



## **Introducing Virgin Trains USA**



- Brightline and Virgin Group have formed a strategic partnership
- Brightline will leverage the Virgin brand and marketing expertise for existing and future developments, establishing "Virgin Trains USA"
- Brightline will rename itself Virgin Trains USA and transition to Virgin Trains USA branding in 2020
- Virgin Group has made a minority investment in Brightline, which will be managed and operated by Brightline's executive team and affiliates of Fortress Investment Group



## **Our Current South Florida System**

- Started construction in late 2014, completed late 2017, invested \$1.5bn to date
- Commenced operations in January 2018, opened Miami station in May 2018
- Executed a trademark and licensing agreement with Virgin Group and currently rebranding to Virgin Trains USA
- Operating hourly service along 67 mile corridor with stops in Miami, Fort Lauderdale and West Palm Beach

#### Carried 701,601 passengers Jan - Sept 2019

**State-Of-The-Art Train Sets** 



**MiamiCentral Station** 



MiamiCentral Departure Lounge





### Ramping Up

- Sequential growth in every quarter in both ridership, fare and revenue
- Sequential growth in our business & commuter numbers
- September 30, 2019 Year-to-date 701,061 passengers
  - 106% increase compared to 2018
- Year-to-date revenue up 193% compared to same period last year
- Half of our riders are taking the WPB-MIA segment
- Significant ridership from Treasure Coast Orlando/Central FL driving to West Palm Beach Station
- Strong indicator in our "too long to drive, too short to fly" business model and Orlando potential
- Fitch credit rating agency: Ridership ahead of analyst projections
- Exploring additional stations in Phase One Treasure Coast Space Coast



## **Additional Stations**

Port Miami Aventura	Boca Raton	Treasure Coast	Space Coast



### **Orlando Extension**

- Construction has commenced & material and supply delivery underway
- Service to Orlando to commence in 2022 after approximate 3-year construction period
- Orlando station located at existing Intermodal Terminal Facility at Orlando International Airport









### **Construction Team**





























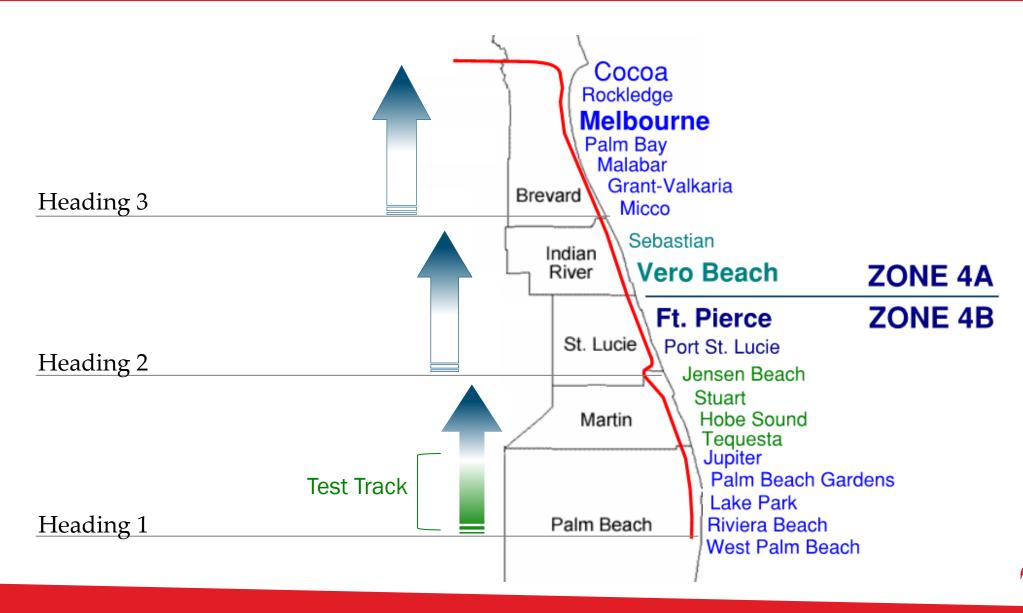








### **Construction Overview**



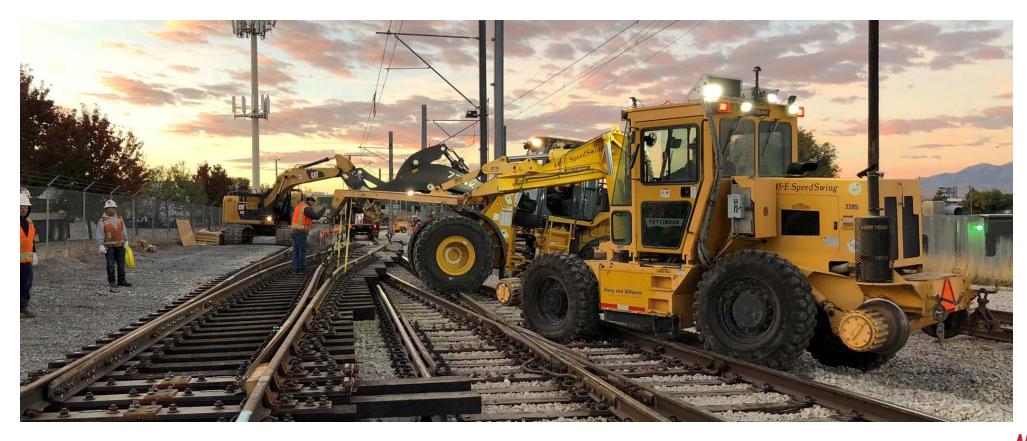
# **Work within Railway Right-of-Way**

Fiber Optic

**Clear and Grub** 

**Earthwork** 

Track Construction Signals



### Phase Two – 170 Miles of New Track



2.35 Million Tons of Granite & Limestone



**225 Million** Pounds of Steel / **2 Million** Spikes & Bolts



440,000 Concrete Ties / 30,000 Timber Ties / 20,000 Steel Ties



**20,000** Railcars Transporting Rock and materials

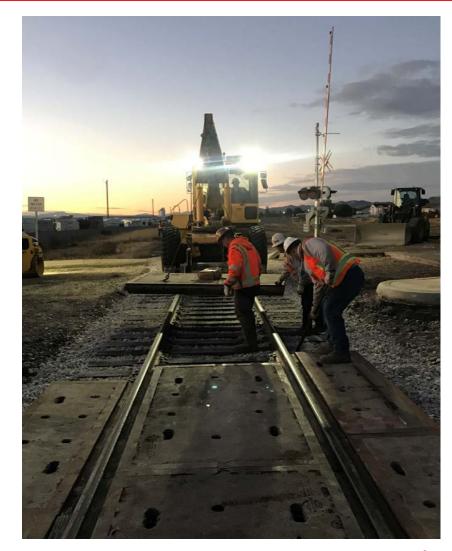


10,000+ Construction Jobs / \$2.4 Billion in Labor Income



## **Temporary Crossing Closures**

- Up to One Week Closures
- Never Adjacent Crossings
- 2 weeks Advance Notice
- Coordinating with local community on MOT and Public Notification of Closures, Detours
- No Night-Time Work
- Special Events





## Phase I Right-of-Way and Grade Crossing

- Newer gate mechanisms/auxiliary flasher lights
- Improved configuration of roadway signage, signals, and pavement markings at crossings
- Positive Train Control (PTC)
- Quiet Zones partnered with MPO's to install additional safety measures to qualify (median separators, exit gates)
- ROW additional signage, fencing, shrubbery, and coordination on suicide prevention
- Constant warning time



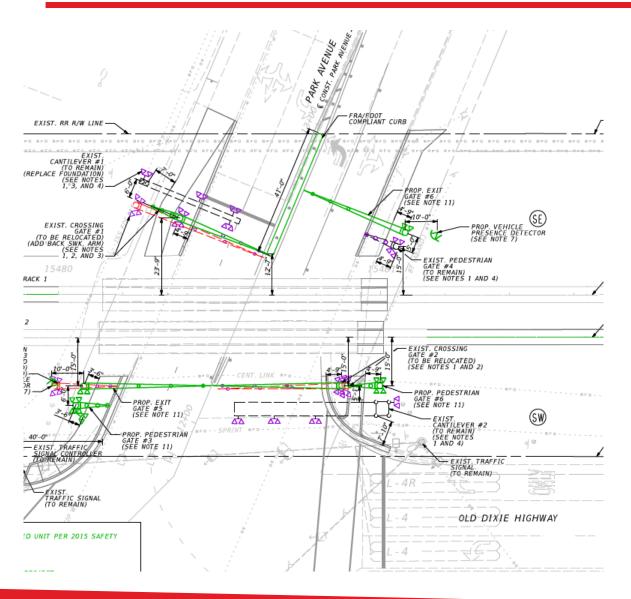


## FRA "Sealed Corridor" Guidelines for speeds 80mph - 110mph

- 4 Quad Gates Center Medians
- Vehicle Presence Detection
- Traffic Signal Preemption
- Improved roadway signage, signals, and pavement markings
- Sidewalks / Pedestrian Gates
- Positive Train Control (PTC)
- Health Monitoring of Crossing Signal Systems
- Quiet zone compatible



## **Grade Crossings – West Palm Beach to Cocoa**



FRA Guidelines include standards for speeds 80 - 110 mph

- Designs follow FRA Sealed Corridor Guideline
  - > Apply to all crossings >79mph
- Similar to quiet zone standard
  - > 100' minimum traffic separators
  - Exit gates
- Vehicle Presence Detection (Radar)
- Pedestrian improvements if Requested by municipalities (via Reimbursement Agmt.)
- Coordination with FDOT Crossing Program

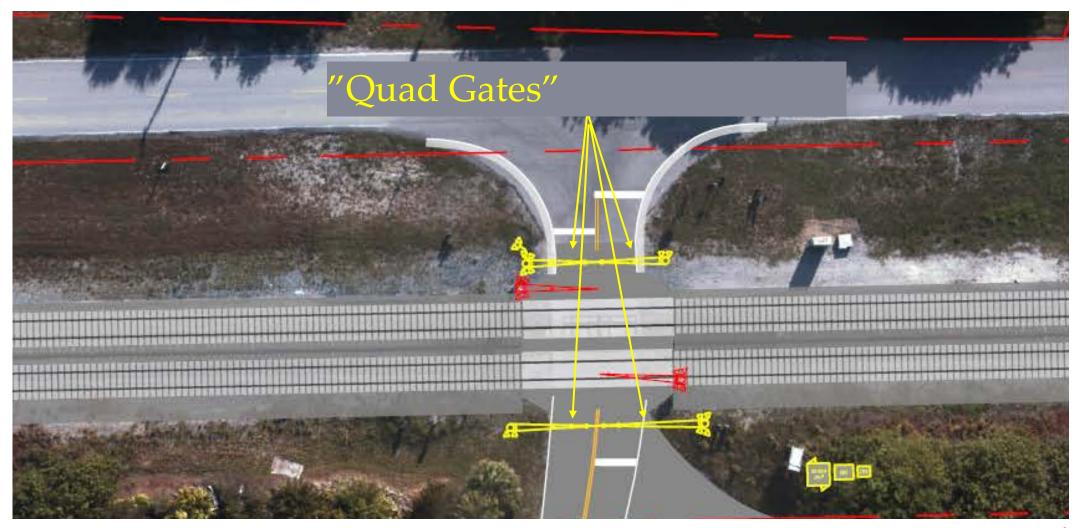


# **Sealed Corridor – Example of Crossing with Center Medians**





## **Sealed Corridor – Example of Crossing with 4-quadrant gates**





## **Brightline Response to South Florida Incidents**

### **Federal CRISI Grant Improvements**

**Preventing Trespassers and Gate Runners** 

- Additional Crossing Gates
- Traffic Delineators (prevent gate runners)
- Active Warning Signs
- Dynamic Envelope (safe zone pavement markings)
- Fencing
- Suicide Awareness / Prevention Program
- System Safety Program (49 CFR Part 270)

SSP is a pending FRA rule specifying requirements to identify and mitigate or eliminate hazards on each railroad's system. In advance of the final rule publication, Brightline/Virgin Trains has taken proactive steps to conduct a hazard analysis to identify areas of the corridor where additional measures, such as those listed above can be implemented.



# **Suicide Prevention**

- To reduce suicides on the FEC Railway corridor, Brightline/Virgin Trains is forming a collaboration with Palm Beach County based 211 Helpline to develop a campaign centered around intervention and awareness to reach people in crisis.
- The campaign will utilize safety messages, PSA's, billboards, and targeted signage in an effort to deter suicide and encourage people in crisis to seek treatment and counseling







## **Safety Outreach and Public Awareness Programs**

#### **Operation Lifesaver**

 Broad based education programs with local communities to raise rail safety awareness

#### **Coordination with First Responders**

- Conduct Homeland Security Exercise and Evaluation Program (HSEEP) compliant exercises with First Responders
- Multi-Agency, Multi-Discipline, Multi-Jurisdiction

#### **Public Notification**

- Variable message signs
- Public service announcements
- Earned media
- Stakeholder outreach
- Online communication





## **Community Engagement**

#### **Community Collaboration**

- Aggressive education campaign in schools, businesses, and communities.
- Training with first responders: hosted nearly a dozen trainings with first responders in Workshop b—12-acre facility in West Palm Beach—on board trains, and in stations to include Police, Fire, and EMS.

#### Safety Ambassadors

- Deployed Safety Street Teams of Brightline teammates and outside contractors to distribute rail safety information already handed out ~20,000 pieces of safety-oriented literature.
- Teams also positioned at approximately 30 of the busiest crossing intersections to distribute rail safety information.





#### **Additional Signage**

- Deployed Variable Message Signs at 20 crossings in each county Brightline currently operates through—Miami-Dade, Broward, and Palm Beach.
- Working with FRA/FDOT on additional permanent signage.

#### **Amplified Public Service Announcements distribution**

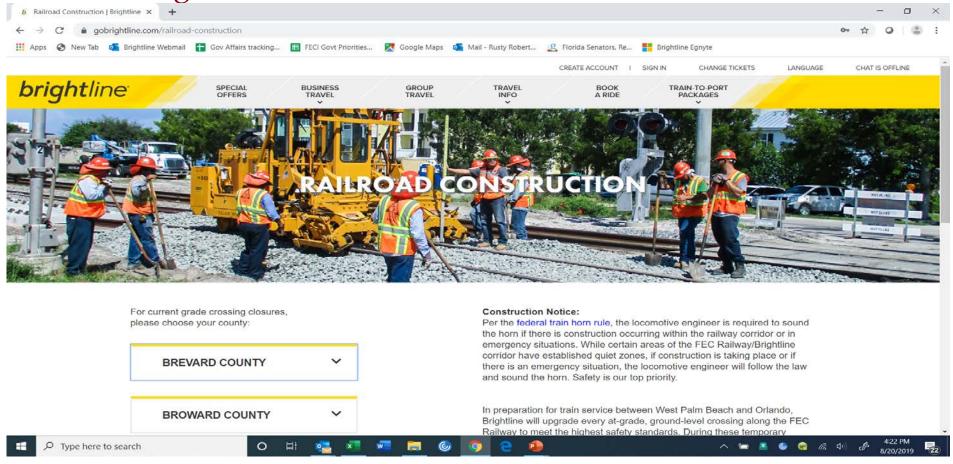
- Began running PSA's in advance of launching the service. Multiple flights ran in radio and TV broadcast in 2017 and Q1/Q2/Q3 in 2018 on TTWN (Total Traffic & Weather Network), iHeartRadio outlets in Miami/Fort Lauderdale/West Palm Beach
- At launch, we amplified the PSA distribution to extend via TV and radio.



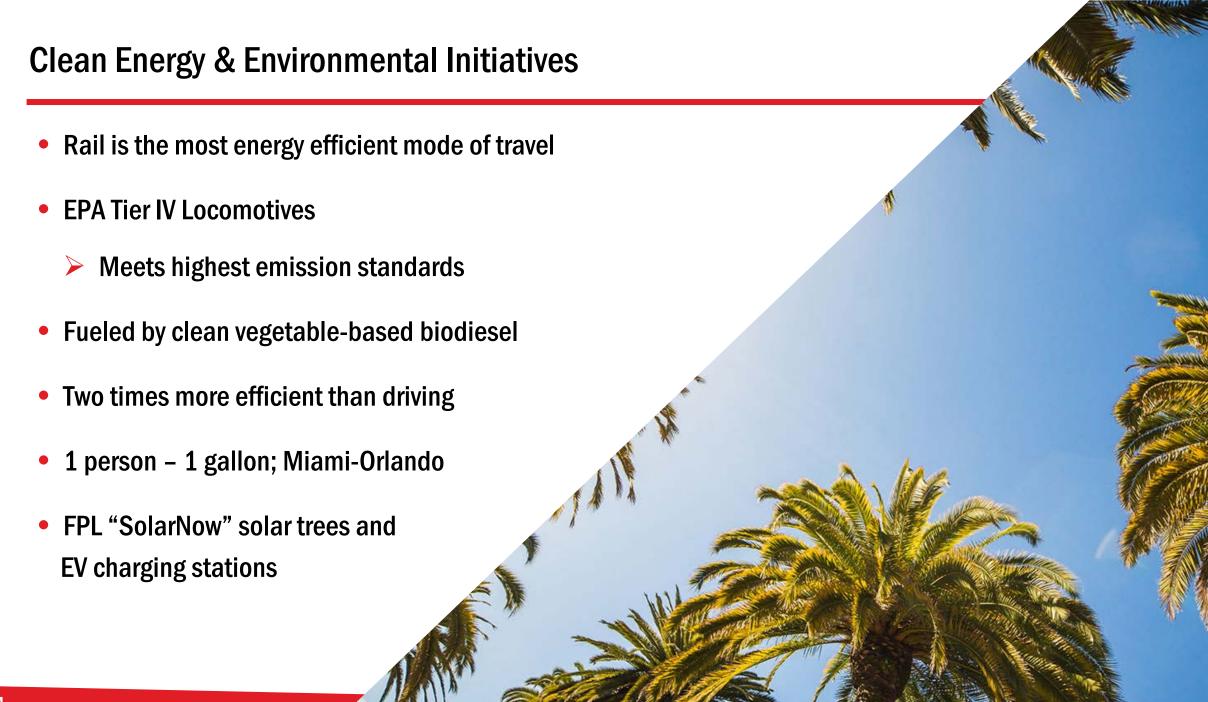
### **Public Outreach**

## Weekly Construction Updates www.gobrightline.com/railroad-construction

Twitter: @GoBrightline







## **Hosting Ocean to Everglades Kickoff**

Brightline/Virgin Trains recently teamed up with the Everglades Foundation, Ocean Conservancy, and Miami Super Bowl Host Committee sponsoring the kickoff event for their Ocean to Everglades initiative at Virgin Miami Central Station.







### **Loxahatchee River**



### **Railroad Bridge Replacement**

- Original built in 1925
- Length 579'
- Navigation channel 42 feet
- Vertical clearances
  - Navigational span: approx. 6.5 feet
  - > Approach spans: approx. 4 feet



## **Loxahatchee River – Railroad Bridge Replacement**

- New bridge rebuilt on top of existing piers
- Replacement of entire superstructure of the moveable (bascule) span and its approaches to accommodate double track.
- West side (abandoned track) will be replaced with a new substructure, ties & rail
- East side: new rail and ties, new span girders
- Full replacement of mechanical components:
  - Electrical, gearing, brakes, rack and pinions, trunnions



## **Loxahatchee River – Small Boat Span**



New steel girders in Spans 1, 3, 5 thru 9

New bascule steel, mechanical, electrical

New Through-girder in Span 4 – raised girders

Gain approx. 3.75 feet of vertical clearance



# St. Lucie River Railroad Bridge – Built 1920





## Proposed New St. Lucie River Vertical Life Bridge

### **Existing Bridge Type**

- Single-track Bascule bridge
- Overall length 1,272 feet
- Vertical clearance closed: 6.6 feet\*
   (\*above mean high water level)
- Horizontal clearance: 50 feet
- Number of underwater piers: 49

### **Proposed New Bridge Type**

- Double-track Vertical Lift
- Overall length: 1,272 feet
- Vertical clearance closed: 18 feet
- Vertical clearance open: 65 feet (matches Roosevelt Bridge)
- Horizontal clearance 180 feet
- Number of underwater piers: 25
- Projected cost: \$100,000,000.

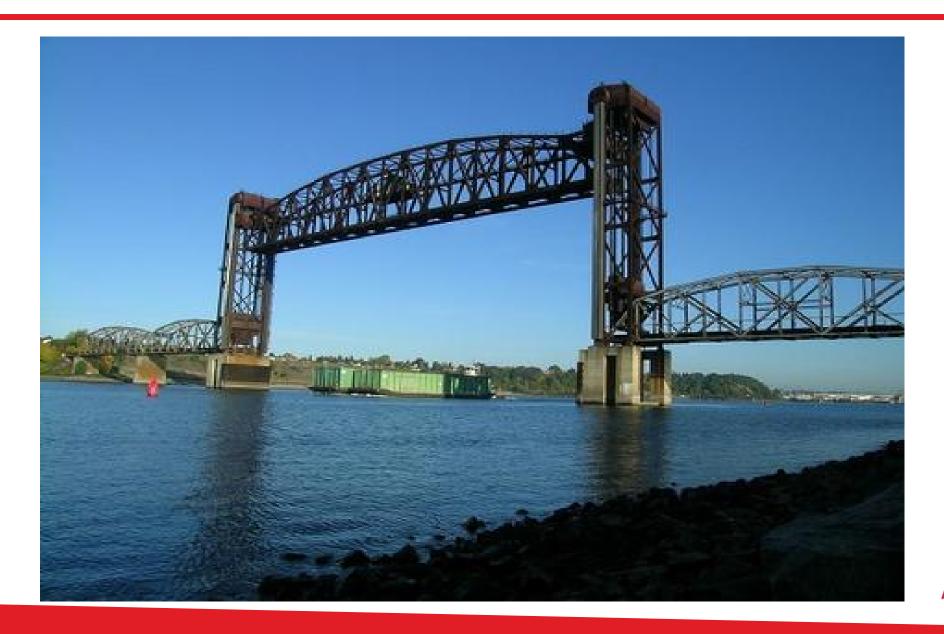


# **Galveston Causeway Railroad Bridge**





# **Burlington Northern Railroad Bridge**





# Pont Jacques Chaban-Delmas Vertical Lift Bridge









# **Thank You**







### **Contact Information**



Rusty Roberts
VP Government Affairs
rusty.roberts@gobrightline.com
(202) 604-5952



Katie Mitzner
Public Information Officer
<a href="mailto:katie.mitzner@gobrightline.com">katie.mitzner@gobrightline.com</a>
(407) 502-3587



### Transportation Safety Statistics in Perspective\*

- Most common cause of rail fatalities
  - > Suicide
  - Gate Running (ignoring gates and warning signals)
    - More than 50% of people killed or injured while trespassing have drugs or alcohol in their system
- Less than 2% of all transportation fatalities nationally are by train
- Nationally, pedestrian and bicycle deaths by trains are 0.1 per 100,000
- Train-motor vehicle collision fatalities are less than 0.05% of all transportation deaths
- 201 highway pedestrian fatalities in 2018 in Palm Beach, Broward, Miami-Dade
- 2017-2018 Treasure Coast: 226 traffic fatalities, 57 pedestrian fatalities
- Florida has 8 of the top 10 cities rated most dangerous highways for pedestrians
- Zero = Number of incidents due to equipment/safety system failure on Brightline system



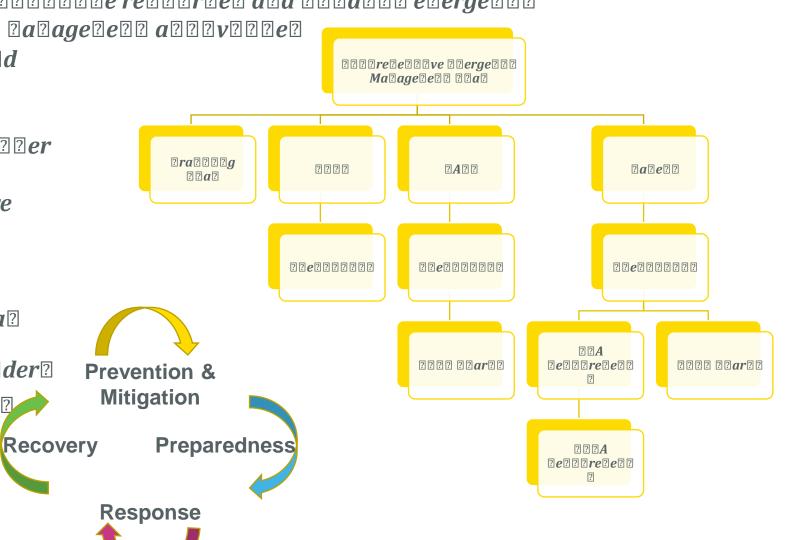
<sup>\*</sup> Sources: NTSB, National Safety Council, Smart Growth America, Operation Lifesaver, FL Dept. of Highway Safety & Motor Vehicles

### A?? ?a?ard? ??a????g

????re?e???ve ??erge??? Ma?age?e?? ??a? ???M?? ??r??g? ????? ?r?g????e ???? ?????e re???r?e? a?d ???d??? e?erge???

• ??a?dard ??era???g ?r??ed?re? A?d ???de???e? deve???ed ?? ?a?age e?erge??????a??????

- o ??rr??a?e??r??er?evere?ea??er
- o ??**re** ? ????**d**?
- o ?????e?? a?d ???ra??r????re ?a???re?
- o ?*era*???*e*??????????????
- o ?a??a? ?ea?? a?d ??????
- o A??????err?r???a?d?r????a? a???
- ??????*ee* ?*ra*????*g* ?*r*?*gra*??
  - o ?e? ??re ?r?e??a????
    - o ??*rre*???*ve A*??????
    - o ??ar? ?? ??rr??a?e ?ea???





### ?a?ered A??r?a?????e??r????

- ?e??r?????re?e??e
  - ??a????, garage? a?d ?er??e?er area?
  - ?e??red ?a? ????r?e?e??, M????ar?, a?d ??A ??ree!
- ??????????*g* ?? ??*a*????, ??*a*???*r*?? *a*?*d garage*?
  - ???????ve ?a?era ???? ???ard a?d ??r?ard? ?a???g v?e??
  - 2?de ?a?era ??r ??a?? d??r v?e???g
  - ??a??e? e?????ed ???? ?a?era? ??r??g???? ???er??r
- ?a??e?ger ? ?aggage ?e??r??? ??ree???g
  - ??a?e ?? ??e ar? de?e???? e????e?? ?e??re e??er??g de?ar??re ????ge a?d ??a???r??
  - ?e?e????? ?r?????ed ??e?? ?? a g?e?? ?r ?? ?aggage
- "Clea? ??v?r???e??"
  - ?e??re ?a????g area a??e????e ???? ?? ???e?ed brick?!?e?ger? a??er ?e??r??? ??ree???g





