DTV AUCTION BASICS

- Auction Proceeds to Broadcasters -- $10 B
- 987 Stations being re-channeled
- 175 Stations tendered their spectrum
  - Most all of these remain as Channel Sharees
- 30 Band changers mostly U to High V
- Largest Sale $199 WXTV in NYC
- Smallest Sale KSPR (relinquished spectrum) $0
KANSAS CITY MARKET

DMAP #33

22 DTV stations in market 11 FS 11 LPTV

Population -- 2,358,840 (2010 Census)

Kansas City is Phase 2

No stations sold/relinquished spectrum

Closest station that sold/gave channel back
   KSPR—Springfield, MO
KANSAS CITY MARKET

3 Stations moving channels
- KMCI
- KSHB
- KSMO

Future channel moves for LPTV
<table>
<thead>
<tr>
<th>Display Channel</th>
<th>Physical Channel(s)</th>
<th>Station</th>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>7</td>
<td>KQTV</td>
<td>ST. JOSEPH</td>
<td>MO</td>
</tr>
<tr>
<td>4</td>
<td>34</td>
<td>WDAF-TV</td>
<td>KANSAS CITY</td>
<td>MO</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>KCTV</td>
<td>KANSAS CITY</td>
<td>MO</td>
</tr>
<tr>
<td>9</td>
<td>29</td>
<td>KMBC-TV</td>
<td>KANSAS CITY</td>
<td>MO</td>
</tr>
<tr>
<td>16</td>
<td>21</td>
<td>KTAJ-TV</td>
<td>ST. JOSEPH</td>
<td>MO</td>
</tr>
<tr>
<td>19</td>
<td>18</td>
<td>KCPT</td>
<td>KANSAS CITY</td>
<td>MO</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>KUKC-LD</td>
<td>KANSAS CITY</td>
<td>MO</td>
</tr>
<tr>
<td>21</td>
<td>16</td>
<td>KAJF-LD</td>
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<tr>
<td>21</td>
<td>16</td>
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<td>22</td>
<td>KMJC-LD</td>
<td>Kansas City</td>
<td>KS</td>
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<td>SAINT JOSEPH</td>
<td>MO</td>
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<td>29</td>
<td>31</td>
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<td>30</td>
<td>30</td>
<td>KCJO-LD</td>
<td>SAINT JOSEPH</td>
<td>MO</td>
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<td>35</td>
<td>43</td>
<td>KCDN-LD</td>
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<tr>
<td>38</td>
<td>41 → 25</td>
<td>KMCI-TV</td>
<td>LAWRENCE</td>
<td>KS</td>
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<td>39</td>
<td>KGKC-LD</td>
<td>LAWRENCE</td>
<td>KS</td>
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<tr>
<td>41</td>
<td>42 → 36</td>
<td>KSHB-TV</td>
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<td>MO</td>
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<td>45</td>
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<td>30</td>
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<td>62</td>
<td>47 → 32</td>
<td>KSMO-TV</td>
<td>KANSAS CITY</td>
<td>MO</td>
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</tbody>
</table>
KANSAS CITY MARKET

- KMCI  CH 41 to 25
  - No location change
  - Antenna changes to side-mount Omni
  - Replication ERP 685 kW for CP
  - Decreased due to new channel
  - Maximized to 1 MW
  - Added Vpol to increase power density & for ATSC-3.0
  - Used to be shared antenna—now separate
KANSAS CITY MARKET

- KSHB CH 42 to 36
- No location change
- Antenna remains top-mount omni
- Replication ERP 647 kW for CP
- Decreased due to new channel
- Maximized to 1 MW
- Added Vpol to increase power density & for ATSC-3.0
- Used to be shared antenna—now separate
KANSAS CITY MARKET

- KSMO CH 47 to 32
- No location change
- Antenna Pattern remains Omni
- Replication ERP 750 kW for CP
- Decreased due to new channel
- Did not maximize to 1 MW
- Added Vpol to increase power density & for ATSC-3.0
  - 321 kW
REPACK TIMELINE

Began at Auction Close

Initial CP’s submitted by July

10 Phases over 3 year period
  Originally 9 Phases
  Prior phase must end before next phase testing
  Equipment mfgs. are loading up inventory
  Purchase is all reimbursement

Ends 7/3/2020
84 MHz Baseline

<table>
<thead>
<tr>
<th>Phase Number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<tbody>
<tr>
<td>Average number of weeks from Phase Start to Phase Completion Date</td>
<td>69</td>
<td>104</td>
<td>108</td>
<td>129</td>
<td>133</td>
<td>137</td>
<td>143</td>
<td>151</td>
<td>156</td>
<td>160</td>
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</table>

*Table 13: Number of weeks from the start of a phase to the phase completion date at 84 MHz*

*Figure 13: Phase timelines at 84 MHz*
KC REPACK TIMELINE

Phase 2
- Starts Testing 11/30/18 & completes 4/12/19
- Most stations have aux facilities
  - On Aux equipment during broadcast day
  - On new equipment during tests

Linked Station Sets (LSS)
- Some stations channel move is dependent on someone else moving first
- KC stations moving has no linked stations
TRANSITION TASKS

- “Inability to Construct” – Channels to create
- PSIP Issues Resolved
- Waiver for special cases
  - Channel 14 and “T-Band” potential interference
  - Co-located stations in different phases
  - Channel swaps
- T-Mobile “incentives” to move early
- Testing prior to Phase completion
- Rescan
TRANSITION TASKS

Future Displacements
- KCDN-LD  CH 43
- KCMN-LD  CH 38
- KGKC-LD  CH 39
- K45IO-LD  CH 45

New Window for displacements after Dec 7th

New Window for Non-Repacked FS & CL A
- Opens Nov 28th & Closes Dec 7th