RAFT trip down the Colorado River through the Grand Canyon is a magnificent adventure that exposes passengers to a natural grandeur carved over millions of years.

River guides tell stories about the canyon that touch on hydraulics, geology, botany, history, zoology and culture. What you’re not likely to hear, however, is a story about why boats floating through the middle section of the Grand Canyon are in Arizona’s 2nd Congressional District while the shore on either side is in the 1st Congressional District.

Arizona’s U.S. House District 2 starts in suburban Phoenix and goes west in a narrow band to the border with California, where it stretches north in a broad swath through rural Arizona all the way to Utah. The district then heads east along the Colorado River through the Grand Canyon in a thin tendril to connect to the relatively large Hopi Indian nation in northeast Arizona.

The Hopi land is surrounded entirely by Navajo territory, which is in the 1st Congressional District. In 2002, in public hearings before the Arizona Independent Redistricting Commission, which drew the map, draft versions of the district were compared to a flying giraffe and an ostrich. But in the end, one of the strangest shaped districts in the country was adopted because it addressed strong concerns from Hopi leaders that they did not want to be in the same district as the much larger Navajo tribe, with whom they have a smoldering land dispute dating back well over a century.

Anyone who has been through the redistricting process recognizes the complexity of trying to balance numerous concerns while complying with strict federal and state laws.

To the outsider it may seem that drawing new congressional and legislative district plans is one dimensional: It’s all about gerrymandering. The term stems from the practice of drawing districts so they favor one party or the other. It came into the lexicon in the early 19th century when backers of Massachusetts Governor Elbridge Gerry drew part of a state Senate plan to favor Gerry’s party. A cartoonist added wings and a reptilian head to the district plan that a clever newspaper editor dubbed the gerrymander.

Odd-looking districts, however, also can reflect difficult choices and compromises. Arizona’s District 2 is an example of drawing a district that is balanced in population and fairly represents different communities, such as the Hopi and the Navajo. And yes, politics is involved, too.

“Don’t underestimate how difficult it is or how much time it will take.”

FLORIDA SENATOR MIKE HARIDOPOLOS

COUNTING US UP

In just over a year, legislators across the country will be grappling with this redrawing that rolls around every 10 years following the census. The U.S. Constitution requires all local, state and federal legislative districts to be redrawn after a census is taken to make the districts roughly equal in population, guaranteeing that each person’s voice is
equally represented in legislative bodies. It’s a constitutional principle known as “one person, one vote.”

Indiana Senator Sue Landske is chairing a special census data advisory committee of the Indiana General Assembly that already has begun to hold hearings. She recognizes the daunting task ahead.

“We have begun planning now, bringing ourselves up to date on redistricting laws and the technology available, so that we will be prepared to fulfill our constitutional redistricting duty when we receive the official census data early in 2011.”

The process will get rolling in April when every American residence will receive a census form. By the end of the year, the U.S. Census Bureau will collect and process a mountain of data. The bureau expects the 2010 count to find an American population close to 310 million people, up from 281 million in 2000.

Billions in federal dollars are tied to the count, as are the number of seats each state has in the U.S. House of Representatives. Once the bureau reports state-by-state population totals, states will know if they are gaining or losing seats.

Once legislatures receive the new census data by April 2011, they must have new district plans before any new elections can be held. While most have about a year to complete the job, four states that hold odd-year legislative elections—Louisiana, Mississippi, New Jersey and Virginia—have only a few months.

Sixteen states have an even tighter deadline because they are required by section 5 of the Voting Rights Act of 1965 to obtain approval of any change in election law by either the U.S. Department of Justice or the federal district court in Washington, D.C. That process can take up to four months.

Most legislatures have the authority to draw both state legislative lines and the boundaries for U.S. House districts, a process that can take anywhere from a few weeks to several months.

The task requires special mapping software and databases with census, demographic and election data to help with the seemingly infinite number of decisions to be made. Some legislatures are already well into the preparation phase.

“Don’t underestimate how difficult it is or how much time it will take to gather from unrelated sources the variety and quantity of data you will need, tie the data to the right piece of earth, and organize it all for easy and immediate access,” says Florida Senator Mike Haridopolos, who will chair his Senate’s line-drawing committee.

Moving a line to satisfy one community will almost certainly affect other groups in
WATCHING CALIFORNIA’S COMMISSION

A new redistricting commission in California will be under the microscope as it tries to draw state legislative district lines in the nation’s most populous state.

In 13 states, some form of reapportionment board or commission will have the initial authority for drawing state legislative district lines. That number increased by one from the 2000 redistricting cycle after California voters adopted an initiative in 2008 shifting redistricting to a 14-member commission bound by a long list of criteria and rules.

The question is whether California’s new panel can agree on plans. It pioneers a unique approach that requires a supermajority of nine of the 14 commissioners, and it must include Republicans, Democrats and representatives from smaller parties as well. They are required to agree on Assembly and Senate maps. In addition, California’s new constitutional language forbids partisan gerrymandering, saying “districts shall not be drawn for the purpose of favoring or discriminating against an incumbent, political candidate, or political party.”

Six states use a board or commission to draw congressional plans, and a handful of states provide for advisory or back-up commissions that take over if the legislature fails to pass new maps by a certain deadline.

Many critics argue it is inherently a conflict of interest for legislators to draw their own district lines. Texas Senator Jeffrey Wentworth has sponsored redistricting reform legislation every session for well over a decade, even after his party went from the minority to the majority in the Texas Senate.

“Allowing state legislators to draw their own district boundary lines is a lot like letting children fill in their own report cards,” he says.

Reform efforts to address this issue are underway in seven states, including California (for congressional plans), Florida, Illinois, Indiana, New York, Ohio and Utah. As a result, it’s possible more states could approach redistricting differently in 2011.

They might get a boost in 2010 with the release of a new documentary film titled “Gerrymandering: the Movie,” which will call for an overhaul of how redistricting is done.

Both good and bad ways. The change might have major political ramifications, and the only way to analyze different options is with good data.

Draft plans are constantly being evaluated to ensure they meet equal population requirements and comply with the federal Voting Rights Act. It is critical that states carefully consider how different plans will affect minority voters. In the past 20 years, the U.S. Supreme Court has ruled repeatedly on cases involving minority voting rights and redistricting.

ALL THE MARBLES

The political stakes are extremely high in redistricting. In addition to complying with federal and state criteria, mapmakers usually consider the political consequences of different choices. Often, districts wind up weighted toward one or the other of the two major political parties, a practice pioneered by the backers of Governor Gerry in 1812.

The U.S. Supreme Court has not yet established standards for what might be an unconstitutional partisan gerrymander, even though the high court acknowledges states could theoretically go too far and run afoul of the 14th Amendment to the Constitution.

In a 2004 federal district court decision, upheld by the Supreme Court, the judges ruled the Georgia legislature drew a legislative map that violated equal population even though the plan had an overall population deviation of less than 10 percent from the smallest to largest districts, a range that was considered by many to be a “safe harbor” under the law. The court implied the only rationale for the population variance was for partisan gain, and that was not permissible.

So in theory, there are limits on gerrymandering under federal law, but it is unclear exactly what those limits are.

There is no doubt, however, that the party coming out on top next November will have the upper hand in this redistricting cycle. Nearly 6,000 legislative seats and 36 governor races are on the ballot in 2010. With redistricting looming in early 2011, it is the election for all the proverbial marbles.

WHAT’S CHANGED

The 2010 redistricting cycle will differ in several significant ways from 2000. Perhaps the biggest potential change will be increased public scrutiny and involvement. Because of the Internet, the public will have access to extensive data and sophisticated mapping technology as never before.

Michael McDonald, a political scientist at George Mason University, thinks that this will be the “game changer” in 2010. “The public will be able to draw plans as effectively as the legislature,” he says.

Legislatures will be offered many alternative maps from outside sources and the public. Those maps will establish benchmarks for judges to consider in the inevitable post-redistricting litigation. In the 2000 cycle of redistricting, 42 states were sued, and in more than a dozen, courts either drew or modified district plans.

Both legislators and outside groups alike will have access to ubiquitous satellite imagery and aerial photographs to overlay on maps. Tools like Google Earth, that were not around 10 years ago, will certainly be used to help make more precise mapping decisions.

Another big change for the 2010 cycle is how the census is taken. In recent decades, the bureau sent out a “long form” survey to every sixth household while everyone else
received the basic form. The long form collected detailed demographic data about things such as education and employment. In the 2010 census, there will only be a short form, which could lead to a more accurate final count. The mail-back rate for the long form always lagged the short form, and it took extra effort to obtain long form data. Those resources can now be redirected toward a more accurate basic count.

Over the past five years, the bureau shifted the long-form, demographic questions to ongoing surveys, making detailed demographic data available for use during the redistricting process. This could make a complex task even more complicated. In previous redistricting rounds, the demographic data were released long after line drawing was completed.

This also will be the first redistricting with a Democratic administration in charge of the U.S. Department of Justice since the 1960s, when the modern era of redistricting began with the historic one-person, one-vote Supreme Court decisions. The department plays a key role through enforcement of the Voting Rights Act. Although many decisions are made by career department attorneys who are not political appointees, there have been allegations of politicizing of the process by both parties in the past, so the actions of the department will be watched closely.

Even though the actual work of redistricting is still more than a year away, legislators and legislative staff should be getting ready by studying the law, developing the technology, and learning the process and demographics specific to their state.

Tom Hofeller, a 40-year redistricting veteran who heads up redistricting operations for the Republican National Committee, warns that now is the time for legislatures to prepare.

“The sooner you fall behind,” he says, “the longer you have to catch up.”

CHECK OUT more about the intricacies of redistricting, including technology, legal decisions, the Census and other issues at www.ncsl.org/magazine.