## **HPCC Systems and the KSU Data for Social Good Challenge!**

### **Help Missing Kids!**

On average, 1000 children go missing every day in the United States. According to the National Center for Missing and Exploited Children (NCMEC), 1 in 6 missing children who run away become victims of human trafficking. HPCC Systems has partnered with NCMEC to help notify first responders, law enforcement, and the community when a child is reported missing.

What can we do as developers to help understand this problem, and what can we do to help?

This year's challenge will analyze different social factors such as poverty, unemployment, and other areas to develop possible insights as to *why* so many are missing *and* to provide additional first responders and other resource information to the requestor.

The goal of the challenge is to answer two questions:

- 1. Is there a correlation between the locations that kids are reported missing and other social factors in that area (unemployment, education, poverty, and population).
- 2. Can we provide additional information to the NCMEC feed to help find the missing children? (fire and police stations, hospitals, churches, food banks, etc.)

### Join in the effort to help find missing children!

- The ADAM Program was launched in November 2000 and donated by LexisNexis® Risk Solutions to the National Center for Missing & Exploited Children, (NCMEC) to assist law enforcement in the recovery efforts of missing children.
- Time is of the essence when a child is missing, and photos play a critical role in the recovery
  efforts. NCMEC uses the ADAM Program to quickly distribute a poster of a missing child,
  targeting a specific search area.
- NCMEC can leverage the ADAM Program to distribute alerts on all missing child cases including endangered runaways and other missing child cases that do not meet AMBER Alert criteria.
- The community can help in the recovery of missing children by signing up for free to receive missing child alerts in their area at <u>adamprogram.com</u>
- Help spread awareness about The ADAM Program and encourage your network of contacts to also signup to receive missing child alerts.
- Thank you for your interest and support in this important cause.

#### The Data!

NCMEC data has been collected from all 50 states and organized into a simple dataset to use as your central source.

In addition, many public datasets have also been gathered and cleaned to help get you started.

These datasets include:

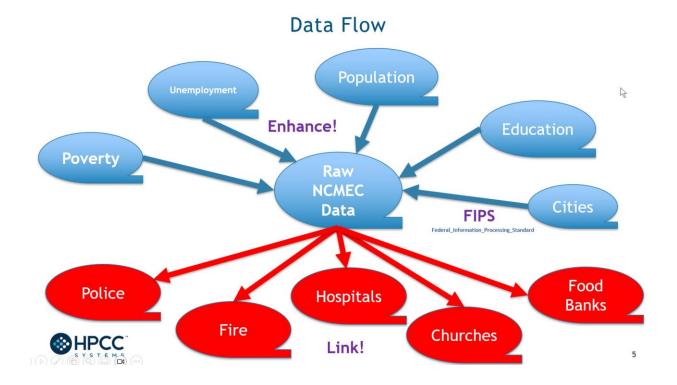
Education
Unemployment
Poverty
Population
Police
Fire Stations
Hospitals
Places of Worship
Food Banks

Auxiliary Datasets:

A Cities dataset with related FIPS and Zip Codes (used for linking the above datasets to the NCMEC data)

**Unemployment Rates** (Not really used in this challenge but interesting data!)

You are not limited to using these datasets! Extra credit will be rewarded by linking in other pertinent data!



# **Challenge Expectation**

Judges will consider the following criteria during final presentation:

- How did you answer the challenge questions?
- How did you approach the solution?
- What datasets did you use? Did you incorporate any new datasets into the challenge?
- How you presented your results (via Roxie, Visualization or other medium)- please reference pertinent ECL workunits with submission
- Drawing conclusions (How did we help find missing children?)
- Demo of work via a PowerPoint presentation or live demo by your team