

AICP STUDY GUIDE

Podcast

Episode 11: We're Chuggin' Along

And, welcome, planners, to the eleventh episode of the VERY UNofficial AICP podcast. I'm Jonathan Miller, and thank you all so much for joining me.

So, we are just chuggin' along here, aren't we? And pun was definitely intended. Before we get too far into laying the tracks for this episode, I just wanted to take a second to thank everyone who's sent the encouraging messages from coast to coast. Besides bringing a huge smile to my face, it helps keep the motivation to make sure, the wheels keep turning.

And with only eighteen days till registration ends, and the exam window only 28 to 42 days away, we don't want to lose any steam do we? In the words of Captain America, I can do this all day.

But anyways, last week we talked about the Homestead Act of 1862 and the Morrill Act of the same year - 1862, how both of these contributed to opening up the west for expansion, and the formation of the U.S. Geological Survey in 1879.

This week, we are continuing again with the westward expansion. I know it seems like a lot, but that's kind of what was going on at the time. So, you know, symptom of the circumstances.

So, to facilitate the movement from east to west - and vice versa - the first connection between coasts was made in the Transcontinental railroad, and we will touch some on a pivotal moment in developing the west with John Powell's, "Report on the Lands of the Arid Regions of the United States."

Just two topics this week, but they're important ones to understand. So, all aboard; let's go.

(01:55)

We're starting our little journey out today not in 1869 when the Transcontinental railroad was completed, but rather in 1862 – again, damnit - when Lincoln signed into law the very aptly named, "Pacific Railway Act of 1862;" 1862 is just a big year for Acts.

This act, in a nutshell since it isn't the super important part, granted land for rights-of-way, and gave some significant loans in order to facilitate the construction of the railway between the Missouri River and the Pacific Ocean. Remember, they already had it built up to the Missouri River.

The act also specified the 32nd parallel at the starting point for the route, and also basically created an oligarchy by making it available to two companies: The Union Pacific and the Central Pacific.

The Union Pacific was to start at the Missouri River near the border of Iowa and Nebraska with the Central Pacific starting in Sacramento - the two ends - with the idea that they would meet in the middle.

The act allocated an initial 6,400 acres of land for rights-of-way - that was increased later on – and \$48,000 in government bonds for every mile of track that was built.

So, if you notice, I didn't say where they were supposed to meet. That's because it wasn't specified, but they sure did specify how much they would get for every mile built. This, of course, was a really smart

move because it basically setup a system of competition: Whoever builds the most tracks gets the most money.

And with that, the race was on.

(03:45)

Let's stop for a second though. So, what prompted this act? Well, basically just the nugget of an idea that a cross-country railroad would be a huge boon to the economy. That idea had been circulating around for a while, but no-one company really had the resources to survey the routes, buy the materials, hire the workers, and protect the workers in order to build it. So, they really needed the subsidies from the federal government in order to get it done. They were also motivated by this little thing called "Manifest Destiny." We will get in to that a little later today.

A group of investors in Sacramento though ended up coming together in 1861, and by that time a rough route was forming. So, when they approached the feds about it then, with the traction they had with the financing, they got it passed in 1862.

So, in 1863, they were off-ish.

In fact, nobody really did much other than illegally setting up shell companies and corporate maneuvering until the Civil War ended. But then, they were off!

(05:01)

Construction of the railroad was rough to say the least. The Union Pacific Company - the one starting on the east - was constantly attacked by Native Americans who, justifiably so, were very threatened at the rapid expansion of the settlers. The encampments that travelled along with the Union Pacific? Those were riddled with gambling, prostitution, violence, and disease...

This is basically where the idea of the "wild west" started.

On the other end, the Central Pacific had the very unfortunate circumstance of having to start by figuring out a way through the Sierra-damn-Mountains, that is very different from the plains in Iowa.

Because it was so difficult, the railroad had a rough time finding and keeping workers until they started exploiting Chinese immigrant labor. You see, the west coast around this time saw a huge influx of Chinese immigrants; partly because of the gold rush.

But, the Central Pacific Railroad Company, however, exploited this and hired the immigrants to work under ridiculous conditions; building tresses on mountain slopes, and blasting through mountains with unstable explosives.

In 1867, they finally broke through the mountains and hit the plains on the other side, but by then the Union Pacific was already to Wyoming; way farther along. And that created the mad dash to the finish. In 1869, they got to be within miles of each other, and that's when the feuding over where to meet to complete the railroad started.

Having little patience for the feud and the delays, Ulysses Grant - the then President - said, para-quoting here, "Nope, I'm not having this crap. Until y'all can figure out where you're going to meet to finish this thing, nobody's getting another penny from us."

So, they real quickly decided on Promontory Point, Utah. Where's that? North of the Great Salt Lake, about an hour and half north of Salt Lake City. So, on May 10th, 1869, the Golden Spike - literally golden, 17.6 karats - was driven in to memorialize the feat.

And, here's a funny tidbit: So who drove in the spike? Well, A guy named Leland Stanford, one of the main financiers of the Central Pacific, swung the Spike Maul and missed. He hit the rail tie. Next up was Thomas Durant, head guy of the Union Pacific, and he also missed.

Like, what the hell? Just goes to show, no matter how much money you have, you can still look like an ass trying to do any kind of manual labor. It took an unsung hero, a regular railroad worker, to finish it off; although Leland Stanford wins the whodunnit of Google. So, let's try and change that.

(08:11)

That's a lot, I know, but let's look at the impacts.

First and foremost, it brought the west into, basically, the world. What used to take months now took days. It meant shipments coming into California could get to the east coast in days, not months. That made trade realistic and it couldn't have been done before. For example, the first freight to go east on the railroad? Japanese Tea. That never would have happened.

It also made the travel more affordable. It took what had cost \$1,000 dollars at the time down to \$150, which subsequently made moving west an actual possibility for way more people.

From a settlement perspective, just the construction alone on the railroad created several towns and cities, and these ended up starting as just trading posts.

More significantly though - and less obvious and direct - was how the transcontinental railroad revolutionized the way we viewed the environment and travel. As John Muir put it:

"With reference to sight-seeing on the Pacific coast, our so-called trans-continental railroad is a big gun; charged with steam and cars it belches many a tourist against the targets of the golden State, — geysers, big trees, Yosemite, among which they bump and ricochet, and rebound to their Atlantic homes, bruised and blurred, their memories made up of a motley jam of cascades and deserts and mountain domes, each traveller voluntarily compacting himself into the fastest cartridge of car and coach, as if resolved to see little as possible. Last year tourists were whizzed over plain and mountain from San Francisco to Yosemite in two days; and I learn that arrangements are being made for next season whereby the velocity of the shot will be increased to one day. This is modern travel spiritualized. Thus are time and space—and travellers—annihilated."

So, this speaks to two things:

- 1) The railroad destroyed the concept on time and space. Up until the transcontinental railroad, it was walking and horses, but this? This brought cities that were days away to within a single day, maybe even less, which revolutionized the economy, and
- 2) It removed any concept of the American landscape. No passengers cared about the environment they were passing. No one cared about the mountains that were destroyed in the process of construction. No one appreciated the beauty in the landscape. It was all business; here to there in as short a time as possible.

And that's just a shame.

(10:57)

So it's no wonder then, that as the transcontinental railroad was being built, that exploration of all of this unprecedented area would need explored. In fact, you could say that it was only because the transcontinental railroad was built that exploration was even possible.

Enter John Wesley Powell. As a professor of Geology, Powell - in 1869 - decided to undertake an exploration of the Colorado Plateau; that's a huge swath of land covering parts of Utah, Colorado, Arizona, and New Mexico.

Ok, so I'm going to backtrack here since I forgot a pretty important thing. It's not directly related to the AICP, you won't be questioned on it, but understanding it will put a lot of this into context.

So, Manifest Destiny. It's a term that gets thrown around. I'm sure we've all maybe heard it, but what the hell is it again?

Well, Manifest Destiny is a belief that was pretty rampant in the 1800's that Americans were destined to essentially populate, expand, take over, control, conquer, whatever you want to call it, basically all of North America.

Manifest Destiny essentially said, "We're Americans now, we're super special and virtuous, and it is our responsibility and destiny to settle the west as we did the east." Basically, complete and utter bullshit. Anyways, back to the story.

(15:56)

So, John Wesley Powell is exploring the Colorado Plateau like a true mountain man. But as Wesley was exploring and surveying the lands, he realized, "This is a special place."

In fact, his observations on rainfall completely counteracted the viewpoint of Manifest Destiny that rain would come wherever we settled; I told you it was bullshit.

So Powell, having noticed that the water just wasn't there to settle as the east had, began writing up a report on how these western arid lands should be developed; if it were to be at all possible. And thus, in 1878, the "Report on the Lands of the Arid Regions of the United States" - which is a mouthful - was written.

So, what was in it? Why was it important and pivotal? Well? First and foremost, it was one of the first reports on development that flew in the face of Manifest Destiny, and proposed instead to develop within the context of the environment.

Powell also argued that land in this area couldn't be developed properly if it were surveyed according to the rectangular method. Instead, he said these arid regions should be surveyed and split based on their watersheds, and that each community should develop as a commune of sorts, where groups could pool together their resources and capital in order to properly irrigate for agriculture.

Remember, irrigation at the time - and maybe still is, I'm not a farmer I don't know - really expensive, and Powell wanted to avoid the West becoming overrun by large plantations and companies - semi-ironic; Silicon Valley.

(14:20)

So, what happened with it? Well, remember the U.S. Geological Survey? Powell's survey of the west was folded into it.

As far as the report? Well, let's just say the inevitable power of the moronic ideal that was Manifest Destiny was too much; a lot of his concepts went ignored. In fact, in 1902, the U.S. passed the Reclamation Act, which we will eventually get to, but spoiler alert, the reclamation act ended up basically obliterating any concept of what a watershed is in the west altogether. And in doing so, eventually created cities like Los Angeles, Phoenix, Las Vegas, etc., etc., etc.

So, while it wasn't successful so much at the time, it was - in hindsight - an indictment on our models of development, and that it's the 'how' of development that should bend to the environment as opposed to the manipulation of the environment to serve the development.

But I might get crucified for that so, shhhhh, don't tell anyone I said that.

(15:29)

So, what did we learn today? Besides way too much that you didn't want to know, we learned that the transcontinental railroad - completed at Promontory Point on May 10th of 1869 - basically is responsible for the west just blowing up. It changed the entire way we viewed travel and the economy, and is

probably single-handedly responsible for making the U.S. the economic giant that it was in the early 1900's.

We also learned that it was that railroad that opened up exploration and led to John Wesley Powell specifically exploring the arid regions of the west. Because it was him doing the exploring, we learned that science is kind of a thing, that rainfall won't just happen because we say it should, and we should settle the land accordingly; just like the Pueblos and Hispanics who were there all along.

(16:31)

And there you have it. That's the transcontinental railroad and John Wesley Powell's "Report on the Lands of the Arid Regions of the United States."

If you want to know more about these topics, feel free to reference the show notes for links to the information we used for this episode, or use google.

Oh, and if you haven't seen it or want to know more about what life was like on the transcontinental railroad trail, watch the show "Hell on Wheels." It was originally on AMC and was on Netflix for a while, but you might be able to find it on one of those streaming services. Awesome show, Common is in it; it's great. It's fictional, obviously. Like the characters are largely fictional, but they do an excellent job portraying life at the time on the transcontinental railroad, and they cover the Union Pacific and Central Pacific railroads.

For those of you playing along at home, our question last week was, "What event helped ensure that the Homestead Act of 1862 and the Morrill Act of 1862 passed?" And that would be the southern states seceding. That's how you know those were 1862; the southerners kept poo-pooing them, so after they left there was no one left to poo-poo it anymore. BAM, passed.

If you want to play along this week, the question is going to be, "What year and in what location was the transcontinental railroad completed?"

Well, thanks for tuning in again and sticking with me. Go ahead and email me or send me a message through the website, Instagram or Facebook, whatever, and let me know if you have any questions, suggestions on how to make this better, plant-based protein recipes, whatever you want.

Also, you know it's coming. Please subscribe to this podcast on whatever platform you use for podcasts, or sign up on the show's website, so you can follow along with future episodes, help prepare for the exam and supplement all of your other study regimens. And be the cool kid on the block and share this out with any planners you know who might be interested.

And go all Dirty Harry and 'make my day' by leaving a review and rating. It helps make sure this content gets put in front of the people who could use it, and helps me out; but that's significantly less important. Make sure you tune in next week. We are picking back up on the tenements. See? I told you we'd be back. We'll talk the shoddy and slimy evolution of the tenement to the dumbbell tenement, and how Jacob Riis - I'm sure you all know this one - came to the rescue with his book, say it with me now, "How the Other Half Lives."

Thanks again everyone, 'till next time.

Links:

Transcontinental Railroad

<https://www.ourdocuments.gov/doc.php?flash=false&doc=32><https://www.ourdocuments.gov/doc.php?flash=false&doc=31>

<https://www.history.com/topics/inventions/transcontinental-railroad>

<https://www.history.com/news/transcontinental-railroad-changed-america#:~:text=The%20transcontinental%20railroad%20had%20a,transformative%20moments%20in%20American%20history.%E2%80%9D>

https://en.wikipedia.org/wiki/First_Transcontinental_Railroad#Aftermath

<https://www.loc.gov/collections/railroad-maps-1828-to-1900/articles-and-essays/history-of-railroads-and-maps/the-transcontinental-railroad/>

Report on the Lands of the Arid Regions

<https://pubs.usgs.gov/unnumbered/70039240/report.pdf>

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https://en.wikipedia.org/wiki/Report_on_the_Lands_of_the_Arid_Region_of_the_United_States

<https://eos.org/features/green-and-grand-john-wesley-powell-and-the-west-that-wasnt>