The Baylor Baja Experience

The Challenge
- Design and build a vehicle that the “fictitious” company would want to mass produce and sell to the public
- Compete against an international field of collegiate students

Baja SAE Series
- Annual Competitions
  - 2011–2012 Baja Competition Locations
    - Auburn, Alabama (Auburn University)
    - Burlington, Wisconsin (University of Wisconsin – Madison)
  - Four Day Competition
    - Day 1: Check in and set up
    - Day 2: Inspection, engine check, and design presentation
    - Day 3: Dynamic events
      - acceleration, mud bog, tractor pull, maneuverability, suspension and traction, hill climb, rock crawl
    - Day 4: Endurance race and competition results

Participation
- Five to ten members representing their University
  - Freshman through Graduate students
- Over one hundred competing universities
  - 2012 Wisconsin competition, 115 registered competitors
- International Participation
  - Venezuela – Universidad Simon Bolivar
  - Brazil – Escola Politecnica Univ Sao Paulo, Escola de Eng de Sao Carlos USP
  - India – Manipal Institute of Technology
  - Canada – Ecole De Technologie Superieure, Universite Laval
  - Mexico – Universidad De La Salle Bajo, Universidad La Salle

Recognized Engineering Programs
- Top US Engineering Programs:
  - Cornell University 3rd
  - Rochester Institute of Technology 10th
  - Johns Hopkins University 14th
  - University of Notre Dame 32nd
  - Purdue University 37th
  - University of Illinois–Urbana Champaign 81st
- Big 12 Competitors
  - University of Oklahoma 44th
  - Iowa State University 69th
  - Baylor University 74th
  - Oklahoma State University 78th
Competition Events Overview

- Dynamic Events (300)
  - Acceleration Land Maneuverability
  - Mud Bog
  - Sled Pull
  - Suspension & Traction
- Static Events (300)
  - Cost
  - Design
- Endurance Race (400)
  - 1000 Total Points

Baylor Baja’s First Competition

- Design

Baylor Baja’s First Competition

- Fabrication

Baylor Baja’s First Competition

- Testing

Baylor Baja’s First Competition

- Burlington, Wisconsin (June 7-10, 2011)
  - 115 registered teams
  - 74th Overall
  - 75th Design
  - 43rd Endurance
  - 29th Mud Bog
  - 25th Tractor Pull
  - 54th Acceleration
  - 85th Maneuverability
  - 86th Suspension and Traction
  - 68th Prototype Cost
The Baja Experience

2012–2013 Goals

- Place in the top third at the Bellingham, Washington Competition
  - Reduce weight and maintain durability
  - Improve suspension and handling
  - Increase external sponsorship
- Continue to set a strong foundation for the program
  - Organizational structure
  - Financial security

Weight Reduction

- Material Selection
- Component Sizing

Improved Acceleration

- Tire size
- Custom Gearbox
- Weight Reduction

Better Handling & Ground Clearance

Estimated Costs (2012–2013)

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials and Parts</td>
<td>$14,000</td>
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<tr>
<td>Competition Registration</td>
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<tr>
<td>Travel to Bellingham, WA</td>
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<tr>
<td>Tools</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$25,000</strong></td>
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</tbody>
</table>
Sponsorship

› Increase external interest in Baylor Baja
› Sponsorship Opportunities
   - Green $250–$1,499
     - Recognition plaque
     - Company name/logo on website and team shirts
     - Regular updates on team progress
   - Gold $1,500–$2,499
     - All Green rewards
     - Company name/logo displayed on vehicle
   - Bear $2,500+
     - All Gold rewards
     - Company name/logo prominently displayed on vehicle

Questions

How Can You Help?

Monetary Donations – $25,000

<table>
<thead>
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<tr>
<td>Car Fabrication &amp; Assembly</td>
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<tr>
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<tr>
<td>Tools</td>
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</tbody>
</table>

How to Donate

Tax deductible donations to: Baylor University for Baylor Baja

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