Estimates of Employment for New TAZs

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Background

- Need 2007 employment estimates by new TAZs for model calibration
- Round 8.0 TAZ level estimates not available until Spring 2010
- Round 7.2A TAZ level estimates at old TAZ system
- Significant slow down of region's economy means less growth between 2005 & 2010, making Round 7.2A less desirable to use directly

Resources

- Round 7.2A TAZ level estimates for 2191 system for 2005 & 2010
- Dun & Bradstreet (DB) employment data for 2007
  - Geocoded to X,Y coordinates and joined to both old and new TAZ system
- ES202 data at the jurisdictional level for 2005 & 2007

DB Evaluation

- Scoured DB data for discrepancies
  - removed duplicate employer records
  - looked for missing large employers e.g. PTO was not in Arlington or Alexandria

- Evaluated DB data at old TAZs and compared with Cooperative Forecast
  - tried to reconcile self employed and large government and military establishment data, but found too many inconsistencies to be able to use 2007 DB employment data directly

Process

- Decided DB was not a sufficient substitute for Cooperative Forecast TAZ employment totals within the old TAZ system
- Used DB data to determine percentage employment splits between old and new TAZ systems
- Applied percentages to Round 7.2A 2005 employment data to obtain 2005 employment estimates for new TAZs

Estimating Employment Growth between 2005 & 2007

- Did not want to use a straight line interpolation
- Wanted to tie incremental changes to Round 8 jurisdictional totals

Calculating TAZ level Employment

- Calculated 2005–2007 growth factor using ES202 wage & salary employment data
- Applied growth factor to each Round 8.0 jurisdictional total to generate a 2007 target
- Divided Round 8.0 jurisdictional growth increment (05–07) by Round 7.2A jurisdictional growth increment (05–10) to generate incremental change factor
- Applied incremental change factor to Round 7.2A (05–10) growth increments by TAZ within each jurisdiction

Results

- Round 7.2A 2005 Modeled Area Total Employment: 3,785,000
- Round 7.2A 2010 Modeled Area Total Employment: 4,081,000

- Round 8.0 2007 Modeled Area Total Employment: 3,883,000
- Round 8.0 2007 employment estimates will be reviewed by models development staff