

# America's DMU

Diesel Multiple Unit



Soon



# Traditional or Modern Trainset?

Have it both ways



**US Railcar's vehicle is an FRA safety compliant, 1200-1500 hp, aerodynamic "locomotive-that-carries-passengers", unites the best of both.**

- Cost Effective
- Greenest Solution
- Quiet Operation
- Interoperable and Flexible
- Optional PRIIA Compatibility (110 mph)
- No waivers required to use freight track





# Is it a Locomotive or DMU?

It is both!

The US Railcar vehicle can pull ANY Amtrak compatible passenger car and is interoperable with ANY AAR standard locomotive, including Multiple Unit (MU) capability.

Is the US Railcar vehicle a passenger car with an engine (DMU) or a locomotive that carries passengers? Technically we are a DMU, but our heart is a locomotive.

***This is not just semantics, it's what makes our "DMU-Locomotive" unique.***

The US Railcar vehicle, was designed for North America starting with the horsepower of a small locomotive, using redundant engines, and the crash worthy framework required by the FRA to run on freight track.





## Two Quick Start Options

### Option 1 – 24 Months:

- US Railcar's FRA compliant DMU, by its very nature, is a quick service start up in 24 months because you can existing track. Just purchase the DMUs, then while they are being built, you make the required track improvements and add stations > Service in 24 months.

### Option 2 – 90 Day:

- If the existing track is reasonable, say class 3, Iowa Pacific Holdings (IPH) will provide quality refurbished rolling stock to begin operation in **90 days** providing all of the operations as well. They are proven operators with \$200 Million of liability insurance. IPH can take full responsibility from track to stations and operations. New DMU based equipment will be phased in as soon as manufacturing is completed.



# Ultimate Flexibility in Your Fleet

## US Railcar's DMU-Locomotive Interoperates with Standard AAR Locomotives And Passenger Cars



Interoperable  
DMU MU'd

Any Standard Car



MU'd  
Locomotive

**In Alaska, you have to be both a rugged individual and a team player who can pull more than your own weight.**

Our cab features locomotive controls so engineers are at home in either end of the train.



# Demonstrating Pulling Power

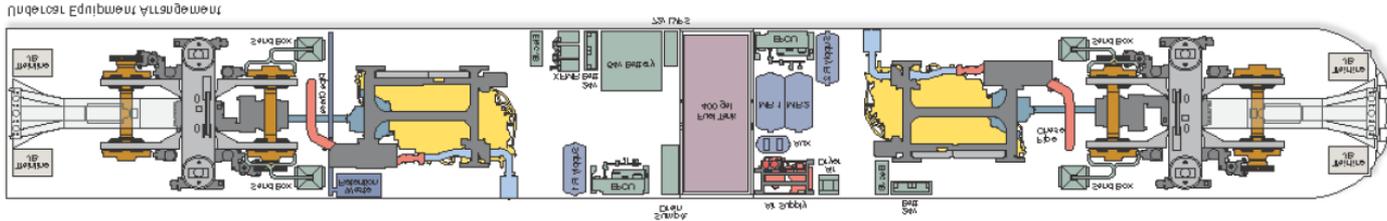
## In Miami – America's DMU



- **BIG RED** pulls 2 Bombardier bi-levels
- Carries approximately 370 passengers
- Proves that it operates on 50% less fuel than locomotive pulled consist saving nearly a \$1 million per year.



# The Advantages of 2 Engine Propulsion



- Ultra reliability with independently operating propulsion systems and 2 engines per propulsion module.
- Added weight of second propulsion module contributes to traction and shunting.
- With the power of a small locomotive, the USR DMU pulls 2 non-powered cars – Any brand conforming to AAR standards.
- Shared fuel tanks and other systems lower maintenance cost for trainset.
- Better traction by driving axles independently
- In consist of powered and unpowered cars performance and fuel economy can be optimized.
- Reduced wheel maintenance compared to driving 2 axles on one truck that require identical diameters to be efficient.



# The Vision

Our flexibility provides you with options from day one. Whether your ridership changes during the day or the season, the USR DMU consist can grow or shrink to match.



This flexibility allows efficient operations, right-sizing for reduced fuel costs and less track wear, all of which contribute to \$ savings!

The next few slides shows a how you can leverage our flexibility.

**WE BUILD *EXACTLY*  
WHAT YOU WANT!**

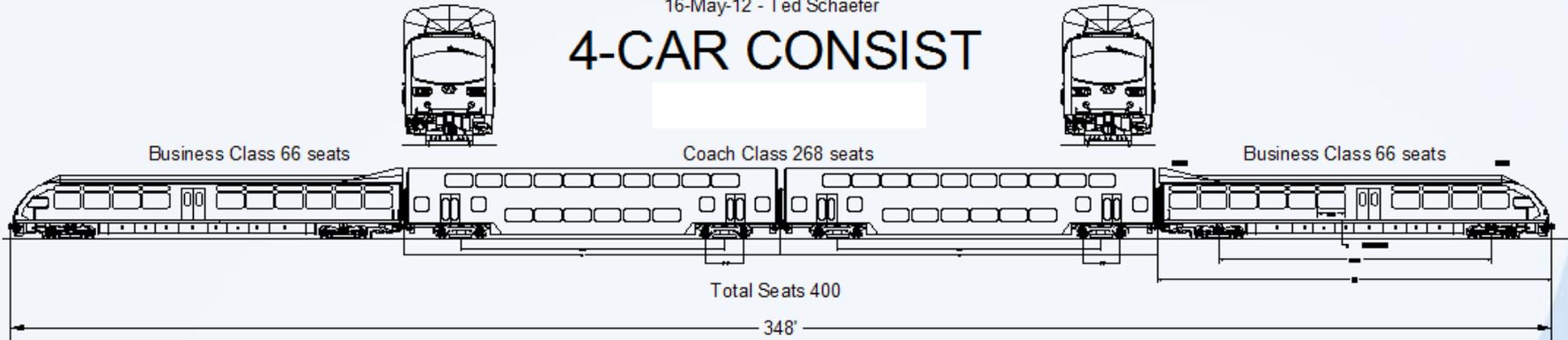


# The 110 Mph DMU Consist

US Railcar, LLC

16-May-12 - Ted Schaefer

## 4-CAR CONSIST



END CARS ARE US RAILCAR DMU-LOCOMOTIVES,  
MIDDLE COACHES ARE FROM ANY MANUFACTURER

### DMU – Next generation PIIA compatible

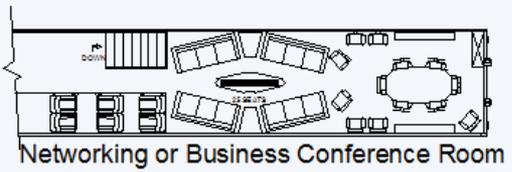
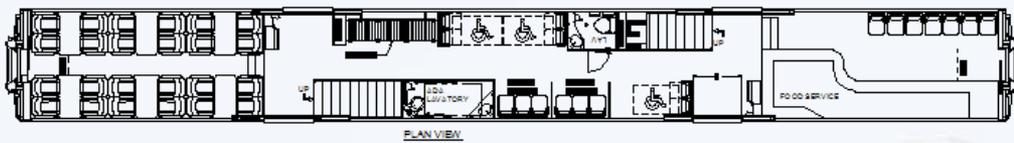
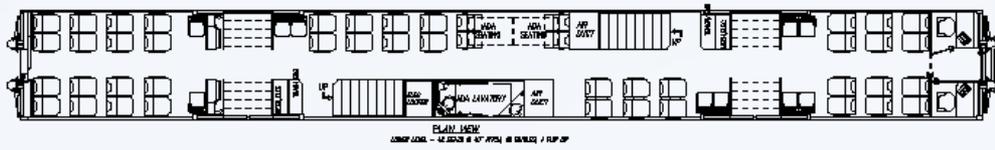
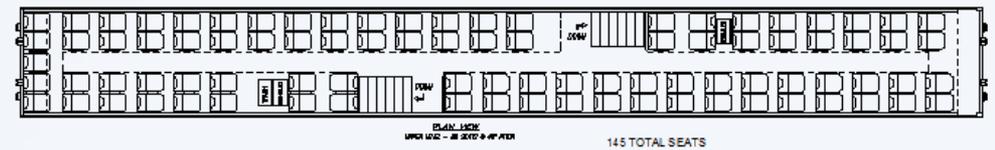
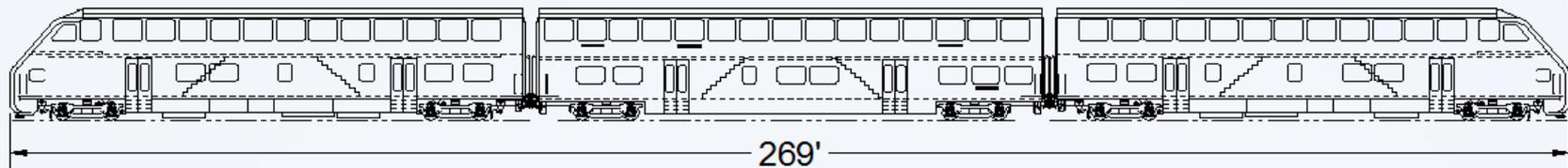
- 66 Business class seat each, 40” pitch
- 89’ Stretched length
- 2 ADA seats each
- Luggage and bike storage
- Split dome window, solar control
- 4 Tier 4f truck engines 770 HP (3080 HP for consist)
- High level boarding
- 14’6” height, TOR

### Unpowered Bi-Level Coaches (any source)

- 134 Coach Class seats average
- 36” Seat Pitch
- 85’ Length
- Galley for 2 levels of service
- Luggage and bike storage
- ADA accommodations
- 110 Mph
- High level boarding
- 16’2” height TOR



# 3 Powered Bi-levels, All USR



US Railcar Bi-level  
43' 3-Car Push Pull  
at High Speed Consist

- One of a kind experience
- Single source
- Possibility of bistro in center car, Conference Room
- 10.3 hp/ton for improvement in acceleration
- Shortest Consist, consistent floor level



# 5-cars, 3 powered

US Railcar, LLC

18-July-12 - Ted Schaefer

## 5-CAR CONSIST



POWERED CENTER CAR

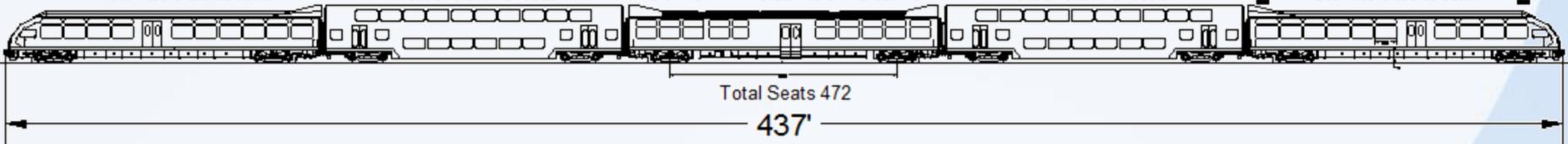
Business Class 66 seats

Coach Class 134 seats

BISTRO WITH 40 SEATS OR 72 SEATS

Coach Class 134 seats

Business Class 66 seats



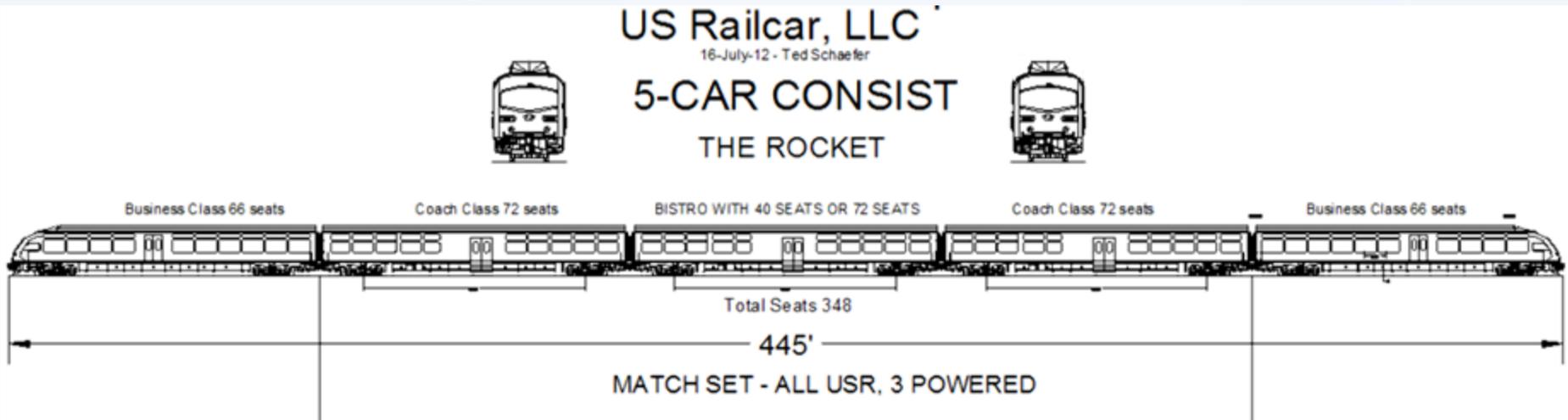
Total Seats 472

437'

END CARS AND BISTRO CAR ARE US RAILCAR DMU-LOCOMOTIVES,  
COACHES ARE FROM ANY MANUFACTURER

- More passengers – 472
- Possibility of bistro in center car
- 7.9 hp/ton vs 6.6 = 20% improvement in acceleration
- Distributed power, better traction

# 5-cars, 3 powered, All USR

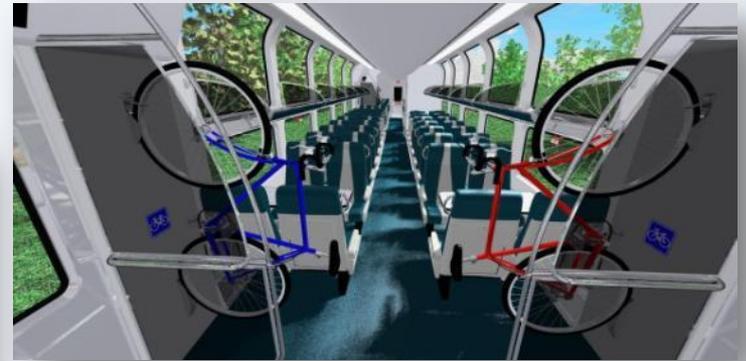


- Matched set – 348 Seats
- Lower Profile
- Single source
- Possibility of bistro in center car
- 7.9 hp/ton vs 6.6 = 20% improvement in acceleration



# Modern Interiors

We Make Commuter and Intercity  
a Luxury Experience



(2-Seat PRIIA Cab available)





# Luxury Interiors



Ideal for Business Class or Tourism



## US Railcar DMU Version 2.0

Underpinning the sleek new exterior and interior, is the same proven, crash-safe frame with years of service in Florida, Oregon and Alaska.



***Both versions  
are available***



The difference is dramatic but evolutionary, allowing US Railcar to use proven designs and knowledge.



## Platform Improvements

- Aero dynamic design
- Improved fuel efficiency
- Quieter
- Modern interior, LED lighting
- Optional Tier 4 engines, including Natural Gas
- Efficient transmission, better dynamic braking
- Optional natural gas operation
- Updated controls and electronics
- Optional PRRIA, 110 mph





## Natural Gas Benefits

US Railcar is currently developing a natural gas propulsion option. This will sacrifice some “intercity” range, but has exciting benefits particularly in the commuter market.

- Lowest Total Cost of Ownership (TCO) over lifetime
  - \$250,000 less costly to build
  - \$1 Million less maintenance over 30 years
  - \$125,000 annual fuel savings
- Reduced emissions and fumes - may permit tunnel operation.
- 5000 pounds lighter
- Natural gas engines are much quieter
- Lower DMU initial purchase price.
- Competitive with electrification but without the upfront cost





# Simplify Maintenance and Lower Costs

*Special facilities not required*



TriMet Facility in Oregon  
Simple, Clean, Low Cost

USR's Natural Gas propulsion will save \$1 Million in maintenance over its lifetime compared to a diesel equipped DMU.

*At 1000 lbs each, the NG "COTS" engines are very easy to handle*

**It cost 30% less to maintain a US Railcar DMU  
1 DMU = maintenance for 1 Locomotive + Coach**

**Easy maintenance and more American parts  
lower the cost of ownership for the US Railcar DMU.**



# America's DMU

Combined, USR's DMUs have accumulated over 1.5 million miles of operation

*"...the ability to take the DMU and run it as a full set as well as use it with existing coaches allowed us to provide desperately needed seating capacity."*

*"...Some DMU's have accumulated over a quarter of a million miles, representing 3,600 trips over 860 operation days and others are fast approaching the same numbers."*

*"...DMU's have redundant power supply with a second traction diesel engine. This second motor assures reliability, if an engine shutdown/failure should occur while the DMU train set is in revenue service, the train can continue in service."*

*"...The cars have been a tremendous asset at a critical time in our growth ..."*

*- Joe Guilietti, Executive Director  
South Florida Regional Transportation Authority.*



# America's DMU

Diesel Multiple Unit

[www.usrailcar.com](http://www.usrailcar.com)

614-246-9465

Soon



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