INFRASTRUCTURE
Focus Area
March 21, 2024

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Johnson County Airports
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Johnson County Wastewater

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Planning, Housing, and Community Development

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Public Works
Agenda

• Airport
• Johnson County Wastewater
• Planning, Housing, Community Development
• Public Works
Roadmap

• Summary
• Key projects and initiatives
• Budget summary
• Challenges
• Opportunities for innovation
• Outcomes and metrics
Airport

Promote aerospace activities in Johnson County and provide economic value and job creation

Airport Business Enterprises:

- New Century AirCenter Airport (IXD)
- Johnson County Executive Airport (OJC)
- New Century Water Distribution System
- New Century Short line Rail (JCAX)
- New Century Commerce Center

Your future is built here...
Key Projects and Initiatives - Airport

1. New Century AirCenter - Air Traffic Control Tower
2. New Century AirCenter - Runway 18/36 Reconstruction
3. New Century AirCenter - New Parallel Taxiway for Crosswind Runway
4. JCAX Rail Infrastructure Improvements (Upfield-Yukon)
5. Johnson County Executive Airport - New West T-Hangars
6. New Century Commerce Center - East Side
Operating Budget - Airport

Total Published Budget Excluding Cost Allocation & Risk Management

- **2024**: $1.50 M
- **2023**: $1.50 M
- **2022**: $1.00 M

- **$11.14 M**
- **$9.13 M**
- **$8.58 M**

- Local Tax Support
- Budget excluding Cost Allocation & Risk Management
Challenges - Airport

• Near-term (<3 yrs.)
  – Enterprise Fund
  – 600 New Century Parkway

• Long-term (3+ yrs.)
  – Aging infrastructure
  – Resources (federal, state, local)
  – Cost increases (economic instability)

• On the horizon (10+ yrs.)
  – Market demand for services
  – Aviation/Aerospace industry and technology changes
  – Expansion Limitations
  – Adjacent Land Use
Opportunities for Innovation - Airport

• Strategic Concept to refine and develop new business processes/plans

• Improved development-leasing policy and review of multiple funding tools
# Outcomes and Metrics - Airport

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2022 Actual</th>
<th>2023 Actual</th>
<th>2024 Target</th>
<th>2024 Estimate</th>
<th>2025 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Park Revenue as a % of expenditures - Based on self-generated revenue. Includes 600 NCOB OPEX</td>
<td>113%</td>
<td>82%</td>
<td>&gt;=120%</td>
<td>75%</td>
<td>85%</td>
</tr>
<tr>
<td>Business Park Revenue as a % of expenditures - Based on self-generated revenue. Does not include 600 NCOB OPEX</td>
<td>190%</td>
<td>113%</td>
<td>&gt;=120%</td>
<td>137%</td>
<td>160%</td>
</tr>
<tr>
<td>Airports Revenue as a % of expenditures</td>
<td>72%</td>
<td>88%</td>
<td>&gt;=95%</td>
<td>86%</td>
<td>88%</td>
</tr>
<tr>
<td>Water Revenue as a % of expenditures</td>
<td>115%</td>
<td>108%</td>
<td>&gt;=100%</td>
<td>109%</td>
<td>110%</td>
</tr>
<tr>
<td>Rail Revenue as a % of expenditures</td>
<td>44%</td>
<td>75%</td>
<td>&gt;=100%</td>
<td>75%</td>
<td>80%</td>
</tr>
</tbody>
</table>
Johnson County Wastewater

What we do: Johnson County Wastewater (JCW) is responsible for the safe collection, transportation and treatment of wastewater generated by our community. Our work supports the protection of public health and the environment by helping to protect the water quality of our lakes, rivers, and streams.

Our Mission

• **Protecting our environment**
• **Serving our customers**
• **Enhancing our communities**
Key Projects and Initiatives - Wastewater

• Nelson Wastewater Treatment Facility Improvements
• Customer Electronic Billing and Payment
• Integrated Plan Program and Phase II Submittal
• Recruitments and Career Progression Program
JCW finances flow through two funds

• Operating Fund
  – Primarily pays for operation and maintenance of the system, including treatment provided by KCMO
  – KPI: Days O&M, target range 90-180 days

• Capital Fund
  – Pays debt service and capital improvements
  – KPI: Debt Service Coverage, minimum 1.10 with a target > 1.20
Project Description
Construction of two new pump stations and a forcemain along State Line Road. These facilities will convey flow from the Leawood Service Area to the new Tomahawk WWTF for treatment.

Estimated Budget
$40,000,000

Construction Timeframe
Fall 2024 - Spring 2026

Project Website
View

Project Drivers and Benefits
Project will provide the most cost-effective long-term solution for treating flow from the Leawood Service Area.
Regional residential bill comparison

At median residential usage (about 4,000 gallons per month), JCW monthly bills remain among the lowest in the region.
Challenges - Wastewater

• Near-term (<3 yrs.)
  – Budget pressures
  – Attracting/retaining talent
  – Inflation/supply chain issues

• Long-term (3+ yrs.)
  – Staffing/leadership development
  – Technology Planning (AI/AR, continued data integration)
  – Demand for service (new growth and redevelopment)

• On the horizon (10+ yrs.)
  – Aging infrastructure/Continued capital project execution
  – Regulatory changes
  – Availability of multiple financing tools
Opportunities for Innovation - Wastewater

- Artificial Intelligence and Augmented Reality (AI/AR) - for asset management, operations and customer service
- Water Reuse
- [Harnessing] Energy in Wastewater
## Outcomes and Metrics - Wastewater

<table>
<thead>
<tr>
<th>BOCC Goal/ Priority</th>
<th>Department Goal</th>
<th>Key Performance Indicator</th>
<th>2022 Actual</th>
<th>2023 Actual</th>
<th>2024 Target/ Estimate</th>
<th>2025 Target</th>
<th>Actions/ Accomplishments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff</strong></td>
<td>JCW derived, based on prior bi-annual customer surveys; Target &gt;= 91%</td>
<td>Customers rating overall satisfaction with service as satisfied or very satisfied (semi-annual)</td>
<td>90.5</td>
<td>86.5</td>
<td>&gt;=91%</td>
<td>&gt;=91%</td>
<td>Customer Electronic Billing and Payment System Implementation underway</td>
</tr>
<tr>
<td><strong>Health &amp; Safety</strong></td>
<td>Meet NDPES permit requirements; &gt;= 98%</td>
<td>Discharge Permit Compliance</td>
<td>99.70</td>
<td>99.88</td>
<td>98%</td>
<td>98%</td>
<td>25-year Integrated Plan &amp; Program including Nelson Wastewater Treatment Facility Improvements</td>
</tr>
<tr>
<td><strong>Health and Safety</strong></td>
<td>JCW derived based on industry standards; &lt;55</td>
<td>Dry Weather Backups/Overflows</td>
<td>17</td>
<td>10</td>
<td>&lt;55</td>
<td>&lt;55</td>
<td>25-year Integrated Plan &amp; Program</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>County-derived target, required level defined in bond covenants Goal &gt;=1.20, 1.10 required</td>
<td>Bond coverage ratio</td>
<td>1.70</td>
<td>1.66</td>
<td>Goal &gt;=1.20 1.10 required</td>
<td>Goal &gt;=1.20 1.10 required</td>
<td>Prudent financial planning, maintain rate plan, WIFIA and SRF loans saving $133 million in financing costs</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>Resolution 014-16, Wastewater Reserve Policy 90-180 days</td>
<td>Days of operating reserves</td>
<td>286</td>
<td>282</td>
<td>90-180 days</td>
<td>90-180 days</td>
<td>Prudent financial planning, maintain rate plan, WIFIA and SRF loans saving $133 million in financing costs</td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td>JCW derived, based on the Strategic Business Plan &lt;10% per year</td>
<td>Employee Turnover</td>
<td>11.80</td>
<td>10.88</td>
<td>&lt;10%</td>
<td>&lt;10%</td>
<td>Recruitment and retention programs, including the creation of career progression, implemented</td>
</tr>
</tbody>
</table>
Planning, Housing and Community Development

The Department improves the community's quality of life through land use planning and construction standards, housing programs and contractor licensing and education.

• Divisions
  • Planning and Zoning Code Enforcement
  • Contractor Licensing
  • Building Code Enforcement and Review
  • Housing - Owner Occupied Rehabilitation, Housing Choice Voucher, Community Development Block Grant Administration
Key Projects and Initiatives - Planning, Housing, Community Development

• Development of Updated Johnson County Zoning and Subdivision Regulations
• Advancing Housing Initiatives
• Development of a Broadband Plan for Johnson County
• Technology Improvements Regarding Electronic Plan Review and Contractor Licensing Event Scheduling and Programming
• Improved Service Delivery for Housing Services Programs
• Partnering on Updates to Energy Codes
Operating Budget - Planning, Housing, Community Development

Total Published Budget Excluding Cost Allocation & Risk Management - Planning, Housing and Community Development

<table>
<thead>
<tr>
<th>Year</th>
<th>Local Tax Support</th>
<th>Budget excluding Cost Allocation &amp; Risk Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>$2.22 M</td>
<td>$20.58 M</td>
</tr>
<tr>
<td>2023</td>
<td>$2.75 M</td>
<td>$22.90 M</td>
</tr>
<tr>
<td>2024</td>
<td>$2.08 M</td>
<td>$23.25 M</td>
</tr>
</tbody>
</table>
Challenges - Planning, Housing, Community Development

• **Near-term (<3 yrs.)**
  – Budget Pressures- Utilization of Staff Resources
  – Familiarity with New Processes

• **Long-term (3+ yrs.)**
  – Management of Growth in the Unincorporated Area

• **On the horizon (10+ yrs.)**
  – Population Changes in the County
  – Utilization of Expanded Technology
Opportunities for Innovation - Planning, Housing, Community Development

• Implementation of entirely digital plan review and processing system that is parcel based with a portal where real time status can be seen by staff and public

• Exploring Housing partnerships and programs
# Outcomes and Metrics – Planning, Housing, Community Development

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<th>Indicator</th>
<th>2022 Actual</th>
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<th>2025 Target</th>
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</thead>
<tbody>
<tr>
<td>% of planning applications completed within 90 days of initial submittal.</td>
<td>91%</td>
<td>91%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>% of acknowledgement of receipt and initial plan review comments within 5 business days</td>
<td>90%</td>
<td>95%</td>
<td>90%</td>
<td>90%</td>
<td>92%</td>
</tr>
<tr>
<td>Housing leverage factor for county funds</td>
<td>22.36</td>
<td>18.26</td>
<td>18</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>% of participants reporting a &quot;high&quot; level of satisfaction with the contractor licensing program</td>
<td>DNM</td>
<td>DNM</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>
Public Works

Johnson County Public Works is responsible for the design, construction and maintenance of the road and bridge infrastructure in the unincorporated area, and transit throughout the county.

Public Works administers the Stormwater Management Program (SMP), County Assistance Road System (CARS) program, and administers and enforces the Kansas Noxious Weed law.
Key Projects and Initiatives - Public Works

• Roads and Bridges Funding in Unincorporated Area
  – Improvements
  – Maintenance
• CARS - Reviewing Funding Scenarios
• Stormwater - Updates to Design Criteria & Floodplain Modeling
• Transit - Strategic Plan
Operating Budget - Public Works

Total Published Budget Excluding Cost Allocation & Risk Management

- **2024**: $19.07 M in Local Tax Support, $31.94 M in Budget excluding Cost Allocation & Risk Management
- **2023**: $17.16 M in Local Tax Support, $30.35 M in Budget excluding Cost Allocation & Risk Management
- **2022**: $16.07 M in Local Tax Support, $30.96 M in Budget excluding Cost Allocation & Risk Management

Legend:
- Red: Local Tax Support
- Blue: Budget excluding Cost Allocation & Risk Management
CIP Project Locations - Public Works

LEGEND

Construction 0-5 Years
- Construction 6-20 Years

Project Locations

Construction 0-5 Years
1. Lackman (Blacktop) RD - 155th ST to 167th ST w/Onesto
2. Lackman (Blacktop) RD - 153rd TERR to 159th ST w/Onesto
3. Bridge Replacement - J-5.0
4. 195th ST - Clare RD to US-156
5. 184th ST - Metcalfe AV to Hall AV
6. Mission RD - 179th ST to 191st ST
7. Bridge Replacement - E-85-10.24
8. Mission RD - Orchard LN to 179th ST
9. 190th ST - Bannor RD to Pfaffen RD
10. Bridge Replacement - R-44.2 w/Overland Park

Construction 6-20 Years
11. 195th ST - Pfaffen Rd to Antioch Rd
12. Bridge Replacement - J-6.0 w/Onesto
13. Kill Creek RD - 105th ST to 115th ST
14. Ridgeway RD - 175th ST to 191st ST
15. 175th ST - Four Corners RD to Ebypton RD
16. 115th ST - Kill Creek RD to Waverly RD
17. Waverly RD - 115th ST to 127th ST
18. 127th ST - Waverly RD to Gardner RD
19. Gardner RD - 127th ST to 142nd ST
20. Bridge Replacement - Du Bois River Bridge - F-8.16.7
21. Lackman (Blacktop) RD - 167th ST to 175th ST w/Onesto
22. Pfaffen Rd - 155th ST to 175th ST w/Overland Park
23. New Century Parkway - 151st Street to Old 86 HWY
Challenges - Public Works

• Near-term (<3 yrs.)
  • Annexations/urban development patterns
  • Road safety improvement funding
  • Road maintenance funding
  • Frontline hiring/retention
  • Local road study outcomes

• Long-term (>3 yrs.)
  • Floodplain mapping
  • New Century Parkway reconstruction
  • Gravel road improvements

• On the horizon (10+ yrs.)
  • Gas tax (CARS funding)
  • Extreme weather events
  • Annexation and county services
  • KDOT Infrastructure (Outer Loop)
Opportunity for Innovation - Public Works

• Artificial Intelligence
• Self driving vehicles
• Reduction of infrastructure (less lanes, traffic signals, signing, parking, etc.)
• Crash and congestion reductions
## Outcomes and Metrics - Public Works

<table>
<thead>
<tr>
<th>Indicator</th>
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<th>2025 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average countywide stormwater infrastructure risk score</td>
<td>2.18</td>
<td>2.17</td>
<td>2.16</td>
<td>2.16</td>
<td>2.15</td>
</tr>
<tr>
<td>Approximate number of primary structures in floodplain</td>
<td>844</td>
<td>843</td>
<td>829</td>
<td>835</td>
<td>829</td>
</tr>
<tr>
<td>Average Bridge Sufficiency Rating</td>
<td>94.6</td>
<td>95.4</td>
<td>95</td>
<td>95</td>
<td>94.5</td>
</tr>
<tr>
<td>Average Asphalt Road Rating Index</td>
<td>7.37</td>
<td>7.44</td>
<td>7</td>
<td>7.4</td>
<td>7.3</td>
</tr>
<tr>
<td>Crashes per 1,000 Vehicles</td>
<td>0.34</td>
<td>0.31</td>
<td>Decreasing Trend</td>
<td>0.29</td>
<td>0.27</td>
</tr>
<tr>
<td>Transit Total Ridership</td>
<td>443,418</td>
<td>611,909</td>
<td>673,100</td>
<td>642,500</td>
<td>675,000</td>
</tr>
</tbody>
</table>
Discussion