

CINCINNATI  
**STREETCAR**™

**MAJOR TRANSPORTATION & REGIONAL  
COOPERATION COMMITTEE**

January 5, 2016

# RECENT DEVELOPMENTS

- Civil construction punch list work and testing continued throughout Nov/Dec
- Cincinnati Streetcar #1176 (Unit #2) arrived in Cincinnati on Nov 24
- Integrated testing activities took place throughout Nov/Dec
  - Live wire test
  - TPSS tests
  - Noise & Vibration test
  - Ride & Comfort test
- Remaining vehicle production continues at CAF Elmira, NY plant
  - Unit #2 - routine testing
  - Unit #3 - routine testing
  - Units #4, 5 - assembly underway



# BUDGET VS. EXPENSES

Through 12/29/15 - DRAFT

BUDGET - June 2013		EXPENSES 12/29/2015		
Budget Category	Base + Allocated Contingency	Expended	Encumbered	Expend. + Encumb.
Pre-Development	\$ 1,313,786.00	\$ 1,264,628.13	\$ 49,157.87	\$ 1,313,786.00
Design	\$ 14,598,719.00	\$ 14,313,044.86	\$ 19,571.85	\$ 14,332,616.71
Real Estate	\$ 2,010,143.00	\$ 2,011,186.00	\$ -	\$ 2,011,186.00
Construction	\$ 52,511,908.33			
MOF	\$ 11,914,668.98			
Utilities (Project)	\$ 6,958,405.62	\$ 65,896,056.30	\$ 5,488,926.63	\$ 71,384,982.93
Utilities (3rd Party)	\$ 6,225,065.37	\$ 2,574,494.38	\$ 3,092,363.76	\$ 5,666,858.14
Vehicles	\$ 25,213,095.40	\$ 10,727,444.87	\$ 13,224,475.63	\$ 23,951,920.50
Fare Vending	\$ 550,000.00	\$ -	\$ -	\$ -
City Project Administration	\$ 4,441,476.27	\$ 3,440,754.39	\$ 260.00	\$ 3,441,014.39
SORTA Project Administration	\$ 2,100,000.00	\$ 1,139,564.10	\$ 860,435.90	\$ 2,000,000.00
Start-up	\$ 250,000.00	\$ -	\$ -	\$ -
Unallocated Contingency	\$ 4,991,010.00	\$ 3,470,200.13	\$ 1,225,924.50	\$ 4,696,124.63
<b>Subtotal</b>	<b>\$ 133,078,277.97</b>	<b>\$ 104,837,373.16</b>	<b>\$ 23,961,116.14</b>	<b>\$ 128,798,489.30</b>
Utilities (Duke Escrow)	\$ 15,000,000.00	\$ 15,000,000.00	\$ -	\$ 15,000,000.00
<b>Grand Total</b>	<b>\$ 148,078,277.97</b>	<b>\$ 119,837,373.16</b>	<b>\$ 23,961,116.14</b>	<b>\$ 143,798,489.30</b>

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

# CONTINGENCY USAGE

Through 12/10/15

Budget Category	Contingency Budget	Completed Contingency Uses	Pending Contingency Uses	Estimated Contingency Uses	Contingency Remaining
<b>ALLOCATED CONTINGENCY</b>					
Pre-Development	\$ -	\$ -			\$ -
Design	\$ 202,370.96	\$ -			\$ 202,370.96
Real Estate	\$ -	\$ -			\$ -
Construction					
MOF	\$ 2,000,000.00	\$ 1,482,305.32	\$ 134,920.00	\$ -	\$ 382,774.68
Utilities (Project)					
Utilities (3rd Party)	\$ 77,207.23	\$ -			\$ 77,207.23
Vehicles	\$ 2,101,722.40	\$ 977,100.75			\$ 1,124,621.65
Fare Vending	\$ 50,000.00	\$ -			\$ 50,000.00
City Project Administration	\$ 190,800.63	\$ -	\$ 190,800.63		\$ -
SORTA Project Administration	\$ 100,000.00	\$ -			\$ 100,000.00
Start-up	\$ -	\$ -			\$ -
<b>Subtotal</b>	<b>\$ 4,722,101.22</b>	<b>\$ 2,459,406.07</b>	<b>\$ 325,720.63</b>	<b>\$ -</b>	<b>\$ 1,936,974.52</b>
<b>UNALLOCATED CONTINGENCY</b>					
Unallocated Contingency		\$ 1,385,418.50		\$ 223,538.00	
Construction	\$ 4,991,010.00	\$ 2,021,100.11		\$ 855,213.00	\$ (1,035,076.64)
City Project Administration			\$ 931,868.72		
Design		\$ 608,948.31			
<b>Subtotal</b>	<b>\$ 4,991,010.00</b>	<b>\$ 4,015,466.92</b>	<b>\$ 931,868.72</b>	<b>\$ 1,078,751.00</b>	<b>\$ (1,035,076.64)</b>
Utilities (Duke Escrow)	\$ -				\$ -
<b>Grand Total</b>	<b>\$ 9,713,111.22</b>	<b>\$ 6,474,872.99</b>	<b>\$ 1,257,589.35</b>	<b>\$ 1,078,751.00</b>	<b>\$ 901,897.88</b>

# GRANT DRAWDOWN SUMMARY

Through 12/31/15

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

\* 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

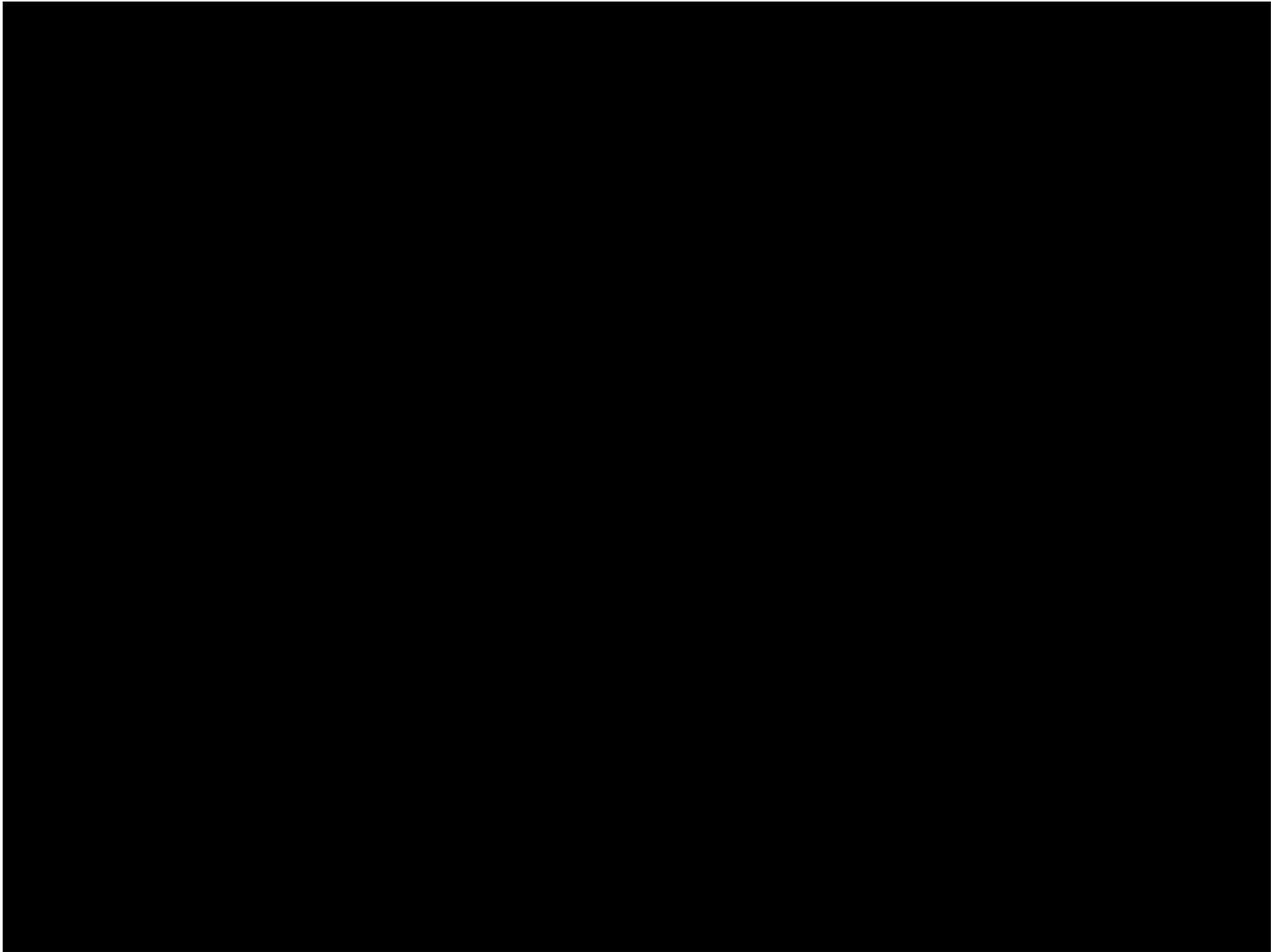


# VEHICLES

- Cincinnati Streetcar #1176 (Unit #2) arrived in Cincinnati on Nov 24
- Integrated testing activities took place throughout Nov/Dec
  - Live wire test
  - TPSS tests
  - Noise & Vibration test
  - Ride & Comfort test
- Remaining vehicle production continues at CAF Elmira, NY plant
  - Streetcars 1177, 1178 (Units #3, 4) expected to arrive in January
  - Streetcar 1178 (Unit #5) expected to arrive in February
- Activities ongoing to close open engineering, testing, quality items
- Spare parts, special tools delivery remain







Major Transportation Committee - January 5, 2016

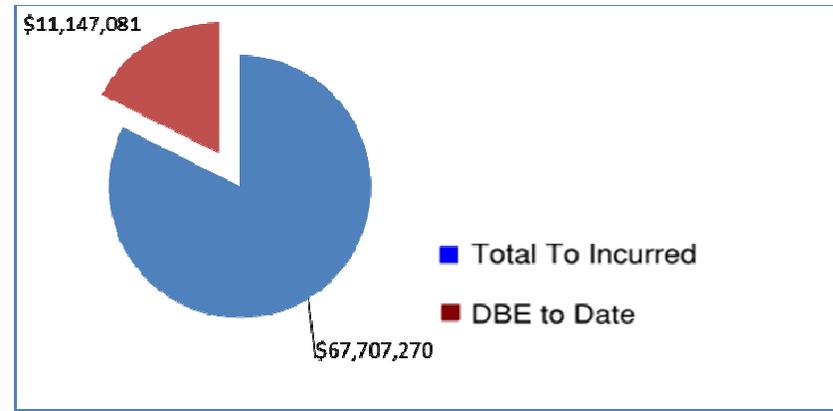
# COMMUNITY ENGAGEMENT

- Additional Stakeholder meetings are being added breaking the route into three sections to better tailor message to needs during the startup phase
- The rest of the comprehensive community engagement plan remains the same as past months



# DBE & INCLUSION

- MPD reports a DBE Spend at end of November: 16.5%, remaining constant since July and below the target of 18%.
- City will continue to monitor MPD's performance against the DBE goal and seek ways to maximize DBE spending
- MPD reports that work could still be on track to meet the DBE subcontracting goal of 18% at the time of final billing. but the tallying of final quantities may show them below their goal



**Minority & Female Workforce Utilization  
(Nov 30, 2015)**

	<u>Actual</u>	<u>Goal</u>
Minority Hours	18.7%	11.9%
Female Hours	3.7%	6.9%
Minority Female	68.2%	50.0%

# RISK/CONTINGENCY ITEMS

- CONSTRUCTION
  - Punch list (open construction items) requires completion before close out can occur - could require additional engineering support
- VEHICLES
  - Any further production issues, and/or difficulty closing open (punch list) engineering, testing, and quality items could delay delivery of remaining cars
  - Spare parts & special tools delivery, training still required
  - Could require additional engineering support
- ADDITIONAL CAPITAL EQUIPMENT, SPARE PARTS NEEDS
  - Start up process may identify additional equipment, spare needs



# RISK/CONTINGENCY ITEMS

- SAFETY & SECURITY CERTIFICATION/INTEGRATED TESTING
  - Issues identified during integrated testing and safety certification may require redesign or additional construction work
- FINALIZE OPERATING BUDGET vs. TURNOVER
  - Delay in approval of operating funding could delay turnover of streetcar assets to SORTA/Transdev
  - This in turn would affect startup, revenue service dates
  - Could result in additional capital cost for City to maintain/operate assets longer than planned



# NEXT STEPS

- CONSTRUCTION
  - MPD completing remaining punch list work, testing items
  - OCS breaker, signal adjustments
- VEHICLES/TESTING
  - Jan - continued vehicle tests in CBD, whole alignment
    - Brake, propulsion, towing in slope tests
    - PIS-PAS-PA/CCTV test
    - 500km burn in test for each vehicle
  - Close open vehicle items (punch list)
  - Spare parts/special tools

# NEXT STEPS

- SAFETY & SECURITY CERTIFICATION
  - City, SORTA sign off on certifiable elements, plans, and procedures
  - City departments SOP's
  - Safety/Security Readiness Review (SSRR) – Jan 12-14
- TURNOVER/ O&M BUDGET APPROVAL
  - SORTA's ability to assume control of assets is dependent in large part on approval of operating funding
  - Timely resolution of open operating funding issues and approval of O&M budget is critical
- PRE-REVENUE SERVICE
  - Simulated revenue service
  - Operator training



CINCINNATI  
**STREETCAR**™

**PLANNING & OPERATIONS UPDATE**



# OPERATIONS & MAINTENANCE UPDATE

JANUARY 2016



# KEY SCHEDULE MILESTONES

January 2016 – FTA Safety Security Readiness Review



February 2016 – Final vehicle delivery



March 2016 – Ticket vending machines Installed



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/August 2016 – Simulated revenue service



September 2016 -- Start of passenger service



# SAFETY

- **Safety/Security Certification:**
  - SSRC meeting weekly (except holidays)
  - FLSSC now meeting bi-weekly (except holidays)
  - Vehicle Design Audit complete
  - SSRR preparations documentation submitted
- **ODOT State Safety Oversight**
  - ODOT staff credentialed
  - Accident Investigation Procedure approved



# STREETCAR OPERATING HOURS

- **Council request to SORTA:**  
One recommendation considering all factors and Alternative 2
- **Factors considered:**
  - Council input (Alternative 2 as basis)
  - Regulatory requirements
  - Transdev contract
  - Bus ridership and connections (local and express)
  - Weekend activity locations and hours
  - Schedule technical issues, consistency of schedule
  - Comments from public (Title VI, outreach to constituents)
  - Other cities' experience



# CONTEXT

- **Original span of service:**

Sunday-Thursday and holidays: 6:00am – 10:00pm

Friday-Saturday: 6:00am – 12:00am

- **Original frequency:**

Base frequency: 15 minutes

Peak (Monday-Thursday, 10 a.m.-9 p.m.): 12 minutes

- Submitted by City to Federal Transit Administration as part of grant applications/contracts



# RECOMMENDATION: ALTERNATIVE 5

- **Recommended span of service:**

Sunday and holidays:	9:00 a.m. – 11:00 p.m.
Monday-Thursday:	6:30 a.m. – midnight
Friday:	6:30 a.m. – 1:00 a.m.
Saturday:	8:00 a.m. – 1:00 a.m.

- **Recommended frequency:**

Base frequency:	15 minutes
Peak (Monday-Friday, 11 a.m.-7 p.m.):	12 minutes



# STREETCAR OPERATIONS AND MAINTENANCE BUDGET

- §3.3 of the OMIGA requires SORTA to submit Operating & Maintenance funding request to the City
- SORTA would like to submit first O&M funding request at February 2016 Major Transportation & Regional Cooperation Committee
- SORTA requests final available City funding projections by February 1, 2016



# RAIL ACTIVATION UPDATE

- Transdev mobilization
- Hiring:
  - Working foreman – vehicle maintenance
  - Lead transportation supervisor
- Upcoming hires:
  - Working foreman – maintenance of way/facilities
  - Transportation supervisors



# SYSTEM INTEGRATED TEST PLAN

- Integrated test team:
  - Final type tests in January
    - Propulsion system
  - Vehicle 300-mile (500-kilometer) burn-in
    - Safety factors – open track access permits, resource requirements, roles and responsibilities



# “BE STREETCAR SAFE” CAMPAIGN

- Outreach continues
- New parking violation fliers used along route
- Monthly community/stakeholder meetings
- Website in development
- Preparing for testing phase communications and grand opening

**BE**  
STREETCAR  
**SAFE**



# CRITICAL ISSUES

- **System turnover:**
  - Construction/vehicle schedule coordination
  - Transdev contract milestones and mobilization
- **First year O&M budget under development:**
  - Operating hours
  - Submission to City Council -- February 2016
  - Start-up budget
  - Capital improvement plan
  - Revenues



# CRITICAL ISSUES

- **Fare collection equipment:**
  - Contactless smartcard evaluation
  - “E-fare” system
- **Trapeze CAD/AVL communications system:**
  - MOF equipment installation
  - System configuration



# QUESTIONS

