



Caltrain Modernization EMU Procurement Boarding Height

(Select Slides from May 2015 JPB Workshop)

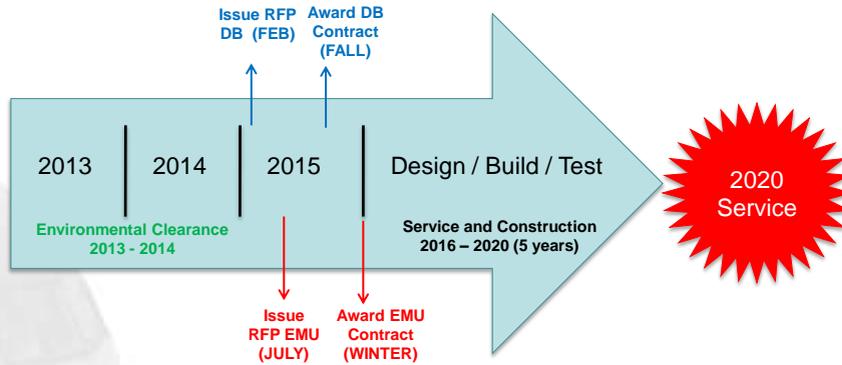
JPB BAC
May 21, 2015



Caltrain Modernization



2020 Revenue Service



Important milestones to meet 2020 service date



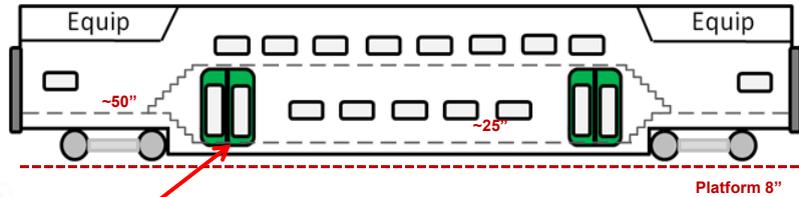
Request for Information Summer 2014

Attributes	Industry Confirmation
Maximize Capacity	<ul style="list-style-type: none"> • Bi-level (versus single level)
Previously Made	<ul style="list-style-type: none"> • Service proven options • Saves costs / time
US Regulation Compliance	<ul style="list-style-type: none"> • ADA • Buy America • FRA Waiver / Alternative Compliant Vehicles Criteria • Meet Caltrain Technical / Quality Standards
Floor Threshold	<ul style="list-style-type: none"> • 2 double doors per car (low level boarding) • ~22" to ~25" most common

Note: Anticipate adequate competition for the RFP



Recommended EMU



1-2 steps onboard

- Bi-level car
- 2 double doors (located: ~25" floor)
- Passengers step (1-2) from platform
- ADA passengers and bikes located ~25" level
- ADA use mini highs and wayside lifts

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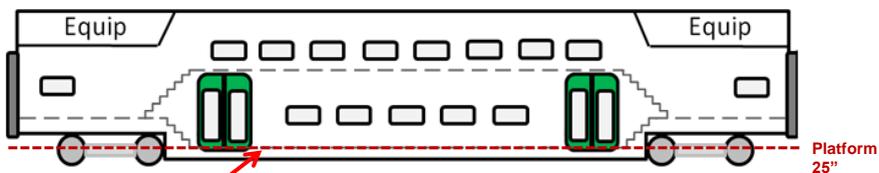
Similar to Today's Bombardier



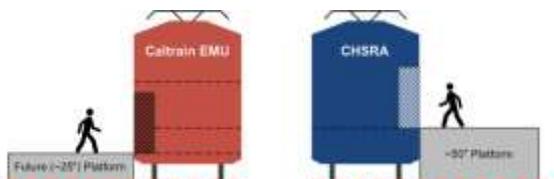
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Future Level Boarding (Beyond Electrification)



No steps, use at 27 stations



HSR / Caltrain Dedicated Platforms

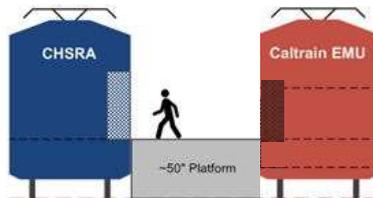


Request for EMU Modification



Request for EMU Modifications

- Stakeholder request for car modification
- Caltrain bi-level EMU ~25" boarding height
- HSR single level cars ~50" boarding height (different needs than Caltrain)
- **Can Caltrain modify EMUs to not preclude ~50" boarding in the future?**

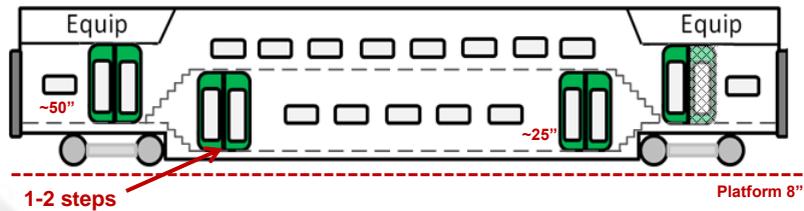


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Modification A (2020)

Cars with More Doors

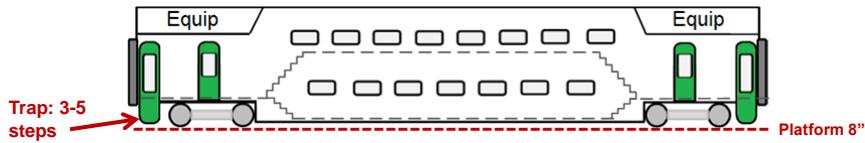


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Modification B (2020)

Cars with Traps



Open Trap



Close Trap



Single Door
w/ Trap

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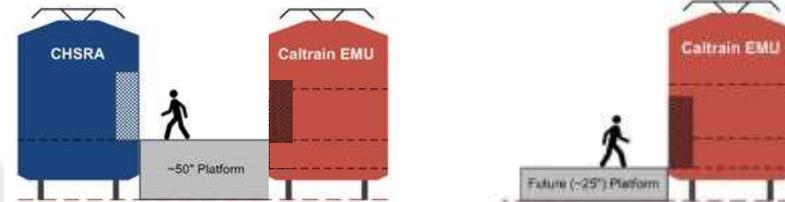


Future Blended System Evaluation Full Fleet EMU Service (HSR and Modified Level Boarding Stations)

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Scenario 1: Shared Platform at HSR Stations Only



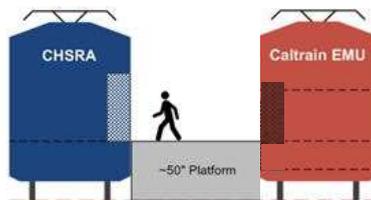
2-3 Stations: Caltrain / HSR
Stations Common Platforms ~50"

25 Stations: Caltrain Level
Boarding ~25"

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Scenario 2: Share Platforms at All Stations



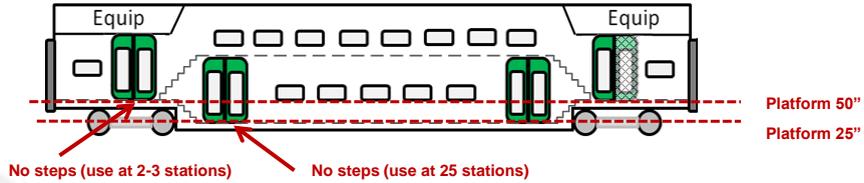
27 Stations: Caltrain / HSR Stations
Common Platforms ~50"

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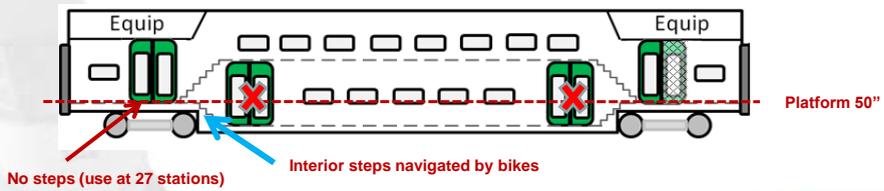


Modification A (Future)

Scenario 1 Shared at 2 - 3



Scenario 2 Shared at All

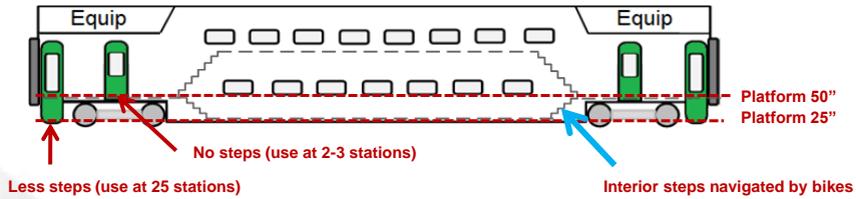


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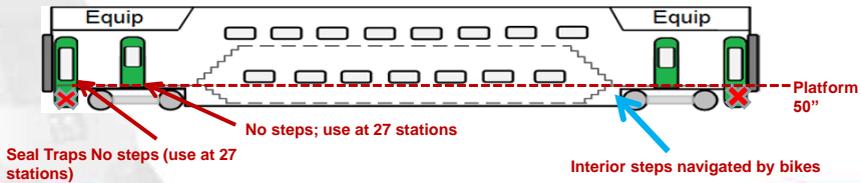


Modification B (Future)

Scenario 1 Shared at 2 - 3



Scenario 2 Shared at All



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Potential Path Forward

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Framework

- HSR / Caltrain blended system partnership
- Blended system not yet defined
 - Community planning
 - Environmental evaluation
- Early investment program (defined / environmentally cleared)
 - CBOSS PTC (2015)
 - Electrification Project (2020)
- Need to make EMU design decision now to not preclude common platforms w/ HSR in future

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Cars with More Doors Option

- Challenges Associated with More Doors
 - Seat loss
 - Passenger circulation inside car
- Short-Term Solution (2020)
 - Design car with 2 sets of doors
 - Keep high doors sealed / use low doors
 - Car configured similar to original EMUs (mitigate challenges)
 - Request HSR to fund modification costs
- Future Blended System (TBD)
 - Community planning / environmental review
 - Define blended service plan and capital improvements
 - Evaluate use of high doors / interior reconfiguration

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Next Steps

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May – July Activities

- Public Meetings
- Release Draft RFP to Car Builders
- June JPB
 - Update on proposed path forward
 - Seats/Standees/Bikes/Bathroom balance
- July JPB
 - Release EMU RFP
 - Regional funding plan update

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Questions

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email: calmod@caltrain.com

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