The City of Fort Smith and the University of Arkansas – Fort Smith extends its admiration and appreciation to the BEST hubs for their outstanding work in bringing this important program to students throughout the country.

We also thank the teachers, mentors, parents, and sponsors of BEST hubs who have given generously of their time, effort, and finances in support of the many students involved in BEST 2015.

Most of all, we congratulate all BEST 2015 teams for a job well done. You’re all winners!
## Table of Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher’s To-Do List</td>
<td>2-3</td>
</tr>
<tr>
<td>2014 Championship Schedule</td>
<td>4-5</td>
</tr>
<tr>
<td>General Information and Important Notes</td>
<td>6-9</td>
</tr>
<tr>
<td>Pit Protocol &amp; Information</td>
<td>10-13</td>
</tr>
<tr>
<td>Frontier Trails BEST Awards and Judging Guidelines</td>
<td>14-16</td>
</tr>
<tr>
<td>Code of Student Conduct</td>
<td>17</td>
</tr>
<tr>
<td>Contact Information</td>
<td>18</td>
</tr>
</tbody>
</table>
Teacher’s To-Do List

We recommend you follow this guide of tasks that need to be completed before and at Frontier Trails BEST.

#1 – Complete the **Team Information Form** on the [http://uafs.edu/ftbest/ft-best-home](http://uafs.edu/ftbest/ft-best-home) web site immediately after your local competition and fax it to the number on the form. The contact person will be emailed their **Team ID** and **Access Code** to enable them to select their team’s Presentation, Picture, Display Judging, and Robot Check-In times by using the “Schedule and Registration” left navigation highlight on the FTBEST web site.

#2 – Mail your Project Notebook to the address on the **Team Information Form**.

#3 – Make your hotel and travel arrangements using the **Hotel Information** on the [http://uafs.edu/ftbest/ft-best-home](http://uafs.edu/ftbest/ft-best-home) web site. If you’re booking a bus, be sure to check with the company about how long the driver can be on duty without having to take a break. Many states have laws regarding driving-time limitations for bus drivers.

#4 – **Lion Treks Sign-up** *(optional campus tours if available)* – Information and sign up will be available at the Registration desk.

#5 – In planning ahead for Frontier Trails BEST consider these issues:

A. **Notebook** – read this notebook carefully and even make copies for other key people, particularly noting the information found in **Pit Protocol and Information** and the **General Information and Important Notes** sections.

B. Determine one adult who will be responsible for receiving any emergency phone calls that may occur from home while your team is at Frontier Trails BEST. Provide that person’s cell number to parents, other school officials, and others. There is no University of Arkansas – Fort Smith official at the Fort Smith Convention Center or the Stubblefield Center who can take such calls. In addition, a medical release form signed by parent or guardian, in your possession, in case emergency medical treatment is necessary.

C. **Display Tear Down/Clean UP** – each team will need to tear down their Display and clean up their area between 3:00-5:00 p.m. on Friday afternoon.

E. **Mixer** – each team must submit the number of students, teachers, mentors, and family members attending for planning purposes. Please email this information to sarah.green@uafs.edu no later than 3:00 p.m.
Monday, November 30, 2015. The Friday night mixer will be held at the Convention Center at 6:00 p.m. The evening event will end at 10:00 p.m.

F. **Pit Meeting** – Friday afternoon at 5:00 p.m. there will be a **mandatory** meeting in the seating area near the Pit Area of the Convention Center for everyone who plans to be in the Pit on Saturday so that we can go over Pit protocol and information. This meeting is intended to cut down on any confusion in the Pit, given that there could be up to 40 teams. Be sure to pass this along to EVERYONE (students, teachers, and mentors) who should be there.

G. **Best T-Shirt Design Award** – Judged prior to Lunch Break by having a selected team member come on the Game Field Stage to display their team t-shirt.

H. **Frontier Trails BEST Conclusion** – We are mindful that we have many teams from far away that need to get on-the-road as soon as possible afterwards. We assure you we are conscious of this in putting together the schedule and will do everything possible to stick to it. However, “stuff happens” and that doesn't always work.
2015 Championship Schedule

*Times and Locations Subject to Change*

Thursday, December 3\textsuperscript{th}

3:00 p.m. – 6:00 p.m. **Team Registration**, Convention Center North Box Office

9:00 a.m. – 8:00 p.m. **BEST Award Exhibits setup**, Convention Center Exhibit Hall C

6:00 p.m. – 9:00 p.m. **Notebook Judging**, UAFS campus, Baldor Technology Center Room 108

12:00 p.m. – Midnight Curfew for Frontier Trails BEST Students

Friday, December 4\textsuperscript{th}

8:00 a.m. – 3:00 p.m. **Team Registration**, Convention Center North Box Office (late arriving teams only)

8:00 a.m. – 8:45 a.m. **Frontier Trails BEST Award Judging Orientation**, Exhibit Hall A

8:00 a.m. – 10:00 a.m. **BEST Exhibit Area Set-Up**, Convention Center Exhibit Hall C (late arriving teams only)

8:00 a.m. – 3:00 p.m. **Team Photos**, Convention Center North Rotunda

9:00 a.m. – 4:00 p.m. **Marketing Presentations**, Convention Center Meeting Rooms 1, 2, & 3

9:00 a.m. – 3:00 p.m. **BEST Award Exhibit Judging**, Convention Center Exhibit Hall C

11:00 a.m. – 4:00 p.m. **Machine and Pit Check-In**, Convention Center Pit Area

12:00 p.m. – 1:00 p.m. **Presentation/Exhibit Judges Luncheon**, Convention Exhibit Hall A

1:00 p.m. – 3:00 p.m. **BEST Award Exhibit Area Open To Public**, Convention Center Exhibit Hall C

3:00 p.m. – 5:00 p.m. **Exhibit Tear Down/Clean Up**, Convention Center Exhibit Hall C

6:00 p.m. – 10:00 p.m. **Mixer**, Convention Center

12:00 a.m. Midnight **Curfew for Frontier Trails BEST Students**
Saturday, December 5th

6:00 a.m.  **Convention Center Open for all Participants**

6:00 a.m. – 7:00 a.m.  **Late Registration**, Convention Center Box Office

6:00 a.m. – 7:00 a.m.  **Late Machine Check-In**, Convention Center Pit Area

6:00 a.m. – 3:00 p.m.  **Judge/Volunteer Hospitality Room Open**, Convention Exhibit Hall A

6:30 a.m. – 6:00 p.m.  **Pit Open for Participants**, Convention Center Pit Area

7:00 a.m. – 7:30 a.m.  **Judges Meeting**, Exhibit Hall A

7:00 a.m. – 7:30 a.m.  **Coaches Meeting (2 per team)**, Convention Center Exhibit Hall A

7:00 a.m. – 7:30 a.m.  **Drivers Meeting**, Convention Center Game Field

7:30 a.m. – 5:00 p.m.  **Concession Stand Open**, Convention Center Hallway

7:30 a.m. – 6:00 p.m.  **Convention Center Open to Public**

7:45 a.m. – 8:00 a.m.  **Opening Ceremony**, Convention Center Game Field

8:00 a.m. – 12:00 p.m.  **Pay Dirt Begins! Preliminary Rounds**

12:00 p.m. – 1:00 p.m.  **FT BEST Sponsors/Judges/Volunteers Luncheon**, Exhibit Hall A

12:00 p.m. – 1:00 p.m.  **Lunch on your own for FT BEST Teams**

1:00 p.m. – 5:00 p.m.  **Pay Dirt Resumes! Preliminary/Semi-Final/Final Rounds**

5:00 p.m. – 6:00 p.m.  **Awards Ceremony & Official Championship Photos for Winning Teams**, Convention Center Game Field

6:00 p.m.  **2014 Frontier Trails BEST Championship Concludes**
General Information & Important Notes

NOTE: an item that is preceded by two asterisks (**) is considered an important note for the team’s attention

**Cheerleaders, Mascots, Music, and Noise-Makers

Teams are encouraged to bring their cheerleaders, pep squads, mascots, and musicians to rally behind them at the competition. Noise-makers are allowed; however, whistles, air horns and other similar high intensity noise-makers are prohibited inside the Convention Center. Amplified instruments or music boxes are not allowed! In addition, the Head Judge has the right to ban any noise-makers that are deemed as a hearing hazard to those in attendance at Frontier Trails BEST.

Code of Student Conduct

Review the "Code of Student Conduct" in the Championship Handbook with your students. Make sure they understand they are guests of the City of Fort Smith and the University of Arkansas – Fort Smith. Be advised that policy restrictions at the Convention Center will be monitored by Convention Center and Frontier Trails BEST personnel.

Concessions

Concessions are located in the Front Hallway of the Convention Center. A full range of lunch and snack items will be for sale throughout the competition. Hours of operation: Saturday, 7:30 a.m. – 5:00 p.m.

**Emergencies and First Aid

For incoming family emergency calls for BEST team members, it is recommended that families be given the cell phone number of a single, official team chaperone whom they can call.

The First-Aid station is located outside of the Box Office in the Convention Center near the Registration Desk.

Equipment Tagging

We recommend that teams label or tag ALL equipment—for table displays, oral presentations, and Pit tables. Frontier Trails BEST does not assume responsibility for stolen or lost equipment.
Lost and Found

Lost and Found is located at the Registration in the Box Office of the Convention Center.

**Parking**

Parking is unrestricted during the Championship weekend. Vehicles associated with BEST teams may park in the any of the lots around the Convention Center.

Photos – Blanket Release Permission

Frontier Trails BEST assumes blanket permission to photograph BEST team members, teachers, parents, chaperones, mentors, and other guests who are in attendance. These photos are used for promotional purposes in printed materials, videos, and on two websites: [www.bestinc.org](http://www.bestinc.org) and [http://uafs.edu/ftbest/ft-best-home](http://uafs.edu/ftbest/ft-best-home).

**Pit Meeting**

It is imperative that ALL team members, mentors, and teachers—anyone who needs to be in the Pit during the competition—attend the Pit Meeting scheduled for 5:00 p.m. on Friday in the seating area near the Pit Area of the Convention Center. Procedures, safety issues, and “pit protocol” will be covered to cut down on confusion and stress on Saturday.

Pre-Opening Saturday Morning

Frontier Trails BEST starts at 7:45 a.m. and we want to have a full house for the opening. Please encourage everyone associated with the team to be in the stands for the opening.

**Registration Check-in**

Before they can begin Frontier Trails BEST activities, teams must check in at Registration at the Fort Smith Convention Center North Box Office. Check-in is 3:00 p.m. – 6:00 p.m. Thursday, 8:00 a.m. - 10:00 a.m. Friday. Late Registration will be at the Convention Center North Box Office 6:00 a.m. - 7:00 a.m. Saturday. Teams arriving for the Championship after 5:00 p.m. Friday must check in Saturday.

**Spirit and Sportsmanship Ballot (BEST Award teams only)**

Each team gets a chance to vote on the teams that demonstrate the best spirit and sportsmanship. Scores from these sheets will be included in the final judges’ vote. The ballot itself is included in the team’s registration packet. NOTE: ballots
are due at Registration at the Convention Center by 2:00 p.m. on Saturday in order to be counted. Late ballots will not be accepted.

**T-Shirt Award**

Judged prior to Lunch Break by having a selected team member come on the Game Field Stage to display their team t-shirt.

**Team Exhibit Staffing (BEST Award teams only)**

It is the responsibility of each team to make sure the exhibit is staffed from 8:00 a.m. to 3:00 pm (only during your scheduled judging time) on Friday for judging/judges interviews (excluding lunch time).

**Team Banners**

Teams may post spirit banners on the first-level railing in the Convention Center before the start of the competition on Saturday. Banner restrictions:

- Maximum size is 2’ wide x 8’ long
- Tape is allowed. Teams should bring their own tape
- Banners may not have any design or language of a crude nature
- Banners and other team signage are not to be posted at other sites in the Convention Center

All banners need to be taken down and thrown away at the conclusion of the event.

**Team Photos (Mandatory)**

We require each team to have a photo made. Team Photos times will be selected on-line at the Frontier Trails BEST web site. A local professional photographer will be taking the photos and Frontier Trails BEST will make those photos available to each team in electronic form. The team can then incur their own printing cost for as many copies as they wish.

**Team Seating in Stands**

Teams cannot claim seating sections on Friday. Team seating is on a “first-come, first-served” basis on Saturday; the stands will be open for claiming team seating at 6:00 a.m. Teams are restricted from roping off any reserved seating.

**Trash Removal from Stands/Display Areas**

There are other events scheduled for the day after Frontier Trails BEST and we need teams’ help in cleaning up the stands as much as possible. Please help us
out by taking all posters/banners, cups, wrappers, and other trash to the large garbage cans that are located throughout the Convention Center.

**Unloading Equipment & Materials**

Teams may temporarily “double-park” by red/yellow curbs anywhere around the Convention Center to unload their equipment and materials, but vehicles must have on their hazard lights while unloading. Failure to do so will result in parking fines. The same thing applies for loading up after the competition.
Pit Protocol & Information

Access to Pit (for Load-In/Out and During the Competition)

*Friday Load-in/out* – The Pit opens at 11:00 a.m. Teams are NOT allowed on the Game Floor any earlier than this time due to the setting up of the playing fields and Pit. **Access to the Pit for loading in/out machines and equipment can only be gained by using the Entry Doors to Exhibit Hall B.** Frontier Trails BEST personnel will be posted there to help guide teams to the Pit. The Pit will close promptly at 5:00 p.m.

*Saturday Load-in/out* – The Pit opens at 6:30 a.m. Access to the Pit for load-in/out is the same as on Friday.

*During the Competition* – Access is limited via the doorway into Exhibit Hall B. The doorway will be identified at the Pit Meeting on Friday. A Frontier Trails BEST staff person will be stationed at the doorway that leads to the Pit and will be checking for passes. No pass no access.

**Access to Power**

There is Power at every Team Table for battery charging in the Pit Area.

**Cell Phones**

Cell phones may be used in the Pit as a means of communicating with team members who cannot access the Pit due to the limited number of passes per team.

**Compliance Check-In on Saturday**

Compliance Check-In takes place in the front of the Pit from 11:00 a.m. – 4:00 p.m. on Friday and from 6:00 a.m. - 7:00 a.m. on Saturday morning. Violations must be remedied immediately or the machine will not be allowed to compete. Teams will select a *Compliance Check-In Time Assignment* via the Frontier Trails web site [http://uafs.edu/ftbest/ft-best-home](http://uafs.edu/ftbest/ft-best-home).

**Driver’s List**

Each team must turn in a driver’s list at the Pit Meeting Friday afternoon at 5:00 p.m. The drivers will be checked throughout the competition – including the semi-final/final rounds – to insure that the driving is spread out among all drivers.

**Driving Practice on Friday at the Convention Center**

Driving practice runs from 11:00 a.m. – 4:00 p.m.; it is an optional activity for
teams.

- Only drivers and a (1) team coach may be in the field area during the practice session.

- Each team is allotted 60 minutes to practice. Two fields are available, so eight teams at a time may practice.

- Sign-up for the 60-minute time slots takes place on the FTBEST web site under the Team Registration menu.

**Driver Rotation**

Drivers must rotate equally throughout the competition on Saturday. Rotation will be checked at the Staging area where teams await the upcoming round. Drivers who are out of rotation will be asked to swap with the appropriate driver. Failure to do so may result in not being allowed to compete in the upcoming round.

**Equipment & Materials Tagging**

Teams should label and/or tag their battery chargers, batteries, and any other equipment and/or materials that will be used at either the repair station or battery charging station. Likewise, tools used at the team’s table should be tagged or marked.

**Game Boss – Teams’ Contact for Problems or Concerns**

The Game Boss, who will be roaming through the Pit during the competition, is THE ONLY designated contact for a team’s issues with equipment, personnel, or other teams. Other Frontier Trails BEST personnel will not handle such matters. The Game Boss will be introduced at the Pit Meeting Friday afternoon so that teams will be able to recognize them on Saturday.

**Machine & Equipment Storage Overnight**

Machines and equipment may be stored at your own risk overnight Friday in the Pit. But, the building is locked and monitored by Security.

**Photo of Robot**

We will be taking photos of all robots during Compliance Check-In at the Convention Center Friday 11:00 a.m. – 4:00 p.m. The photos are used in judging. A Frontier Trails BEST staff member will be on hand to coordinate this in the Pit.
Pit Meeting Friday at 5:00 p.m.

There is a mandatory meeting for ALL team members, mentors, and teachers that expect to be in the Pit during the competition. The meeting will cover information provided in this document as well as other logistical issues.

Pit Passes on Saturday

Due to the limited size of the Pit, our goal is to cut down on the large number of “peripheral people” in the area. Therefore, each team will receive five (5) Pit Passes in their registration materials for use on Saturday. Access to the Pit will be closely checked and only those individuals with Pit Passes will be allowed access. It is up to each team to determine who needs to be in the Pit and how passes will be swapped.

Repair Station

For teams that need repair assistance, there is a designated Repair Station located at the rear of the Pit.

“Team Rep” Lanyard

Each team will have a lanyard in their registration packet that is to be worn by a single team member (student) who wishes to voice a complaint or concern to the Game Boss. This is done so that one person per team addresses the concern and not the entire team, which is both unproductive and chaotic.

Team Member vs. “Adult” Machine Work

Each team must self-regulate members’ behavior in the Pit. The “Pit Police” will be looking to see if more adults are working on the machines than are students. If identified, the adults will be asked to either leave the Pit or substitute for a student. The emphasis is on student-led repairs.

Team Numbers

Each team’s machine is required to have its team number on its machine in an easily visible location. The number must be a minimum 2” in size; otherwise the judges have a difficult time distinguishing machines.
2015 Frontier Trails BEST Awards and Judging Policies

I. Awards

A. BEST Award teams **only** are eligible for the following awards:

**BEST Award**
This award is given to the team that best embodies the concept of *Boosting Engineering, Science and Technology*. Winning the BEST Award is considered the highest achievement any team in the competition can accomplish. First, second, third, fourth place trophies will be awarded.

**BEST Award Category Awards**
Trophies will be awarded to the highest score in the following BEST Award categories:

- Best Project Engineering Notebook
- Best Marketing Presentation
- Best Table Display and Interviews
- Best Team Spirit and Sportsmanship

B. **All** teams are eligible to receive the following awards:

**Game Division Award**
Trophies will be awarded to the teams whose machines finish first, second, and third in the tournament bracket. In addition, fourth place “finalist” will also be awarded.

**Founders Award for Creative Design**
This award is given to the team that makes best use of the engineering process in consideration of offensive and defensive capabilities in machine design; awarded in recognition of BEST founders Steve Marum and Ted Mahler. First, second, and third place plaques will be awarded.

**Most Robust**
This award is given to the team whose machine requires the least maintenance during and between matches and is generally the sturdiest machine in the competition. First, second, and third place plaques will be awarded.

The following NEW award will be presented at all BEST regionals:

**BEST Simulink Design Award**
Awarded to one team in each of the 4 BEST regions (Northern Plains,
Frontier Trails, Souths, Texas) that best applies the ‘Simulink Support Package for VEX’ based on the judging criteria and robot performance in the competition.

**Most Elegant**
This award is given to the team whose machine demonstrates the best design and execution of the game - the machine that makes you say “Wow!” First, second, and third place plaques will be awarded.

**Most Photogenic**
This award is given to the team whose machine is the most eye-pleasing. First, second, and third place plaques will be awarded.

**igus TOP GUN Award**
This award goes to the team that scores the most points in a single round of competition. *(Optional depending upon Game)*

**T-Shirt Award**
This award is given to the team with the most original game specific team t-shirt design. First, second, and third place plaques will be awarded.

**Web Page Award**
This award is given to the team with the best team web site; based on page functionality, creative use of the game theme, information about team members and community efforts. First, second, and third place plaques will be awarded. *(Web address should be included on the Team Information form available on-line at our website or sent via email to john.martini@uafs.edu by Wednesday November 25, 2015 to be considered for this award.)*

**BEST Award Recognition**
- The teams ranked first, second, and third in the BEST Award Division will receive trophies superior to the teams finishing first through third in the Game Division.

- **BEST Award Category Awards**
Trophies will be awarded to the highest score in the following BEST Award categories:
  - Best Project Engineering Notebook
  - Best Marketing Presentation
  - Best Table Display and Interviews
  - Best Team Spirit and Sportsmanship

- Ties will be allowed only after detailed review by the judges.
- Presentation of the BEST Award trophies will be made during the awards
ceremony on Game Day.

**IV. Additional Information about competing at Frontier Trails BEST**

**Seating at Frontier Trails BEST**
As with all teams at the Championship, Frontier Trails BEST Award candidate teams may not rope off reserved seating for their teams before Saturday.

**Results**
Each team will be mailed a copy of its score sheets by December 31, 2015. Top rankings will be posted on the Web.

**Questions**
Inquiries about the Frontier Trails BEST Award guidelines must be submitted to the BEST Inc. web site Q&A board (at www.bestinc.org) for posting and response to all teams. **Please do not contact the Frontier Trails BEST office (e-mail or phone) with these questions.**

**NOTE:** SEE AWARDS AND JUDGING FILES ON WEB SITE FOR DETAILS!!!!!
Code of Student Conduct

Frontier Trails BEST expects teams and supporters accompanying them to conduct themselves in an appropriate manner while participating in the Championship. **This includes all activities associated with their participation in the event.**

- Appropriate conduct of teams and supporters is the sole responsibility of school officials and other adult chaperones that have legal responsibility as supervisors.

- Students should be under the supervision of school officials or chaperones during all excursions and competition activities, and in hotels and restaurants.

- Students who violate the conduct code at any point during Frontier Trails BEST are subject to suspension from remaining competition activities.

- **Frontier Trails BEST reserves the right to refuse participation in future competitions, to any team whose behavior has been disruptive.**

Inappropriate conduct includes, but is not limited to, the following:

- Property damage, vandalism, or theft.

- Appropriation of University of Arkansas – Fort Smith or Frontier Trails BEST memorabilia.

- Use of alcohol or illegal drugs.

- Use of water pistols, water balloons, or other creative missiles.

- Fighting or loud/foul language or other disruptive/rude behavior.

- Disruptive and excessive noise during activities other than the actual competition.

- Dress that includes shirts/t-shirts and shoes are expected of all students during the competition.

- Distractive apparel that displays design or language of a crude nature.

**Financial liability for all damages or losses incurred by actions of team members and supporters shall be the sole responsibility of the team/school.**
Contact Information

Awards & Judging
   Dr. Kerrie Taber (479-788-7707; kerrie.taber@uafs.edu)

General Administration
   Jason Merritt (479-788-7877; jason.merritt@uafs.edu)

Press Coverage
   John Post (479-788-7025; john.post@uafs.edu)

Pit Boss
   Mandy Keyes (479-788-7405; mandy.keyes@uafs.edu)