MAJOR TRANSPORTATION & REGIONAL COOPERATION COMMITTEE

February 2, 2016
RECENT DEVELOPMENTS

• Civil construction punch list work and testing continues

• Integrated testing and training activities:
  – Overhead Contact System (OCS) training
  – Traction Power Substation (TPSS) Training
  – Passenger Information Display Sign (PIDS) testing
  – Vehicle Lifting Jack training
  – Forklift Training

• Remaining vehicle production continues at CAF Elmira, NY plant
  – Unit #3 - resolving open issues prior to shipment
  – Unit #4 - undergoing final inspections
  – Unit #5 - in production

• Safety & Security Readiness Review (SSRR) held Jan 12-14
BUDGET VS. EXPENSES
Through 1/31/16 - DRAFT

* Construction Expenditures include $2.938 Million in unreleased retainage on MPD contract.
Vehicle Expenditures include $410,344 in unreleased retainage on CAF contract.

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Base + Allocated Contingency</th>
<th>Expended</th>
<th>Encumbered</th>
<th>Expend. + Encumb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Development</td>
<td>$1,313,786.00</td>
<td>$1,264,628.13</td>
<td>$49,157.87</td>
<td>$1,313,786.00</td>
</tr>
<tr>
<td>Design</td>
<td>$14,598,719.00</td>
<td>$14,313,044.86</td>
<td>$19,571.85</td>
<td>$14,332,616.71</td>
</tr>
<tr>
<td>Real Estate</td>
<td>$2,010,143.00</td>
<td>$2,011,186.00</td>
<td>-</td>
<td>$2,011,186.00</td>
</tr>
<tr>
<td>Construction</td>
<td>$52,511,908.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOF</td>
<td>$11,914,668.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities (Project)</td>
<td>$6,958,405.62</td>
<td>$66,678,375.73</td>
<td>$4,706,607.20</td>
<td>$71,384,982.93</td>
</tr>
<tr>
<td>Utilities (3rd Party)</td>
<td>$6,225,065.37</td>
<td>$2,574,494.38</td>
<td>$3,092,363.76</td>
<td>$5,666,858.14</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$25,213,095.40</td>
<td>$10,727,444.87</td>
<td>$13,224,475.63</td>
<td>$23,951,920.50</td>
</tr>
<tr>
<td>Fare Vending</td>
<td>$550,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City Project Administration</td>
<td>$4,441,476.27</td>
<td>$3,493,053.35</td>
<td>-</td>
<td>$3,493,053.35</td>
</tr>
<tr>
<td>SORTA Project Administration</td>
<td>$2,100,000.00</td>
<td>$1,139,564.10</td>
<td>$860,435.90</td>
<td>$2,000,000.00</td>
</tr>
<tr>
<td>Start-up</td>
<td>$250,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unallocated Contingency</td>
<td>$4,991,010.00</td>
<td>$3,507,046.64</td>
<td>$1,189,077.99</td>
<td>$4,696,124.63</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$133,078,277.97</strong></td>
<td><strong>$105,708,838.06</strong></td>
<td><strong>$23,141,690.20</strong></td>
<td><strong>$128,850,528.26</strong></td>
</tr>
<tr>
<td>Utilities (Duke Escrow)</td>
<td>$15,000,000.00</td>
<td>$15,000,000.00</td>
<td>-</td>
<td>$15,000,000.00</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$148,078,277.97</strong></td>
<td><strong>$120,708,838.06</strong></td>
<td><strong>$23,141,690.20</strong></td>
<td><strong>$143,850,528.26</strong></td>
</tr>
</tbody>
</table>
## CONTINGENCY USAGE

Through 1/22/16

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Contingency Budget</th>
<th>Completed Contingency Uses</th>
<th>Pending Contingency Uses</th>
<th>Estimated Contingency Uses</th>
<th>Contingency Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALLOCATED CONTINGENCY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Development</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Design</td>
<td>$ 202,370.96</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 202,370.96</td>
<td>-</td>
</tr>
<tr>
<td>Real Estate</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 202,370.96</td>
</tr>
<tr>
<td>Construction</td>
<td>$ 2,000,000.00</td>
<td>$ 1,515,500.32</td>
<td>$ 169,083.20</td>
<td>$ -</td>
<td>$ 315,416.48</td>
</tr>
<tr>
<td>MOF</td>
<td>$ 77,207.23</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 77,207.23</td>
</tr>
<tr>
<td>Utilities (Project)</td>
<td>$ 2,101,722.40</td>
<td>$ 977,100.75</td>
<td>$ -</td>
<td>$ 1,124,621.65</td>
<td>-</td>
</tr>
<tr>
<td>Fare Vending</td>
<td>$ 50,000.00</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 50,000.00</td>
<td>-</td>
</tr>
<tr>
<td>City Project Administration</td>
<td>$ 190,800.63</td>
<td>$ -</td>
<td>$ 190,800.63</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>SORTA Project Administration</td>
<td>$ 100,000.00</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 100,000.00</td>
<td>-</td>
</tr>
<tr>
<td>Start-up</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$ 4,722,101.22</td>
<td>$ 2,492,601.07</td>
<td>$ 359,883.83</td>
<td>$ -</td>
<td>$ 1,869,616.32</td>
</tr>
<tr>
<td><strong>UNALLOCATED CONTINGENCY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unallocated Contingency</td>
<td>$ 4,991,010.00</td>
<td>$ 1,385,418.50</td>
<td>$ 223,538.00</td>
<td>$ 801,368.00</td>
<td>$ (989,301.64)</td>
</tr>
<tr>
<td>Construction</td>
<td>$ 2,029,170.11</td>
<td>$ 931,868.72</td>
<td>$ -</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>City Project Administration</td>
<td>$ 608,948.31</td>
<td>$ -</td>
<td>$ 1,024,906.00</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$ 4,991,010.00</td>
<td>$ 4,023,536.92</td>
<td>$ 931,868.72</td>
<td>$ 1,024,906.00</td>
<td>$ (989,301.64)</td>
</tr>
<tr>
<td>Utilities (Duke Escrow)</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>$ 9,713,111.22</td>
<td>$ 6,516,137.99</td>
<td>$ 1,291,752.55</td>
<td>$ 1,024,906.00</td>
<td>$ 880,314.68</td>
</tr>
</tbody>
</table>

**Note:**
- Dollars are in USD.
## GRANT DRAWDOWN SUMMARY

**Through 1/31/16**

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>GRANT NUMBER</th>
<th>ALI CODE</th>
<th>Description</th>
<th>Authorized</th>
<th>Drawn</th>
<th>Pending</th>
<th>Amount Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Circulator</td>
<td>OH-03-0303</td>
<td>12.79.00</td>
<td>City Project Admin.</td>
<td>$1,453</td>
<td>$1,453</td>
<td>$0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.79.00</td>
<td>SORTA Project Admin.</td>
<td>$1,388,545</td>
<td>$877,126</td>
<td>$511,419</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.23.03</td>
<td>Construction</td>
<td>$12,598,000</td>
<td>$12,371,830</td>
<td>$226,170</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.13.20</td>
<td>Vehicles</td>
<td>$11,002,000</td>
<td>$7,606,846</td>
<td>$3,395,154</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$24,989,998</td>
<td>$20,857,255</td>
<td>-</td>
<td>$4,132,743</td>
</tr>
<tr>
<td>CMAQ</td>
<td>OH 95-X054</td>
<td>12.23.03</td>
<td>Construction</td>
<td>$4,000,000</td>
<td>$4,000,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$4,000,000</td>
<td>$4,000,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rail ROW Grant</td>
<td>OH-90-X265</td>
<td>13.73.00</td>
<td>Contingency</td>
<td>$268,278</td>
<td>$268,278</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$268,278</td>
<td>$268,278</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TIGER 3</td>
<td>OH 79-0002</td>
<td>12.79.00</td>
<td>City Project Admin.</td>
<td>$154,545</td>
<td>$154,545</td>
<td>-</td>
<td>$(0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.79.00</td>
<td>SORTA Project Admin.</td>
<td>$211,453</td>
<td>$34,434</td>
<td>$177,019</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.23.03</td>
<td>Construction</td>
<td>$15,554,000</td>
<td>$15,554,000</td>
<td>-</td>
<td>$(0)</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$15,919,998</td>
<td>$15,742,980</td>
<td>-</td>
<td>$177,018</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>$45,178,274</td>
<td>$40,868,513</td>
<td>-</td>
<td>$4,309,761</td>
</tr>
</tbody>
</table>

* Budget revision on 9/16/15 moved $4.998 M from Urban Circulator ALI 12.13.20 to 12.23.03
** Drawn + Pending = 85.4% of Federal grant funds
VEHICLES

• Integrated testing and training activities continue
  – Additional on-street vehicle testing expected to resume in next few weeks
  – 500 km burn in testing
  – Transdev maintenance staff arriving, training

• Remaining vehicle production continues at CAF Elmira, NY plant:
  – Streetcars 1177 (Unit #3) awaiting repair work to close open item prior to shipment
  – Streetcar 1178 (Unit #4) undergoing final inspections, expected in next few weeks
  – Streetcar 1179 (Unit #5) expected to arrive in March
START UP - TRAFFIC ENFORCEMENT

- Enforcement tools needed to keep track clear of obstructions that could impair streetcar service or cause safety hazards
- Ordinance drafted:
  - Clarify parking restrictions proximate to streetcar tracks
  - Enable enforcement officers to clear offenders quickly
- Additional Ordinances to provide tools for SORTA/Streetcar operations staff to enforce fare and operational rules
- Passage of these Ordinances by City Council will help acclimate public to streetcar operating environment in advance of revenue service.
START UP - TRACK ACCESS PERMITTING

- TAP permit process transitioning from MPD to SORTA/Transdev
- Contractors, others working in ROW required to get a TAP permit as part of their normal ROW permit from City DOTE
  - Allows streetcar operations to know who/what to expect in the street
  - Streetcar operations is then able to coordinate work with utilities, contractors
- OSHA rules require workers to observe a 10 foot safety envelope around active OCS wire
- Transdev will offer safety training/certification to workers
RISK/CONTINGENCY ITEMS

• CONSTRUCTION
  – Traffic signal modifications may be needed to facilitate signal operation
  – MOF Modifications – align facility to operational needs
  – Additional capital equipment needs identified as part of start up (some budget exists for this)

• VEHICLES
  – CAF delays may require additional engineering support from LTK
  – Spare parts & special tools delivery, training still required

• SAFETY & SECURITY CERTIFICATION/INTEGRATED TESTING
  – Issues identified during integrated testing and safety certification may require redesign or additional construction work
Warming up after gathering data on the route

Back in class, reviewing data sources and uses
KEY SCHEDULE MILESTONES

- March 2016 -- Final vehicle delivery
- March 2016 -- Final Documents to ODOT
- March 2016 -- Integrated testing / vehicle burn-in complete
- April 2016 -- Completion of civil construction
- Spring 2016 -- All system turnovers complete
- May/June 2016 -- Transdev mobilization, phase 2
- July 2016 -- TVMs installed
- July/August 2016 -- Simulated revenue service
- September 2016 -- Start of passenger service
SAFETY AND SECURITY

- Safety/Security Certification:
  - SSRC meeting weekly
  - FLSSC meeting bi-weekly
  - SSRR Feedback
    - Updates to required documents
      - System Safety Program Plan*
      - Security and Emergency Preparedness Plan*
      - Emergency Operations Plan*
      - Accident/Incident Investigation Procedure
    - Changes to Rail Activation Plan

* Documentation required 6 months prior to start of revenue service. (Currently on target)
SAFETY AND SECURITY

• System Safety Director completed Security Training. Currently receiving Rail Accident Investigation Training

• Forklift Training provided to streetcar personnel by System Safety Director. Will be providing additional training (CPR/First-Aid and Scissor Lift)

• TVA in progress. Stations are next to be assessed

• Hazard Log and SOIL are updated as items are closed

• Operational Hazard Analysis now in progress
Track access is a critical function to maintain safety along the streetcar track and energized overhead contact system (OCS) and manage access.

Per ordinance, as a condition of a right-of-way or building permit along the streetcar line, permit applicants must also obtain a track access permit from SORTA.

SORTA took over Feb. 1, 2016; subcontracted to Transdev.
Figure 2: OCS Wire Danger Zone 10' Diameter
TRACK ACCESS

• Minimum one person on a permitted work crew must be trained on streetcar safety

• SORTA/Transdev to provide annual credentials for trained individuals

• Training class is free; approximately 2 hours
  – Train safety
  – OCS safety
  – Communication protocols with SORTA/Transdev
TRANSDEV MOBILIZATION

• Hires:
  – Working Foreman – Maintenance of Way/Facilities
  – Transportation Supervisors
  – Vehicle Maintenance Technicians

• Upcoming hires:
  – Transportation Supervisors
  – Vehicle Maintenance Technicians

• Rulebook and SOP updates ongoing
STREETCAR OPERATIONS AND MAINTENANCE BUDGET PROCESS

- §3.3 of the OMIGA requires SORTA to submit Operating & Maintenance funding request to the City

- January 4, 2016 letter from SORTA requested available City revenue sources to finalize budget by February 1, 2016

- SORTA would like to submit first O&M funding request at February 17, 2016 Major Transportation & Regional Cooperation Committee
STREETCAR OPERATIONS AND MAINTENANCE BUDGET PROCESS

• Unless revenue projections change, SORTA will use fare policy and services levels previously presented

• SORTA to provide projections:
  – Fare revenue (based on City ridership/elasticity projections and SORTA fare policy)
  – Advertising/naming rights revenue (based on contractor projections)
  – FTA formula funding (not anticipated for year 1)
STREETCAR OPERATIONS AND MAINTENANCE BUDGET PROCESS

• Expense projections have not substantially changed since June 2015 presentation

• Four expense categories:
  – Transdev contract (fixed price, fixed scope)
  – Direct costs (traction power, fare media, IT costs, SORTA systems maintenance, marketing, etc.)
  – 8% SORTA overhead (fixed / SORTA staff costs)
  – City overhead

• OMIGA requires SORTA to present expenses by City fiscal year (June 30 / July 1)
STREETCAR OPERATIONS AND MAINTENANCE BUDGET PROCESS

• Budget assumptions and risks
  – Schedule
    • Vehicle deliveries, training, spare parts and special tools
    • September 15, 2015 revenue service date
    • Safety/Security certification
  – FTA approval of revised operating hours
  – Transdev contract changes
    • Revised operating hours
    • IGA Amendment 7
  – Turnover schedule
  – Utilities (traction power, TPSS communications)