

OC Streetcar Vehicle Delivery Update



Vehicle Design Review Process

- Approximately 16-month design process
- Several key management documents in process: Document Control, Project Management Plan, Quality Assurance Plan, Master Schedule, Master Test Plan, First Article Inspection Plan
- 15 design areas (carbody, cab layout and controls, doors, power, braking, etc.)
- Hundreds of design documents submitted that will go through an iterative review process between OCTA and Siemens
- Selection of exterior design is one of the first critical steps in design process

Vehicle Exterior Design Key Dates

- August 2018: Board reviewed OC Streetcar exterior design concepts and directed staff to seek public feedback
- September – October 2018: OCTA gathered public, stakeholder, and industry feedback
- November 2018: Final exterior design concept due to Siemens

Final Vehicle Design Considerations

- Public/Stakeholder feedback
- Advertising compatibility/revenue opportunities
- Industry Input

Public and Stakeholder Outreach

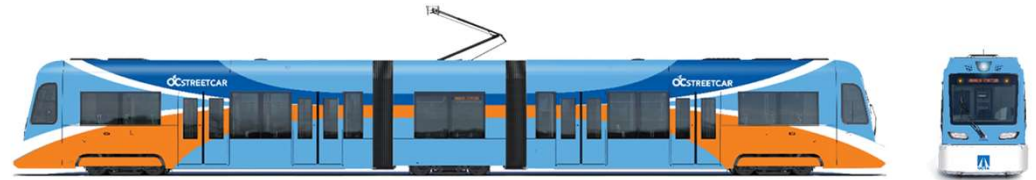
- Online and print questionnaire
- Social media post and ads
- Emails/Mailers
- Media relations
- Open houses
- Community events
- OC Streetcar Stakeholder Working Group
- Employer Transportation Coordinators
- City briefings
- Diverse Community Leaders Group
- OCTA Advisory Committees
- OCTA Teen Council



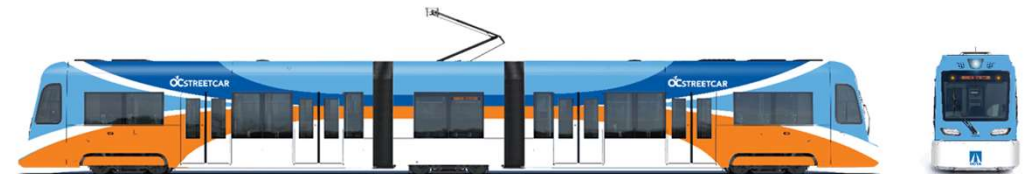
Public and Stakeholder Feedback

- 4,300 participants
- All three options received support
- Design B was first choice by general public
- Design C was first choice by key stakeholders

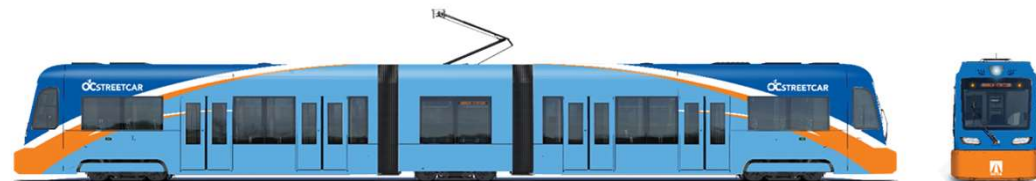
Design A



Design B



Design C



Advertising Compatibility and Revenue Opportunities

Transit advertising experts prefer Design C:

- Simple, clean design provides clarity for advertisements
- Advertisements don't compete with OC Streetcar branding
- Creates greater opportunities for ad sales

Design A



Design B



Design C



Industry Input

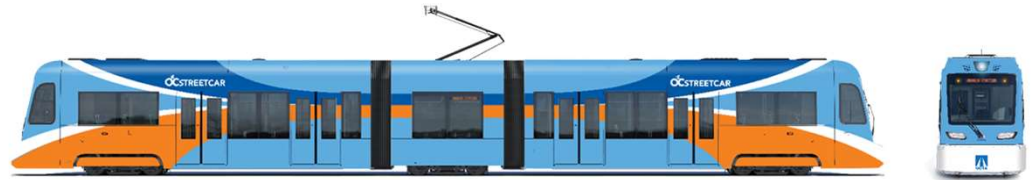
Designs A and B:

- Complex design and paint scheme. More costly and labor intensive to maintain.
- White paint scheme difficult to keep clean

Design C:

- Simple design paint scheme is more cost-effective for maintenance
- Benefits of having interchangeable doors with minimal use of decal striping

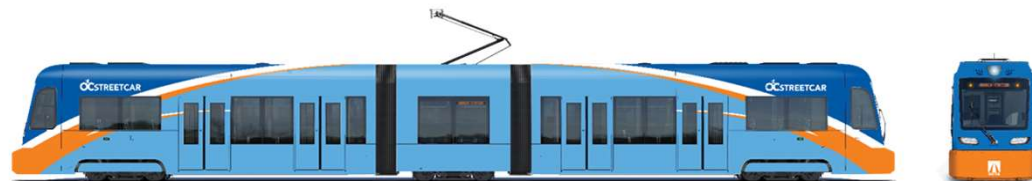
Design A



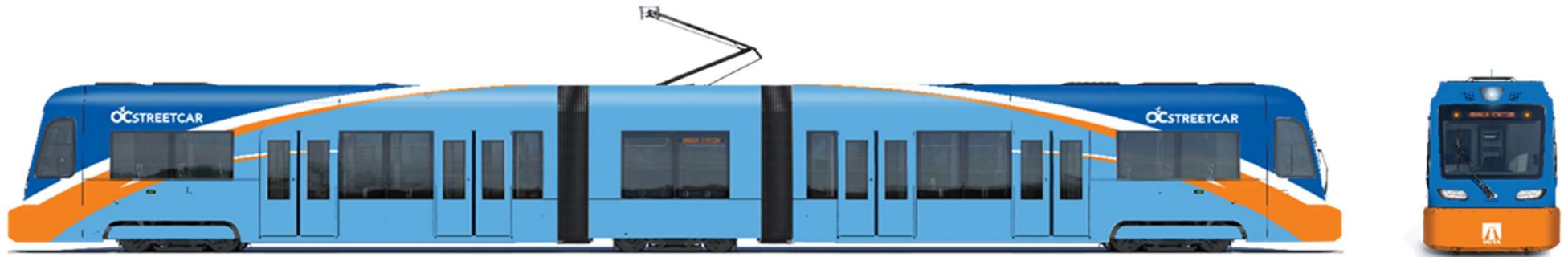
Design B



Design C



Recommendation: Design C



Benefits of Design C

- The paint scheme of the front of the vehicle is highly visible and distinguishable which enhances overall safety while operating in mixed-traffic.
- The simple design is classic and would not become outdated.
- The design accommodates rather than competes with advertising, which could enhance revenue opportunities.
- The paint scheme is the most simplistic in its design, making it more cost effective for maintenance and repair.
- The doors are a single color, with minimal use of decals, making them interchangeable for replacement, minimizing cost, replacement delays, and reducing inventory. Also reduces having to remove the vehicle from service for an extended period of time.
- The minimal use of white paint is easier to keep the vehicle clean.

Next Steps

- Provide final vehicle design concept to Siemens for further design refinement
- Continued vehicle delivery project management
- Coordination with Siemens on vehicle design review process