



# Badgerloop SpaceX Hyperloop Competition

# Pod II



Corporate Sponsorship Packet Competition II - 2017





### Dear Future Sponsor,

The success of Badgerloop relies on the strong support of companies like yours. This support offers innovative and driven students the opportunity to collaborate on this challenging project, while gaining valuable experience not only in design and fabrication, but also in business, operations, and management. As we are nearing the second decade of the 21st century, the transportation industry has not kept up to speed. At Badgerloop, we aim to bring about revolutionary change in this industry by make efficient, cost effective, intelligent, and lightning fast ground transportation a reality. Taking this concept from paper to product is no small feat, and we hope that you will consider sponsoring Badgerloop to help us in this endeavor. We welcome the following contributions: consultation services, monetary gifts, equipment/materials, or anything you feel would be beneficial to our endeavor.

On June 15, 2015, SpaceX announced their intention to host a competition and build a one mile test tube. Within two months of the announcement, over 1,200 teams had registered to participate. As of January 31, 2016, the University of Wisconsin-Madison was awarded the 3rd best overall design by judges at Design Weekend in Texas. Thirty other international teams joined us in Hawthorne, CA for the final round of the competition, in January 2017. Thanks to our unique pod engineering and holistic integration of virtual reality technologies and feasibility analysis, we won one of two Innovation Awards.

The Hyperloop challenge is not over yet, Competition II is happening this summer. To gain a competitive edge, we are going above and beyond the competition requirements by incorporating innovative designs, such as: active stability control, redundant brakes, industry-grade control systems, magnetic propulsion, virtual reality, and much more.

As a sponsor, your company will receive many benefits depending on your sponsorship tier. For more information about these benefits, please see our sponsorship tiers on page five.

This packet includes a team overview, competition weekend description, projected budget, and information on how to make a donation. We would be more than happy to answer any questions or concerns you may have. Our team is extremely passionate about this project and we cannot wait to help build the future of high-speed transportation. We hope you will consider sponsoring our team to promote innovation, engineering, and education. More information about our team and the competition can be found on our website: <a href="https://www.badgerloop.com/">https://www.badgerloop.com/</a>.

Sincerely,

Zuf Wang Team President

Kali Kinziger Industry Relations Lead





#### **Team Overview**

Within days of the competition announcement, motivated students formed what is now Badgerloop. The innovative nature of this contest made it easy to recruit not only members but also faculty advisors. The talented professors of the College of Engineering are extremely supportive, helping the team create productive timelines and providing expert knowledge. Today the Badgerloop team has over 180 general members (majority are undergraduate students) and two dedicated faculty advisors. Our team is comprised from a variety of majors, such as engineering, computer science, business, and communications.

For the 2015-2016 year, our team entered the competition with the intent to design and build a full, competition-scale pod to be tested at the test track this summer. Thanks to the Physics Department at UW and Professor Duncan Carlsmith of Garage Physics and Venturewell, we have a workspace in Chamberlin Hall that is our Electrical Engineering Headquarters. Additionally, thanks to the College of Engineering, our pod fabrication and assembly is located in the Engineering Research Building as our Mechanical Engineering Headquarters.



# Competition Weekend - January 2017

The Competition Weekend will took place at the SpaceX Hyperloop test track in Hawthorne, CA, over January 27-29 weekend. During that weekend and the Testing Week leading up to it we made great strides in furthering our pods capabilities. Our success came when Elon Musk, founder of SpaceX and the Hyperloop concept sat in our pod! Additionally, we won the Innovation Award attributed to our pod's design, and virtual reality set up. Unfortunately, we did not make it into the tube as there were mechanical and electrical errors that needed to be debugged. We learned a lot during Competition Weekend and are fully equipped to send a working pod down the track next competition!

Here are our latest renderings of the pod. Feel free to contact our Technical Director, Max Henry at henry5@wisc.edu for questions about our design!









# **Budget**

| Subsystem                      | Cost        |
|--------------------------------|-------------|
| Composites                     | \$13,260.96 |
| Structure                      | \$5,793.91  |
| Propulsion                     | \$9,634.07  |
| Braking                        | \$6,924.77  |
| Stability                      | \$1,193.80  |
| Electronics                    | \$2,438.40  |
| Pod Total                      | \$39,245.91 |
| Pod Shipping                   | \$5,000     |
| Damage Control and Maintenance | \$15,000    |
| Team Member Lodging & Travel   | \$15,000    |
| Grand Total                    | \$74,245.91 |

# **Sponsorship Tiers**

| Category                    | Platinum          | Gold              | Silver      | Bronze     |
|-----------------------------|-------------------|-------------------|-------------|------------|
| Gift (monetary/material)    | \$20,000          | \$10,000          | \$5,000     | \$1,000    |
| Logo on pod                 | Most<br>Prominent | Very<br>Prominent | Prominent   | Visible    |
| Logo on competition apparel | Most<br>Prominent | Very<br>Prominent | Prominent   | Visible    |
| Logo on website             | Section I         | Section II        | Section III | Section IV |
| Handbook of member resumes  | Х                 | Х                 | Х           |            |
| Invitation to Reveal Event  | X                 | X                 | X           | X          |
| Social Media Shout out      | Х                 | X                 |             |            |
| Badgerloop newsletter       | Х                 | X                 | X           | Х          |

For questions about maximizing your sponsorship benefits please contact Kali Kinziger at kkinziger@wisc.edu. Thank you!





## **Tax Exempt Donations**

Badgerloop has partnered with the UW Foundation in order to help manage our incoming finances and to allow donations to be tax-exempt. All donations made to Badgerloop via the methods below will be tax exempt.

#### Check

Checks should be payable to "UW Foundation," with "Badgerloop Fund" in the memo line. Please include a letter stating gift amount, intended purpose, and contact information.

UW Foundation C/o Brad Green 1848 University Ave Madison, WI 53726

#### **Online**

Make a private donation online to Badgerloop by visiting the link below. Also tax-exempt.

http://supportuw.org/giveto/badgerloop

#### **Materials**

Please contact Kali Kinziger (<u>kkinziger@wisc.edu</u>) regarding material donations.







Thank you to those who are helping us in Competition II!

