

This and the next page are the email which the following document references. I've removed the recipients to avoid being misleading, because the following document differs from the one which was actually attached to this email and which the recipients actually received on July 5 or 6, (because of re-sends, so that would be misleading too without these deletions).

The following document is v3 (2022/06/27). The versions which I sent on July 4²⁰²¹(v1) and July 20²⁰²¹(v2) are at <https://5usc2302.github.io/risk/5%20U.S.C.%202302%20justification/Substantiation...pdf%20track%20changes.zip>.

andrew.janca.2@outlook.com

From: andrew.janca.2@outlook.com
Sent: --- 2021/07/04 (v1) ---
To: --- Press ---
Cc: andrew.janca@fema.dhs.gov; --- Press ---
Subject: (5 U.S.C. 2302) Pandemics have been the #1 or #2 (after drugs) non-CBRN risk on DHS's list since 2011. The SNS was empty and the Nation was unprepared because we suppressed those risk assessments. We are still doing so.
Attachments: What's missing.pdf; SNRA letter to committee staff March 2019.pdf; SNRA FAQ 20190319 redacted.pdf; SNRA follow-up letter 20201016.pdf; Substantiation and context.zip; Attachment list 20210704.docx

Summary: The DHS/FEMA Strategic National Risk Assessment (SNRA) is the science-based comparative national risk assessment of natural, accidental, and adversarial hazards that FEMA's National Preparedness System is based on. It has been locked up since 2011. (The SNRA's climate change analysis is the only Government climate study that I know of that has been suppressed by both parties.) While classification and disagreements with DHS HQ had much to do with that before 2015, neither has been an obstacle since. As far as I know, the decisions to suppress the science that FEMA's plans, requirements, and doctrine are based on have been made by DHS/FEMA itself since 2015.

I don't have the moral credibility or communication skills to solve this problem inside the Government. Everything I've tried has failed. That is why I'm writing you now.

The context and documentation for the statements above is attached. Larger files (all of which are already public information) are in <https://bd02.github.io/external>. I will forward this to the committee staff I wrote to before, to my Department and agency, and to the addressees and cc-ed on the forwarded email below tomorrow.

I am not speaking for my Department or agency, any past or present DHS organization, or any past or present colleagues.

The unredacted information that these letters, attachments, and links communicate is explicitly within the scope of 5 U.S.C. § 2302, and communicated solely for its lawful purposes.

Thank you,

Andrew Janca
andrew.janca.2@outlook.com

From: Janca, Andrew <andrew.janca@fema.dhs.gov>
Sent: Tuesday, October 27, 2020 07:21
To: --- AUSA ---@usdoj.gov; --- POC GAO-20-297 ---@gao.gov
Cc: OGC <ogc@HQ.DHS.GOV>; FEMA-OCC <FEMA-OCC@fema.dhs.gov>; GAO-OIG Liaison <GAO-OIG.Liaison@HQ.DHS.GOV>; FEMA-GAO-OIG-LIAISON <FEMA-GAO-OIG-LIAISON@fema.dhs.gov>; Media Inquiry <MediaInquiry@HQ.DHS.GOV>; FEMA-News-Desk <FEMA-News-Desk@fema.dhs.gov>; Janca, Andrew <andrew.janca@fema.dhs.gov>
Subject: 1/3 - What my agency (DHS/FEMA) is telling each of you is factually inconsistent with what we're telling the other

Hello – Recent statements that my agency has given GAO and the press factually conflict with sworn declarations that my agency has given in court.

I drew my agency's attention to the inconsistencies between the latter, and the information which my agency later communicated to GAO and the press, in February. My agency has not corrected them.

(I'm talking around the subject to some extent because the non-disclosure agreements that that unsuccessful correction attempt left me with limit what I can put in a cover letter with multiple recipients on my end. So I'm trying to say as much as I can without going into the protected content.)

These inconsistencies are public, but currently below the threshold of public awareness. Since I have pointed them out to others outside the Executive Branch (footnotes 10-12, SNRA follow-up letter 20201016.pdf inside the second attachment), I'm obligated to tell you too. I haven't contacted the journalist yet, but I'll work on that next.

The three public inconsistencies that are the easiest to start with are

- <https://www.courtlistener.com/docket/6284501/28/1/public-employees-for-environmental-responsibility-v-united-states/> paragraph 8;
- <https://www.gao.gov/assets/710/706612.pdf> pp. 11-12, 28; and
- <https://www.eenews.net/climatewire/stories/1062857757> (if the link doesn't work there's a pdf copy in the second attached).

The connecting context is the DHS/FEMA Strategic National Risk Assessment (SNRA), the "risk basis" of the National Preparedness System and the subject of a briefed-but-pending FOIA litigation (1:18-cv-00158-CKK) that --- AUSA --- inherited in May. I helped FEMA update this risk assessment in 2015, and I signed off on the language that FEMA used to tell the public what it said. The FOIA case duplicates a FOIA request that I made in October 2016.

I have also worked on the National THIRA that is referenced in these parts. It is a very different kind of thing than the SNRA: neither product is capable of filling the role of the other. My agency's use of it to bury something else should not be allowed to discredit the honest work that my colleagues have done on it.

This email is 1 of 3. Attached to this and the next two emails are what I sent committee staff Friday before last (October 16), July 2020, and March 2019, including the unclassified SNRA itself. The last attachment to this email is the one piece from my February correction attempt (a FOIA for what FEMA later told GAO and the journalist) that I can share without restriction. I've redacted the protected content, but the rest will still be helpful for context. Additional context:

- GAO: Relevant context is GAO-11-873 and 16-371 (DHS context), 16-243 (risk comparisons), and prior reports referenced in GAO-20-297. The 'missing' methodology report I mentioned in the SNRA FAQ p. 6 (How does the SNRA relate to DHS' HSNRC?) is the missing documentation discussed in GAO-16-371. Declaration 28-1 in --- AUSA ---'s case discusses another GAO document in paragraph 10.
- DHS/FEMA public affairs [cc-ed]: Relevant context is <https://www.eenews.net/stories/1062824495>, <https://web.archive.org/web/20140502084541/https://www.llis.dhs.gov/sites/default/files/NPS-LLIS.pdf> 3-6, 3-7, 3-12, 3-16, <https://www.fema.gov/pdf/government/training/tcl.pdf> 460-463, SNRA 2011/15 and HSNRC 2013/17 pandemic and comparative analyses, QHSR 2014 Bio Study, and the QHSR 2014 homeland biosecurity national capability targets. The targets were classified in their final version: I believe this is why they disappeared, but I don't actually know.
- USAO: I will forward you the full February 18, 2020 packet (including the unredacted version of the last attachment) separately. The main differences with the Trusted Traveler case (<https://www.courtlistener.com/docket/16824447/113/state-of-new-york-v-wolf/> pp. 16-17, <https://www.courtlistener.com/docket/16824447/124/state-of-new-york-v-wolf/> p. 9) are 1) my agency did not correct the problematic filing when I pointed out its inconsistencies with other information; 2) my agency subsequently made those inconsistencies public (above); and 3) the real-world consequences of my agency's choices in your case.

The information these letters and attachments communicate is explicitly within the scope of 5 U.S.C. § 2302, and communicated solely for its lawful purposes.

I apologize for the awkwardness of this letter.

Andrew Janca, PhD

National Preparedness Directorate, FEMA

U.S. Department of Homeland Security

Phone: (202) 786-0937

andrew.janca@fema.dhs.gov

Warning: This communication, along with any attachments, is covered by federal and state law governing electronic communications and may contain confidential and legally privileged information such as found under 49 CFR 1520 or the Privacy Act of 1974. It should not be communicated to any person, or agency, unless disclosure is in performance of official DHS duties and there exists a valid need to know. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, use or copying of this message is strictly prohibited. If you have received this in error, please reply immediately to the sender and delete this message. Thank you.

Citations for email text

DHS (July email subject line)

Pandemics have been the #1 or #2 (after drugs) non-CBRN risk on DHS's list since 2011.¹ The SNS was empty² and the Nation was unprepared³ because⁴ we⁵ suppressed those risk assessments.⁶ We are still doing so.^{7, 8, 9, 10}

DHS/FEMA (July email summary)

The DHS/FEMA Strategic National Risk Assessment (SNRA)¹¹ is the science-based comparative national risk assessment of natural, accidental, and adversarial hazards that FEMA's National Preparedness System is based on.^{12, 13} ~~It has been locked up since 2011.~~^{14, 15}

unclassified documentation at <https://5usc2302.github.io/risk>**

While classification and disagreements with DHS HQ had a lot to do with that before 2015,¹⁶ neither has been an obstacle since.¹⁷ As far as I know, the decisions to suppress the science that FEMA's plans,¹⁸ requirements,¹⁹ and doctrine²⁰ are based on have been made by DHS/FEMA itself since 2015.²¹

** A legally protected (see page 8) but un-authorized disclosure. I'm not sure what the best way to characterize the unclassified SNRA's current (February 2024) release status is, but given that the information in it is physically available, "locked up" is too strong a verb in this context (describing its current state).

Pandemics have been the #1 or #2 (after drugs) non-CBRN risk on DHS's list since 2011.

¹ Page 6 below and cited references. Figures 1 (pandemics) and 3 (drugs) below, fatality risk. CBRN risks are excluded because their numbers are classified, so nothing about their risk compared with other events (e.g. more, less, the same) can be said about them.

The SNS was empty because we suppressed those risk assessments.

² Pages 7-8 below and cited references.

The Nation was unprepared because we suppressed those risk assessments.

³ DHS (12/22/2020) 2020 national preparedness report (<https://www.hsdl.org/?view&did=848274>) page 2 callout block. FEMA (1/15/2021) initial assessment report on pandemic response to COVID-19 (https://www.fema.gov/sites/default/files/documents/fema_covid-19-initial-assessment-report_2021.pdf) pp. 100-102.

⁴ Pages 8, 10, 12-14, and 19 below, and cited references.

We suppressed those risk assessments.

⁵ DHS/FEMA research lead (me), personal knowledge. Agency leaders, paragraphs 14, 16, 17 ("FEMA's position") DHS/FEMA National Preparedness Directorate (NPD) 4/30/2019 declaration 28-1, *Public Employees for Environmental Responsibility (PEER) v. U.S. Department of Homeland Security* 1:2018-cv-00158, D.D.C., at <https://www.courtlistener.com/docket/6284501/28/1/public-employees-for-environmental-responsibility-v-united-states/>. Agency managers, paragraphs 11, 13 ("NPD leadership"), NPD (4/30/2019) 28-1. Agency staff, paragraph 6 FEMA Disclosure Branch 3/1/2019 declaration 22-1 *PEER v. DHS*, at <https://www.courtlistener.com/docket/6284501/22/1/public-employees-for-environmental-responsibility-v-united-states/>. DHS HQ, 2012-15 history described in March 2019 SNRA FAQ for Congress (*SNRA FAQ 20190319.pdf*); improper b(5) withholdings in the FOIA of note 9.

⁶ Pages 8-12 and 15 below and cited references, and 10/16/2020 letter to committee staff pp. 5-6.

We are still suppressing those risk assessments.

⁷ Pages 9-11 and 15-18 below, and cited references.

⁸ DHS SNRA 2011 (FOIA requested items 2b, 4), FEMA SNRA 2015 (1, 2a, 3): FEMA (2018, December 10). Final response, FEMA FOIA 2016-FEFO-00165 and appeals. At <https://bd02.github.io/external/Reorganized/FOIAs%20for%20SNRA%20documentation/FOIA%20correspondence%202017-FEFO-00165/SNRA%20FOIA%20correspondence%202016-18.zip>. Note: the SNRA 2011 requested document #5 and the SNRA 2015 requested documents #6-8 were released in full (<https://bd02.github.io/external/Released%20documentation/Originals%20OCRed/Split%20by%20redaction%20status/Released%20in%20full.zip>), and the SNRA 2011 seven-page public summary (<https://www.dhs.gov/xlibrary/assets/rma-strategic-national-risk-assessment-ppd8.pdf>) has always been public (on DHS's website: FEMA removed it from its own some time in fall 2020 [https://web.archive.org/web/2020*/https://www.fema.gov/media-library-data/20130726-1854-25045-5035/rma_strategic_national_risk_assessment_ppd8_1_.pdf]).

⁹ DHS HSNRC 2013 (DHS HQ): DHS (2019, June 17), Denial in full, FOIA request 2017-HQFO-00005, portions withheld by b(5) [the b(1) withholdings are proper for certain segregable parts, but the b(5) withholdings are not (DHS cites these finalized studies as non-political authorities for political decisions, <https://docs.house.gov/meetings/HM/HM09/20150708/103703/HHRG-114-HM09-Wstate-SmithT-20150708.pdf>)]. DHS FOIA annual report raw data, PRIV FY 2019, tab raw data requests, row 43766. At <https://www.dhs.gov/publication/annual-foia-report-raw-data>, https://www.dhs.gov/sites/default/files/publications/fy19_raw_data_priv.xlsx. The 2018 HSNRC methods documentation is public, https://www.rand.org/pubs/research_reports/RR2140.html, but internally and externally the risk content (which is displayed in part in figure 1) is in the same unclear status as the 2018 QHSR.

¹⁰ SNRA 2011, 2015: NPD (4/30/2019) 28-1, current status in docket at <https://www.courtlistener.com/docket/6284501/public-employees-for-environmental-responsibility-v-united-states/>. Update: DHS won on December 17, (documents 32 and 33 at the same link), note 121 below.

2021

The versions of this document that I sent on July 4 (v1) and July 20 (v2) 2021, with differences from this version indicated, are at https://5usc2302.github.io/risk/5_U.S.C._2302_justification/20220627-0926/Supporting_files_and_context/Other/Substantiation...pdf_track_changes.zip. This document is v3, 2022/06/27.

Citations for email text.....	1
<i>DHS (July email subject line).....</i>	<i>1</i>
<i>DHS/FEMA (July email summary).....</i>	<i>1</i>
Context	3
Pandemic risk	6
Justification for 5 U.S.C. § 2302 disclosure.....	8
Responsibility	11
<i>Status update (17 October 2020 to 4 July 2021)</i>	<i>11</i>
Background (summary)	12
<i>Origin.....</i>	<i>12</i>
<i>The U.S. national risk assessment</i>	<i>12</i>
<i>FEMA's master risk assessment</i>	<i>12</i>
<i>Why the National Preparedness System failed</i>	<i>13</i>
Accountability	15
<i>What they will tell you</i>	<i>15</i>
<i>'We're using something else now'</i>	<i>17</i>
Information Quality Act	19
Additional charts	20

DHS/FEMA

¹¹ Brief description, p. 12.

¹² U.S. Department of Homeland Security (2011, September). National preparedness goal, 1st edition, pp. 3-4. At <https://www.fema.gov/pdf/prepared/npg.pdf>.

¹³ U.S. Department of Homeland Security (2015, September 30). National preparedness goal, 2nd edition, pp. 4-5. At https://www.fema.gov/sites/default/files/2020-06/national_preparedness_goal_2nd_edition.pdf.

¹⁴ March 2019 SNRA FAQ for Congress ([SNRA FAQ 20190319.pdf](#)) p. 1 (*General*); *Supporting files and context.zip / Sent to Congress March 2019 / SNRA FOIA appeal (2018).pdf*, pdf pp. 1-4 (unnumbered two pages of 9/24/2018 appeal and numbered pp. 1-2 of 11/1/2017 appeal letter). Attached, or at <https://bd02.github.io/external/Reorganized/Sent%20to%20committees%20March%202019/>.

¹⁵ Parenthetically, the SNRA's climate change analysis is the only Government climate study that I know of that has been suppressed by both parties. **2015**: White House edits to SNRA climate change findings p. 15, November 2015 Findings document (attached zipfile *Supporting files and context.zip / Other / Referenced pages - Pandemic distribution, WH edited page.pdf* [second and third pdf pages], *WH version SNRA Findings Nov 2015.pdf*); outcome, FEMA/NPD SNRA decision briefing 30 November 2016. **2018**: Redacted content, *PEER v. DHS* production Bates numbers 000072, 90-92, 322-338 [pdf pp. 11-12, 47-52, 479-512], [https://5usc2302.github.io/risk/5_U.S.C._2302_justification/What's_missing_\(full\).pdf](https://5usc2302.github.io/risk/5_U.S.C._2302_justification/What's_missing_(full).pdf) (original production <https://www.courtlistener.com/docket/6284501/24/3/public-employees-for-environmental-responsibility-v-united-states/>). **2021**: FEMA internal confirmation specific to climate change, 9/14/2021.

¹⁶ U.S. Department of Homeland Security (2011, December 9). SNRA public summary, p. 4. At <https://www.dhs.gov/xlibrary/assets/rma-strategic-national-risk-assessment-ppd8.pdf>; or email 1/2, *SNRA 2015 Consolidated unclassified documentation.pdf* ([https://web.archive.org/web/20211231153713/https://5usc2302.github.io/risk/Strategic%20National%20Risk%20Assessment%20\(SNRA\)%202015%20-%20Consolidated%20Unclassified%20documentation.pdf](https://web.archive.org/web/20211231153713/https://5usc2302.github.io/risk/Strategic%20National%20Risk%20Assessment%20(SNRA)%202015%20-%20Consolidated%20Unclassified%20documentation.pdf)) pp. 697-703.

¹⁷ March 2019 SNRA FAQ for Congress p. 2 (*Security*); *Supporting files and context.zip / Sent to Congress March 2019 / SNRA FOIA appeal (2018).pdf*, last page (page 2 of October 2016 FOIA request letter 2017-FEFO-00165). Attached, or at <https://bd02.github.io/external/Reorganized/Sent%20to%20committees%20March%202019/>. Since 2015, the classified SNRA (which includes the CBRN risk numbers) has been completely separated from the main unclassified base assessment. Unless noted otherwise, the unclassified 2015-present DHS/FEMA SNRA is the risk assessment that I refer to below.

¹⁸ U.S. Department of Homeland Security (2016, August 18). Protection Federal Interagency Operational Plan (FIOP) 1st edition (2016), https://www.fema.gov/sites/default/files/documents/fema_protection-fiop.pdf pp. 5-6. Mitigation FIOP 2nd ed. (2016), https://www.fema.gov/sites/default/files/documents/fema_mitigation-fiop.pdf pp. 5-6. Response FIOP 2nd ed. (2016), https://www.fema.gov/sites/default/files/documents/fema_response-fiop.pdf pp. 7-8, B-3, B-4, B-9, B-1.1-1.4. Recovery FIOP 2nd ed. (2016), https://www.fema.gov/sites/default/files/documents/fema_recovery-fiop.pdf p. 5.

Some of that will change. FEMA is revising the last two FIOPs into a single document that doesn't explicitly (it still does so indirectly, but the text doesn't make a big deal about it as the current versions do) cite or claim the SNRA, or any other risk or evidential authority. A public engagement draft or final version should be out later this year.

¹⁹ U.S. Department of Homeland Security (2022, May 13). Risk-based core capabilities, pp. 9, 25, 35-36, A-1-2, 14, 18-19, 21-23, 28-31, 49, B.1-3, 12, C-2, 5, D-13, E-9, F-12, G-16, H-1-3, 10, 14, 26, 28-32, 35. Preparedness grants manual. At https://www.fema.gov/sites/default/files/documents/fema_fy-2022-preparedness-grants-manual.pdf. Core Capabilities, note 13 above.

²⁰ Note 13.

²¹ Unfortunately, this is still true, present tense. The problem isn't that the agency stopped using this risk assessment, or replaced it with something else (I'm mentioning this because it is probably the first thing they'll tell you, when you ask). The problem is that it hasn't actually done so (pp. 17-18). Instead, the agency represents that it has or has not in different contexts, depending on what is most advantageous for it to be true at a given moment (pp. 9, 15).

Context

PANDEMIC: Disaster agency foresaw killer virus months before COVID-19

E&E News, Thursday, April 9, 2020²²

The Federal Emergency Management Agency warned last year that a pandemic caused by a novel strain of influenza would cripple the country's response capabilities by driving millions of people into overwhelmed hospitals. The report,²³ which was written before the new coronavirus first surfaced in China, offered these prescient predictions: The deluge of patients would create "a shortage of medical supplies, equipment, beds, and healthcare workers."

FEMA's warning, issued in July, forecast with stunning accuracy the social, economic and personal devastation that the ongoing pandemic has caused.

The report, which has not been previously described, was drafted in collaboration with the White House Office of Science and Technology Policy and other federal organizations. With detail about widespread "social distancing" and "the overcrowding of hospitals and medical centers," the federal government's disaster agency provides perhaps the strongest contradiction of [the President's] assertions that the scope of the current pandemic could not have been foreseen.

...

"Is it really fair to say you had no warning about this?" ABC News' Martha Raddatz asked [FEMA Administrator] Gaynor in a March 22 interview.

"The public health medical mission, statutory lies with HHS," Gaynor replied. "My mission, FEMA, prior to this, [was] national disasters and those catastrophic events that happen."

FEMA has come under increasing scrutiny as it has taken charge of distributing emergency medical supplies and personal protective equipment, known as PPE, to desperate states and hospitals... Lawmakers and governors are questioning the capacity of the Strategic National Stockpile, a repository of supplies that is distributed during public health emergencies. Although the stockpile is controlled by HHS, FEMA is the primary customer, tapping it at least a dozen times since the stockpile was created in 1999, most recently when Hurricane Dorian hit the coast of the U.S. Southeast in August.

The stockpile is not designed to handle the demand for a 50-state pandemic such as COVID-19. [A FEMA spokesperson] said in a recent statement that the agency's "planning assumptions" for the pandemic acknowledged that the stockpile alone "could not fulfill all requirements at the State and tribal level."

...

PANDEMIC: Warning about killer virus was preliminary – FEMA.

E&E News, Monday, April 13, 2020²⁴

Responding to the story by E&E News, FEMA said its report "was not intended to drive resourcing decisions by itself, but rather to serve as a foundation for a more comprehensive analysis for future decisions." The agency report "was the first step in that process," FEMA said in an email to E&E News...

FEMA said its next step is to "look at national capability" to deal with a catastrophic event and to "support national targets" for building capacity to deal with the events.

...

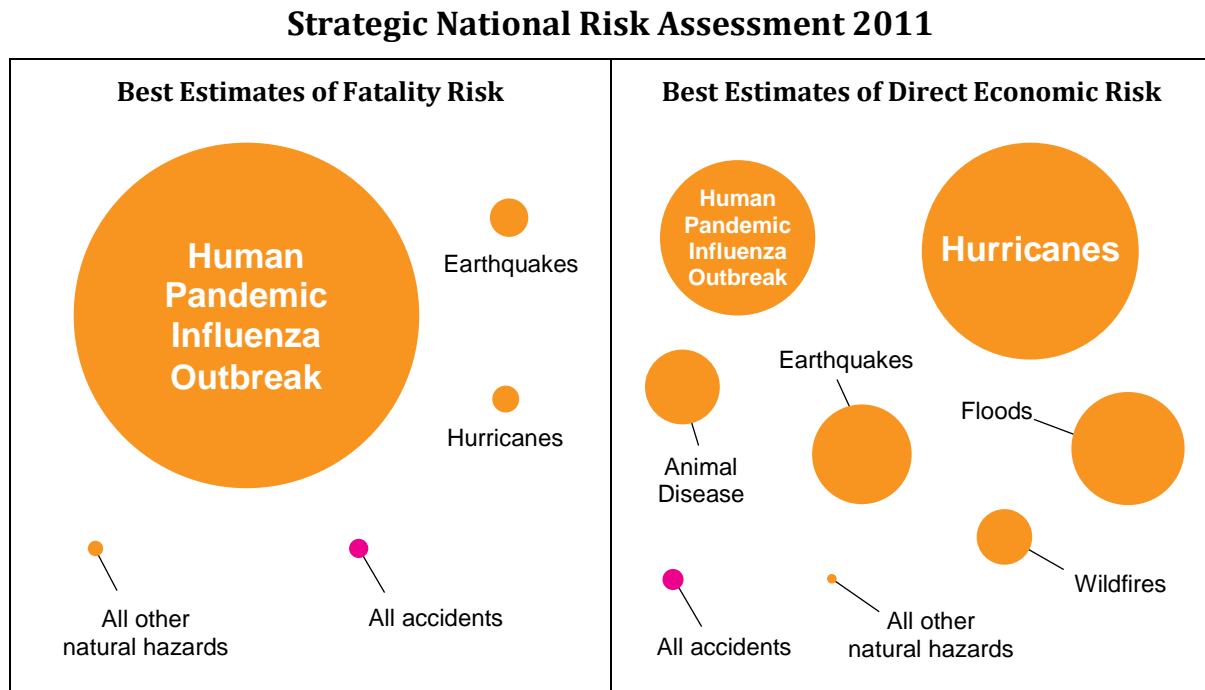
²² Frank, Thomas (2020, April 9). Disaster agency foresaw killer virus months before COVID-19. *E&E News*: at <https://www.eenews.net/climatewire/stories/1062824495> (paywalled original; pdf print at https://5usc2302.github.io/risk/References/EE_News_Frank_20200409_FEMA_foresaw_killer_virus_months_before_COVID-19.pdf). Bracketed [was] is in source, other brackets added.

²³ Federal Emergency Management Agency (2019, July 25). 2019 National Threat and Hazard Identification and Risk Assessment (THIRA): overview and methodology. At <https://web.archive.org/web/20190725231745/https://www.fema.gov/media-library/assets/documents/181470>.

²⁴ Frank, Thomas (2020, April 13). Warning on killer virus was preliminary – FEMA. *E&E News*: at <https://www.eenews.net/climatewire/stories/1062857757> (paywalled original; pdf print at https://5usc2302.github.io/risk/References/EE_News_Frank_20200413_FEMA_-_Warning_about_killer_virus_was_preliminary.pdf).

The depicted information is **UNCLASSIFIED WITHOUT CAVEATS** and lawfully disclosed under 5 U.S.C. § 2302 but not otherwise authorized. Andrew Janca, DHS risk analyst (work # 202-679-7991, andrew.janca@fema.dhs.gov), 2021/07/04

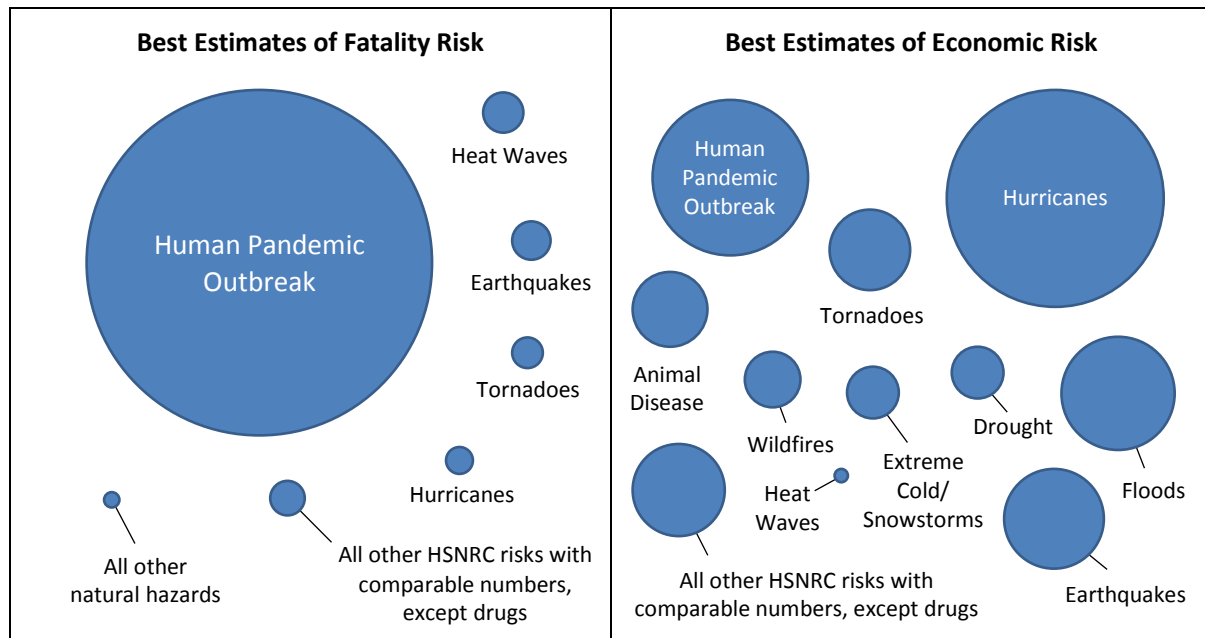
FIGURE 1: BEST ESTIMATES OF FATALITY AND ECONOMIC RISK IN THE UNCLASSIFIED SNRA AND HSNRC.²⁵



Not depicted: Risks with classified data (all terrorist attacks), cyber attacks, space weather, tsunamis, volcanoes, acts of war, risks outside FEMA's traditional mission space, risks added in later iterations.

Homeland Security National Risk Characterization 2013

(Displayed risks are limited to FEMA's mission space for comparison – border/immigration risks not shown)

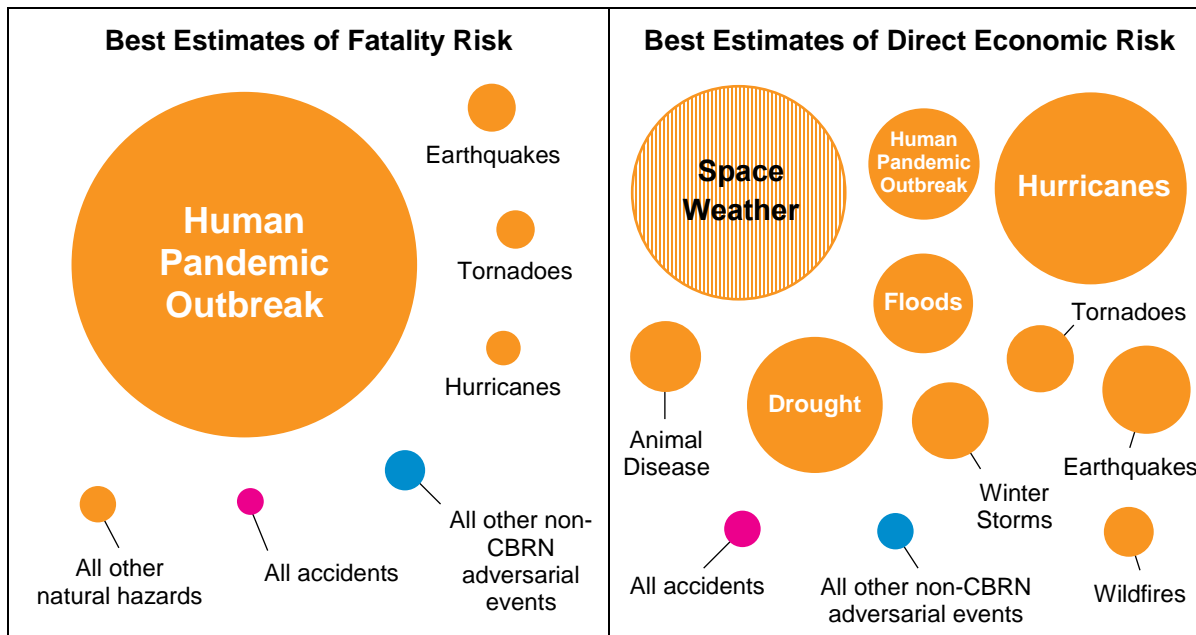


Not depicted: Illicit drugs, events with classified data (all terrorist attacks), risks with data gaps (cyber attacks, space weather, tsunamis, volcanoes, illegal immigration), acts of war. On this chart, the displayed risks are limited to FEMA's traditional mission space to enable comparison with the other charts, not because of data challenges or negligible risk in other DHS missions: the fatality and economic risks of Illicit Drugs (which for the 2013 HSNRC include the collective costs to users and society from individual Americans' use of illegal drugs smuggled across an air/land/sea border or other DHS screened route) are larger than those of all FEMA-mission-space events displayed above, including pandemics. This chart is reproduced with the Illicit Drugs numbers at the end of this letter (figure 3).

²⁵ The SNRA's and 2013 HSNRC's main charts resemble figure 7, page 54, <https://web.archive.org/web/20210528231449/https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/l1-hzrds-sssmnt/l1-hzrds-sssmnt-eng.pdf>. That format represents more data and critical uncertainties, but differences in overall best-estimate risk magnitudes aren't as clear as they are on the 'planets' charts reproduced above.

The depicted information is **UNCLASSIFIED WITHOUT CAVEATS** and lawfully disclosed under 5 U.S.C. § 2302 but not otherwise authorized. Andrew Janca, DHS risk analyst (work # 202-679-7991, andrew.janca@fema.dhs.gov), 2021/07/04

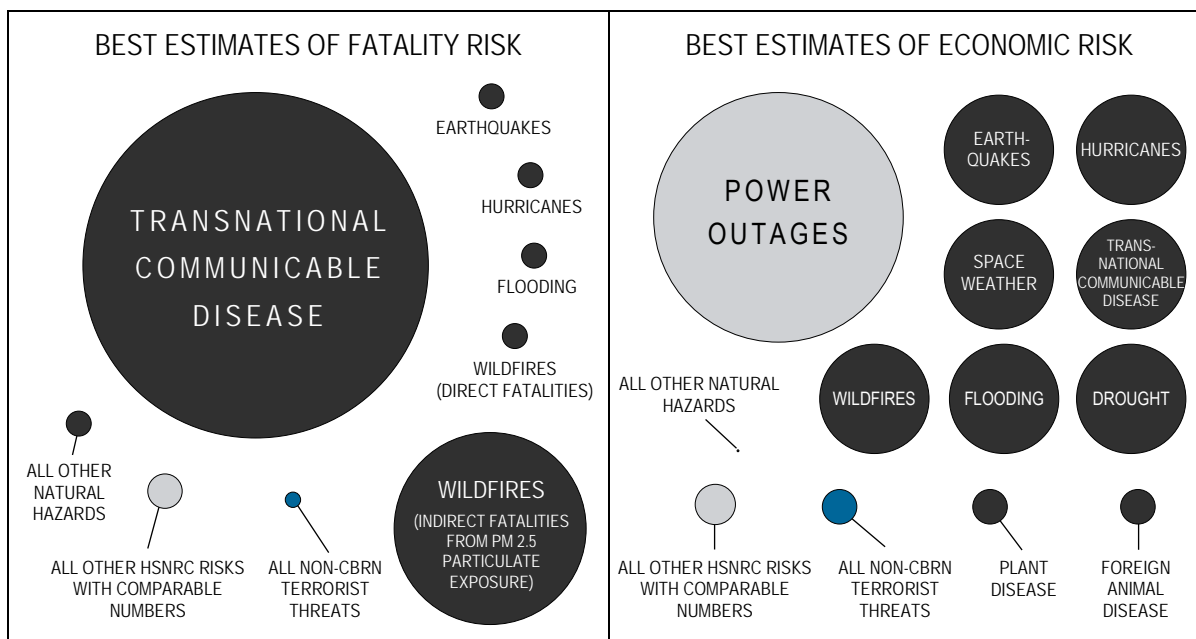
Strategic National Risk Assessment 2015



Not depicted: Events with classified data (CBRN terrorist attacks), risks with data gaps or data comparability challenges (cyber attacks, cross-cutting events, qualitatively assessed events), acts of war, risks outside FEMA's traditional mission space.

HOMELAND SECURITY NATIONAL RISK CHARACTERIZATION 2018

HSNRC 2018 source data on DHS planets chart (displayed risks are primarily in FEMA's mission space)



Unlike the other three, this chart does **NOT** itself come from the 2018 HSNRC (at least not in any decks or documents that I have seen), but represents HSNRC 2018 data in the same format as the other assessments for purposes of comparison. Sets of uniformly sized circles represent the geometric midpoints of reported common order of magnitude bins, and the other circles depict the underlying data from the documentation and its cited public or SNRA sources. Depicted wildfire indirect fatality risk (1,880/year), 2008-12 average annual premature deaths from short-term exposure to PM_{2.5}, table 2 p. 17, Fann et al. 2018 (<https://pubmed.ncbi.nlm.nih.gov/28826118/>) (SNRA-equivalent best-estimate average from HSNRC data source). Not depicted: events with classified data (CBRN), unknown shareability (counterfeit goods), data gaps or limitations (cyber events, illegal migration, trans-national drug trafficking), acts of war. Plant disease depicted as same magnitude as animal disease. Deaths from illicit drug use are not depicted, but that is because of counting differences between the 2013 and 2018 assessments rather than [my] deliberate omission.

The SNRA's methods differ from those of the 2018 HSNRC. Any miscalculation or misrepresentation of the HSNRC's intended estimates, methods, numbers, or sources is my responsibility [ajj].

Pandemic risk

Every one of the four science-based national risk assessments that DHS analysts have made since 2011 has assessed the human life risks from a pandemic of natural origin to be greater than those of every threat and hazard that FEMA has responded to in its forty year history – combined (figure 1).

- The 2011 Strategic National Risk Assessment (SNRA) and 2013 Homeland Security National Risk Characterization (HSNRC) pandemic analysis, based on the ‘moderate’ version of National Planning Scenario #3 with updated numbers from CDC, projected 140,000 – 440,000 U.S. deaths [153,000 to 480,000 in a U.S. (including territories) population of 335.1 million] in the first wave of the pandemic.^{26, 27, 28}
- The 2015 SNRA projected 77,000 – 230,000 [84,000 – 250,000] U.S. deaths for its median 1 in 30 year pandemic scenario, together with the larger set of probability-tagged pandemic events ranging from 12,300 to 1.94 million [13,400 to 2.1 million] U.S. deaths²⁹ that the Nation could expect to experience every 10 to 60 years or so.³⁰ The SNRA’s estimate for a pandemic exceeding 916,000 [one million] U.S. deaths in a population of 307 [335] million is 1 in 200 years.³¹
- The 2018 HSNRC used the same median consequence scenario, but with a higher best estimate return period of 25 years.³²

The one national preparedness success³³ of this pandemic – the fall 2019 cost-benefit analysis that resulted in the project that was later renamed Operation Warp Speed³⁴ – used the same 2015 CDC sources³⁵ and probabilistic risk assessment methods³⁶ as the 2015 SNRA. The CEA’s scenario range corresponds to the middle fifty percent (roughly the 25th to 75th percentile range bounded above by the 547,000 death line) of table 12, p. 158 of the SNRA Technical Appendix.³⁷

²⁶ SNRA 2015 technical appendix [TA] (email 1/2* zipfile *Full unclassified documentation.zip* / *SNRA 2015 Technical appendix.pdf*) pp. 366-368, numbers. CDC also provided the SNRA’s probability estimate (1/30 years).

²⁷ Model parameters: U.S. Government (2006, March). National Planning Scenarios v. 21.3, at <https://web.archive.org/web/20140502084541/https://www.llis.dhs.gov/sites/default/files/NPS-LLIS.pdf>, pp. 3-6, 3-7, 3-12, 3-16. Estimates reflect a single pandemic wave, pp. 3-11 – 3-12.

²⁸ The 2014 QHSR Bio Study (<https://www.dhs.gov/sites/default/files/publications/2014-qhsr-final-508.pdf>) broadened the HSNRC’s pandemic scenario to 1,000-2 million U.S. deaths for an event of natural origin, and 80,000-750,000 U.S. deaths for a 1/80 year accident.

²⁹ SNRA 2015 technical appendix [TA] table 12 p. 158, or SNRA Resource for Planners [RFP] (email 1/2* *SNRA 2015 Consolidated unclassified documentation.pdf* or [https://web.archive.org/web/20211231153713/https://5usc2302.github.io/risk/Strategic%20National%20Risk%20Assessment%20\(SNRA\)%202015%20-%20Consolidated%20Unclassified%20documentation.pdf](https://web.archive.org/web/20211231153713/https://5usc2302.github.io/risk/Strategic%20National%20Risk%20Assessment%20(SNRA)%202015%20-%20Consolidated%20Unclassified%20documentation.pdf), front - p. 494) table 4 p. 184.

³⁰ TA p. 145 [RFP p. 173] table 1B top row (low/best/high frequency 0.017=1/60, 0.033=1/30, 0.10=1/10) or p. 148 [p. 175], *Frequency*.

³¹ TA table 12 p. 158, or SNRA Resource for Planners [RFP] table 4 p. 184, conditional probability of 916,000 U.S. fatalities (interpolation of 868,000 and 973,000) given event occurrence 0.150, times overall event best estimate probability of 1/30 years.

³² DHS 2018 HSNRC risk summary sheet, transnational communicable disease, p. 251. The HSNRC 2018 data referenced or depicted in this document are limited to HSNRC numbers that either came from public sources, one of the other three assessments which I worked on as an analyst, or aggregated from multiple numbers that are impossible to pick apart from the depicted aggregation. The 2018 HSNRC’s plant disease numbers come from another project I worked on (the QHSR Bio Study): since I’m not sure of their shareability, I’ve arbitrarily represented them as being in the same order-of-magnitude bin as animal disease for visualization purposes. HSNRC source document is UNCLASSIFIED // FOR OFFICIAL USE ONLY; extracted information is UNCLASSIFIED without caveats.

³³ U.S. Department of Homeland Security (2020, December 22). 2020 national preparedness report, page 57. At <https://www.hsdl.org/?view&did=848274>.

³⁴ Zinberg et al (2020, August 18). The White House prepared for a pandemic. *Wall Street Journal*: at <https://www.wsj.com/articles/the-white-house-prepared-for-a-pandemic-11597792593> (Frank [4/9/2020] also touches on this analysis).

³⁵ U.S. Centers for Disease Control and Prevention (CDC) (2015, April 10). CDC modeling efforts in response to a potential public health emergency: influenza A(H7N9) as an example. *Clinical Infectious Diseases* special issue 60(suppl. 1) (issue date 1 May 2015): at https://academic.oup.com/cid/issue/60/suppl_1. Meltzer et al (pp. S1-8, https://academic.oup.com/cid/article/60/suppl_1/S1/356555) define the common scenario set used by the vaccine-infrastructure paper (Biggerstaff et al. pp. S20-29, https://academic.oup.com/cid/article/60/suppl_1/S20/356419) that CEA used, the PPE paper (Carias et al. pp. S42-51, https://academic.oup.com/cid/article/60/suppl_1/S42/356585) referenced below, the other applications in this CDC-modeling special issue, and the 2015 SNRA.

³⁶ White House Council of Economic Advisers (CEA) (2019, September 5). Mitigating the impact of pandemic influenza through vaccine innovation. At <https://trumpwhitehouse.archives.gov/wp-content/uploads/2019/09/Mitigating-the-Impact-of-Pandemic-Influenza-through-Vaccine-Innovation.pdf>.

³⁷ A 2010 back-of-the-envelope version with risk numbers similar to the 2011 SNRA’s scenario is in the previous Administration’s study (<https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST-Influenza-Vaccinology-Report.pdf> p. 17).

Had the Federal Government used the SNRA³⁸ and these models³⁹ as the national all-hazards all-missions all-of-Government decision support tools that they were designed to be^{40, 41} – even for just the one application of prioritizing what goes into the Strategic National Stockpile (SNS) that DHS created the SNRA’s classified core to do^{42, 43} – on January 1, 2020 the United States would have had more than enough PPE for every single front-line medical and long-term care worker in America – without re-use or rationing – for the whole year.^{44, 45, 46, 47, 48}

³⁸ Summary, p. 12 below; March 2019 SNRA FAQ for committee staff (attached or at <https://bd02.github.io/external/Reorganized/Sent%20to%20committees%20March%202019/SNRA%20FAQ%2020190319%20redacted.pdf>). The 2011 SNRA public summary is at <https://www.dhs.gov/xlibrary/assets/rma-strategic-national-risk-assessment-ppd8.pdf>.

³⁹ Heinrichs, Rebecca (2020, April 1). The truth about the National Security Council’s pandemic team. *National Review*: at <https://www.nationalreview.com/2020/04/coronavirus-truth-national-security-council-pandemic-team/>. Earliest use of these CDC models that I know of (2014), *Wall Street Journal* 4/30/2020 p. A1 (Many missteps led to mask shortages), <https://www.wsj.com/articles/miscalculation-at-every-level-left-u-s-unequipped-to-fight-coronavirus-11588170921>.

⁴⁰ World Health Organization (2016, June). Joint external evaluation of International Health Regulations (IHR) core capacities of the United States of America, pp. 34-35. At <https://apps.who.int/iris/bitstream/handle/10665/254701/WHO-WHE-CPI-2017.13-eng.pdf>.

⁴¹ Attached *FOIA appeal FEMA 2017-FEFO-00165 20171101.pdf* page 8 cited references, and page 6 note 15. (Attached, or <https://bd02.github.io/external/Reorganized/Sent%20to%20committees%20March%202019/SNRA%20FOIA%20appeal%20282018%29.pdf>.)

⁴² U.S. Department of Homeland Security (2008, June). WMD terrorism risk assessment in DHS Science & Technology. Steve Bennett. Presentation, S&T Stakeholders Conference, June 2-5 2008: at <https://ndiastorage.blob.core.usgovcloudapi.net/ndia/2008/homest/benn.pdf>. The classified terrorism risk assessments created by Homeland Security Presidential Directives (HSPD) HSPD-10 (Biodefense for the 21st Century) and HSPD-18 (Medical Countermeasures against Weapons of Mass Destruction) were used to risk-prioritize SNS purchases of countermeasures specific to CBRN terrorist attacks until 2018 (<https://www.latimes.com/politics/story/2019-07-17/times-investigation-homeland-security-gutted-programs-aimed-at-stopping-wmd-terrorism>). However, resourcing decisions for other risks and overall SNS funding continued to be made by human judgement, rather than the expanded all-hazards versions of them (the SNRA and HSNRC) which disappeared.

The SNRA’s comparative methodology and the frequency, fatality, and direct economic loss metrics come from the DHS Terrorism Risk Assessments. (The 2011 SNRA wildfire and chemical accident chapters were my first learner projects at RMA. The textbook I used to complete them was one of the methodological appendices from the 2008 Bioterrorism Risk Assessment [BTRA]).

⁴³ HSPD-21 (2007-present) requires the Secretary of Health and Human Services to use “accepted national risk assessments” to prioritize SNS purchases (<https://www.hsdl.org/?view&did=480002> ¶ 25). Although planning for a full-scope homeland security national risk assessment was already underway when the directive was issued in 2007, the SNRA itself didn’t exist yet, so the classified Terrorism Risk Assessments that the SNRA was built on (previous note) – but which compared only CBRN terrorist attack risks with each other – continued in that role by themselves, at first. The SNRA’s disappearance made that initial role permanent.

⁴⁴ In combination with domestic production (<https://www.hassan.senate.gov/imo/media/doc/SCTF%20Demand%20PPE%20Chart.pdf>): Two billion N95 respirators (CDC), 17 million face shields (ASPR), four billion gowns (ASPR). In combination with domestic production and projected imports [gap fill]: 100-400 million surgical masks (CDC), 19 billion gloves (ASPR). CDC: CDC 2015 national resourcing model, notes 45, 46 below. ASPR: Numbers scaled in proportion to N95s using 2018 ASPR TRACIE PPE calculator (<https://asprtracie.hhs.gov/technical-resources/resource/6457/hospital-personal-protective-equipment-planning-tool>), note 47 below. 23,000 ventilators, note 48.

⁴⁵ N95 masks: Carias et al (2015, April 10). Potential demand for respirators and surgical masks during a hypothetical influenza pandemic in the United States. *Clinical Infectious Diseases* 60(suppl. 1) S42-51. At https://academic.oup.com/cid/article/60/suppl_1/S42/356585.

The 2015 SNRA’s median scenario (25% attack rate, 0.1-0.3% CFR) represents a severity 4 to low-severity-5 scale pandemic on table 1 of Meltzer et al (https://academic.oup.com/cid/article/60/suppl_1/S1/356555), the scenario space that defines the risk inputs of the national resourcing model for pandemic events that the CDC published in April 2015 (https://academic.oup.com/cid/issue/60/suppl_1). The SNRA’s scenario range spans the interval between the low and high severity and transmissibility scenarios of the model’s PPE chapter (Carias et al, https://academic.oup.com/cid/article/60/suppl_1/S42/356585), corresponding to 2 billion N95 respirators (Carias table 3 base case, midpoint of the 20% and 30% attack rate estimates for the SNRA’s 25% attack rate fatality scenario set = 1982-2624 million N95s for low-severity and 2172-3085 million N95s for high-severity scenarios, low end of both ranges, rounded). With no mitigation measures other than social distancing, no attenuation in projected demand, no imports, no increase in domestic production above the 35 million per month U.S. baseline in January 2020, no decontamination technologies, and no vaccine – i.e. all of the blue bar increases in need, and none of the green or orange increases to supply above the 35 million/month dark green bars of early 2020 (slide 4, <https://www.hassan.senate.gov/imo/media/doc/SCTF%20Demand%20PPE%20Chart.pdf>) – that would have taken the United States through June 2021 in the absence of any further intervention.

I stress that the completeness of that sufficiency is true only for the N95 respirators, which were in shortest supply in the first year of the pandemic. Everything else that FEMA flew in – everything that my FEMA colleagues did in the response – would have been every bit as vital and needed as it was in the history that really happened.

Each of the applications in this CDC resourcing model (https://academic.oup.com/cid/issue/60/suppl_1), including the vaccine-infrastructure chapter (Biggerstaff et al, https://academic.oup.com/cid/article/60/suppl_1/S20/356419) that the CEA’s cost-benefit analysis used as its intermediate source, used the same scenario set as the 2015 SNRA (Meltzer et al, https://academic.oup.com/cid/article/60/suppl_1/S1/356555). Since this paper was still in press when we launched the SNRA update, CDC sent us the preprints and told us which numbers to use.

⁴⁶ Surgical masks, Carias et al, 100-400 million masks. This would have filled the small projected future supply gaps in the Government’s chart, but not in the absence of continued imports from overseas (slide 6 (<https://www.hassan.senate.gov/imo/media/doc/SCTF%20Demand%20PPE%20Chart.pdf>)).

The Government has had detailed, comprehensive tools for connecting risk to resources for at least a decade. While the resourcing parts are well known,⁴⁹ the tools on the risk front end – the risk assessments that provide national and community decision-makers, given their personal values, the information they need to know which risks and which resources they need to prioritize over others to protect their people⁵⁰ – are not. We buried them.⁵¹

Justification for 5 U.S.C. § 2302 disclosure

I am disclosing this information because it evidences censorship of science, fraud, waste, and violations of law and policy, and because its suppression harmed our employers. The purpose of this document is to describe my reasonable belief for these things that is necessary for this disclosure to be legal by 5 U.S.C. § 2302.

⁴⁷ Since the 2015 CDC journal issue does not estimate projected needs for other kinds of PPE in these 2015 models, the most authoritative source is a CDC PPE calculator which the HHS office of the Assistant Secretary for Preparedness and Response (ASPR) adapted to pandemic influenza (<https://asprtracie.hhs.gov/technical-resources/resource/6457/hospital-personal-protective-equipment-planning-tool>). Since this model was made for hospitals rather than communities it scales to workforce size rather than population illness and hospitalization numbers, so the relevant output numbers are ratios relative to the N95 resource needs determined by the CDC model above. (I am making the assumption that gown, glove, and face shield consumption relative to N95 mask consumption by non-hospital workers is comparable to the ratio for hospital workers, which seems a safe assumption as a lower bound.)

The tables for the different disease scenarios are distributed between the different tabs of the spreadsheet referenced above (a section 508 compliant PDF version is at <https://files.asprtracie.hhs.gov/documents/aspr-tracie-hospital-ppe-planning-tool.pdf>): the total sums for each scenario relative to the total N95 mask requirement (i.e. if your scenario needs X N95 masks, how many of each other kind of PPE will you also need) are summarized below.

PPE NEEDS RELATIVE TO N95 MASKS, FROM ASPR PPE CALCULATOR (2018)*

Per N95 mask	EVD VHF		MERS SARS		Pandemic	
	Initial	Hosp.	Initial	Hosp.	Inpatient	ED
N95	1.00	1.00	1.00	1.00	1.00	1.00
Gloves	5.14	10.55	4.40	6.67	9.52	16.19
Gowns	1.05	1.00	1.00	1.40	2.09	3.05
Face shields	1.00	1.00	1.00	1.00	0.0162	0.0085
Boot/shoe cover	2.00	3.09	2.00	2.80	2.12	3.52

Using the pandemic influenza rather than the MERS/SARS model (because the purpose of these calculations is not to show what the projections would have been with the benefit of hindsight, but the assumptions that would have been applied at the time) and, to be conservative, applying the lower of the other-PPE-to-N95 ratios between the two tabs (9.52 glove sets/N95s and 2.09 gowns/N95s from the inpatient tab and 0.0085 face shields / N95s from the ED tab) to the two billion N95 masks of the 2015 SNRA's median scenario results in total projected stockpile requirements of 17 million face shields, four billion gowns, and 19 billion gloves.

The gowns would have covered the demand-supply gap for the remainder of the pandemic with domestic production alone (<https://www.hassan.senate.gov/imo/media/doc/SCTF%20Demand%20PPE%20Chart.pdf> slide 5), as would have the face shields given the added domestic production of non-traditional suppliers (Ford, Boeing, universities, and so on, slide 8). The projected number of gloves also would have been more than sufficient to meet any gaps, given expected continued *imports* from overseas, but would have lasted only two or three months by themselves at most had those been cut off (slide 7).

* HHS Office of the Assistant Secretary for Response and Prevention (ASPR) (2018, December 11). Hospital personal protective equipment planning tool. ASPR TRACIE: at <https://asprtracie.hhs.gov/technical-resources/resource/6457/hospital-personal-protective-equipment-planning-tool>, pdf version at <https://files.asprtracie.hhs.gov/documents/aspr-tracie-hospital-ppe-planning-tool.pdf>, calculating tool at <https://files.asprtracie.hhs.gov/documents/aspr-tracie-hospital-ppe-planning-tool.xlsx>.

⁴⁸ A second paper in this issue by Meltzer et al (https://academic.oup.com/cid/article/60/suppl_1/S52/356562) projects peak national ventilator need for the same combination of scenarios as Carias et al. The endpoint of one of these scenarios (20% attack rate, 0.25% CFR [high severity]) corresponding to the 2015 SNRA best estimate ($0.25\% \times 20\% \times 310 \text{ million} = 155,000 \approx 0.20\% \times 25\% \times 307 \text{ million} = 154,000$ fatalities, 1.2 million vs. 1.4 million hospitalizations) has a projected need of 23,250 ventilators (source table 3).

⁴⁹ E.g. DHS 2007 Target Capabilities List at <https://www.fema.gov/pdf/government/training/tcl.pdf> pp. 460-463, HHS 2010 PHEP hospital surge model <https://archive.ahrq.gov/prep/hospurgemodel/description/description3.htm>, CDC 2015 tools discussed above.

⁵⁰ U.S. Department of Homeland Security (2011, April). Page 11, first paragraph. Page 9, strategic planning, capabilities-based planning, resource decisions. Risk management fundamentals: homeland security risk management doctrine. At <https://www.dhs.gov/xlibrary/assets/rma-risk-management-fundamentals.pdf>.

⁵¹ Notes 54-57 below.

Our suppression of this risk information degraded the Federal Government's capability to make risk-based resourcing decisions across missions and Departments,⁵² and state and local government partners' capabilities to protect their own people against their own greatest risks.⁵³ But we continue to keep it buried today.^{54, 55, 56, 57}

We avoid accountability by telling different things to different people.

- We tell the courts that FEMA never actually used the (2015) SNRA, because FEMA has been using other risk tools in its place since 2015.⁵⁸
- We tell the press that those other tools are brand new⁵⁹ – so new that the Government can't be blamed for failing to prepare the Nation for a disaster matching the pandemic scenario that a journalist discovered in them in April 2020.⁶⁰
- We tell Congress and the President that the risk data available to FEMA at the end of 2019 gave no indication that pandemic risk might be significantly greater than anything else FEMA has ever dealt with.⁶¹ That disconnect wasn't FEMA's fault, but the fault of the state and local government partners who gave FEMA bad information about national risk because they were ignorant.^{62, 63}

But we continue making the same requirements on those partners to plan to the wrong risks and build the wrong capabilities⁶⁴ which inverted the Nation's preparedness in the first place – and tell them that the risk-based evidential authority for those requirements is the 2015 SNRA.⁶⁵ Which they can't see.⁶⁶

⁵² FEMA, April 2020 email to E&E News. Frank, Thomas (2020, April 13). Warning on killer virus was preliminary – FEMA. *E&E News*: at <https://www.eenews.net/climatewire/stories/1062857757> (paywalled original; pdf print at https://5usc2302.github.io/risk/References/EE_News_Frank_20200413_FEMA_-_Warning_about_killer_virus_was_preliminary.pdf).

⁵³ DHS (2020, December 22). 2020 national preparedness report. Page 2, callout block. At <https://www.hsdl.org/?view&did=848274>.

⁵⁴ DHS SNRA 2011 (FOIA requested items 2b, 4), FEMA SNRA 2015 (1, 2a, 3): FEMA (2018, December 10). Final response, FEMA FOIA 2016-FEFO-00165 and appeals. At <https://bd02.github.io/external/Reorganized/FOIAs%20for%20SNRA%20documentation/FOIA%20correspondence%202017-FEFO-00165/SNRA%20FOIA%20correspondence%202016-18.zip>. Note: the SNRA 2011 requested document #5 and the SNRA 2015 requested documents #6-8 were released in full (<https://bd02.github.io/external/Released%20documentation/Originals%20OCRed/Split%20by%20redaction%20status/Released%20in%20full.zip>), and the SNRA 2011 seven-page public summary (<https://www.dhs.gov/xlibrary/assets/rma-strategic-national-risk-assessment-ppd8.pdf>) has always been public (on DHS's website: FEMA removed it from its own some time in fall 2020 [https://web.archive.org/web/2020*/https://www.fema.gov/media-library-data/20130726-1854-25045-5035/rma_strategic_national_risk_assessment_ppd8_1_.pdf]).

⁵⁵ DHS HSNRC 2013 (DHS HQ): DHS (2019, June 17), Denial in full, FOIA request 2017-HQFO-00005, portions withheld by b(5) [the b(1) withholdings are proper for certain segregable parts, but the b(5) withholdings are not (DHS cites these finalized studies as non-political authorities for political decisions, <https://docs.house.gov/meetings/HM/HM09/20150708/103703/HHRG-114-HM09-Wstate-SmithT-20150708.pdf>)]. DHS FOIA annual report raw data, PRIV FY 2019, tab raw data requests, row 43766. At <https://www.dhs.gov/publication/annual-foia-report-raw-data>, https://www.dhs.gov/sites/default/files/publications/fy19_raw_data_priv.xlsx. The 2018 HSNRC methods documentation is public, https://www.rand.org/pubs/research_reports/RR2140.html, but internally and externally the risk content (which is displayed in part in figure 1) is in the same unclear status as the 2018 QHSR.

⁵⁶ SNRA 2011, 2015: NPD (4/30/2019) 28-1, current status in docket at <https://www.courtlistener.com/docket/6284501/public-employees-for-environmental-responsibility-v-united-states/>. **Update:** DHS won on December 17, 2021 (documents 32, 33 at the same link), see p. 16 note 121 below.

⁵⁷ SNRA: FEMA internal orders 2/21/2017, 5/11/2021. The written orders enforcing this censorship on me personally no longer apply to me since I changed jobs in March (I'm still in the same organization, but a different work unit). But it still continues, and this fully unclassified risk data is still effectively locked up inside ~~and outside~~ FEMA. ²⁰²² at <https://5usc2302.github.io/risk>

⁵⁸ DHS/FEMA National Preparedness Directorate (NPD) (2019, April 30). Paragraph 8. Declaration 28-1, *Public Employees for Environmental Responsibility (PEER) v. U.S. Department of Homeland Security* 1:2018-cv-00158, D.D.C., at <https://www.courtlistener.com/docket/6284501/28/1-public-employees-for-environmental-responsibility-v-united-states/>.

⁵⁹ FEMA, April 2020 email to E&E News (note 52 above).

⁶⁰ Frank, Thomas (2020, April 9). Disaster agency foresaw killer virus months before COVID-19. *E&E News*: at <https://www.eenews.net/climatewire/stories/1062824495>.

⁶¹ DHS 2020 national preparedness report pp. 1-3.

⁶² DHS 2020 national preparedness report p. 2, callout block.

⁶³ Of the real national risk picture, which we censored. Notes 54, 56, 57 above (limited to DHS/FEMA actions).

⁶⁴ U.S. Department of Homeland Security (2022, May 13). Risk-based core capabilities, pp. 9, 25, 35-36, A-1-2, 14, 18-19, 21-23, 28-31, 49, B.1-3, 12, C-2, 5, D-13, E-9, F-12, G-16, H-1-3, 10, 14, 26, 28-32, 35. Risk-based requirements, pp. A.1-2, 21-23, 28-31, B.1-3, H.1-2, 10-11, 14, 20, 22, 28-30. Preparedness grants manual. At https://www.fema.gov/sites/default/files/documents/fema_fy-2022-preparedness-grants-manual.pdf.

⁶⁵ U.S. Department of Homeland Security (2015, September 30). Risk and the Core Capabilities. National preparedness goal, 2nd edition, pp. 4-5. At https://www.fema.gov/sites/default/files/2020-06/national_preparedness_goal_2nd_edition.pdf.

I signed off on the planning assumptions that those requirements are based on in 2015 – not the assumptions themselves (called the Core Capabilities⁶⁷), but FEMA's claim that they were supported by the national risk picture that my team found.⁶⁸ But FEMA never submitted that picture – or that claimed connection – to the outside critical and stakeholder scrutiny that they needed;⁶⁹ that Government information quality standards require;⁷⁰ and that FEMA agreed to as the condition for our contributors' help, and our endorsement of that claim.⁷¹

Those planning assumptions turned out to be wrong. That is why the National Preparedness System failed in 2017 and 2020.

But we are still using them.⁷² We are still keeping the real risk data that we say that those planning assumptions came from locked up.⁷³ And we are still avoiding the scrutiny and accountability needed for correction⁷⁴ – and prioritizing that evasion over mission success.⁷⁵

⁶⁶ DHS Homeland Security Advisory Council (2016, March 17). Grant review task force final report, spring 2016, p. 21 (*Observations: Consistency...*). At [https://www.dhs.gov/sites/default/files/publications/HSAC%20-%20Grant%20Review%20Task%20Force%20-%20Final%20Report%20-%20FINAL%20\(accessible\).pdf](https://www.dhs.gov/sites/default/files/publications/HSAC%20-%20Grant%20Review%20Task%20Force%20-%20Final%20Report%20-%20FINAL%20(accessible).pdf). --FEMA National Advisory Council (2020, November 30). November 2020 report pp. 20-22, at https://www.fema.gov/sites/default/files/documents/fema_nac-report_11-2020.pdf.

⁶⁷ The 2011-present (PPD-8) Core Capabilities replaced the Target Capabilities (<https://www.fema.gov/pdf/government/training/tcl.pdf>) of DHS/FEMA's pre-2011 (HSPD-8) doctrine. The first purpose of the 2015 SNRA update was to check whether the 2011-assessed national risk picture still supported the broad, balanced all-hazards existing set of Core Capabilities, and was consistent with the small adjustments that FEMA and its stakeholders made to them in 2015. I expected that it would, and those were the findings that we reported.

⁶⁸ Note 65.

⁶⁹ March 2019 SNRA FAQ for Congress p. 4 (*Why does a highly technical product that was made by experts need outside critics?*).

⁷⁰ Information Quality Act. Section 515, Consolidated appropriations act for FY 2001 (Public Law 106-554): at <https://www.govinfo.gov/content/pkg/PLAW-106publ554/pdf/PLAW-106publ554.pdf#page=156>.

- OMB (2002, February 22). Guidelines for ensuring the quality, objectivity, utility, and integrity of information disseminated by Federal agencies. At https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/OMB/fedreg/reproducible2.pdf.

- Graham, John D. (2002, March 21). OMB's role in overseeing information quality. Remarks, National Academy of Sciences. OMB: at https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/OMB/inforeg/info-quality_march21.pdf.

- OMB (2004, December 16). Final information quality bulletin for peer review. At https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/OMB/fedreg/2005/011405_peer.pdf.

- OMB, OSTP (2007, September 19). Updated principles for risk analysis. At https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/memoranda/2007/m07-24.pdf.

- DHS (2012, April 12). Directive 026-07: Scientific integrity. At https://www.dhs.gov/sites/default/files/publications/mgmt/general-science-and-innovation/mgmt-dir_026-07-scientific-integrity_revision-00.pdf.

- DHS (2019, November 21). Directive 139-02: Information quality. At https://www.dhs.gov/sites/default/files/publications/mgmt/information-and-technology-management/mgmt-dir_139-02-info-quality_revision-01.pdf. Directive 139-02-001, information quality implementation. At https://www.dhs.gov/sites/default/files/publications/mgmt/information-and-technology-management/mgmt-dir_139-02-001-info-quality-implementation_revision-01.pdf.

- President (2021, January 27). Restoring trust in Government through scientific integrity and evidence-based policymaking. At <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/>.

⁷¹ SNRA instructions to contributors, at <https://www.courtlistener.com/docket/6284501/24/3/public-employees-for-environmental-responsibility-v-united-states/000001-43, esp. 000011-13> (*SNRA 2015 Consolidated unclassified documentation.pdf* [email 1/2* or [https://web.archive.org/web/20211231153713/https://5usc2302.github.io/risk/Strategic%20National%20Risk%20Assessment%20\(SNRA\)%202015%20-%20Consolidated%20unclassified%20documentation.pdf](https://web.archive.org/web/20211231153713/https://5usc2302.github.io/risk/Strategic%20National%20Risk%20Assessment%20(SNRA)%202015%20-%20Consolidated%20unclassified%20documentation.pdf)] pp. 664-666).

⁷² Note 64.

⁷³ Since January 2020, the states whose ignorance of pandemic risk the agency still blames for its 2020 failures (<https://www.hsdl.org/?view&did=862169> pp. 3, 76) have buried a quarter million of their own people from a risk that their FEMA-mandated 'risk assessment' tools insisted was zero on 12/31/2019 and 12/31/2020 and 12/31/2021 (p. 11 12/22/20 – 5/11/21 and notes 81, 83).

These insensible results aren't actually coming from the state emergency managers who are reporting them to FEMA, but from the tools themselves. The tools by themselves are sound (note 81 below), but they are so poorly calibrated to the Nation's actual risk picture that it is impossible to get the right answer from them, even when you know what it is. This error is baked into the constructs which FEMA took from this core risk assessment in 2011 and 2015 (notes 65, 67) that define the current national preparedness system (page 13 below), which these proxy or derivative assessments use as their evaluation rules (note 98 below). FEMA could easily fix it by recalibrating those constructs against the science they were based on, but not without revealing that the latter actually exists.

⁷⁴ Accountability to our elected leaders and DHS, notes 61, 73. To Congress, notes 61, 73, 75, 141. To the law, notes 116, 117, 118, 119, 121.

⁷⁵ The funding stream which Congress appropriated for a) conducting national risk assessments and b) building state and local risk management capabilities is the funding stream that FEMA is using to c) suppress its national risk assessment and d) keep its unclassified risk data from state and local emergency managers. 10/16/2020 letter p. 6; Disclosure Branch (3/1/19) declaration 22-1 ¶ 6, NPD (3/1/19) 22-2 ¶ 1, NPD (4/30/19) 28-1 ¶ 1.

Responsibility

I am using the word “we” because I helped bury this too. I probably have more responsibility for that than anyone else above the ground today.

Status update (17 October 2020 to 4 July 2021)

October 27, 2020: After I had tried to get what FEMA was saying in court corrected, and failed to do so, I told the Justice Department (which represents DHS in court) and GAO together that what we were telling each of them factually contradicted what we were telling the other,^{76, 77} and sent them all this information (the information in the other attachments). Nothing happened.

I spent October²⁰²⁰ to June²⁰²¹ writing this letter.

Late December 2020: I told the committee staff that I would contact the third party who was unaware of the contradictions between what we were telling him and others – the journalist whose article I’d cited in my October 16 follow-up letter⁷⁸ – before following up with them again.⁷⁹

December 22, 2020: FEMA reported that the risk data available to the agency on December 31, 2019 had given no indication that pandemics were any more of a risk than other threats and hazards that emergency managers had to deal with.⁸⁰

April 28, 2021: The 2020-updated versions of the information which FEMA had referenced in the December report were released internally. They returned the same result: On December 31, 2020, half the jurisdictions using this FEMA-mandated tool to assess their risks reported that their risk from pandemics was zero.⁸¹ FEMA used [is using] those numbers anyway.

May 11, 2021: Management renewed the prohibitions on sharing the [real] risk data which contradicted these results inside or outside FEMA.^{82, 83}

⁷⁶ DHS/FEMA National Preparedness Directorate (NPD) (2019, April 30). Declaration 28-1 paragraph 8. *PEER v. DHS* 1:2018-cv-00158, D.D.C., at <https://www.courtlistener.com/docket/6284501/28/1/public-employees-for-environmental-responsibility-v-united-states/>.

⁷⁷ U.S. Government Accountability Office (GAO) (2020, May 4). National preparedness: additional actions needed to address gaps in the Nation's emergency management capabilities, pp. 11-12, 28. GAO-20-297: at <https://www.gao.gov/assets/710/706612.pdf>.

⁷⁸ Note 52.

⁷⁹ That is this [7/4/2021] letter. I'm a very slow writer. The intervening events listed on this page (starting with the Government's decision to keep in place the issues that the 10/27/2020 email reported) complicated the existing issues with new ones faster than I could write.

⁸⁰ U.S. Department of Homeland Security (2020, December 22). 2020 national preparedness report. At <https://www.hsdh.org/?view&did=848274>.

⁸¹ 68/120 (57%) reported zero risk for pandemic or epidemic scenarios on 12/31/2019 and 55/117 (47%) on 12/31/2020. (My 2019 count is lower than the published one [58%].) This looks like an improvement, but it isn't. It should be zero. If what these tools reported had *any* connection to risk, or even just perceived risk, the number of jurisdictions reporting on 12/31/2020 that pandemics posed no risk to their communities would be zero.

These information products (THIRAs) are superb planning tools – so long as they are closely calibrated to a shared picture of risk between users, that users can see and judge for themselves. The THIRAs were never intended to be used without at least that common national risk picture to calibrate against, feed into, and iteratively correct and improve. Without that, and siloed from each other by default, the risk picture that these tools will paint, by their construction, can be only as accurate as the risk assumptions encoded by the ‘risk-based’ capabilities which determine the risk picture that comes out of them – even when that picture is clearly wrong.

⁸² FEMA internal orders 2/21/2017, 3/26/2019, 5/11/2021, *Supporting files and context.zip / Other / Restrictions.pdf* pp. 1-2. These are not the best example for a number of reasons – 1) they're the orders on me personally which made the censorship explicit, after I had crossed the unspoken lines which internally enforce it; and 2) they no longer apply to me directly since I changed jobs in March²⁰²² – but they're the part that I can substantiate without embarrassing anyone other than me.

⁸³ Updates since July 4:²⁰²¹ 9/14/2021: Management confirm that FEMA will continue to withhold the SNRA, including its climate change analysis in particular, from the public. 12/17/2021: DHS wins its FOIA litigation against PEER, https://storage.courtlistener.com/recap/gov.uscourts.dcd.192957/gov.uscourts.dcd.192957.33.0_1.pdf. See p. 16 note 121 below. 12/31/2021: State, local, tribal, and territorial governments report the updated results of their FEMA risk-assessment tools (note 81). There is no substantial difference: the assessments report that 45% of jurisdictions, totalling 80 to 100 million Americans, have zero pandemic risk today.

+ December 2022, 2023: FEMA reports these numbers to the President and Congress in subsequent versions, <https://www.hsdh.org/?view&did=873847> p. 8, <https://www.fema.gov/emergency-managers/national-preparedness#reports> pp. 9-10.

Background (summary)

The Strategic National Risk Assessment (SNRA) was designed to help Federal and community decision-makers prioritize and plan for the greatest risks to the Nation, with math, science, and evidence.

Origin

In 2011, FEMA asked DHS for a master risk assessment that would compare every threat and hazard in FEMA's mission space – a One Ring To Rule Them All of national risk – using math, science, and evidence that FEMA could defend. DHS's analysts gave FEMA what it asked for. DHS has been trying to put that genie back into its bottle since.⁸⁴

We see reproducibility as an essential feature of competent and accountable government. Show me what numbers, assumptions, and equations you used: and then show me how they add up to what you say they add up to.

- John Graham, OMB Office of Information & Regulatory Affairs, March 2002

The former DHS Office of Risk Management & Analysis (RMA) created the SNRA for FEMA in 2011. RMA accomplished this by adding hurricanes, pandemics, and other natural/accidental/malevolent hazards to the existing comparative framework of the classified DHS terrorism risk assessments⁸⁵ which determine[d] what goes into the Strategic National Stockpile. DHS/FEMA updated the SNRA itself in 2015. FEMA's update focused on building out a fully unclassified version that its state and local stakeholders could see and use.

The U.S. national risk assessment

The SNRA is a national risk assessment. It makes comparative judgements between risks – chemical accidents vs. terrorist bombings, nuclear meltdowns vs. pandemics, geo-magnetic storms vs. a second 9/11 – touching the equities, responsibilities, and budgets of every Department in the U.S. Government. It expresses those risks in common mathematical terms, allowing direct comparison and resource allocation decisions between functions and agencies in a way that the Government has never been able to do before. What the national Budget does for revenue and spending, the SNRA does for national risk.

At present, the U.S. Government manages national risk in the same way that it managed the national accounts a century ago, before the creation of the unified Budget. The Government makes risk tradeoff decisions in program siloes, or decision-by-decision, judging costs and benefits in isolation from other risk management decisions, like the decision that the CEA's Warp Speed analysis supported. The SNRA breaks down those walls for risk, like the Budget does for money.

A national risk assessment is an entirely new thing in American government. I believe that many of the SNRA's problems may stem from this: without a pre-existing frame of reference, decision-makers who encounter it don't have the standard of comparison needed to understand just how much this thing will empower citizens, and empower accountable government.

FEMA's master risk assessment

The SNRA's quantitative method makes FEMA's planning assumptions explicit in a way that makes it possible for any expert, critic, or citizen to examine and question them, to an extent that no other kind of analysis that DHS, FEMA, or any other U.S. Government entity practices can do.

If they could see it. Once the agency got what it wanted from us in 2015 – an updated master risk assessment that FEMA could claim as evidential confirmation for its updated planning assumptions – it buried the risk assessment to protect those assumptions, and those claims, from scrutiny.

⁸⁴ From 2012-15 DHS HQ was making the decisions and FEMA was the impacted party. Since 2015 DHS/FEMA has been making the decisions itself for the SNRA. DHS HQ returned to this analytic line of work for its own planning needs in 2016, but did not interfere with FEMA. I don't know what (if any) role DHS HQ had in FEMA's decisions after 2016.

⁸⁵ The DHS Integrated CBRN Terrorism Risk Assessment (ITRA) and its biological (BTRA), chemical (CTRA), and radiological-nuclear (RNTRA) components (notes 42 and 43 above).

Why the National Preparedness System failed

The PPD-8 (2011-present) National Preparedness System was designed on the assumption that it would have the capability of dynamic self-correction.⁸⁶ It needed that capability to work.^{87, 88}

The system wasn't built on the largest scope science project that the Government has ever made from vanity. Emergency managers are practical people. It was built on a science project because dynamic self-correction is what science does. That's what science is.⁸⁹ That scrutiny by outside stakeholders,⁹⁰ other partners,⁹¹ and critics⁹² is the one element that every means for that self-correction needs to function.^{93, 94}

The planning assumptions at the center of this system were formulated by a relatively small number of people, based on their best good-faith interpretation of what they thought that science said, in a few small rooms, in a few small months in 2011 and in 2015.⁹⁵ The subsequent events which cut off those routes for self-correction – in 2011 by external events, and in 2015 by DHS/FEMA itself – froze those assumptions in place.⁹⁶

The formalization of those derivative planning assumptions – the PPD-8 Core Capabilities – as risk assessment tools in themselves,⁹⁷ to define the risk picture that state and local governments were and are required to plan to⁹⁸ – as stand-ins⁹⁹ for the unavailable real risk picture,¹⁰⁰ for which they had been originally designed as capabilities, to counter¹⁰¹ – further institutionalized the circular risk assumptions which had constrained their own definitions.¹⁰² That rigid and unquestioned continuation, compounded over years, magnified the eventual real-world impacts of each error in them out of proportion to its original magnitude.

In 2017 and 2020, those planning assumptions turned out to be wrong.

⁸⁶ Reference of note 65, page 4, paragraph preceding *Risk and the Core Capabilities*.

⁸⁷ U.S. Department of Homeland Security (2011, April). Adaptability. Risk management fundamentals: homeland security risk management doctrine, page 11. At <https://www.dhs.gov/xlibrary/assets/rma-risk-management-fundamentals.pdf>.

⁸⁸ U.S. Department of Homeland Security (2011, November). National Preparedness System. Page 2, SNRA role. At https://www.fema.gov/pdf/prepared/nps_description.pdf.

⁸⁹ The success and credibility of science are anchored in the willingness of scientists to

- 1) Expose their ideas and results to independent testing and replication by others. This requires the open exchange of data, procedures, and materials.
- 2) Abandon or modify previously accepted conclusions when confronted with more complete or reliable experimental or observational evidence.

Adherence to these principles provides a mechanism for self-correction that is the foundation of the credibility of science.

American Physical Society (1999, November 14). What is science? APS Council, https://www.aps.org/policy/statements/99_6.cfm.

⁹⁰ OMB (2002) V.3.a, V.3.b.ii.B, pp. 8459-60.

⁹¹ Unity of effort. DHS (April 2011) pp. 11-12.

⁹² Graham, John D. (2002, March 21). OMB's role in overseeing information quality. Remarks, National Academy of Sciences, page 10. OMB: at https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/OMB/inforeg/info-quality_march21.pdf.

⁹³ Transparency. DHS (April 2011) pp. 11-12.

⁹⁴ Utility. OMB (2002) V.2, p. 8459.

⁹⁵ March 2019 SNRA FAQ for Congress p. 4 (*Why does a highly technical product that was made by experts need outside critics?*).

⁹⁶ March 2019 SNRA FAQ for Congress p. 3 (*How is FEMA using the SNRA?*).

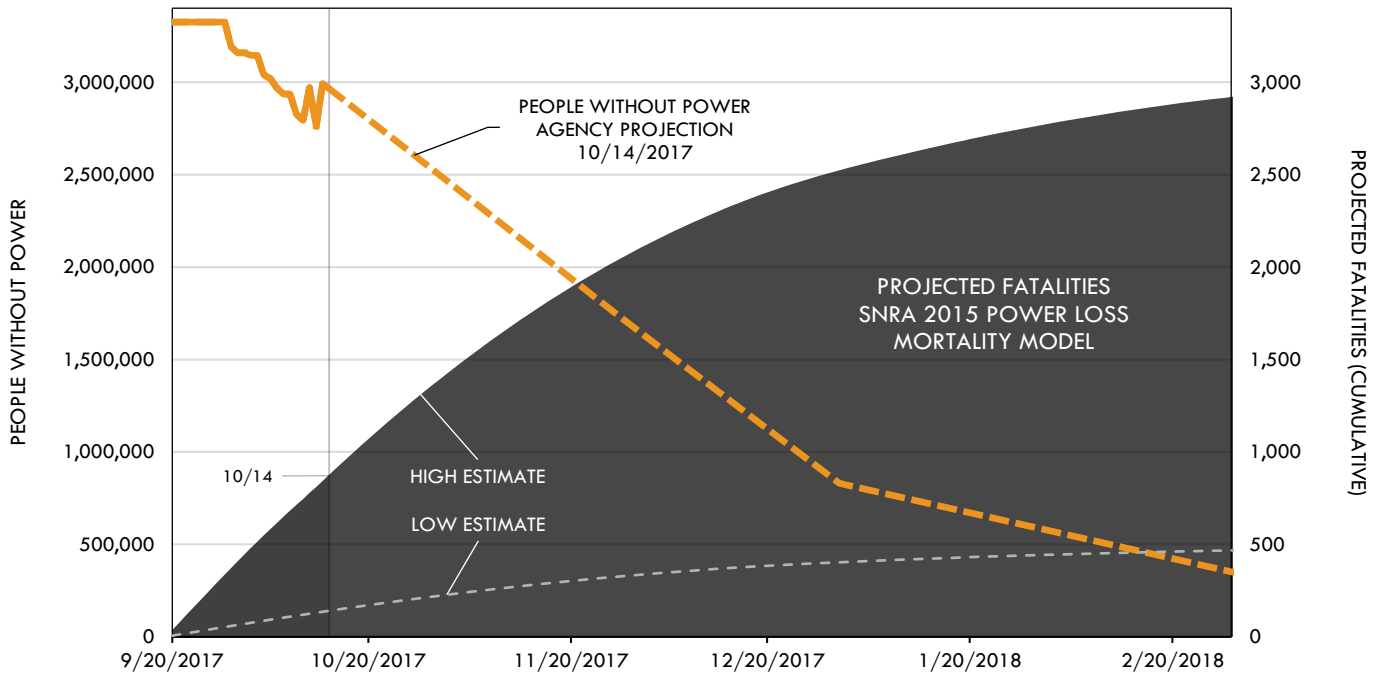
⁹⁷ I.e. the capabilities define the risks, rather than vice versa. The origin of this is a specific interpretation of capability-based planning which emphasizes pre-defined capabilities as first-order elements in themselves, rather than risk.

⁹⁸ DHS (2018, May). Comprehensive preparedness guide (CPG) 201 pp. 5, 7, 11-18. At <https://www.fema.gov/sites/default/files/2020-07/threat-hazard-identification-risk-assessment-stakeholder-preparedness-review-guide.pdf>.

⁹⁹ DHS 2020 national preparedness report pp. 2 (callout box, second sentence), 4, 16-18.

¹⁰⁰ The unavailability of the SNRA's information to the enterprise partners who were supposed to be making use of it for their own planning was the National Preparedness System's specific failure point in 2017 (figure 2).

FIGURE 2: SNRA 2015 POWER LOSS MORTALITY MODEL. RETROSPECTIVELY PROJECTED FATALITIES IN PUERTO RICO, BASED ON THE INFORMATION AVAILABLE TO FEMA IN OCTOBER 2017



Power loss mortality model: Linear extrapolation of best-estimate (90) excess fatalities, New York City 14-15 August, 2003 East Coast Blackout, Anderson et al (2012) (*Epidemiology* 23(2) 189-193, NIH public access <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3276729/pdf/nihms348988.pdf>) to total person-days without electric power. Low estimate (1.8 fatalities/million person-days) assumes the 90 NYC fatalities represented all fatalities from the multi-state blackout (50 million person-days without power in U.S. and Canada); high estimate (11.25 per million person-days) assumes the 90 NYC fatalities represented impacts only in NYC (8 million person-days). The SNRA used the low-estimate-assumptions for the electric-power-related hazard events which FEMA added in 2015 (space weather & physical attack on the power grid). FEMA also included indirect fatalities in other events added or revised in 2015 where defensible numbers were available, but these were not specific to electric lifeline failure.

Maria power restoration curve: 9/20-10/13, FEMA senior leadership briefing (SLB) 10/13/17 1700 EDT (<https://oversight.house.gov/sites/democrats.oversight.house.gov/files/Senior%20Leadership%20Briefing%20and%20Recovery%20Snapshots.pdf>); projected 10/14-3/31 (linear interpolation), FEMA daily operations brief 10/14/17 (<https://www.hsdl.org/?view&did=804878>). Assumption of constant population (Census July 2017). Official fatality total (47 as of 10/14) not included in chart.

Figure 2 above is the second of a pair of charts in a separate FOIA letter (2020-FEFO-00393, <https://bd02.github.io/external/FOIA%202020-FEFO-00393/Maria/PR%20data%20FOIA%2020200218%20Request%20letter.pdf>) that I'm including here partly for completeness – the first is figure 1 in the 10/16/2020 letter to committee staff – which retrospectively project the number of expected deaths from the long-term, wide-scale power outage after Maria. Figure 1 in the 10/16/2020 letter shows the results for the actual outages which were determined after the fact. This figure instead displays what the fatality projections would have been with the information that FEMA had available three weeks after the storm. The results are the same.

The model as documented (email 1/2; SNRA pp. 197-198, 201, 204-205, 365, 371) isn't necessarily obvious, nor is it unique. A nearly identical power-loss death predictor, the same as FEMA's except for one parameter, was made public in July 2015 (https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20150727-5191 pp. 71-72, esp. footnote 76). But as far as I can tell, it doesn't appear to have attracted attention outside of its original context (a regulatory filing) until some years later.

¹⁰¹ Note 65 above (National Preparedness Goal 2nd edition pp. 4-5); also National Preparedness Goal, 1st edition (2011), p. 3, <https://www.fema.gov/pdf/prepared/npg.pdf>.

¹⁰² March 2019 SNRA FAQ for Congress p. 4 (*Why does a highly technical product that was made by experts need outside critics?*).

Accountability

What they will tell you

These are the things that DHS and FEMA will tell you, to deflect your asking further.

DHS (general)

They relate to a frequent point of confusion: DHS's practice of claiming data and analysis as evidence for final decisions, then turning around and shielding that evidence from scrutiny by claiming it to only be a 'draft'. This is how we have our cake, and eat it too.

We avoid political accountability by claiming that our decisions are based on objective science and evidence.^{103, 104, 105, 106, 107, 108, 109, 110, 111} When we are called on those claims,^{112, 113, 114, 115} we turn around and avoid scientific accountability by calling them discretionary policy decisions that critics have no right to question.^{116, 117, 118, 119} When these contradictions become unsustainable,¹²⁰ we make stuff up.¹²¹ When our choices catch up to us,^{122, 123, 124, 125} we double down,¹²⁶ and keep going.^{127, 128}

¹⁰³ This section includes the larger DHS context of these issues including the DHS strategic planning context where the SNRA first got trapped, as well as the post-2015 DHS/FEMA-centered issues that the rest of this document mostly focuses on.

We avoid political accountability.

¹⁰⁴ U.S. Department of Homeland Security (2011, September). National Preparedness Goal, 1st edition (2011), pp. 3-4. At <https://www.fema.gov/pdf/prepared/npg.pdf>. (SNRA)

¹⁰⁵ U.S. Department of Homeland Security (2011, December 9). The Strategic National Risk Assessment in support of PPD 8: A comprehensive risk-based approach toward a secure and resilient Nation (public summary). At <https://www.dhs.gov/xlibrary/assets/rma-strategic-national-risk-assessment-ppd8.pdf>. (SNRA)

¹⁰⁶ U.S. Department of Homeland Security (2012, February 3). Testimony, DHS Office of Policy, transcript p. 65. House Committee on Homeland Security Subcommittee on Oversight, Investigations, and Management. At <https://www.hsdl.org/?view&did=731178>. (SNRA, HSNRC, QHSR analysis)

¹⁰⁷ U.S. Department of Homeland Security (2013, September 9). Using enterprise-wide risk modeling, analysis, and assessment to inform homeland security policy and strategy. Alan Cohn, DHS Office of Policy. Presentation, Association for Federal Enterprise Risk Management (AFERM) 6th Annual Federal Enterprise Risk Management Summit: at https://www.aferm.org/wp-content/uploads/2016/10/ERM_2013_Cohn_Using_Risk_Modeling.pdf. (SNRA, HSNRC, QHSR analysis)

¹⁰⁸ U.S. Department of Homeland Security (2014, June). Quadrennial Homeland Security Review 2014 pp. 6-7, 15-17, 34-35, 41-43, 47, 56, 64, 67, 71-72, 74, 81, 94-96 ("risk" cited as an evidential basis for policy decisions as opposed to a descriptive term). DHS Office of Policy, Strategic Plans. At <https://www.dhs.gov/sites/default/files/publications/2014-qhsr-final-508.pdf>. (HSNRC and QHSR analysis)

¹⁰⁹ U.S. Department of Homeland Security (2015, July 8). Testimony, DHS Office of Policy. House Committee on Homeland Security Subcommittee on Oversight and Management Efficiency: at <http://docs.house.gov/meetings/HM/HM09/20150708/103703/HHRG-114-HM09-Wstate-SmithT-20150708.pdf>. (HSNRC and QHSR analysis)

¹¹⁰ U.S. Department of Homeland Security (2015, September 30). National preparedness goal, 2nd edition, SNRA pp. 4-5, threats & hazards identification p. 12. At https://www.fema.gov/sites/default/files/2020-06/national_preparedness_goal_2nd_edition.pdf.

¹¹¹ DHS/FEMA National Preparedness Directorate (NPD) (2019, April 30). Declaration 28-1, *Public Employees for Environmental Responsibility (PEER) v. U.S. Department of Homeland Security* 1:2018-cv-00158, D.D.C., at <https://www.courtlistener.com/docket/6284501/28/1/public-employees-for-environmental-responsibility-v-united-states/>. Paragraph 6 ("data-driven policy decisions").

When we are called on those claims,

¹¹² FEMA FOIA request 2016-FEFO-00165, <https://bd02.github.io/external/Reorganized/FOIAs%20for%20SNRA%20documentation/>. (SNRA)

¹¹³ Public Employees for Environmental Responsibility (PEER) (2018, January 25). Flying blind – Our national risk assessment is still under wraps. Press release: at <https://www.peer.org/flying-blind-our-national-risk-assessment-still-under-wraps/>. PEER (2018, January 25). Complaint, document 1, *PEER v. DHS* 1:2018-cv-00158, D.D.C., at <https://www.courtlistener.com/docket/6284501/1/public-employees-for-environmental-responsibility-v-united-states/>. (SNRA)

¹¹⁴ DHS FOIA request 2017-HQFO-00005 for Homeland Security National Risk Characterization (HSNRC), Current Strategic Environment 2012, Future Strategic Environment 2013 reports (C. Beckner 10/4/2016). DHS Privacy Office FOIA log October 2016, at <https://web.archive.org/web/20170315142742/https://www.dhs.gov/sites/default/files/publications/dhs-privacy-office-foia-log-october-2016.pdf>. (HSNRC and QHSR analysis)

¹¹⁵ FEMA FOIA request 2020-FEFO-00401, https://5usc2302.github.io/risk/2020-FEFO-00401/FOIA_2020-FEFO-00401_request_letter_20200218_redacted.pdf. (National THIRA)

We avoid scientific accountability.

¹¹⁶ FEMA (2018, December 10). Final response, FEMA FOIA 2016-FEFO-00165 and appeals. At <https://bd02.github.io/external/Reorganized/FOIAs%20for%20SNRA%20documentation/FOIA%20correspondence%202017-FEFO-00165/SNRA%20FOIA%20correspondence%202016-18.zip>. (SNRA, my FOIA)

¹¹⁷ DHS/FEMA National Preparedness Directorate (NPD) (2019, March 1). Declaration 22-2 paragraphs 4, 6, 8, 10, 12, 14, 16, 18, *PEER v. DHS*, at <https://www.courtlistener.com/docket/6284501/22-2/public-employees-for-environmental-responsibility-v-united-states/>. FEMA Disclosure Branch (3/1/2019) 22-1 paragraphs 7, 10-13. (SNRA, PEER's FOIA)

¹¹⁸ DHS (2019, June 17). Denial in full, FOIA request 2017-HQFO-00005, b(1) [this would be segregable portions of the HSNRC documentation], b(5). DHS FOIA annual report raw data, PRIV FY 2019, tab raw data requests, row 43766. At <https://www.dhs.gov/publication/annual-foia-report-raw-data>, https://www.dhs.gov/sites/default/files/publications/fy19_raw_data_priv.xlsx. (HSNRC and QHSR analysis)

¹¹⁹ FEMA (2021, February 9, April 9). Interim and final responses, FEMA FOIA 2020-FEFO-00401. At <https://5usc2302.github.io/risk/2020-FEFO-00401/>. (National THIRA)

When those contradictions become unsustainable,

¹²⁰ PEER (2019, March 29). Memorandum 24-1, *PEER v. DHS*, at <https://www.courtlistener.com/docket/6284501/24-1/public-employees-for-environmental-responsibility-v-united-states/>. (SNRA)

We make stuff up.

¹²¹ DHS/FEMA National Preparedness Directorate (NPD) (4/30/2019) *PEER v. DHS* (1:18-cv-00158-ckk D.D.C.) declaration 28-1, <https://www.courtlistener.com/docket/6284501/28-1/public-employees-for-environmental-responsibility-v-united-states/>.

1) Query and agency response.

- a. Attached *NTHIRA FOIA 2020-FEFO-00401 less redacted.pdf* (also https://5usc2302.github.io/risk/2020-FEFO-00401/FOIA_2020-FEFO-00401_request_letter_20200218_redacted.pdf).
- b. Response and production, <https://5usc2302.github.io/risk/2020-FEFO-00401/>.

2) Content: **A.** NPD (4/30/2019) 28-1 ¶ 9, regarding 2011 version used in 2015. **B.** 28-1 ¶ 2, 8, 10, 14, 16, and 17, FEMA using other products instead. **C.** 28-1 ¶ 2, 8, 16, National THIRA from 2015.

A. NPD (4/30/2019) 28-1 paragraph ¶ 9, regarding 2011 version used in 2015:

- a. FEMA production Bates pp. 303-304, https://5usc2302.github.io/risk/2020-FEFO-00401/NPG_20150323_0423_drafts_page_5.pdf, responsive to *NTHIRA FOIA...pdf* request #1.
- b. Note: 28-1's temporal-ordering objection would also invalidate or characterize as fraudulent 1) this April 2019 declaration's claims (28-1 ¶ 2, 8, 16) about the 'national THIRA' (National Preparedness Goal 2nd edition October 2015, NTHIRA public prospectus July 2019, NTHIRA content finalized February 2020 [*NTHIRA FOIA...pdf* pp. 1, 4]); 2) FEMA's claims about the 2011 SNRA and the 'risk-based' national preparedness system based on it, going back to 2011 (National Preparedness Goal October 2011, SNRA 2011 summary December 2011); and 3) the FEMA/NPD salaries, which Congress funded on the latter assurances, that paid for these declarations in the first place (Disclosure Branch 22-1 ¶ 6, NPD 28-1 ¶ 1, 4, 6).

B. Paragraphs ¶ 2, 8, 10, 14, 16, and 17, FEMA using other products instead:

- a. FEMA Disclosure Branch responses and production for 2/9/2021 and 4/9/2021, null responses to *NTHIRA FOIA...pdf* (2020-FEFO-00401) requests #2, #3, #4, #6a, #6b, #7: All content corresponding to the claims of 28-1 is either still (two years later) pre-decisional (#2, #3, #4, #7) or non-existent (#6a, #6b). https://5usc2302.github.io/risk/2020-FEFO-00401/Interim_final_response_20210209.pdf page 1, production https://5usc2302.github.io/risk/2020-FEFO-00401/Production_20210209_single_pdf_reduced_size.pdf, 4/9/2021 responses at <https://5usc2302.github.io/risk/2020-FEFO-00401/>.
- b. Note: See pp. 13, 17-18 of this document. The referenced THIRAs are derivative products of the SNRA: they are 'risk-based' only to the extent that a) the 2015 SNRA's risk picture is valid, and b) that the planning assumptions which FEMA took from the 2015 SNRA (the 'Core Capabilities'), which the THIRAs use as their evaluation tools (<https://www.fema.gov/sites/default/files/2020-07/threat-hazard-identification-risk-assessment-stakeholder-preparedness-review-guide.pdf> pp. 5-7, 11-15), accurately reflect that risk picture (*Risk and the Core Capabilities*, https://www.fema.gov/sites/default/files/2020-06/national_preparedness_goal_2nd_edition.pdf pp. 4-5).

C. Paragraphs ¶ 2, 8, 16, National THIRA from 2015:

- a. *NTHIRA FOIA...pdf* (2020-FEFO-00401) pp. 1-2 and (pp. 3-4) requests #6-8, and agency responses. 2/9/2021 agency interim response (https://5usc2302.github.io/risk/2020-FEFO-00401/Interim_final_response_20210209.pdf) page 1 regarding requests #6a, 6b; production (https://5usc2302.github.io/risk/2020-FEFO-00401/Production_20210209_single_pdf_reduced_size.pdf) Bates pp. 266-302 (July 2019 prospectus), 073-265 (actual content still pre-decisional in 2021).
- b. In addition: FEMA to GAO April 2020, <https://www.gao.gov/assets/710/706612.pdf> pp. 11-12, 28. FEMA to E&E News April 2020, Frank (4/13/2020) (<https://www.eenews.net/climatewire/stories/1062857757>, pdf print at https://5usc2302.github.io/risk/References/EE_News_Frank_20200413_FEMA_-_Warning_about_killer_virus_was_preliminary.pdf). FEMA to the President 12/19/2020 [12/22/2020 to Congress and the public], <https://www.hsd.org/view&did=848274> pp. 29, 74. FEMA to the President 12/17/2021 [12/21/2021 to Congress and the public], https://web.archive.org/web/20211221193939/https://www.fema.gov/sites/default/files/documents/fema_2021-national-preparedness-report.pdf page 89.

3) Materiality to case: U.S. District Court for the District of Columbia (D.D.C.) (12/17/2020) *PEER v. DHS* (1:18-cv-00158-ckk D.D.C.) document 33, <https://www.courtlistener.com/docket/6284501/33/public-employees-for-environmental-responsibility-v-united-states/>. **A.** NPD (4/30/2019) declaration 28-1 ¶ 9 ==> D.D.C. (12/17/2020) document 33 p. 11. **B.** NPD 28-1 ¶ 2, 8, 10, 14, 16, 17 ==> D.D.C. 33 p. 22. **C.** NPD 28-1 ¶ 2, 8, 16 ==> D.D.C. 33 pp. 3, 22.

4) Materiality to the present context: Page 9 first bullet, pp. 15, 17-18.

When our choices catch up to us,

¹²² Federal Emergency Management Agency (2018, July 12). 2017 hurricane season FEMA after-action report. Page 12. At https://www.fema.gov/sites/default/files/2020-08/fema_hurricane-season-after-action-report_2017.pdf. (THIRA)

DHS/FEMA (specific to the 2015 SNRA):

‘We’re using something else now’

1) Ask to see it.

There are no security issues. I made a FOIA request for any national risk assessment that FEMA might be using or has been using in the SNRA’s place from 2015 to the present. The only FOIA exemption which FEMA applied to the redacted documents it produced was that they were still pre-decisional [b(5)], as of April 9, 2021.¹²⁹

2) It’s not actually something else. FEMA is still using this risk assessment. FEMA uses this risk assessment every time it uses, or says it is using, one of those something-elses.

The ‘risk-based’ Core Capabilities which FEMA’s substitute risk tools¹³⁰ rely on as their primary authority¹³¹ are based on the 2015 Strategic National Risk Assessment (SNRA).¹³² Any claim that FEMA makes that some other product that the agency is using – to the extent that that claim involves those ‘risk-based’ Core Capabilities in some way – is a ‘risk’ assessment is valid only to the extent that the 2015 SNRA is valid,¹³³ and to the extent that the Core Capabilities reflect what the 2015 SNRA actually says.¹³⁴

¹²³ FEMA 6/19/2020 testimony to Senate Homeland Security Committee, <https://www.c-span.org/video/?472884-1/senate-hearing-procurement-distribution-strategies-response-coronavirus-pandemic> at 44:55-45:18.

¹²⁴ Frank, Thomas (2020, April 9). Disaster agency foresaw killer virus months before COVID-19. *E&E News*: at <https://www.eenews.net/climatewire/stories/1062824495> (paywalled original; pdf print at https://5usc2302.github.io/risk/References/EE_News_Frank_20200409_FEMA_foresaw_killer_virus_months_before_COVID-19.pdf). (National THIRA)

¹²⁵ DHS 2020 national preparedness report pp. 1-2. (THIRA)

We double down,

¹²⁶ Frank, Thomas (2020, April 13). Warning on killer virus was preliminary – FEMA. *E&E News*: at <https://www.eenews.net/climatewire/stories/1062857757> (paywalled original; pdf print at https://5usc2302.github.io/risk/References/EE_News_Frank_20200413_FEMA_Warning_about_killer_virus_was_preliminary.pdf). (National THIRA)

And keep going.

¹²⁷ U.S. Department of Homeland Security (2022, May 13). Risk-based core capabilities, pp. 9, 25, 35-36, A-1-2, 14, 18-19, 21-23, 28-31, 49, B.1-3, 12, C-2, 5, D-13, E-9, F-12, G-16, H-1-3, 10, 14, 26, 28-32, 35. Risk reporting, pp. A.1-2, 21-23, 28-31, B.1-3, H.1-2, 10-11, 14, 20, 22, 28-30. Preparedness grants manual. At https://www.fema.gov/sites/default/files/documents/fema_fy-2022-preparedness-grants-manual.pdf.

¹²⁸ DHS 2020 national preparedness report p. 2. FEMA continues to use this information in its ‘data-driven policy decisions’ (note 111), in place of the SNRA or other accountable data.

¹²⁹ 2/9/21 production pp. 73-265 (non-redacted pp. 1-72 and 266-302 were already public, but responsive [they answered part of the question that I asked]). FEMA’s responses to requests #1 (2/9 production pp. 303-304), #6 (2/9 interim response letter), and #9 (4/9/21 production) were fully responsive. Request, responses, and records are at <https://bd02.github.io/external/Reorganized/Other/FOIA%202020-FEFO-00401/>.

¹³⁰ NPD 28-1 paragraphs 6-8.

¹³¹ DHS (2018, May). Comprehensive preparedness guide (CPG) 201 pp. 5-6, 11-15, 19-31, 33-40. At <https://www.fema.gov/sites/default/files/2020-07/threat-hazard-identification-risk-assessment-stakeholder-preparedness-review-guide.pdf>.

¹³² U.S. Department of Homeland Security (2015, September 30). Risk and the Core Capabilities. National preparedness goal, 2nd edition, pp. 4-5. At https://www.fema.gov/sites/default/files/2020-06/national_preparedness_goal_2nd_edition.pdf.

As noted above, that interpretation was off in some ways which turned out to be very consequential. This section doesn’t focus on the validity of that claimed connection with the invisible risk assessment, but on the internal consistency of FEMA’s separate claims to have 1) replaced the risk assessment 2) with other information products which 3) depend on that risk assessment for their claimed validity in the first place.

¹³³ NPD 28-1 paragraphs 8 and 9. FEMA FOIA 2020-FEFO-00401 request p. 2, https://5usc2302.github.io/risk/2020-FEFO-00401/FOIA_2020-FEFO-00401_request_letter_20200218_redacted.pdf, 2/9/2021 production pp. 303-304, https://5usc2302.github.io/risk/2020-FEFO-00401/Production_pp_303-304.pdf.

¹³⁴ This was one of the National Preparedness System’s failure points in 2020. The primary failure point in both 2017 and 2020 was the unavailability of the SNRA’s information to enterprise partners (figure 2).

All FEMA is doing is

- a) Taking a science-based national risk assessment that, by design,¹³⁵ is based on accountable evidence that anyone can question;¹³⁶
- b) Creating another layer in between [that risk assessment and the next layer (c)];¹³⁷
- c) Basing a new ‘risk-based’ tool that, by design, is accountable to nobody except the leaders of the day,^{138, 139} on top of that constructed ‘risk-based’ layer;^{140, 141}
- d) Asserting that the original risk assessment – the one that the replacement product’s claimed connection to ‘risk’ rather than ‘something we made up’ depends on – never existed;¹⁴² and
- e) Counting on the reader to not look up the document that its descriptions of the new layer repeatedly cite as their ‘risk’ based source.¹⁴³

That’s it. That’s really all it is. You don’t even need Google to find it. Just look up the source that FEMA cites (the National Preparedness Goal), on FEMA’s website.¹⁴⁴

FEMA is still using this risk assessment. It’s just doing so in a way that completely removes 1) the assessment itself, 2) the planning assumptions that FEMA took from it, and 3) the decisions that DHS and FEMA base on those planning assumptions from all political,¹⁴⁵ scientific,¹⁴⁶ stakeholder,¹⁴⁷ and legal¹⁴⁸ accountability whatsoever – even internal accountability¹⁴⁹ – every time it uses, or claims to be using, one of those ‘something-elses’.

¹³⁵ The 2015 SNRA explicitly incorporated into its instructions OMB’s Information Quality Act (IQA) standards for highly influential scientific assessments of risk to health, safety, and the environment that are used to inform government decisions. SNRA instructions to contributors, at <https://www.courtlistener.com/docket/6284501/24/3/public-employees-for-environmental-responsibility-v-united-states/> 000001-43, esp. 000011-13.

¹³⁶ Graham, John D. (2002, March 21). OMB’s role in overseeing information quality. Remarks, National Academy of Sciences, page 10. OMB: at https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/OMB/inforeg/info-quality_march21.pdf.

¹³⁷ DHS (2018, May). Comprehensive preparedness guide (CPG) 201, pp. 7, 11-14 (using Core Capabilities to define risks). At <https://www.fema.gov/sites/default/files/2020-07/threat-hazard-identification-risk-assessment-stakeholder-preparedness-review-guide.pdf>.

¹³⁸ NPD 28-1 paragraphs 3, 11, 12, 13, 14, 15, 16, 17.

¹³⁹ SNRA FAQ p. 4, *Don’t FEMA and its stakeholders already have other all-threats/all-hazards risk management tools?*

¹⁴⁰ Federal Emergency Management Agency (2019, July 25). Pages 2, 5-10, 16-17 (defining what the Nation’s top risks are as those which most challenge a specific set of pre-defined capabilities that were defined by what the Nation’s top risks are). 2019 National THIRA: overview and methodology. At <https://web.archive.org/web/20190725231745/https://www.fema.gov/media-library/assets/documents/181470>.

¹⁴¹ 2022: ‘Risk-based’ readiness measures (https://www.dhs.gov/sites/default/files/2022-03/Federal%20Emergency%20Management%20Agency_Remediated.pdf page DRF-17) and [the measures’ source] national capability targets (https://www.fema.gov/sites/default/files/documents/fema_2022-2026-strategic-plan.pdf pp. 19-20, 23-24). While the targets themselves are real (though invisible, https://5usc2302.github.io/risk/2020-FEFO-00401/2020-FEFO-00401_production_20210209_single_pdf_reduced_size.pdf pp. 180-265), the [replacement] risk assessment they’re based on (<https://www.fema.gov/emergency-managers/risk-management/risk-capability-assessment>, <https://www.hsdl.org/?view&did=862169> pp. 89-90) doesn’t actually exist (note 121(B) above). The entirety of these planning tools’ risk content – not the risk scenarios themselves which come from other sources, but the selection rules (the same Core Capabilities) which assess those scenarios as higher risk than others – comes from the 2011 and 2015 master risk assessment that FEMA is using them to cover today.

Nothing has changed in reality: the only shifts are narrative. Instead of claiming the evidential authority of an invisible master risk assessment that is invisible only because the agency puts a lot of work into keeping it that way, FEMA just created a fictional replacement that is invisible because it doesn’t exist. It’s a much lower maintenance solution.

These tools (THIRAs, national THIRA, national capability targets) are all part of the same product line. They’re good products: they just got caught up in the same accountability conflicts that trapped the risk assessment that this document is about.

¹⁴² NPD 28-1 paragraphs 8, 9, 11, 13, 16, 17.

¹⁴³ U.S. Department of Homeland Security (2015, September 30). Risk and the Core Capabilities. National preparedness goal, 2nd edition, pp. 4-5. At https://www.fema.gov/sites/default/files/2020-06/national_preparedness_goal_2nd_edition.pdf.

¹⁴⁴ At <https://www.fema.gov/>.

¹⁴⁵ Notes 104-115.

¹⁴⁶ Notes 116-119.

¹⁴⁷ Notes 122-128.

¹⁴⁸ Notes 120-121.

¹⁴⁹ FEMA internal orders 2/21/2017, 3/26/2019, 5/11/2021 (note 82).

Information Quality Act

None of that should have happened.

Everybody makes mistakes. But the mistakes in themselves weren't the problem.

The problem is that DHS excluded the scrutiny needed to *correct* those mistakes. That is the critical outside scrutiny that any information needs to be safe to use.

The 2015 SNRA explicitly adopted the peer and public review requirements of OMB's information quality standards for U.S. Government risk assessments.^{150, 151} These standards connect the sometimes philosophical-sounding practices which science has developed over centuries, to hold itself accountable – to the very real people and very consequential things that DHS exists to protect.¹⁵²

When information is used to direct and coordinate really important things, really good things can happen if that information is good. But really bad things can happen if that information is bad.

These information quality standards are meant to ensure that the information that the Government uses to *make* important decisions, and to explain and *justify* important decisions so our employers can hold us accountable for those decisions, is good information rather than bad information.

A lot of really bad things happened because we didn't do that.

But that isn't in the past. It's still going on. We're still doing it.

¹⁵⁰ SNRA instructions to contributors, at <https://www.courtlistener.com/docket/6284501/24/3/public-employees-for-environmental-responsibility-v-united-states/000001-43>, esp. 000011-13 (or email 1/2* *SNRA 2015 Consolidated unclassified documentation.pdf* [[https://web.archive.org/web/20211231153713/https://5usc2302.github.io/risk/Strategic%20National%20Risk%20Assessment%20\(SNRA\)%202015%20-%20Consolidated%20Unclassified%20documentation.pdf](https://web.archive.org/web/20211231153713/https://5usc2302.github.io/risk/Strategic%20National%20Risk%20Assessment%20(SNRA)%202015%20-%20Consolidated%20Unclassified%20documentation.pdf)] pp. 651-696, esp. pp. 664-666).

¹⁵¹ OMB (2002, February 22). Guidelines for ensuring the quality, objectivity, utility, and integrity of information disseminated by Federal agencies. At https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/OMB/fedreg/reproducible2.pdf.

- OMB (2004, December 16). Final information quality bulletin for peer review. At https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/OMB/fedreg/2005/011405_peer.pdf.
- OMB, OSTP (2007, September 19). Updated principles for risk analysis. At https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/memoranda/2007/m07-24.pdf.

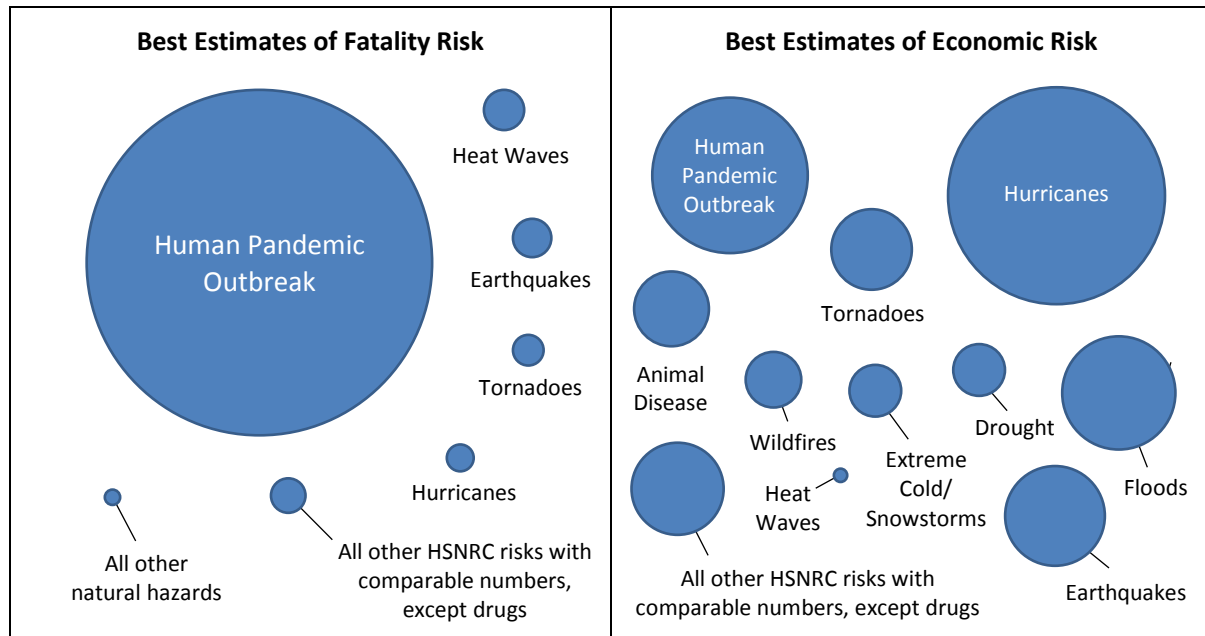
These standards implement OMB's interpretation of the Information Quality Act (section 515, <https://www.govinfo.gov/content/pkg/PLAW-106publ554/pdf/PLAW-106publ554.pdf#page=156>).

¹⁵² *SNRA FOIA appeal (2018).pdf* (in attached zipfile, folder *Supporting files and context.zip* / *Sent to committees March 2019*) blue-banded pdf pages 1-4 (unnumbered two pages 9/24/2018 appeal + pp. 1-2 of 11/1/2017 appeal).

Additional charts

FIGURE 3: HSNRC 2013 WITH ILLICIT DRUGS (INCLUDED TO AVOID BEING MISLEADING).

Homeland Security National Risk Characterization 2013 with Drugs



Fatality risk

Economic risk

