Interim Charge:
Recurrence of Abuse and Neglect
• The location of known risk factors for child maltreatment are layered over a map of the area.

• The combination of risk factors most correlated with known child maltreatment occurrences is identified.

• A forecast for the location of future maltreatment occurrences is generated based on where risk factors overlap geographically.
Risk terrain model child maltreatment forecast using 2013 data only

Actual locations of 2014 child maltreatment cases, all ages and types.

98% of future child maltreatment captured in predicted “risk cluster” areas – including recurrence.

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Ranked risk factors that predict future child maltreatment for the most vulnerable children (age 0-3 years)

Risk Terrain Modeling (RTM)

1. Domestic violence
2. Presence of a runaway
3. Low household income
4. Aggravated Assault
5. Capital Murder

The 5 year recurrence risk is approx. 20% in Texas. These risk factors also predicted recurrent cases present in the dataset.
Early childhood trauma is proven to cause life-long structural brain abnormalities and genetic modifications that result in:

- Obesity
- Diabetes
- Cardiovascular disease
- Asthma
- Autoimmune disease
- Cancers
- Mental illness
- Addiction
- Violent crimes
- Teen pregnancy
- Premature birth
- Poverty

Known risk factors for child maltreatment

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The information necessary to predict fatality, evaluate the effectiveness of services, improve child wellbeing, and develop effective prevention strategy crosses multiple departments, initiatives, and databases: