

Information design for the human brain

NICAR 2016, Denver,

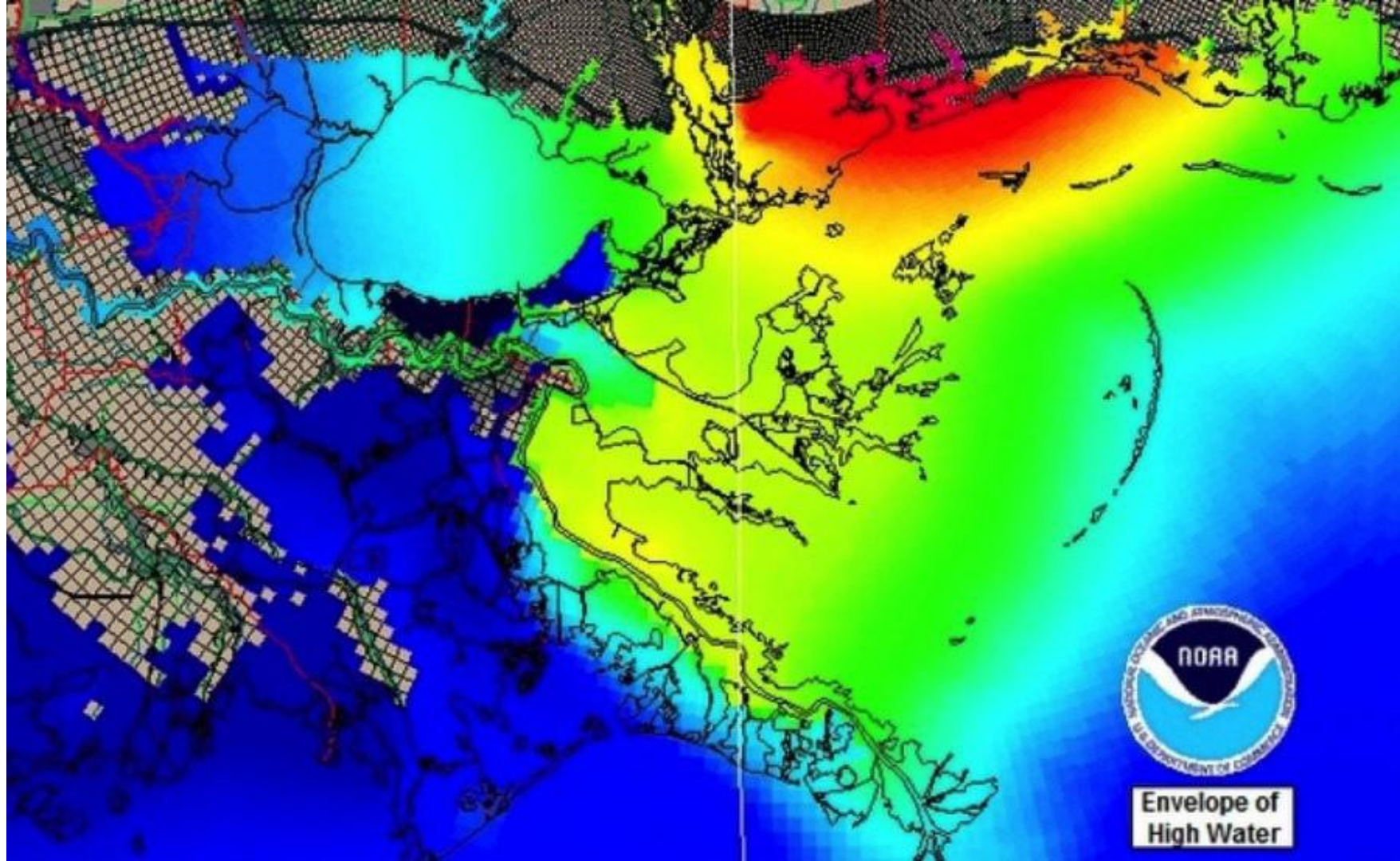
Friday, March 11

Alexandra Kanik

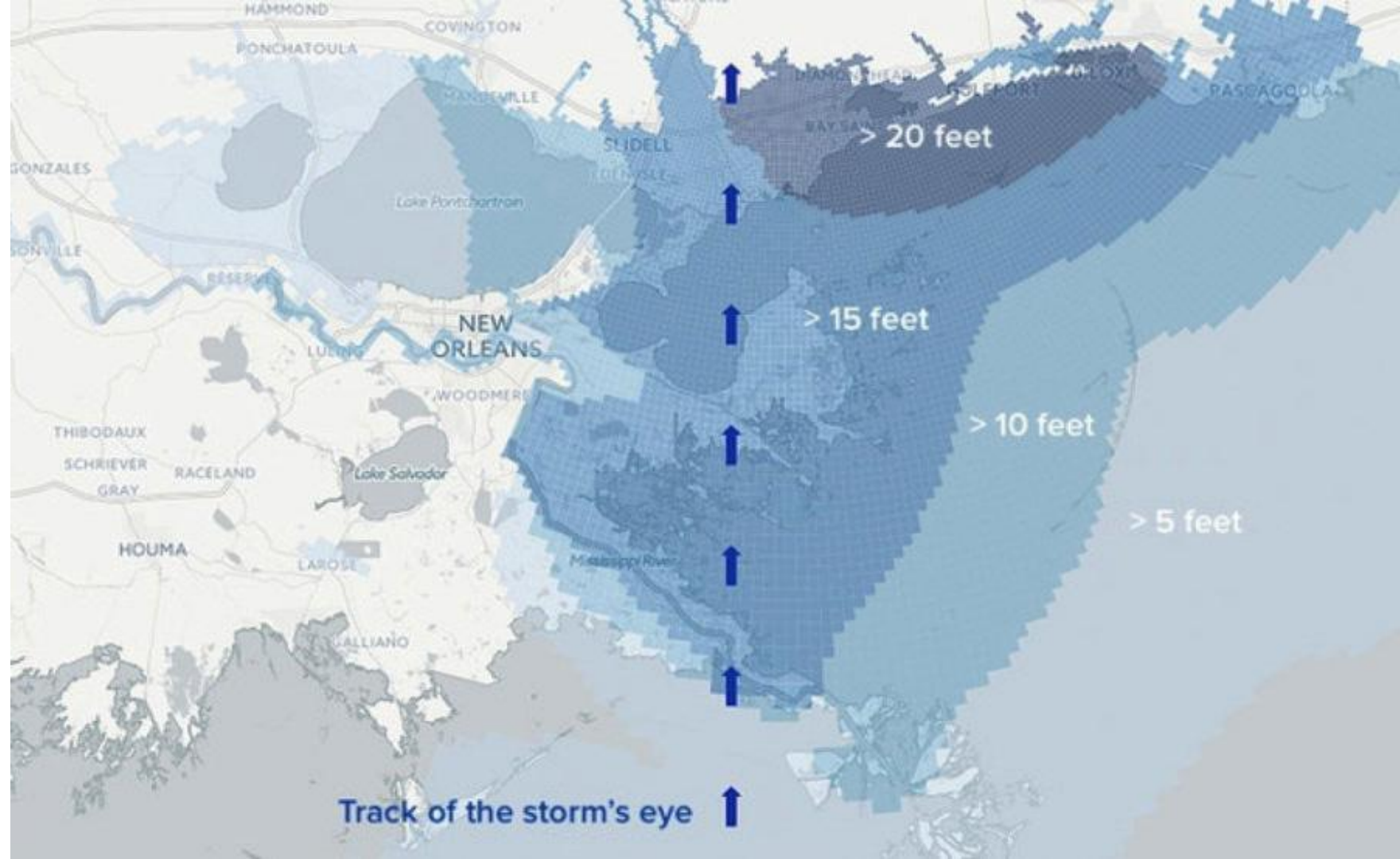
@act_rational

publicsource.org
metricshift.org

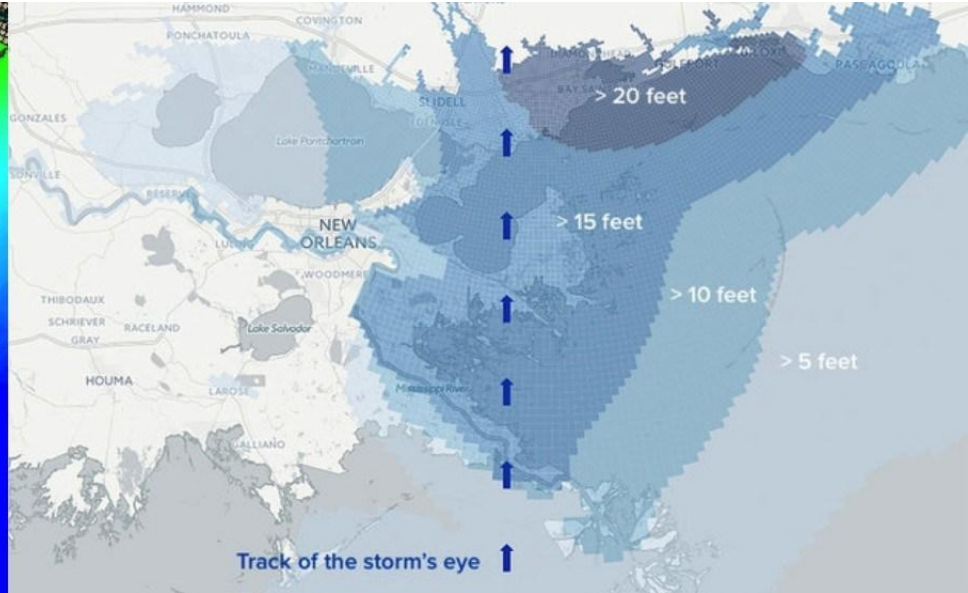
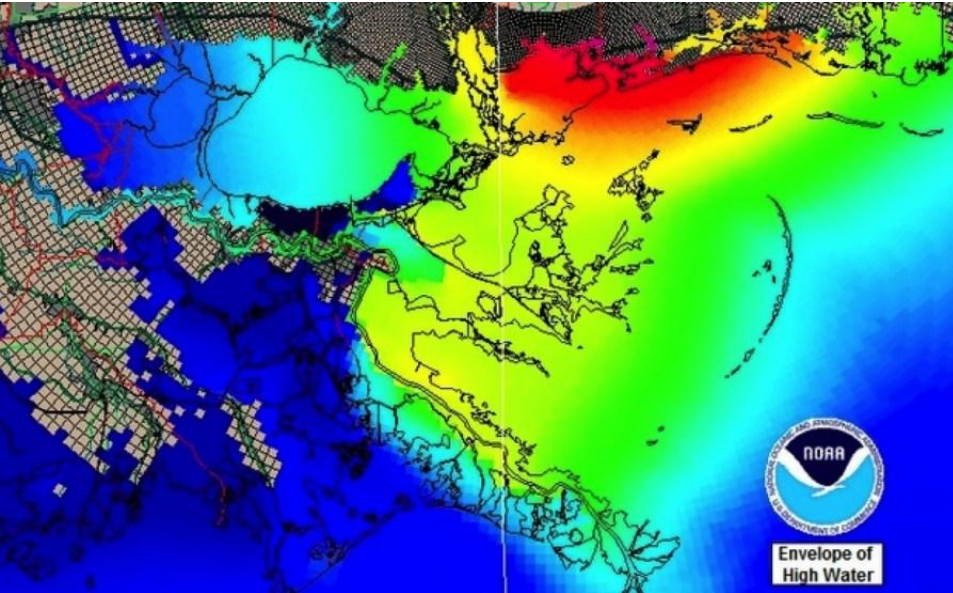
THE IMPORTANCE OF COLOR



Envelope of
High Water



Don't make people's brains work harder than they have to.







The Stroop Effect



RED

RED

Say the words

Red

Red

Black

Black

Brown

Brown

Orange

Orange

Pink

Pink

Green

Green

Say the colors



Red

Black

Brown

Orange

Pink

Green





VS.



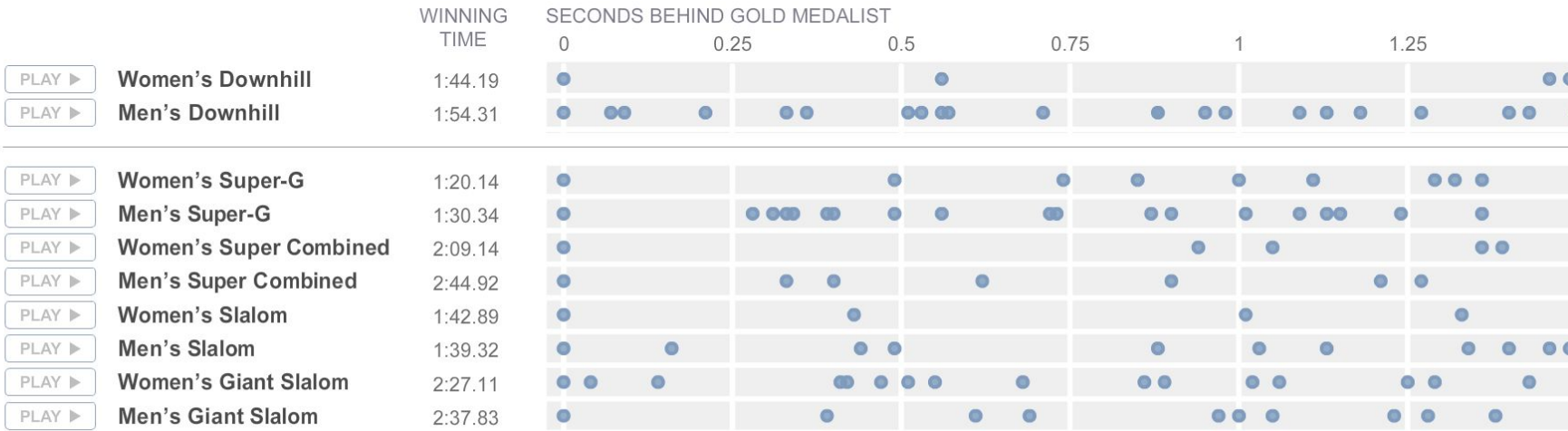
Fractions of a Second: An Olympic Musical

At the Olympics, the blink of an eye can be all that separates the gold medalist from the 10th-place finisher. In some events, this is obvious. But in others, with athletes racing one by one, the closeness of the race is harder to perceive. Listen to the differences below.



Alpine skiing

The women’s downhill course was extremely tiring, and, because it was more challenging than the men’s course, it ended up separating the skiers by much larger margins. This pattern appears in the two speed events: the downhill and the super-G.



Fractions of a Second: An Olympic Musical

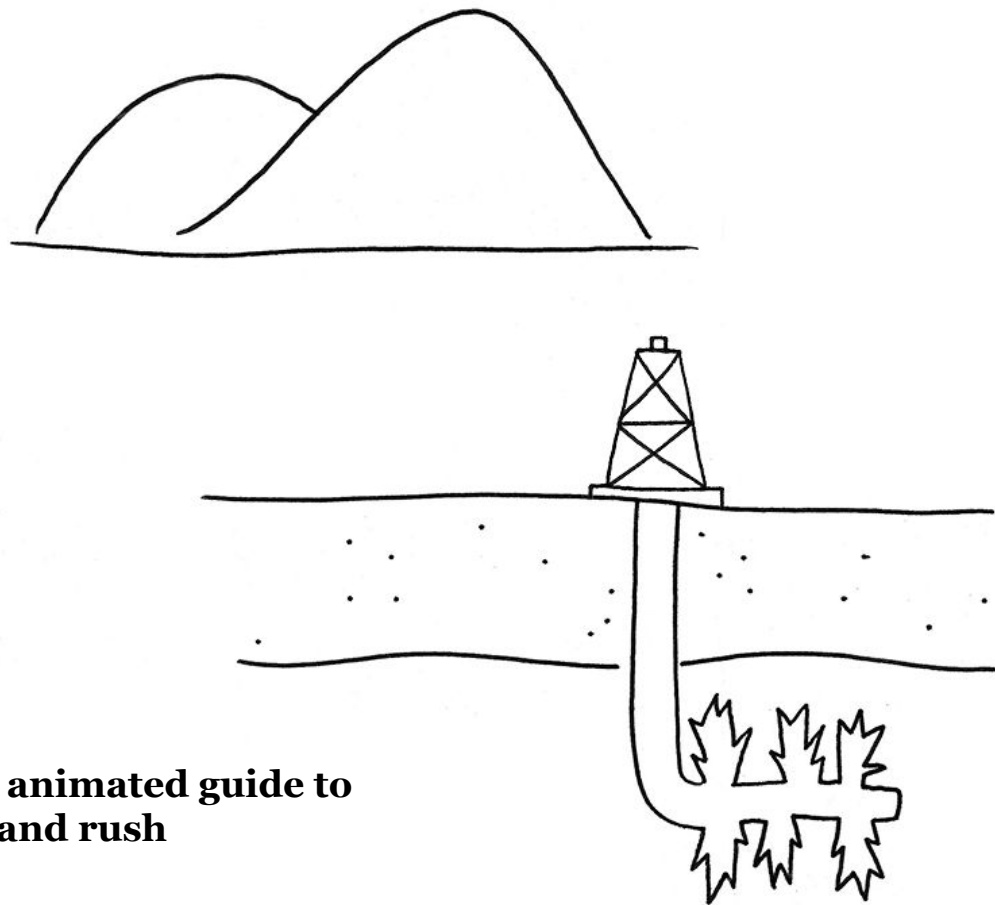
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Speaking of sequences...







**12 Sandy GIFs: An animated guide to
Wisconsin's frac sand rush**

WisconsinWatch

How Texas shifted from blue to red



GOVERNOR



LIEUTENANT
GOVERNOR



ATTORNEY
GENERAL



COMPTROLLER



U.S. SENATOR



U.S. SENATOR



LAND
COMMISSIONER



AGRICULTURE
COMMISSIONER

Watch the Twin Cities grow from 1870 to present

Pioneer Press

1870s

This decade:

Properties: 1,672

Square feet: 2,622,750

Current value: \$223,903,000

Cumulative:

Properties: 1,672

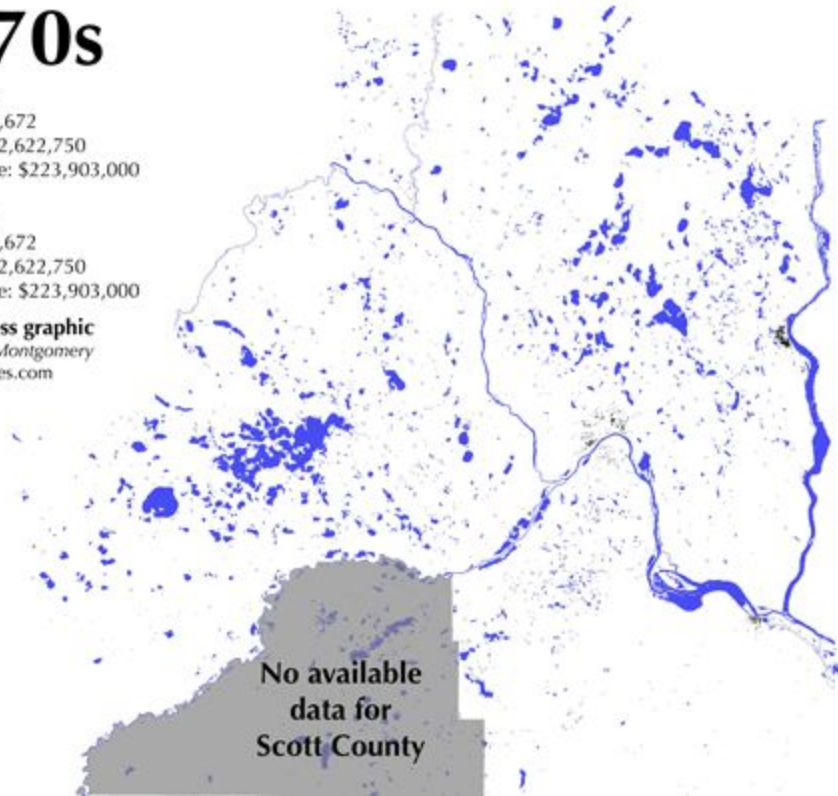
Square feet: 2,622,750

Current value: \$223,903,000

Pioneer Press graphic

by David H. Montgomery

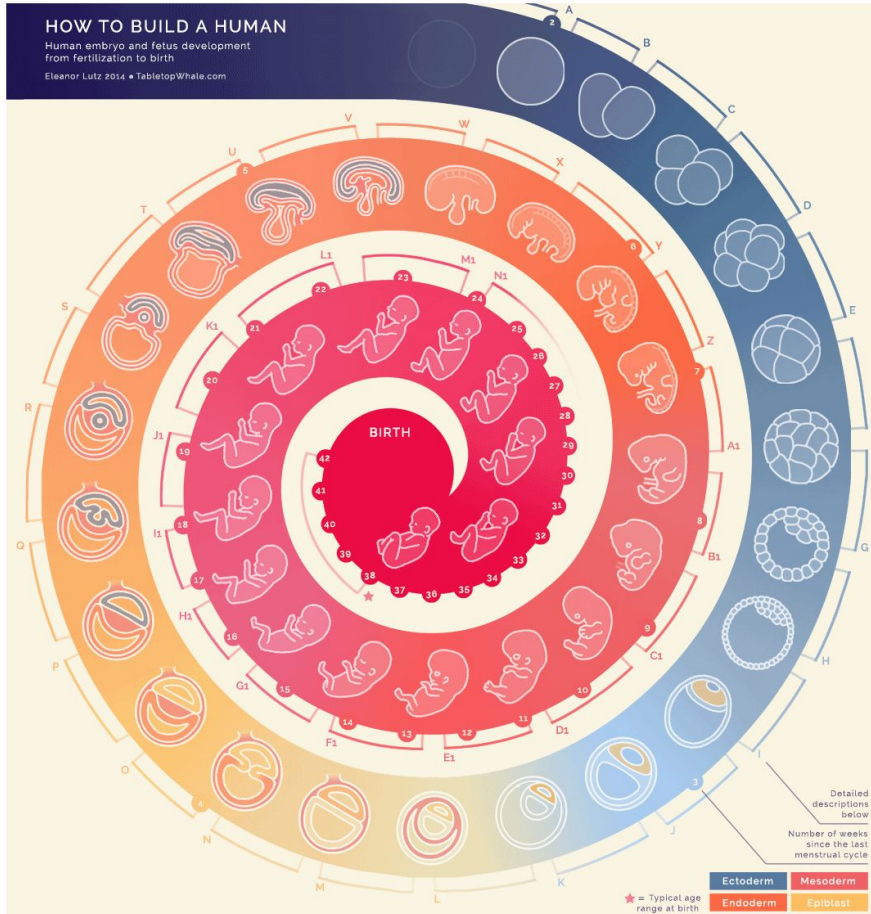
www.twincities.com



HOW TO BUILD A HUMAN

Human embryo and fetus development
from fertilization to birth

Eleanor Lutz 2014 • TabletopWhale.com



A. Fertilized egg
B. 2-cell stage
C. 4-cell stage
D. 8-cell stage
E. Compacted 8-cell
F. Morula
G. Blastocyst
H. ICM growth

I. Bilaminar germ disk
J. Amniotic cavity/yolk sac
K. Implantation complete
L. Extraembryonic mesoderm
M. (Zoom)
N. Hypoblast cells replaced
O. Mesoderm immigration
P. Ectoderm formation

Q. Primary neurulation
R. Secondary neurulation
S. Neurulation complete
T. (Rotate view)
U. Embryonic folding
V. Primitive gut tube forms
W. (Inside to outside view)
X. Major blood vessels form

Y. Upper limb bud forms
Z. Lower limb bud forms
A1. Hand plate forms
B1. Webbed fingers and toes
C1. Fingers/toes separate
D1. Gonads differentiate by sex
E1. Eyelids form
F1. Iris develops

G1. Second trimester
H1. Taste pores develop
I1. Fetus weighs about 100g
J1. Vernix caseosa covers skin
K1. Lanugo replaced by vellus
L1. HPA axis established
M1. Fetus weighs about 500g
N1. >50% survival if born

Donald Trump vs. Sea Level Rise

BuzzFeed



Lena Groeger's exhaustive [piece on animated gifs](#) touches on many more scientific benefits of the animated gif.

If you're a coder, here's a fun [command-line guide](#) on how to turn your screencast into an animated gif.