METROPOLITAN KANSAS CITY’S NEXT LONG-RANGE TRANSPORTATION PLAN

Public Meeting 6/03/09
PRESENTATION OUTLINE

- Overview of TO2040
- “Paint the Town” – Land Use Forecasting
- Discussion
  - Growth and Development
  - Transportation Needs
  - Environment
PURPOSE OF LONG-RANGE PLAN?

- Identify the region’s long term transportation needs
- Consider available resources and funding
- Coordinate and collaborate across jurisdictional boundaries
- Directly guide future investment
- Federally required
OUR REGION IS CHANGING

- Growing in Size
- Aging Population
- Planning for Different Futures
- Desiring Lifestyle Choices
- Adding new jobs
KEY THEMES HEARD TO-DATE

- Focus on system preservation
- Integrate land use and transportation
- Increase travel choice & multi-modal options
- Improve safety and public health
- Focus on transportation management and demand reduction
- Better integrate environmental and sustainability factors at all levels
A REGION’S VISION . . .

. . . MORE THAN JUST TRANSPORTATION
THE POLICY FRAMEWORK:

TRANSPORTATION’S ROLE SUPPORTING THE VISION
ACCESSIBILITY
Maximize mobility and access to opportunities for all area residents.
ECONOMIC VITALITY

Support an innovative, competitive 21st century economy.
CLIMATE CHANGE AND ENERGY USE
Decrease the use of fossil fuels through reduced travel demand, technology advancements, and a transition to renewable energy sources.
ENVIRONMENT – Protect and restore our region’s natural resources (land, water, and air) through proactive environmental stewardship.
PLACE MAKING- Coordinate transportation and land use planning as a means to create quality places in existing and developing areas and to strengthen the quality of the region.
PUBLIC HEALTH
Facilitate healthy, active living.
SAFETY AND SECURITY- Improve safety and security for all transportation users.
**SYSTEM CONDITION**-Ensure the transportation system is maintained in good condition.
SYSTEM PERFORMANCE - Manage the system to achieve reliable and efficient performance.
TRANSPORTATION’S ROLE

- It is not the only factor
- It is one of many variables
- Our resources area limited
- But we do have choices today that will influence our future...

Which is why we want your help
PAINT THE TOWN

Two Possible Land Use Scenarios
For Transportation Outlook 2040
2040 Forecast of Metro KC
Total Population and Employment
<table>
<thead>
<tr>
<th>Land Use Description</th>
<th>Range: FAR or Units per Acre (UPA)</th>
<th>Planned Acres</th>
<th>Planned Employment</th>
<th>Planned Population</th>
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<tbody>
<tr>
<td>Agriculture</td>
<td>0 UPA</td>
<td>8,341</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Commercial (High)</td>
<td>.3 FAR</td>
<td>5,496</td>
<td>77,553</td>
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<tr>
<td>Commercial (Low)</td>
<td>.2 FAR</td>
<td>68,200</td>
<td>427,751</td>
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<td>Industrial/Bus. Park (High)</td>
<td>.24 FAR</td>
<td>28,369</td>
<td>160,084</td>
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<tr>
<td>Industrial/Bus. Park (Low)</td>
<td>.2 FAR</td>
<td>74,255</td>
<td>523,941</td>
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<tr>
<td>Mixed Use (High)</td>
<td>.65 FAR</td>
<td>2,032</td>
<td>46,608</td>
<td>44,032</td>
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<tr>
<td>Mixed Use (Low)</td>
<td>.35 FAR</td>
<td>14,951</td>
<td>92,308</td>
<td>174,309</td>
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<tr>
<td>Office (Low)</td>
<td>.25 FAR</td>
<td>14,576</td>
<td>308,552</td>
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<tr>
<td>Office (Med)</td>
<td>.275 FAR</td>
<td>208</td>
<td>5,132</td>
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<td>Parks, Open Space</td>
<td></td>
<td>174,713</td>
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<tr>
<td>Public/Semipublic (High)</td>
<td>.3 FAR</td>
<td>8,942</td>
<td>464,419</td>
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<tr>
<td>Public/Semipublic (Low)</td>
<td>.22 FAR</td>
<td>26,148</td>
<td>895,902</td>
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<td>Residential MF High</td>
<td>17.5-24.99 UPA</td>
<td>1,791</td>
<td>54,802</td>
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<tr>
<td>Residential MF Low</td>
<td>6.5-9.99 UPA</td>
<td>14,845</td>
<td>181,707</td>
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<td>Residential MF Low-Med</td>
<td>10-13.49 UPA</td>
<td>13,720</td>
<td>251,892</td>
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<td>Residential MF Medium</td>
<td>13.5-17.49 UPA</td>
<td>7,398</td>
<td>169,794</td>
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<td>Residential MF Very High</td>
<td>25 or more UPA</td>
<td>408</td>
<td>18,727</td>
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<td>Residential SF Large Lot</td>
<td>.75 to .124 UPA</td>
<td>36,414</td>
<td>103,779</td>
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<td>Residential SF Low</td>
<td>2-3.24 UPA</td>
<td>411,904</td>
<td>2,445,683</td>
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<tr>
<td>Residential SF Medium</td>
<td>3.25-6.49 UPA</td>
<td>52,656</td>
<td>625,291</td>
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<td>Residential SF Very Low</td>
<td>1.25-1.99 UPA</td>
<td>216,695</td>
<td>926,371</td>
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<tr>
<td>Rural Policy Area</td>
<td>0 to .14 UPA</td>
<td>491,789</td>
<td>140,160</td>
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<tr>
<td>Rural Residential</td>
<td>.15 to .24 UPA</td>
<td>219,854</td>
<td>125,317</td>
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<tr>
<td>Urban Fringe</td>
<td>.25 to .74 UPA</td>
<td>137,217</td>
<td>195,534</td>
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</table>

None: 8,537
Developed: 9,140
Office (High): 215
ROW: 47,282
RR ROW: 218

TOTAL: 3,002,249 | 5,457,398
Probability of New Development

Trying to Explain:
• Which land vacant in 2000 is most likely to have developed since then?

Major Explanatory Variables:
• Median Income in 2000
• Vacant Land in 2000
• Employment Density in 2000
• Sewer availability
• Distance from land that developed during 1990s
• Distance from roads
• Road density
• Poverty rate in 2000
• County
Probability of Re-Development

Trying to Explain:
• Which currently developed land is most likely to have a structure built since 1980 that is 20-40 years newer than its surrounding neighborhood

Major Explanatory Variables:
• Median age of housing unit 1990
• Percent in Poverty 1990
• Median income 1990
• Being inside an incorporated area 1990
• Density of roads
• Distance from major roads and freeways
Probability of Decline

Trying to Explain:
• Which land is most likely to be currently vacant that historically had an urban structure built upon it?

Major Explanatory Variables:
• Median age of housing unit in 1990
• Percent in Poverty in 1990
• Percent of population that is white in 1990
• County
Baseline Scenario
Combined Probability of Land Use Change
Baseline Scenario Type
Of Land Use Change

- New Development
- Redevelopment
- Decline
- Developed
- Vacant
VISION: AMERICA’S GREEN REGION

- The MARC Board has adopted the following REGIONAL VISION:

“Greater Kansas City is a sustainable region that increases the vitality of our society, economy, and environment for current residents and future generations.”
VISION: AMERICA’S GREEN REGION

- Is the baseline development pattern consistent with the vision of a “Green Region”?
- Well, it consumes a lot of greenfields
- And it will take a lot of greenbacks to build all of the new infrastructure required.
- But this probably isn’t what most people mean by a “green” region.
- What’s an alternative?
WHAT IF . . .?

- Carbon dioxide is regulated as a pollutant?
- The cost of energy doubles (or triples)?
- The housing bust is like the dot-com bust, with years of overhang?
- Housing becomes something we buy simply for shelter, rather than an investment?
- Changing demographics, costs, and return change housing preferences?
  - only ¼ of all households are married couples with children, yet that’s how we build most new housing
WHAT IF . . . ?

- Consumption rises slower than incomes, and real incomes continue to stagnate?
  - No more “house as piggybank”
  - What happens to sales tax revenue?
- We simply can’t afford to build much new infrastructure AND maintain what we’ve already got in the ground?
- Local governments need to maximize tax revenue net of costs?
  - Density becomes something to be sought rather than avoided
WHAT IF . . . ?

- Metro areas that protect and celebrate nature are the most likely to attract and retain talented people?
- Diversity, density of opportunity and talent are the keys to vibrant places and innovative economies that generate net new income for residents?

What kind of land use pattern would best help us adapt to these kinds of changes?
Increase the Probability of Redevelopment

Adopt Policies That . . .
Adopt Polices That . . .

Focus Development in Neighborhood and Employment Centers

A - Urban Regional Centers
B - Regional Mixed-Use Centers
C - Community Centers
D - Neighborhood Centers
E - Convenience Centers
F - Rural/Fringe Centers
G - Regional Employment Centers
Centers along urban transit and activity corridors

Identify Priority Areas for Development/Redevelopment

Adopt Polices That . . .
Historic City Centers

Adopt Policies That . . .

Identify Priority Areas for Development/Redevelopment

*Historic City Centers*
Adopt Polices That . . .

Protect Natural Areas:
- Floodplain
- Parks
- High-quality agricultural land
- MetroGreen greenways
- Stream Buffers
Adaptive Scenario
Combined Probability of Land Use Change

Baseline Scenario
Distribution of New Population

Baseline

Adaptive
## Gain, Loss, Refill

<table>
<thead>
<tr>
<th></th>
<th>Population Change</th>
<th>Household Change</th>
<th>Employment Change</th>
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<tbody>
<tr>
<td>Gain</td>
<td>722,878</td>
<td>308,161</td>
<td>476,345</td>
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<tr>
<td>Loss</td>
<td>(47,387)</td>
<td>(20,658)</td>
<td>(26,886)</td>
</tr>
<tr>
<td>Refill</td>
<td>1,894</td>
<td>796</td>
<td>663</td>
</tr>
<tr>
<td>All</td>
<td>677,386</td>
<td>288,299</td>
<td>450,122</td>
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<table>
<thead>
<tr>
<th></th>
<th>Population Change</th>
<th>Household Change</th>
<th>Employment Change</th>
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</thead>
<tbody>
<tr>
<td>Gain</td>
<td>406,500</td>
<td>174,522</td>
<td>266,558</td>
</tr>
<tr>
<td>Loss</td>
<td>(4,152)</td>
<td>(1,841)</td>
<td>(1,715)</td>
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<tr>
<td>Refill</td>
<td>277,266</td>
<td>119,317</td>
<td>169,564</td>
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<tr>
<td>All</td>
<td>679,614</td>
<td>291,998</td>
<td>434,406</td>
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## Population, Households and Employment Change by County

<table>
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<th>Population</th>
<th>Household</th>
<th>Employment</th>
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<tbody>
<tr>
<td><strong>Baseline</strong></td>
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<tr>
<td>CA</td>
<td>106,121</td>
<td>41,172</td>
<td>31,369</td>
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<tr>
<td>CL</td>
<td>122,362</td>
<td>54,078</td>
<td>68,906</td>
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<tr>
<td>JA</td>
<td>126,258</td>
<td>52,695</td>
<td>70,304</td>
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<tr>
<td>JO</td>
<td>194,023</td>
<td>86,495</td>
<td>219,528</td>
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<tr>
<td>LV</td>
<td>59,666</td>
<td>24,710</td>
<td>13,994</td>
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<tr>
<td>PL</td>
<td>49,712</td>
<td>22,607</td>
<td>37,937</td>
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<tr>
<td>WY</td>
<td>19,245</td>
<td>6,541</td>
<td>8,083</td>
</tr>
<tr>
<td>All</td>
<td>677,386</td>
<td>288,299</td>
<td>450,122</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Household</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adaptive</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CA</td>
<td>40,019</td>
<td>17,136</td>
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<tr>
<td>CL</td>
<td>109,810</td>
<td>47,346</td>
<td>40,831</td>
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<tr>
<td>JA</td>
<td>195,544</td>
<td>83,435</td>
<td>118,606</td>
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<tr>
<td>JO</td>
<td>205,588</td>
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<td>201,795</td>
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<td>LV</td>
<td>30,260</td>
<td>13,121</td>
<td>10,059</td>
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<td>PL</td>
<td>39,799</td>
<td>17,307</td>
<td>19,164</td>
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<tr>
<td>WY</td>
<td>58,572</td>
<td>25,341</td>
<td>30,587</td>
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<tr>
<td>All</td>
<td>679,592</td>
<td>291,983</td>
<td>433,287</td>
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</tbody>
</table>
MORE SUSTAINABLE DEVELOPMENT

- Baseline – 276 square miles
- Adaptive – 60 square miles
  - Land developed in nodes = 12% of all developed land
  - Nodes contain 80% of population growth, covering both new and existing areas.
- Still to do – convert to infrastructure costs.
SCENARIO COMPARISON

AVERAGE TRIP DISTANCE
TRAFFIC CONGESTION

VEHICLE HOURS TRAVELED
VEHICLE MILES TRAVELED
SCENARIO COMPARISON

PROXIMITY TO ACTIVITY:
percent of people, households and jobs within 1/2 mile of urban activity corridors

PROXIMITY TO HOSPITALS:
people, households and jobs within two miles of area hospitals
NEITHER SCENARIO IS A FORECAST

- They each depend upon their own set of assumptions, and neither set is entirely likely to occur as stated
- Toward which future will the KC Region generally move?
  - The question is not whether we grow but how we grow.
  - This is largely a matter of the policies we adopt today.
- Huge role for transportation policy
- Seeking alignment between local and regional plans that moves us toward the vision of becoming America’s Green Region.
DISCUSSION

- Growth and Development
  - What, Where, and Why?
- Transportation
  - Needs Now and in Future?
- Opportunities/Priorities
DISCUSSION:
GROWTH AND DEVELOPMENT

- What future are you planning for?
- What regional future should we be planning for?
- What factors or policies will be most critical in achieving Olathe’s vision and that of the broader region?
DISCUSSION: ENVIRONMENTAL CONSIDERATIONS

- What are the key environmental considerations from your perspective?
- Ideally, how should these considerations influence our long term transportation investment strategy?
- What are the challenges in addressing these considerations?
DISCUSSION:
TRANSPORTATION NEEDS

- What are the most pressing transportation needs today?
- How do you see these transportation needs changing over time? (2020,30,40)
- Are their clear solutions, strategies, or roadblocks?
QUESTION AND ANSWER
NEXT STEPS

- 18 months (July ’08 – December ‘09)
- Major activity:
  - **Phase 1**: Values, Needs, Direction (Fall ’08)
  - **Phase 2**: Strategies, Priorities (Spring ‘09)
  - **Phase 3**: Project Solicitation and Plan Development (Summer/Fall ’09)
THANK YOU

Tom Gerend  
Assit. Dir. Transportation

Frank Lenk  
Director- Research Services

Mid-America Regional Council  
816-474-4240