

MARC Technical Forecast Committee Meeting Notes June 4, 2008

Attendees:

Jeff Pinkerton, MARC
Tom Jacobs, MARC
Jennifer Dady, Gardner
Mike Peterman, Blue Springs
Kyle Elliot, KCMO
Steve Lebofsky, KCMO
Phelps Murdock, Bridging the Gap
Hai Nguyen, MARC
Karen Clawson, MARC
Lisa Pool, MARC
Ron McLinden, RTA
Manny Trillo, MARC
John Rod, Overland Park
David Schwartz, KDOT

Heping Zhan, Lee's Summit
Mary Hunt, Independence
Brian Parr, MARC
Brant Gaul, Lenexa
James Joerke, MARC
Mike Grimm, UG
Rob Richardson, UG
Frank Lenk, MARC
Andrea Repinsky, MARC
Gerri Doyle, MARC
Charles Gorugantula, MARC
Aaron Baumgarten, MARC
Danny Dumovich, UG
Daniel Erickson, Platte County
Jason Halterman, Platte County

1. Review draft baseline control totals

Frank Lenk distributed a spreadsheet of draft baseline control totals (see meeting documents). Mr. Lenk explained that he used the rates in the latest version of the regional model to predict employment & population values out to 2050, and he provided growth rate estimates by decade for the full 15-county region.. Mr. Lenk asked the Committee to consider whether the values are a good starting point for the August forecast. He said that, if all land is fully developed as depicted in the aggregation of local land use plans in the 7-county area, we're planning for 5.4 million people and 3.0 million jobs. If we extend the 2040-2050 growth rates out into the future, it would take us until 2170 to reach 5.4 million people, and 2220 for 3.0 million jobs. Feedback is welcome via email to Mr. Lenk.

2. Review baseline planned land use maps

Mr. Lenk reviewed a planned land use map with updates from Tonganoxie, Harrisonville, Blue Springs, Raymore, and Independence. Ms. Repinsky said that she expects to receive baseline planned land use updates from the Unified Government, Leavenworth County, and Johnson County. The regional planned land use dataset will also be modified according to updates from Kansas City, MO and Edwardsville.

3. Adaptive scenario development

Attendees reviewed the updated map of nodes & corridors, which included draft datasets of commercial centers & town centers, and nodes & corridors from KCMO and Prairie Village. Mr. Lenk reminded the Committee that the plan for creating the adaptive scenario plan involves densification of the baseline map land uses around the nodes & corridors. Mr. Lenk encouraged all communities to submit additional nodes & corridors. Attendees asked for a clearer definition of nodes & corridors, noting that different types of nodes may call for different treatment in the

adaptive land use scenario, whether, for example, the nodes are in developed or developing areas, or town centers vs. commercial areas. Mr. Lenk suggested that participants submit places where land use might change to higher density; places that are ripe for redevelopment at a higher density. MARC staff will develop definitions of different types of nodes & corridors, which will be distributed to the Committee for review.

4. Model calibration

- a. Mr. Lenk reviewed the factors from 1990 that, according to the initial regression analysis, best explain where development had occurred by 2000. (See meeting materials for images) It is important to understand what, exactly, is being calibrated. The dependent variable is whether a polygon was developed in 2000, not whether it developed during the 1990s. This allows the model to better consider the importance of access to employment locations that are inherent in the region's historical development pattern. Essentially, the historical development pattern contains 150 years of information that a calibration on the last decade would ignore. As such, the calibration is an estimation of the demand for land, since over long time frames, there are very few supply constraints here. This makes the calibration more suitable for evaluating the potential for redevelopment as well as new development.
- b. . The factors used were employment density, distance to incorporated areas (where the score is 0 if you're in an incorp. area), poverty, freeway ramps, and arterials. The county is used as a variable, as well, he said, which allows the model to recognize that there are differences among counties. Mr. Lenk reviewed the resulting map of development probability. Mr. Lenk explained that the including the entire road network as a variable ended up being so closely correlated to development that no other variables were significant. However, since most roads are local roads and such roads are more an effect than a cause, this variable was not used. The biggest surprise was that median household income proved either insignificant, or it entered the equation with a negative sign. It is not clear why this is, and income is still under investigation. But for now, median household income was not used.
- c. Discussion of development probability map:
 - Mr. Lenk noted that the map showed a difference between Johnson & Jackson Counties, likely because Johnson County has low poverty and high employment access, while Jackson County has high poverty and high employment access. Moreover, in Jackson County and Wyandotte County, the model is struggling to explain why there are vacant polygons so near employment centers. Mr. Lenk can remove "county" as a variable, though it did show up as a significant variable. He said the poverty variable seems to be bringing Jackson County down more than it should, and the discontinuity between Jackson and Johnson Counties needs to be solved.
 - Mr. Rod disagrees with the use of poverty, but not income. Mr. Lenk said that it appears from the regression that development is avoiding poverty more than it is seeking income, but he doesn't know why income wouldn't be a variable.
 - Mr. McLinden suggested using housing value as a variable.
 - Mr. Richardson suggested fixing data anomalies, such as proximity values creeping across geographic blocks such as rivers.
 - Mr. Rod suggested that the model should consider the cost of redevelopment, because, for example, the high redevelopment costs in northeast Johnson County

should decrease the probability of redevelopment in comparison to areas with low land value. Mr. Rod suggested that the map should not be called “Development probability.” Mr. Lenk responded that the model says that the proximity to employment matters.

- Mr. Richardson and Mr. Rod suggested including school districts as a variable. Mr. Lenk responded that he has not done this because school district quality is a function of income.
- Mr. Richardson suggested that the proximity to amenities or per capita spending on parks may be variables to consider.
- Attendees asked about Belton’s high value compared to Raymore, and the high values in Lee’s Summit compared to low values across the county line in Raintree Lake. Mr. Lenk suggested that attendees focus on the probability values outside of the developed area, and that we’re looking at why the region did not develop randomly; we’re explaining why a parcel is vacant or not vacant.
- Mr. Richardson suggested to use parcel size as a variable, since small, isolated vacant parcels are hard to redevelop.
- Mr. Murdock suggested that development activity depends on demand, not whether a parcel is vacant. Many factors affect the value/land use, but vacancy may not matter. Mr. Lenk encouraged attendees to focus on the probability values outside of the developed area, and that the Committee is investigating why the region did not develop randomly; the model explains why a parcel is vacant or non-vacant.
- Mr. Lebofsky suggested looking at different factors for residential vs. non-residential development. Mr. Lenk responded that we would like to get to that, but it may not occur in this version of the model.
- Mr. Rod objected to the name of the map as estimating development probabilities. Development inherently means focusing on the new activity. Mr. Lenk said that he will rename the map and correct discontinuities among counties.
- Mr. McLinden asked whether the Committee will review the implications of the probabilities and consider policy changes that may affect the values. Mr. Lenk said that he does want to consider mixed use and mixed income housing policies.

5. Paint chips

Mr. Lenk said that MARC staff has started to review the chip attributes using population and employment values from the chips as they have been applied to existing current land use, and comparing the population and employment values from the chips with actual population and employment. The population values were reasonable, but the employment values were high, especially for public/semipublic. Mr. Gaul suggested that the FAR on public/semipublic is high. Mr. Lenk said that MARC staff will continue to review and calibrate the chips.

6. LRTP & public participation planning

Mr. Lenk said that public participation for Paint the Town and the Long-Range Transportation Plan may be merged with Imagine KC, in conjunction with KCPT. Imagine KC is being conducted

through a grant to test new public participation technology. It will be used for a regionwide town hall meeting to address sustainability issues, possibly including future scenarios.

NEXT STEPS

- Mr. Lenk will rename the “Development Probability” map and correct discontinuities among counties
- MARC staff will evaluate incorporating school district boundaries and parcel size into the model.
- Ms. Repinsky will solicit and incorporate planned land use updates through a limited time period.
- MARC staff will correct the non-residential paint chips based on existing employment values.
- MARC staff will prepare and distribute more clearly-defined categories of nodes & corridors of development/redevelopment.