0.776	0.7300	0.1606
1001	20221	Broadway Plaza /Downtown Walnut Creek	Shopping	685	31725	1076	RETAIL	3.578	0.8674	3.1940
1025	20109	Sun Valley Mall	Shopping	1440	51137	2261	RETAIL	3.597	0.8674	3.1940
1399	30084	County East Mall	Shopping	540	27217	848	RETAIL	4.737	0.8674	3.1940
612	10173	Hilltop Mall	Shopping	1700	56896	2669	RETAIL	3.797	0.8674	3.1940
102	50366	Stoneridge Mall	Shopping	1285	47526	2017	RETAIL	3.566	0.8674	3.1940
74	50322	Parks Reserve Forces Training Area	Military	741	5395	741	SERVICE			
1336	30180	Deer Valley Medical Center	Medical	357	4195	811	SERVICE	2.500	0.7300	0.1606

Whether the error exists in your model version or not, this patch may be safely implemented. Changing out the SP\_GEN\_LIST.DBF files will not adversely affect model performance on versions of the model where the patch is not required.

## Obtaining the Files

The corrected \*.dbf files may be downloaded from the CCTA website at [www.ccta.net](http://www.ccta.net). Alternatively, the files are available on the Dowling Associates FTP. If transmitted by e-mail, the patch files may not go through because most e-mail filtering programs will block the attachments.

The Dowling FTP site is a directory on the Dowling website that allows users to share files by uploading and downloading files to this location.

To download a file:

1. Using your browser, connect to our site using <ftp://ftp.dowlinginc.com>
2. Enter the username as: **daftp**
3. Enter the password as: **3huwr6** (all lowercase letters)
4. Double click on the “CCTA” directory.

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5. Right-click on **2006\_09\_11-SpecialGenerators.zip** and select **Copy to Folder**.
6. Browse to the location on your local computer where you want the file to be placed.
7. Click **OK**.
8. While the download is occurring, a progress bar will be displayed showing the copying progress.