

# Color: The Map's Best friend ... or Enemy

ANDY SKINNER

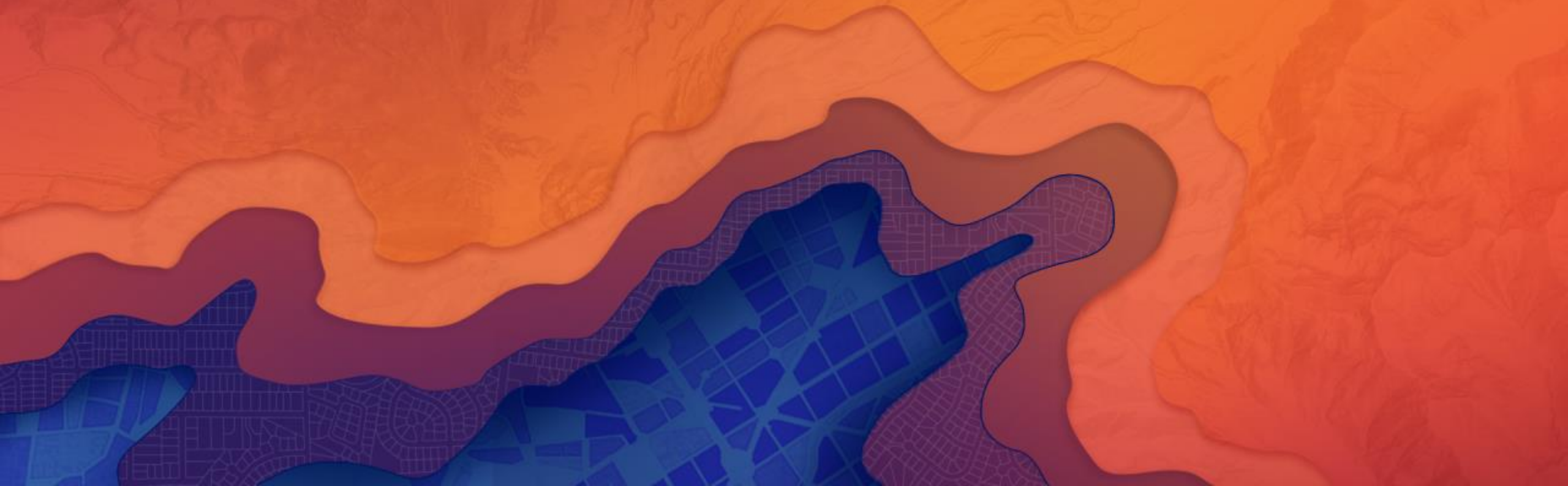
# Color

The Maps Best Friend ... or Enemy

- Why?
- Who?
- How?
- Where?
- How much?
- How many?

# Is Color Absolutely Necessary?

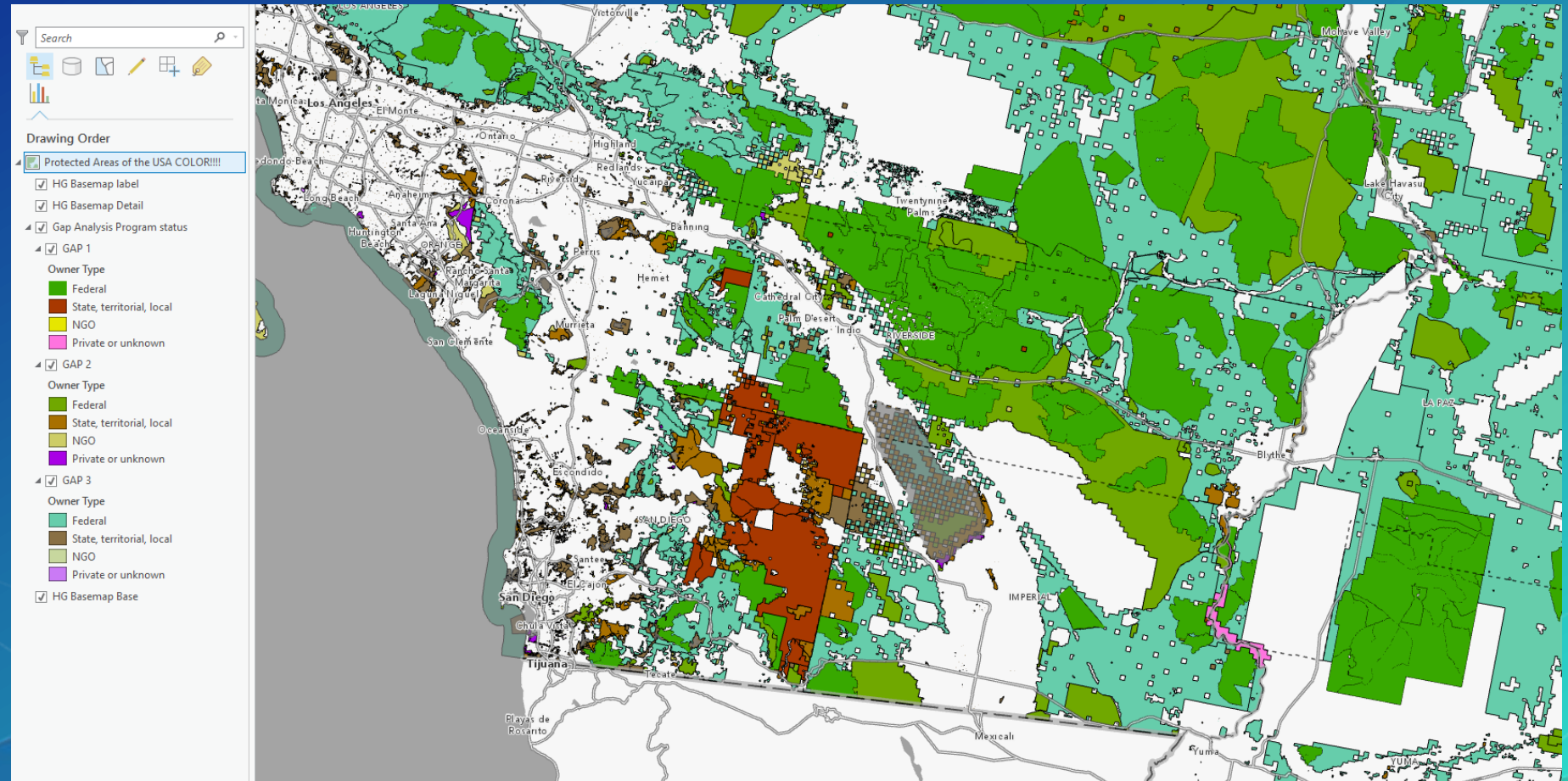
WHY?





# Is color absolutely necessary?

## Protected Areas in Southern California



# Is color absolutely necessary?

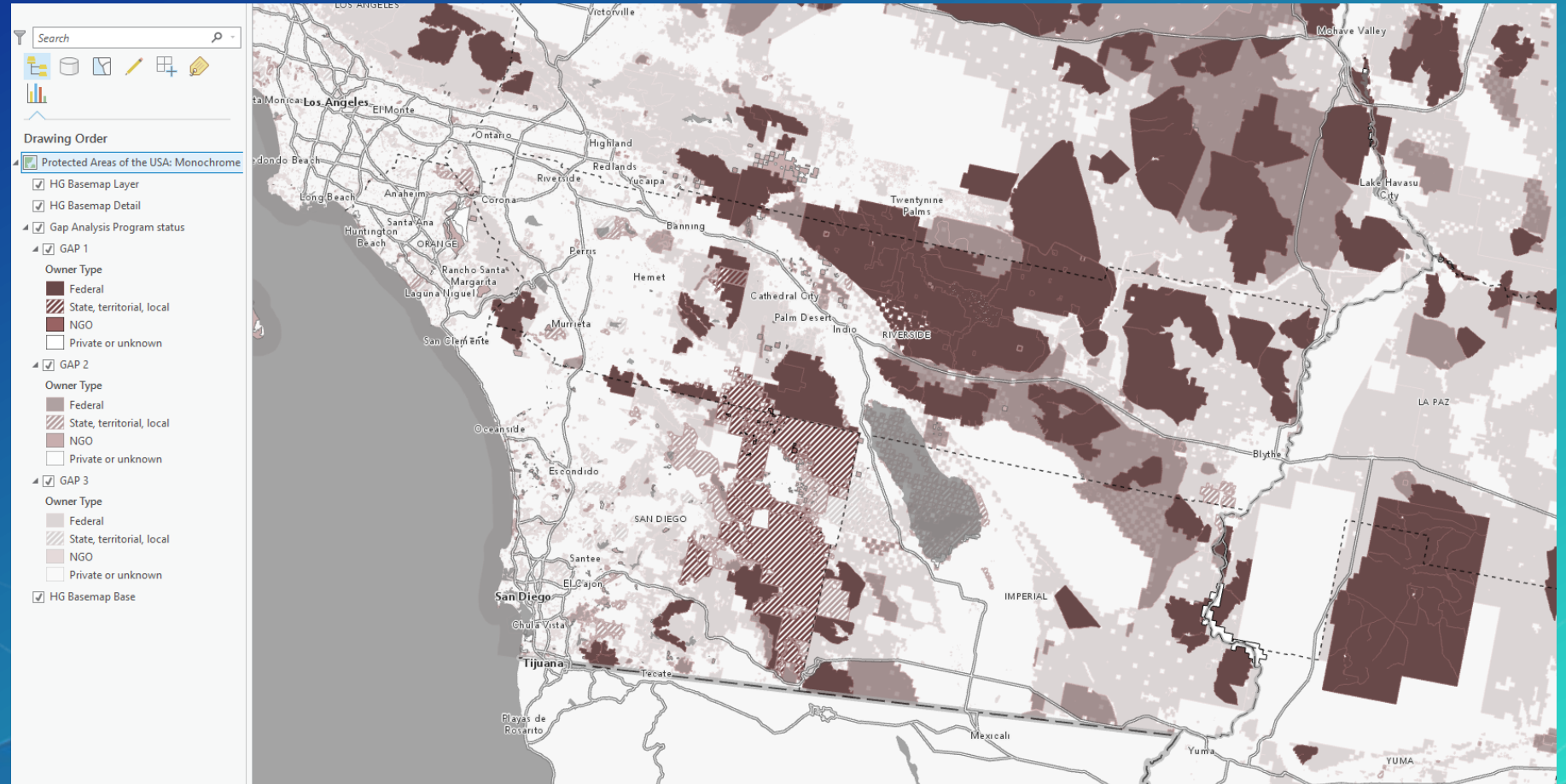
## Protected Areas in Southern California





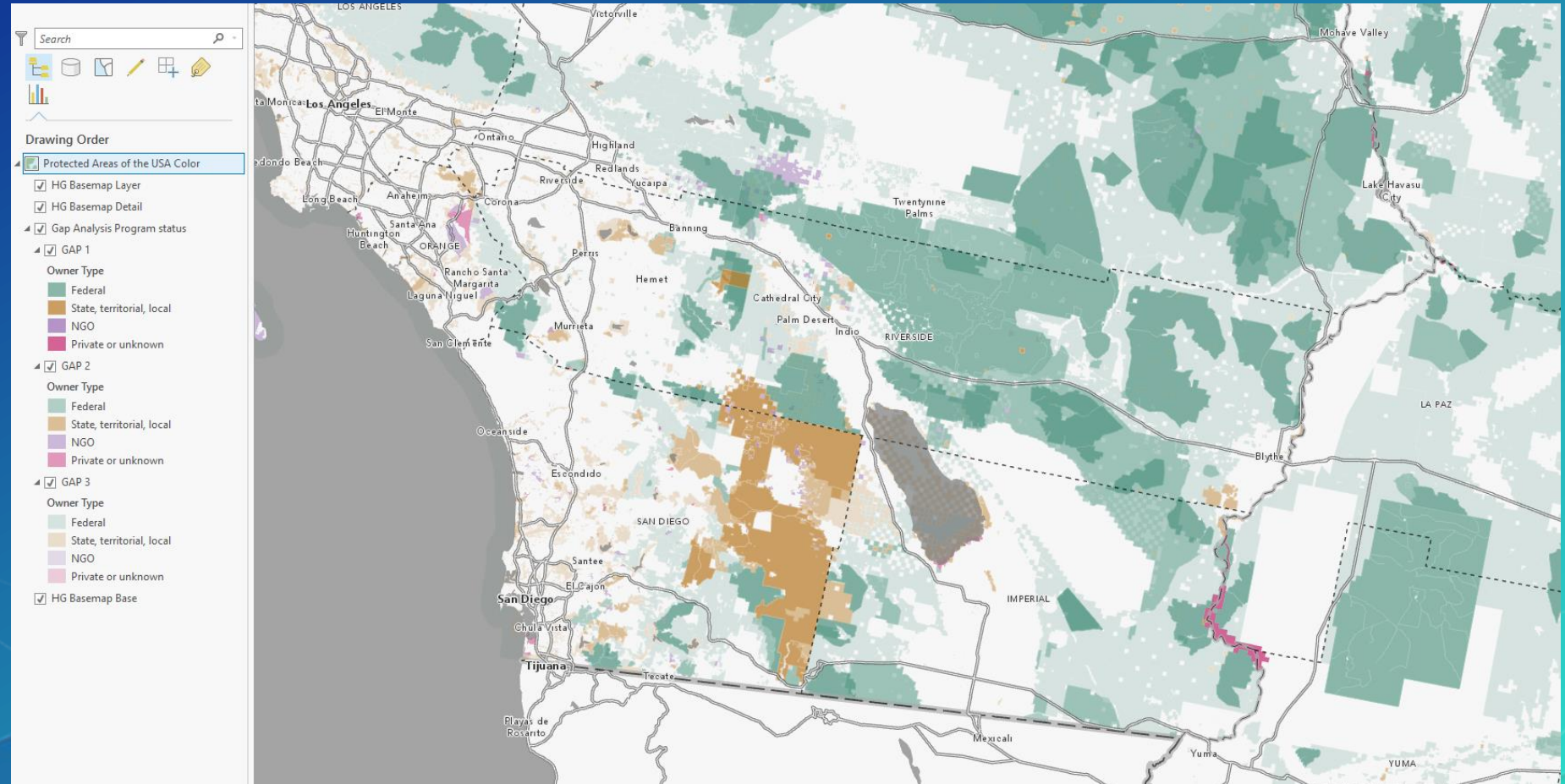
# Is color absolutely necessary?

## Protected Areas in Southern California



# Is color absolutely necessary?

## Protected Areas in Southern California







# Who is the user, and how will they react?

WHO?



# Who is the user, and how will they react?

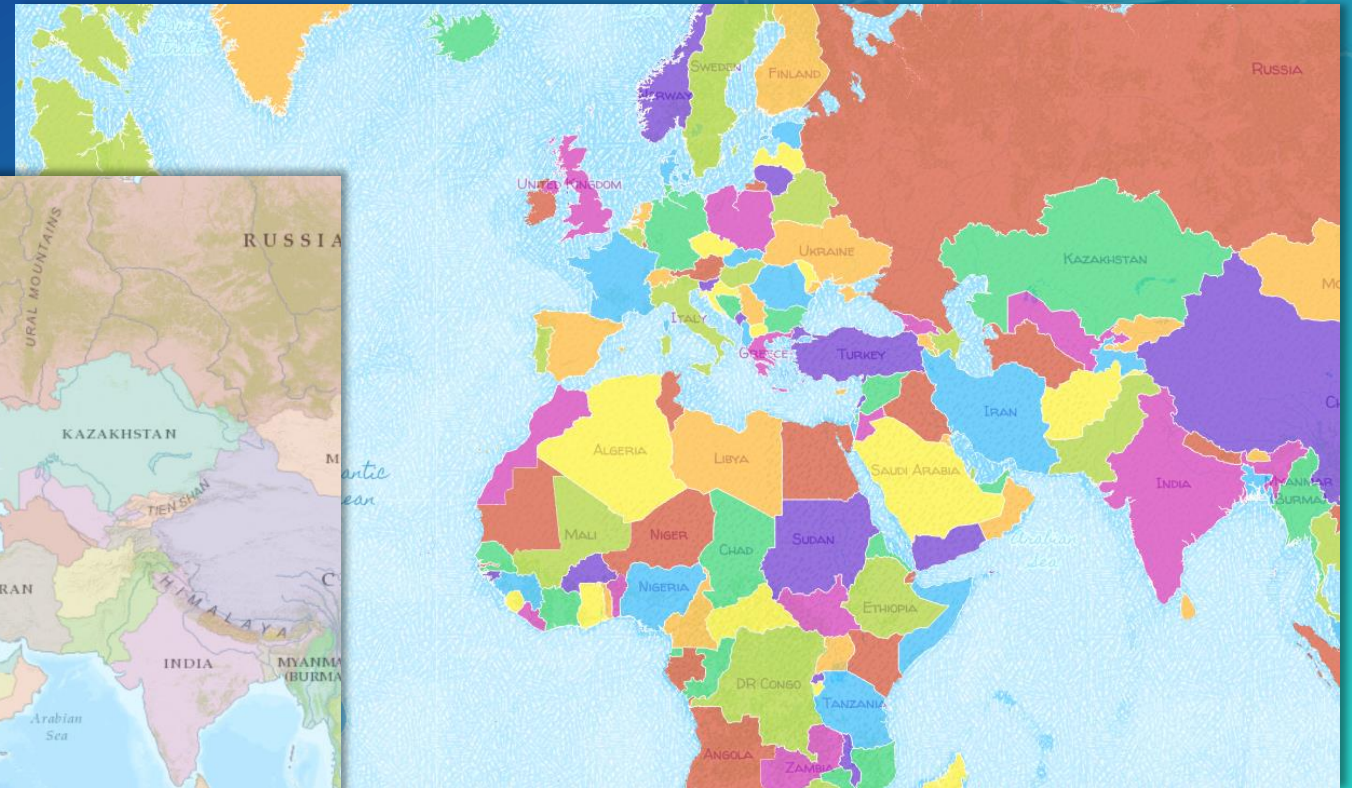


Kids color palette on the 'colored pencil' vector basemap.



# Who is the user, and how will they react?

More subtle variations of the same palette on the Topographic basemap.



Kids color palette on the 'Colored Pencil' vector basemap.



# Who is the user, and how will they react?

## Geology of the United States





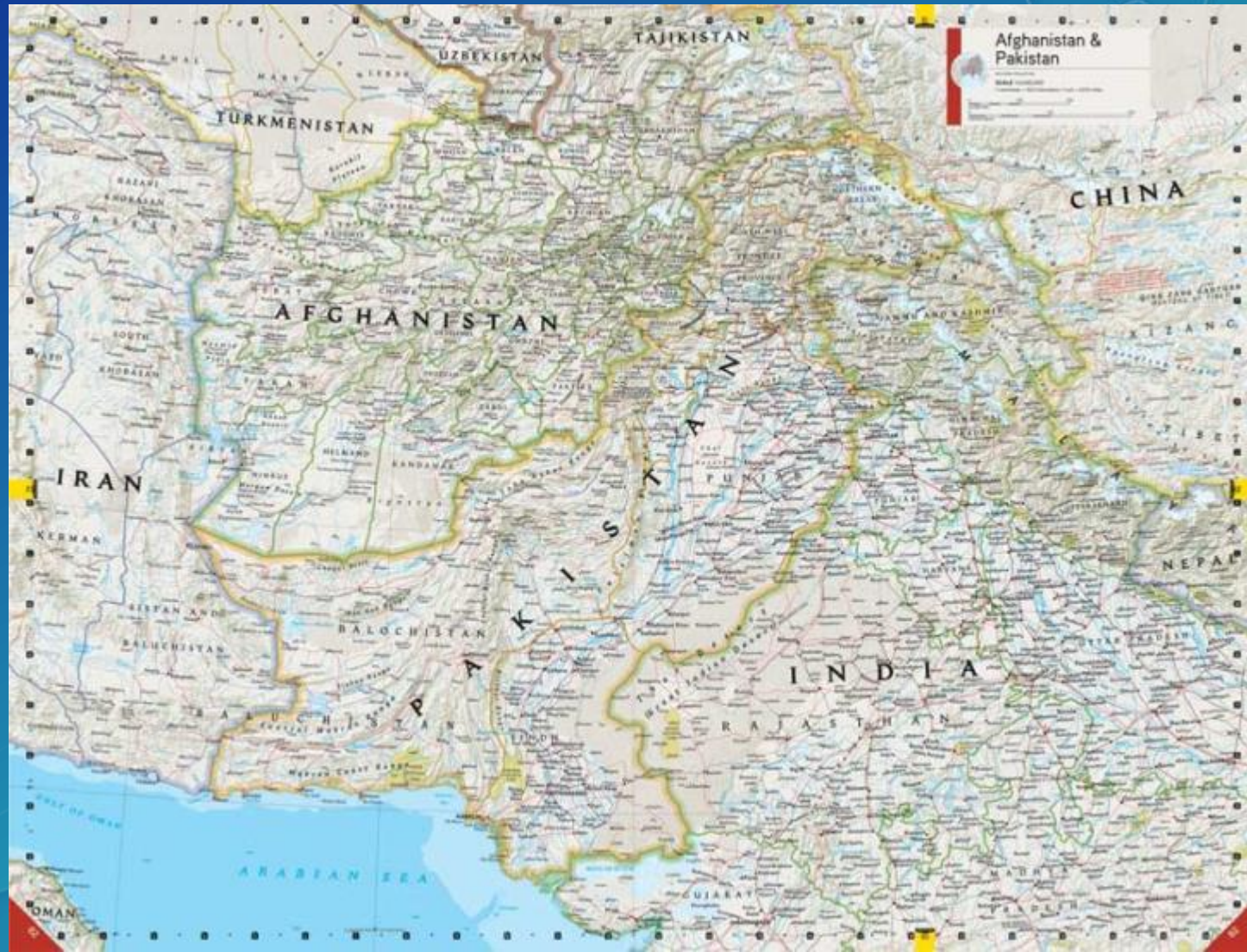
# How is the map going to be delivered?

HOW?



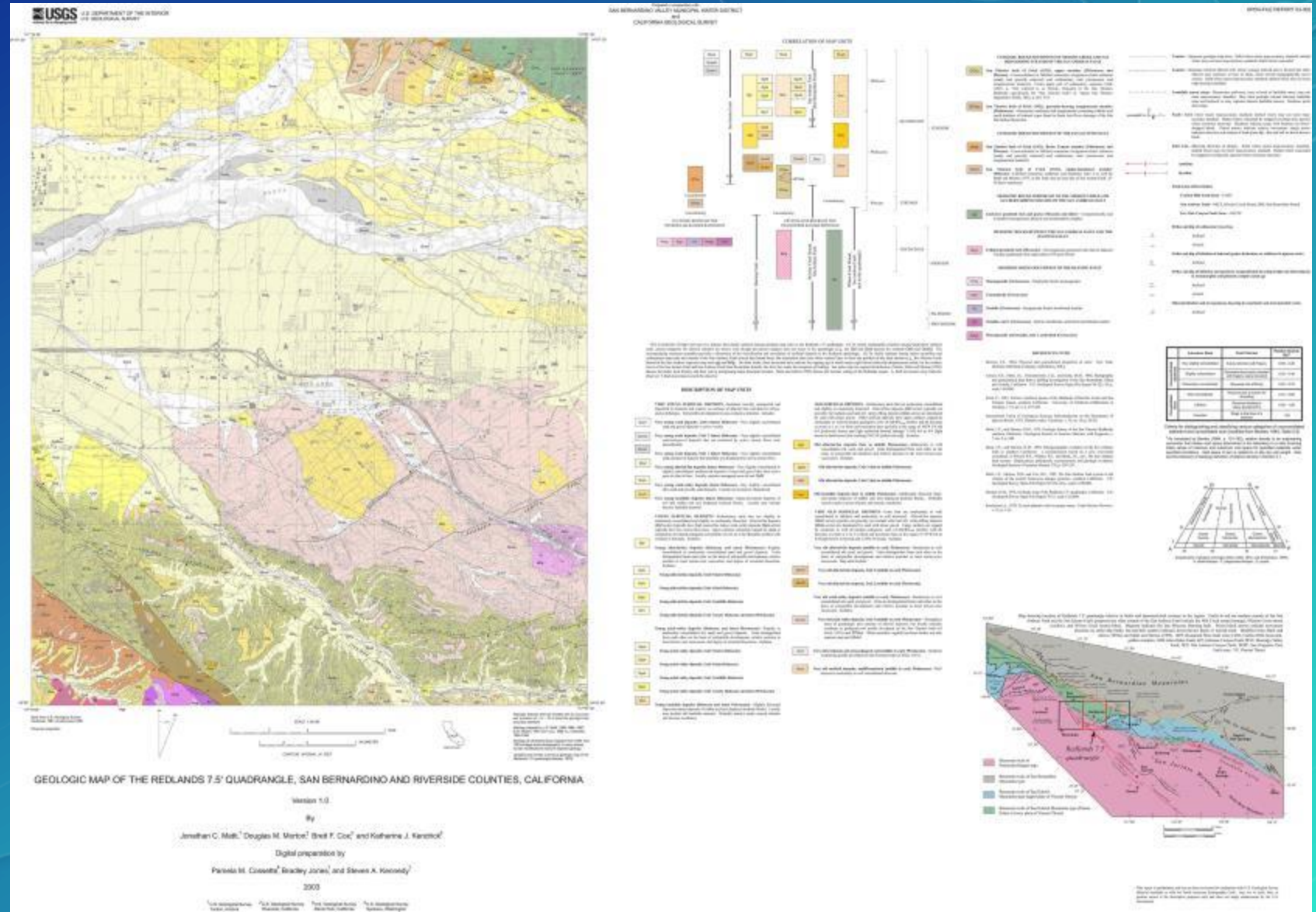
How is the map going to be delivered?

National  
Geographic





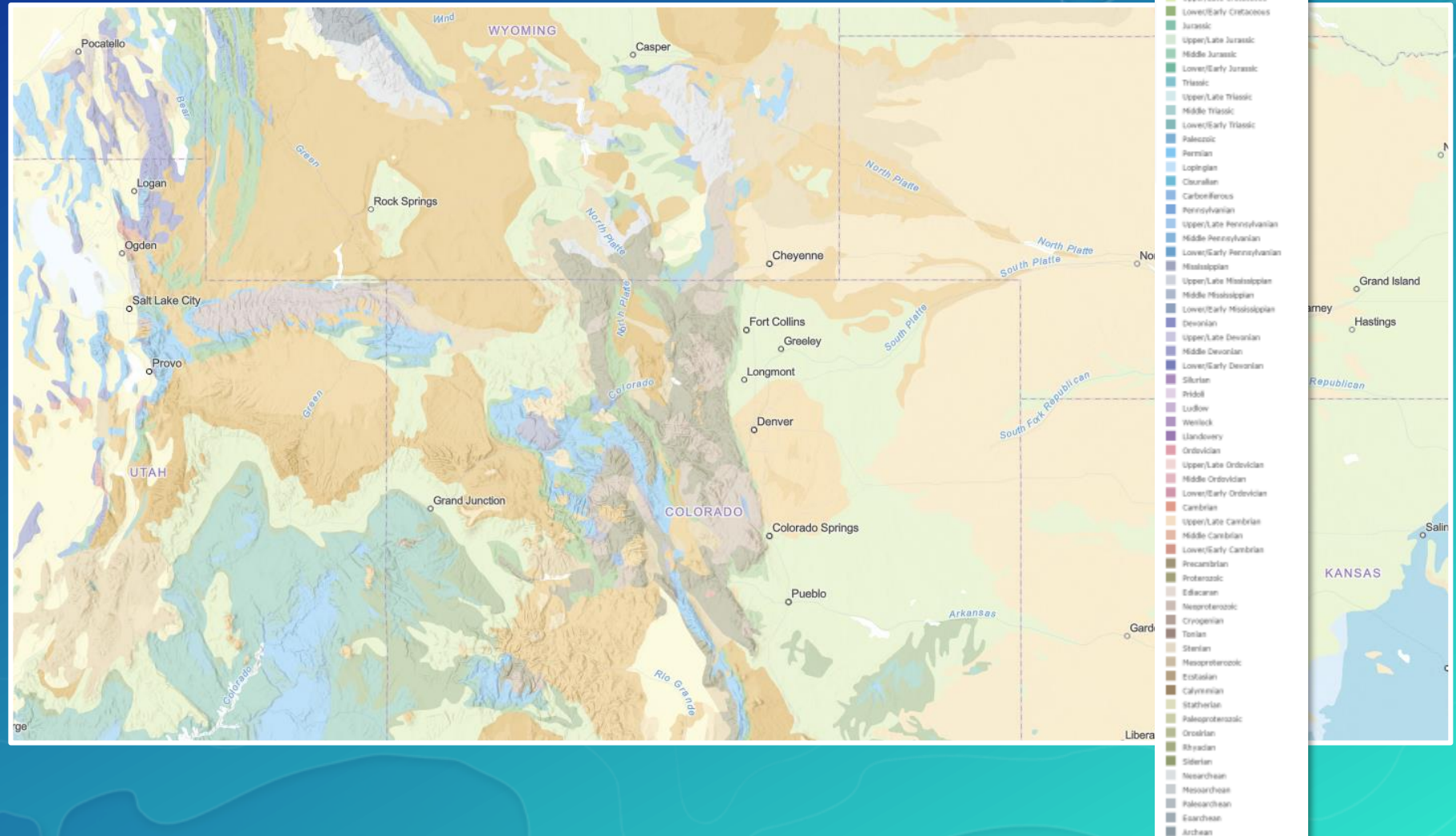
USGS  
Redlands  
Geology





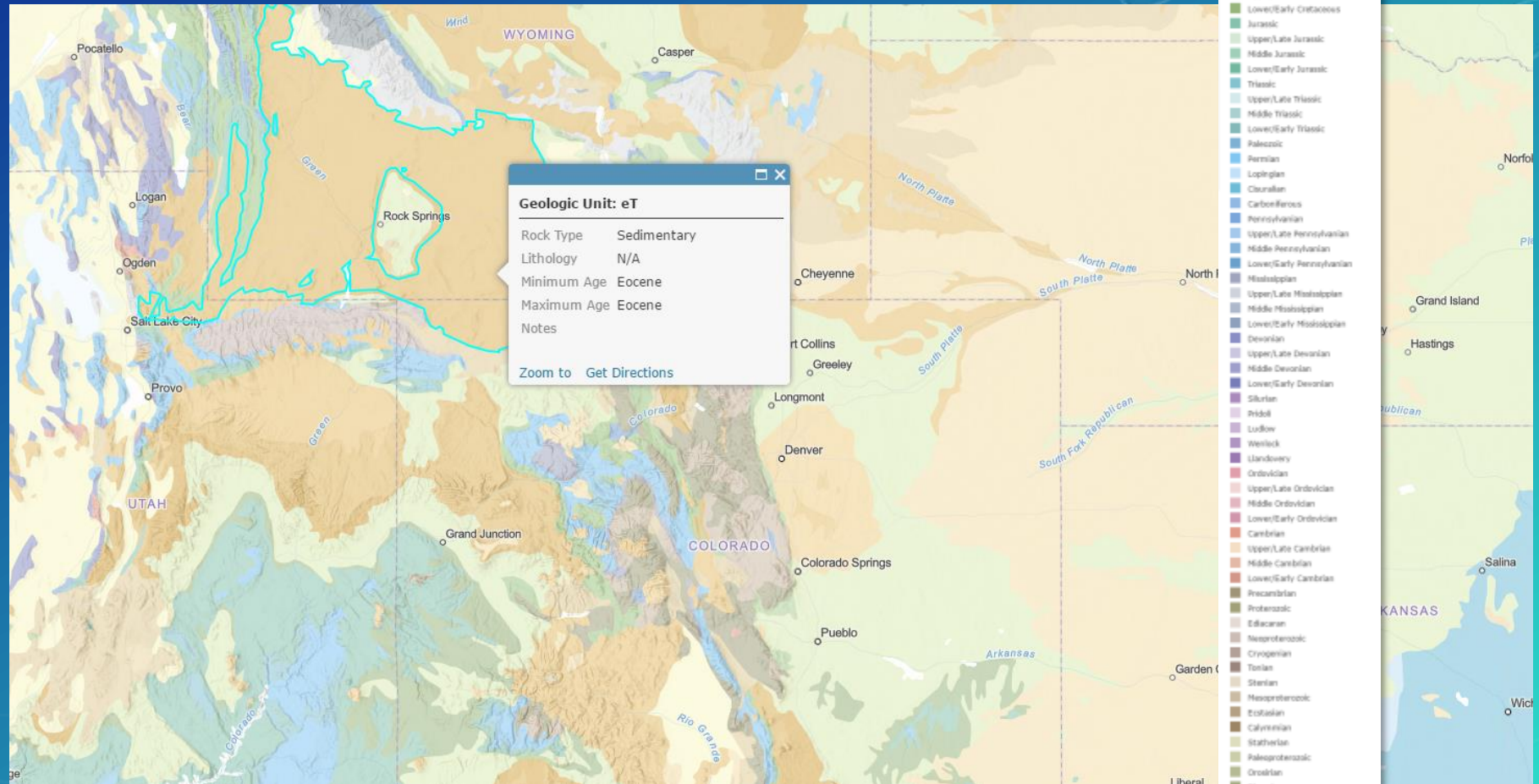
# How is the map going to be delivered?

# Geology of the United States



## How is the map going to be delivered?

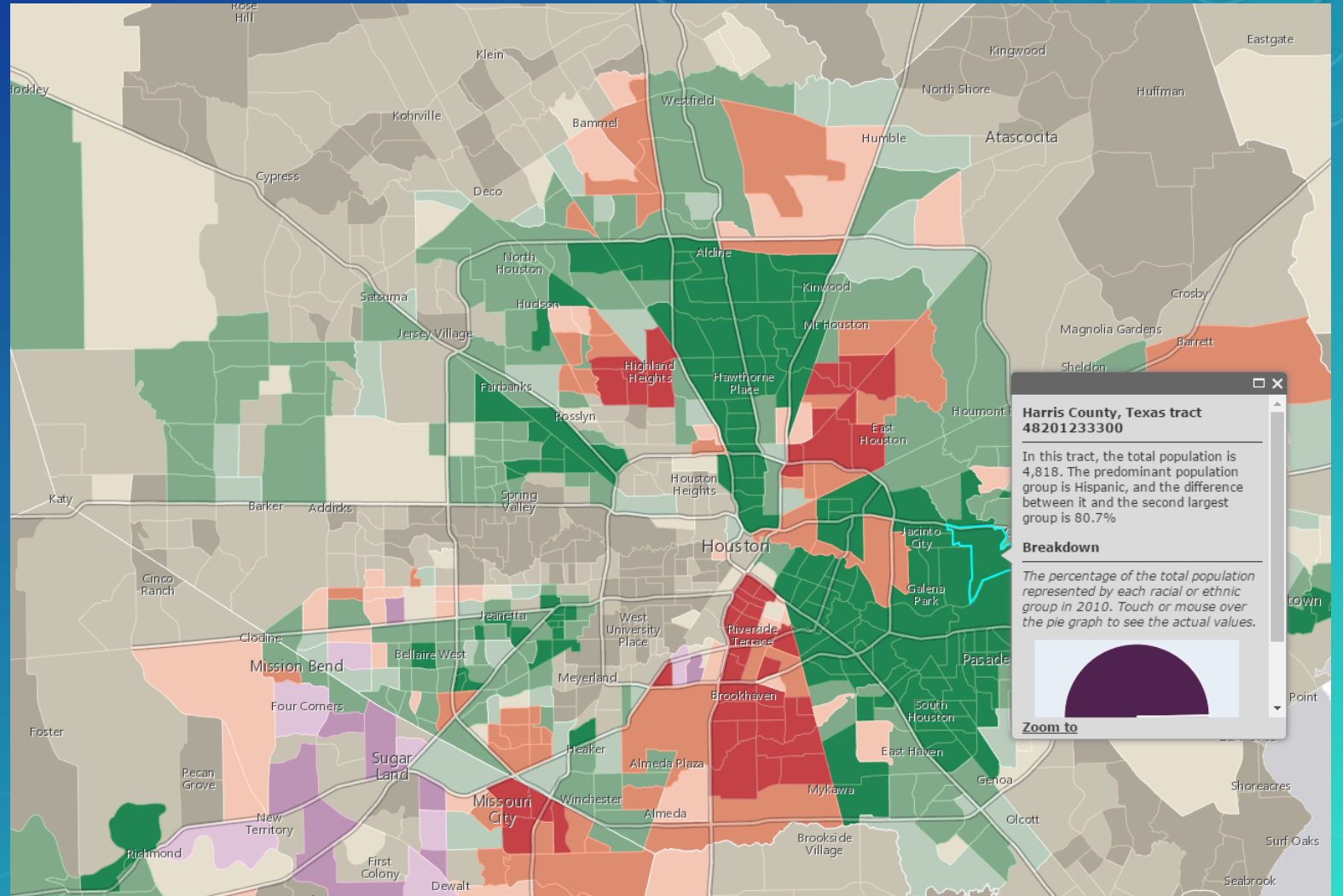
# Geology of the United States





# How is the map going to be delivered?

Predominant  
Population in the  
United States





Does it stand alone, or is it a  
part of something else?

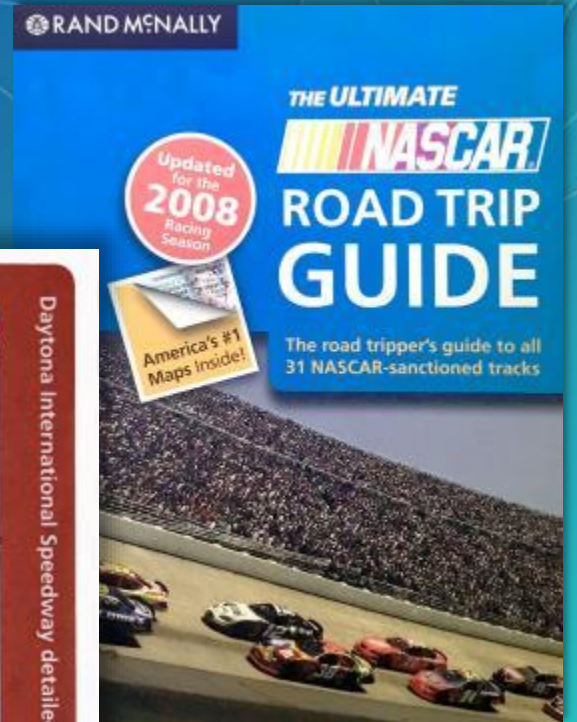
WHERE?



Does it stand alone, or is it part of something else?

Rand McNally NASCAR Atlas

Daytona  
International  
Raceway





# Does it stand alone, or is it part of something else?

## City of Long Beach Story Map

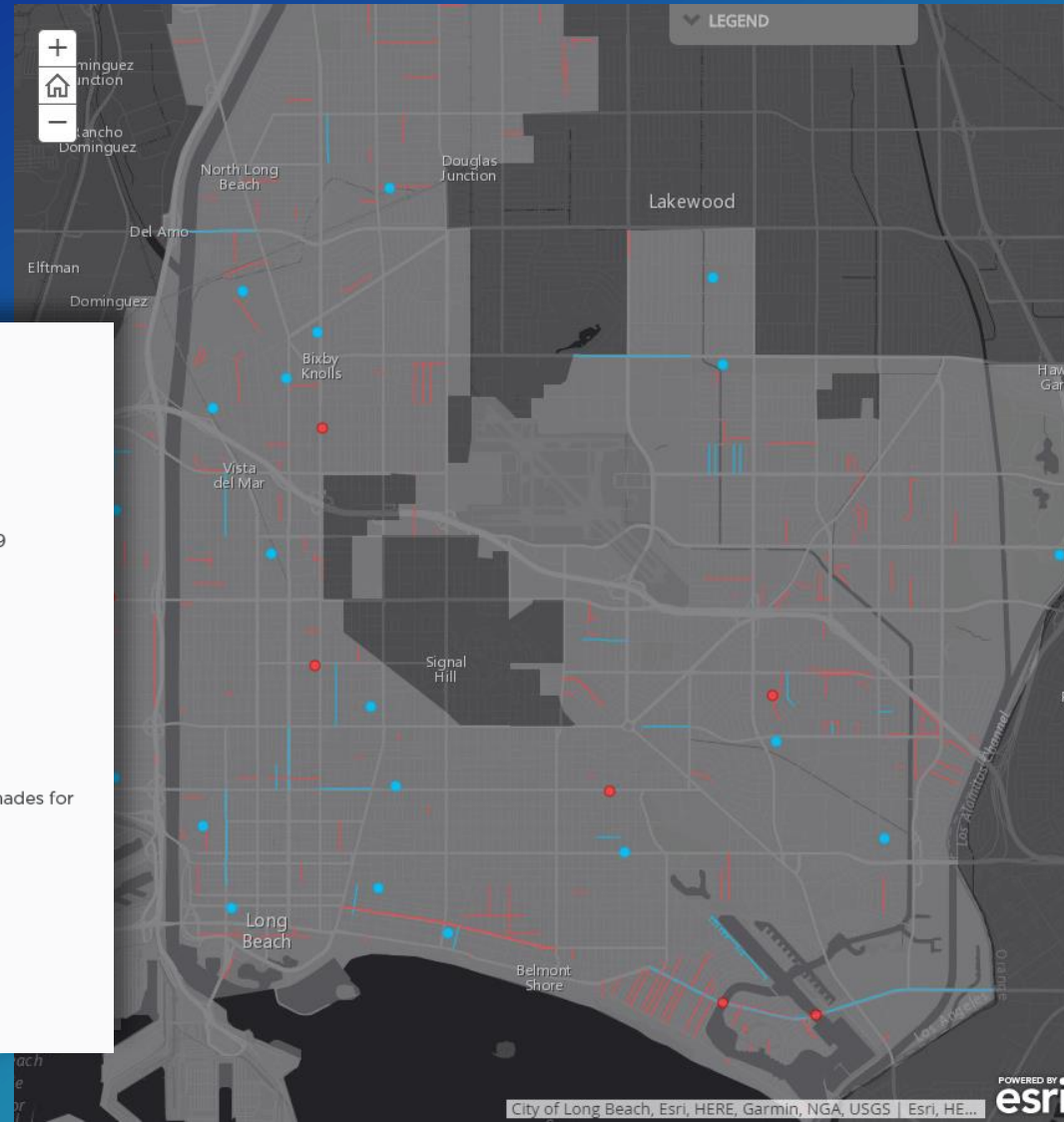
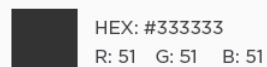
### OFFICIAL CITY COLORS

Note: CMYK values are for print use only.



### SECONDARY WEB COLORS

When using Black or Gray, please use these shades for overall site consistency.



LONG BEACH

A LIVABLE LONG BEACH

## MEASURE A PROJECTS vs. GENERAL CAPITAL IMPROVEMENT PROJECTS

Every year, the City of Long Beach maintains a general capital improvement plan that it will carry out in conjunction with Measure A funded improvements. Measure A projects are shown in **RED**, while all other Capital Improvement Projects not funded by Measure A are shown in **BLUE**.

**Measure A** states: "To maintain 911 emergency response services; increase police, firefighter/paramedic staffing; repair potholes/streets; improve water supplies; and maintain general services; shall the City of Long Beach establish a one cent (1%) transactions and use (sales) tax for six years, generating approximately \$48 million annually, declining to one-half cent for four years and then ending, requiring a citizens' advisory committee and independent audits, with all funds remaining in Long Beach."

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## IMPROVING OUR STREETS

The Fiscal Year 17 Measure A Residential Street Improvement Projects will primarily provide for slurry sealing of residential streets at various locations throughout the city.

A slurry seal is a layer of emulsified asphalt and is



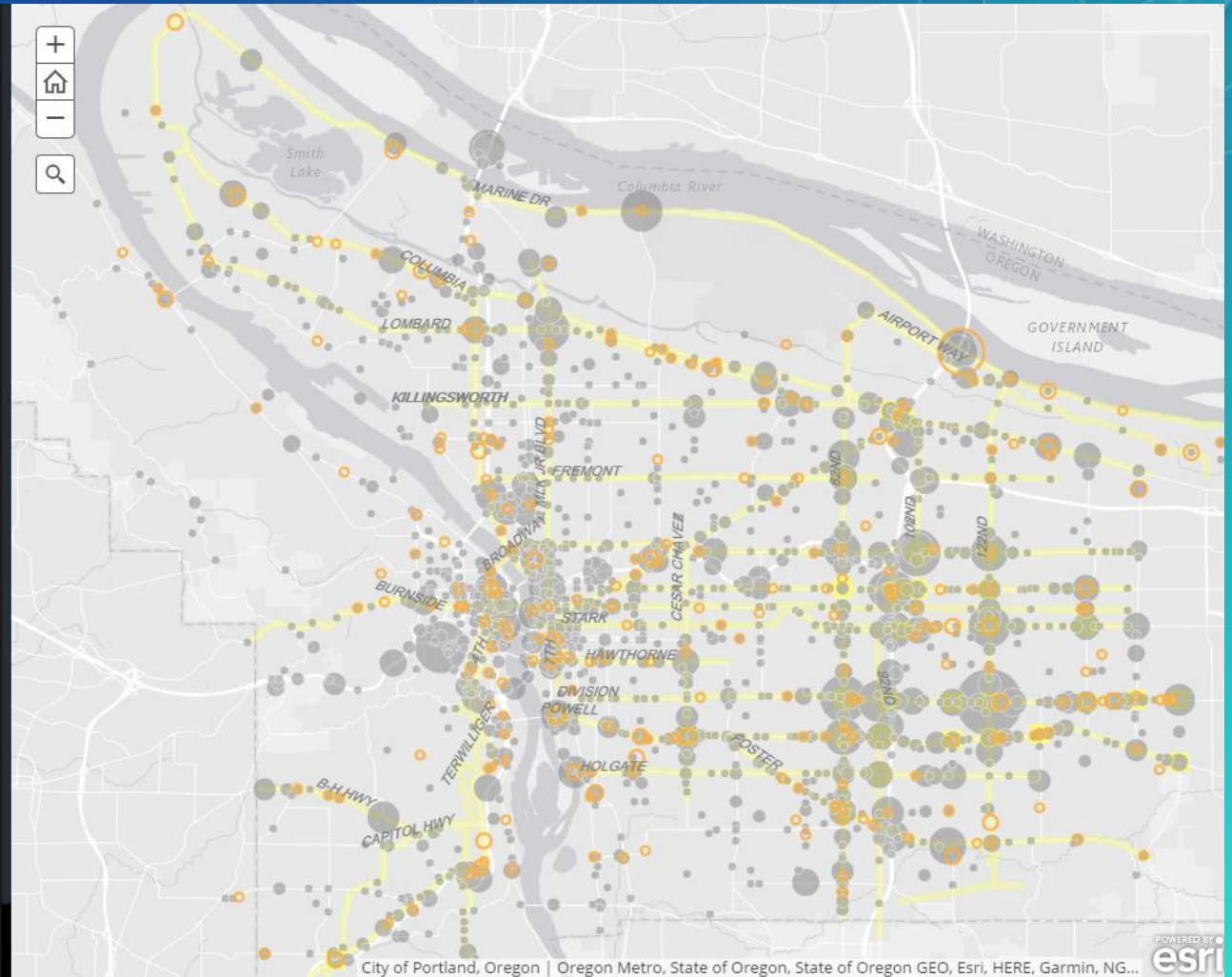
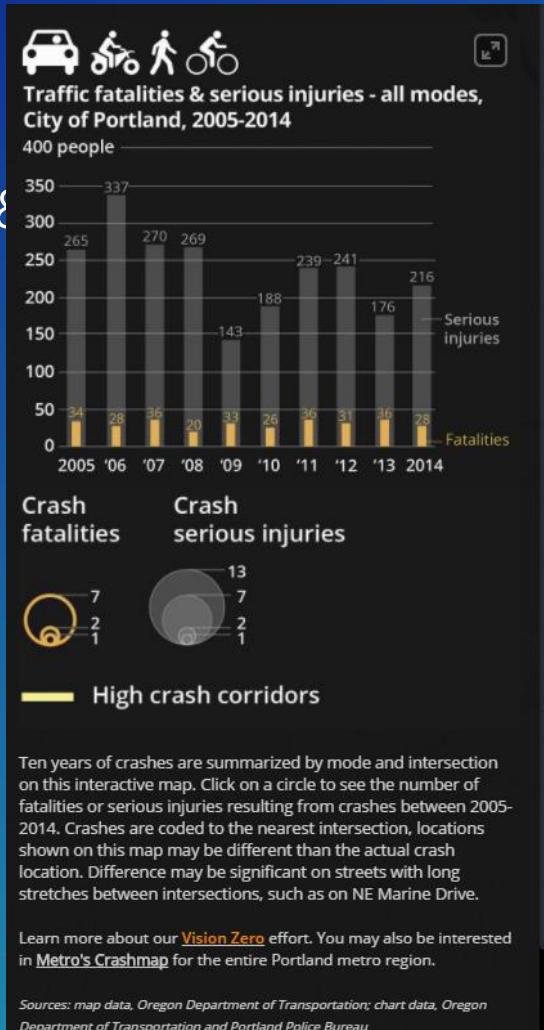
The background features a warm orange-to-red gradient with a subtle, organic texture. In the lower-left corner, there is a dark blue, irregularly shaped area containing a white geometric pattern of intersecting lines and squares, resembling a stylized map or circuit board.

Do I need full color, or should I  
be selective?

HOW MUCH?

# Do I need full color, or should I be selective?

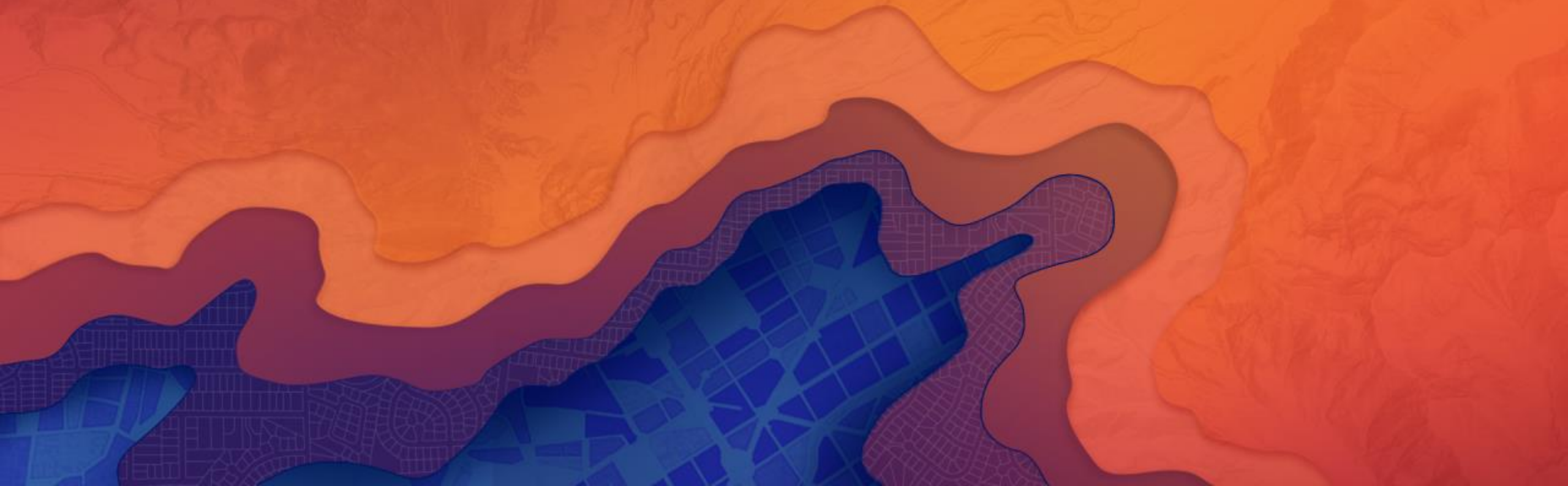
## City of Portland Traffic Fatalities & Serious Injuries, 2005-2014



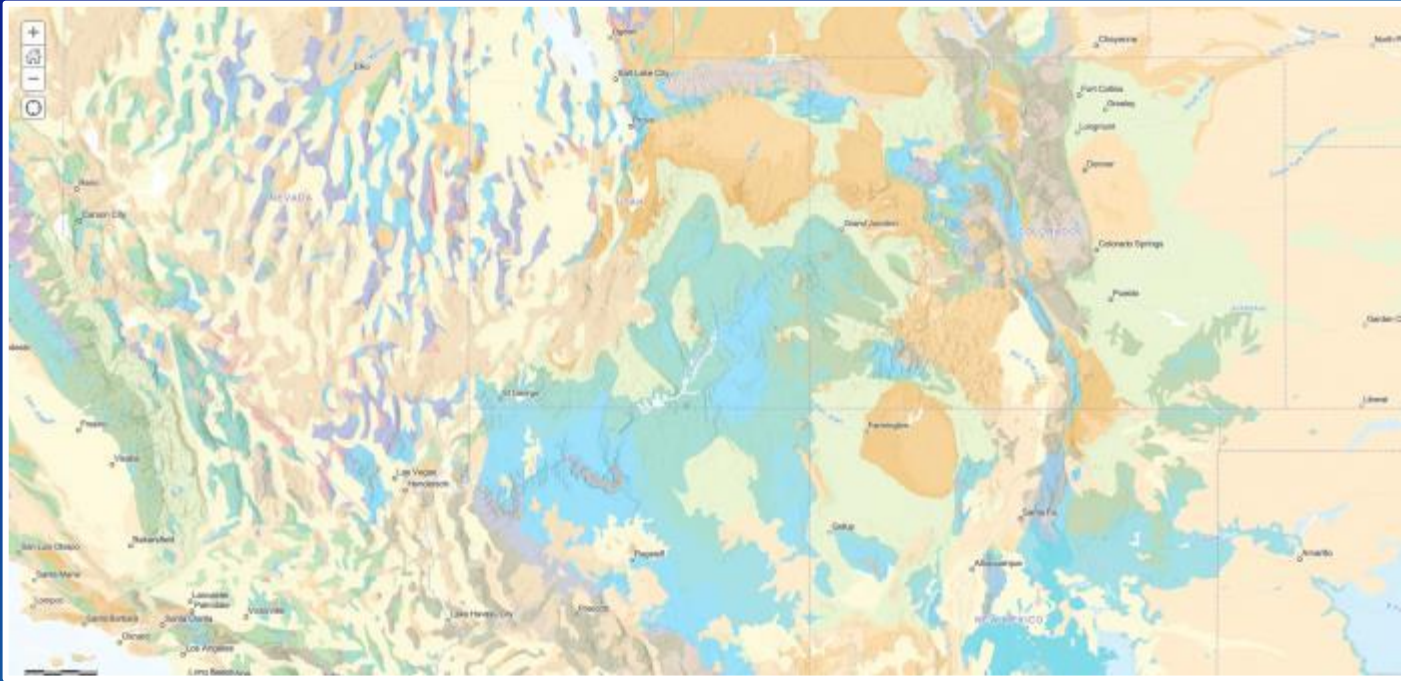


# Am I reaching all users?

HOW MANY?



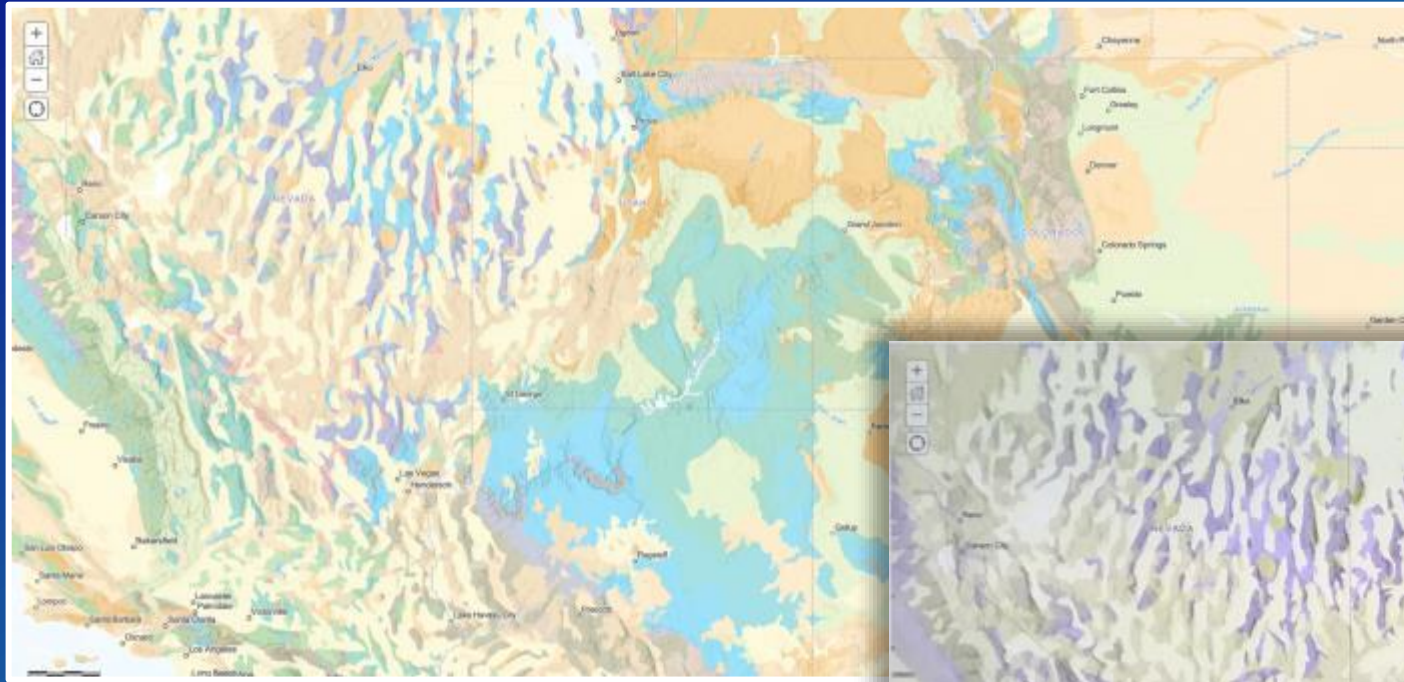
# Am I reaching all users?



Geology of the  
United States ...

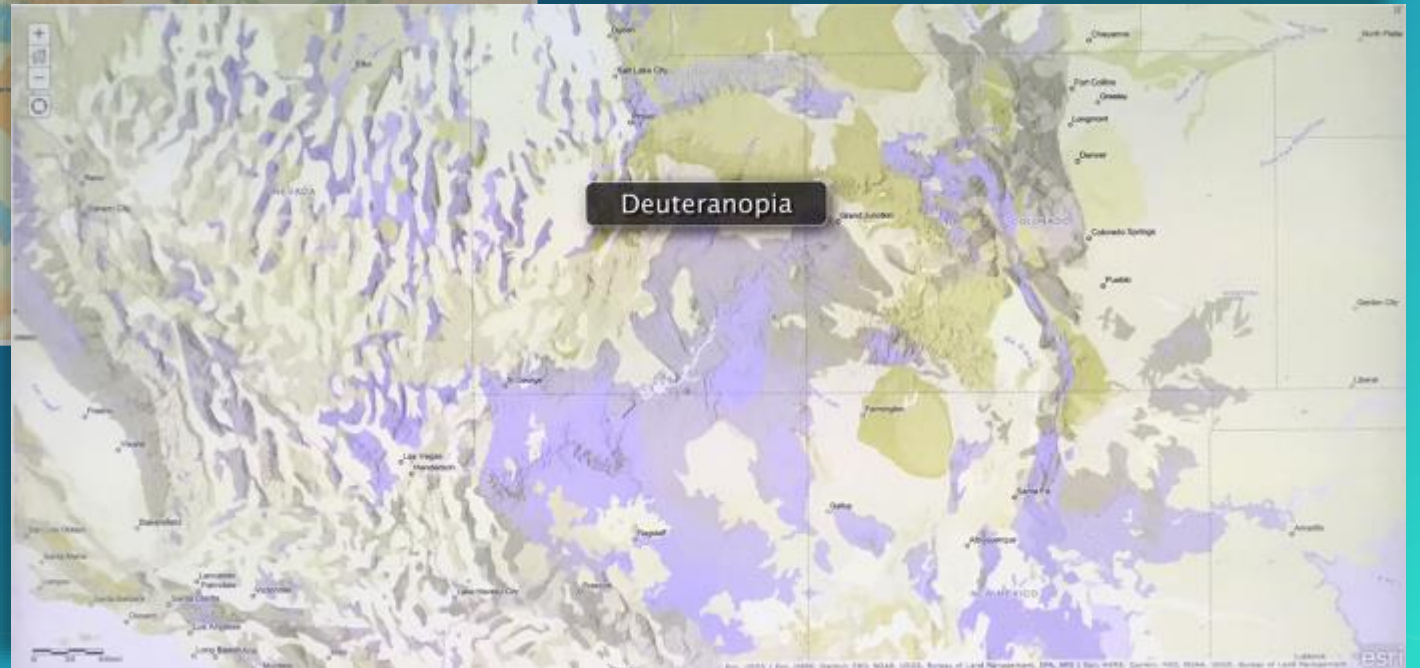


# Am I reaching Everyone?



Geology of the  
United States ...

... as seen by  
a user with  
color blindness



# Color Blindness in the USA

Women make up about 51% of the population, and about 0.5% are color blind regardless of race.

For men, the breakdown is:

Around 5-6% of Caucasian men are color blind

3% of Hispanic

3% of Asian

2% of African

There are approximately 320 million in the USA, so ...

Around

2.5%

of people in the USA are color blind...

Or approximately

8 million



# Am I reaching Everyone?

<http://colororacle.org/>  
<http://colorbrewer2.org/>

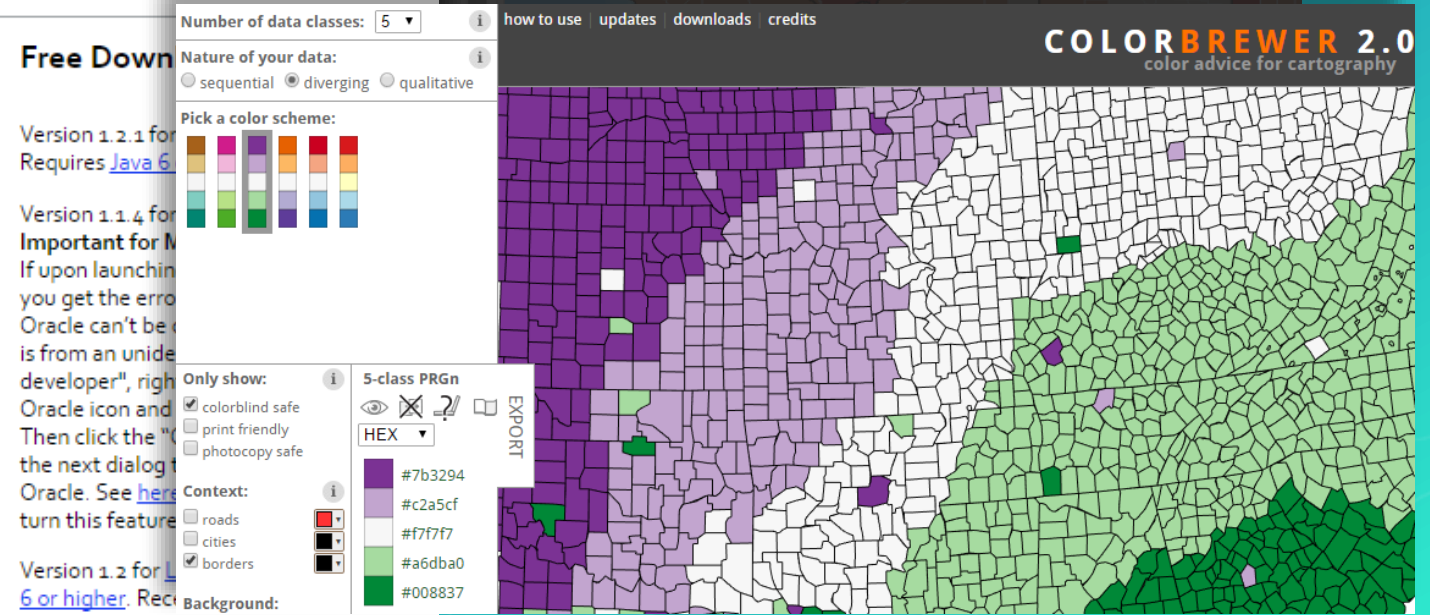
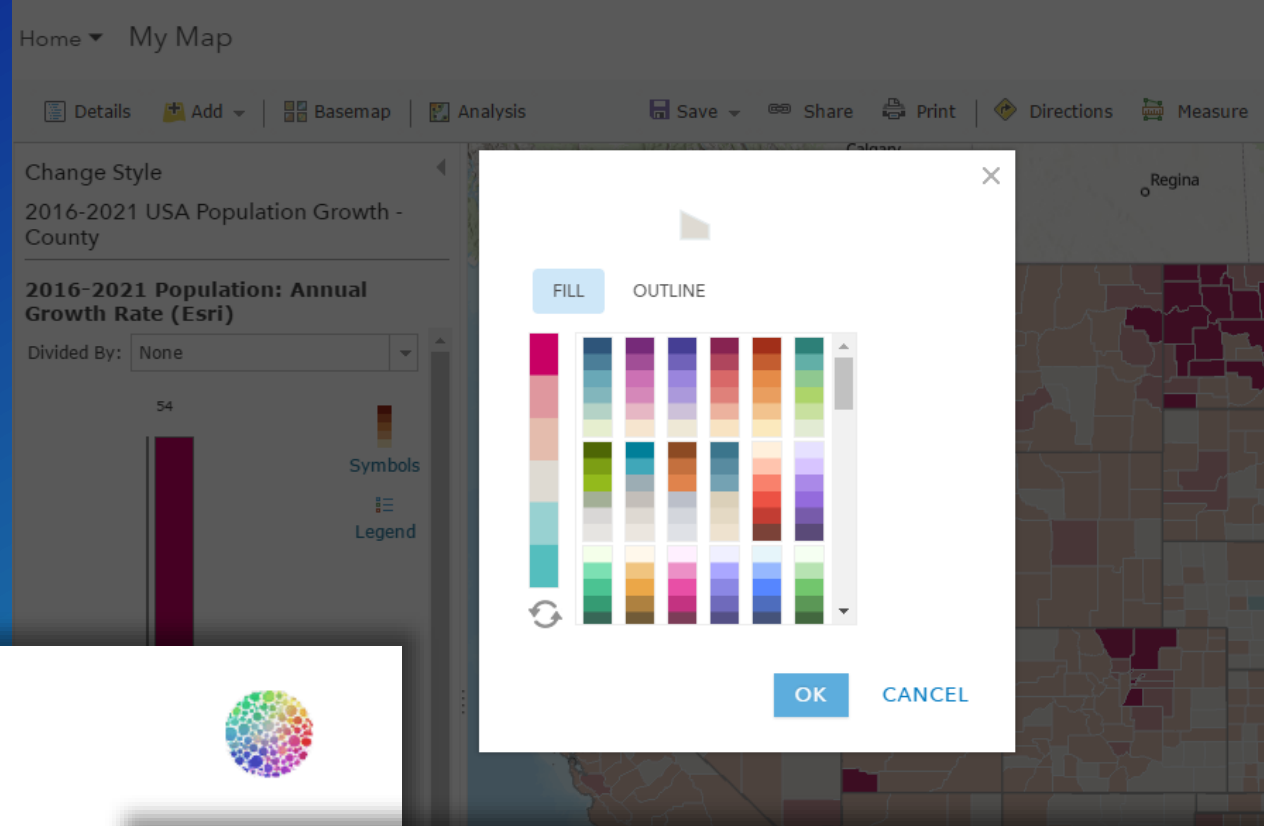
## Color Oracle

Design for the Color Impaired

Color Oracle is a free color blindness simulator for Window, Mac and Linux. It takes the guesswork out of designing for color blindness by showing you in real time what people with common color vision impairments will see.

Color Oracle applies a full screen color filter to art you are designing – independently of the software in use. Eight percent of all males are affected by color vision impairment – make sure that your graphical work is readable by the widest possible audience.

Read this article for more information: [Color Design for the Color Vision Impaired](#)



# Color

The Maps Best Friend ... or Enemy

- Why?
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- How many?
- Is color absolutely necessary?
- Who is my user, and how will they react?
- How is the map going to be delivered?
- Does it stand alone, or is it part of something else?
- Do I need full color, or should I be selective?
- Am I reaching all users?

## Links

Color Brewer

<http://colorbrewer2.org>

Color Oracle

<http://colororacle.org>





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THE  
SCIENCE  
OF  
WHERE