

# SFPE Standards-Making Committee on Design Fire Scenarios

Meeting Report – April 25, 2017



**Present:** Charles Fleischmann (Chair), Jason Butler, Dorota Brzezińska, Laura Hasburgh, Craig Hofmeister, M.C. Hui, Martin Nilsson, Jason Smart, Collen Wade, Craig Weinschenk and Shaun Wrightson and Chris Jelenewicz (Staff).

The following was discussed:

1. **Progress on NFRIS Data** – Craig Weinschenk has completed a preliminary analysis of NFIRS data. Specifically, Assembly (Recreation, amusement and convention) and the Hotel/Motel use groups were analyzed. Based on this analysis, it appears the NFRIS database will provide adequate information on the “first item ignited” that is needed for the analysis.
2. **Occupancy Analysis of NFIRS** – The following occupancy/use groups will be a priority for analysis:
  - a. Assembly (recreation/amusement & convention)
  - b. Assembly (eating & drinking)
  - c. Educational (schools)
  - d. Health Care (hospitals)
  - e. Health Care (asylums/mental institutions)
  - f. Residential (hotels/motels)
  - g. Mercantile (department stores)
  - h. Storage (parking)

The committee was asked to provide feedback on this list and suggest others to be considered.

3. **Item First Ignited (IFI) Analysis** – Based on the preliminary NFRIS analysis, the most common “first items ignited” were:
  - a. Interior Wall Covering – Coleen Wade
  - b. Structural member or framing – Jason Smart
  - c. Upholstered furniture – Charley
  - d. Appliance housing or casing
  - e. Mattress, Pillow, Bedding – Craig Hofmeister
  - f. Linens, Towels or Tablecloths
  - g. Box, carton, bag, basket, rubbish – Rob Plonski & Jason Butler
  - h. Rolled paper & Fabrics

- i. Electrical wire
- j. Magazine, newspaper

Committee members were asked to research at least one of these items and find data related to fire growth rate, species production, heat of combustion, fire duration and decay period.

Charley will develop a straw-man on how these distributions will be estimated.

Last summer the SFPE Intern drafted the attached spreadsheet with some of the data that will be needed to create these distributions. It is not all inconclusive but can serve as a good start.

**4. Moving Forward** – Committee members who are not identified on the “fire item ignited” list in Section 3 were asked to volunteer for one of the items on this list.

Charley will send out the strawman document. Once the straw-man is completed and shared with the committee, committee members can start to draft distributions.

CJ will work with Craig Weinschenk to identify a platform where the committee can store its data. They will explore GitHub.

**5. Next meeting** -- The next meeting will be scheduled by CJ Doodle Poll.

- **End of Report** -