

Kern COG Travel Model Use Guidelines

Kern COG Travel Model Distribution

- Kern COG operates and maintains a regional travel demand model at in accordance to agreements and policies adopted by the Kern COG Board and its member agencies.
- Kern COG annually budgets funds to perform model runs at the request of member agencies.
- Kern COG can perform model runs for nonmember agencies for \$275 per hour or other rate set by the Kern COG Board (the rate includes a prorated portion of model development costs, staff expense and overhead) with the concurrence of affected member jurisdictions.
- Kern COG can distribute model files at the request of member and nonmember agencies given they have the appropriate proprietary software to use the files.
- Kern COG uses an attorney approved “shrink wrap” style Model Use Disclaimer Contract where use of the model and its output is deemed acceptance of the Contract (*see below*).
- **The disclaimer shall be printed in any model output documentation and the words “*This is NOT an official Kern COG model output*” shall be legibly displayed on all Kern COG Model output such as maps and tables.**

Kern COG Model Use Disclaimer Contract - 5/25/06

Kern COG provides modeling services, data and code to local developers and others as a courtesy and reserves the right to deny use of the software code. The Kern COG Model was developed for the regional air quality conformity analysis. The Kern COG Model contains millions of variables that could be modified to alter results. Kern COG is not responsible for ensuring that all model assumptions are identical to the latest planning assumptions used in the Kern COG Model at the time the files are provided. Kern COG may provide telephone and e-mail support, as staffing is available, on an hourly basis at a rate set by the Kern COG board.

This transportation model output uses data and software code received from the Kern Council of Governments (“Kern COG”). Kern COG makes no representation or warranty that the data and software code is accurate or consistent with Kern COG’s latest planning assumptions. Output from the data and software you have received from the Kern COG is not an official Kern COG Model output and Kern COG is not bound by the results. Kern COG makes no warranties, express or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose, as to the timeliness, accuracy, quality and completeness of the Kern COG Model data and software code. In no event will Kern COG be liable for any special, incidental, indirect, or consequential costs or damages, including, but not limited to, any lost revenues or profits, based upon any claim, whether in contract or tort, arising out of related to this transportation model output. Kern COG is not responsible and shall be held harmless by a user of the Kern COG Model against any damages, claims, judgments, costs and expenses(including reasonable attorney’s fees) arising out of any use or misuse of the transportation model output. The associated software code may not be redistributed, modified, or used for any purpose other than those authorized by Kern COG in writing. **This disclaimer shall be printed in any model output documentation and the words “*This is NOT an official Kern COG model output*” shall be legibly displayed on all Kern COG Model output.**

Adjustment Methodology for Traffic Assignment Results

Kern COG recommends that travel model users avoid using link level raw traffic volumes directly from the model. An adjustment process is recommended for traffic volume forecasts on specific road segments that accounts for travel model validation errors. Where base year traffic counts are available (see *Kern COG Traffic Count Program website* <http://www.kerncog.org/traffic-counts/>), forecast traffic volumes are calculated based on the increment between the base year and future year model results:

$$\text{Adjusted Forecast Volume} = \text{Base Year Count} + (\text{Model Forecast Volume} - \text{Base Year Model Volume})$$

An incremental adjustment is recommended instead of an adjustment based on ratios. A ratio adjustment factor does not guarantee continuity of traffic volumes between adjacent road segments, and can result in very large adjustments on low-volume links. However, circumstances exist where a ratio or growth factor adjustment is appropriate. For example, a growth factor based on daily model volumes can be applied to peak hour traffic counts to generate approximate peak hour forecasts. If a new road or ramp connection is tested in a forecast, no traffic count would exist and the model forecast volume would be used directly.

Kern COG Travel Model Applications

The regional travel model provides a common source for land use and travel forecasts for the entire Kern Region, saving member agencies thousands of dollars annually in maintaining separate models for each jurisdiction. Typical travel model forecast applications include:

- Regional measures for input to air quality analysis
- Project level traffic studies
- Identify traffic "hot spots"
- Forecast effectiveness of major road or transit improvements
- Impacts of land use changes
- Compare land use or transportation alternatives using regional performance measures
- Countywide VMT assessment with and without a project

Kern COG Travel Model Documentation and Support Contacts

Full model documentation is available online at:

<http://www.kerncog.org/category/data-center/transportation-modeling/>

Socio-economic forecasts are available online at:

<http://www.kerncog.org/category/data-center/census-projections/>

Socio-economic transportation analysis zone maps and data are available online at:

<http://www.kerncog.org/category/data-center/data/>

Support and training for nonmembers may be subject to the adopted hourly support rate. Here are the primary Kern COG Travel Model support contacts:

- Ed Flickinger, Travel Model Operator, 661-635-2005, eflickinger@kerncog.org
- Vincent Liu, Travel Model Operator, 661-635-2913, vlui@kerncog.org
- Ben Raymond, Socio-economic Data, 661-635-2911, braymond@kerncog.org
- Rob Ball, Planning Director, 661-635-2902, rball@kerncog.org