Infrastructure Investments and the Kansas Economy

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Overview

• Public goods
• What is the economic impact of the Kansas transportation system?
• Disinvestments in the Kansas Department of Labor
• Deferred Maintenance in Higher Education
Public Goods

• **Public goods** are commodities or services that benefit all members of society, and which are often provided through **public** taxation.
• Examples: National defense and roads.

Kansas ranks 4th in the nation with 140,372 miles of public roads. Roughly 10,000 miles are the state Highway system that carries the majority of traffic.
A right-wing experiment sarcastically known as the 'bank of KDOT' is ruining Kansas' roads.
Between FY11-FY20, $2.6 Billion Taken from KDOT

- During FY 2015 – FY 2019, hundreds of millions of dollars were transferred from KDOT to the SGF.
Starting in FY2017, Expenditures Fell

- Preservation/maintenance expenditures started to fall in FY2016.
- By FY2017, Expansion and preservation also contracted.
What was the Opportunity Cost of the Bank of KDOT?

• To understand this, we need to think about the economic impact and value of our public roads and highways.
• The state values its highway infrastructure at $30 Billion
  • It is an asset
  • That depreciates
  • And requires preservation
• Kansas highways contribute to the Kansas economy
• KDOT expenditures contribute to the Kansas economy.
Roads to Prosperity or Bridges to Nowhere?

- Theory and Evidence on the Impact of Public Infrastructure Investment (Sylvain Leduc and Daniel Wilson, 2012 NBER Macroeconomics Annual)
- Estimate the multiplier effect of highway construction in US states
- They find a positive impact on state economic activity.
Leduc and Wilson Found Large Multipliers

- Estimates show a large impact on economic activity
  - There is a significant impact in the first couple of years and then a larger second-round effect after six to eight years. The multipliers that we calculate from these impulse responses are large, between 1 and 3 on impact and between 3 and 7 at six to eight years out.
  - It takes about five years to fully realize the benefit of construction.
Welfare Effects of Transportation Infrastructure Improvement

- Estimate the value of improvements in the US Interstate Highway System, taking into account traffic congestion.
- Calculate the Return on Investments for each Segment of US Highways.
Allen and Arkolakis shared their ROI estimates for the state of Kansas.

Improving/Expanding I-70 from Kansas City to Topeka would result in a 101% Return on Investment.

Emporia to Wichita has a 62% ROI.

Investing in Kansas Highways has a huge payoff.

Causal Effect of Kansas Tax Cuts on Economic Growth

- Synthetic Control Method
  - Kansas is Treated State (Tax Cuts)
  - Other states make up a weighted average of “synthetic Kansas”
  - Border states + Idaho, Iowa, Arkansas, Mississippi, Georgia, South Carolina, West Virginia, Pennsylvania, Massachusetts, Maine
- Growth was lower in Kansas!

Source: Hope & Limberg 2020
In 2008, KDOT has calculated the impact of reducing preservation funding by 60 percent from $385 million per year to $154 million per year (in constant 2008 dollars) over the period from 2009 to 2020.
KDOT Estimated the Economic Impact of Infrastructure Investments

Instead of spending the projected $385 million per year on preservation KDOT spent an average of $273.5 million per year (in constant 2008 dollars) over the period from 2011 to 2020.

- This was a 29% reduction in preservation expenses compared with the 60% reduction that KDOT modeled.

Assuming a 60 percent decrease in maintenance funding suggests that by 2020 the Kansas economy would lose 12,000 jobs and $670 million per year in gross state product.

- Since the cut was half of that, given the same set of assumptions
- Kansas may have lost 6,000 jobs and $335 million per year in gross state product.
- Totaled over 9 years, this would result in a 2% decrease in GSP.

http://www.ksdot.org/PDF_Files/Transportation%20Infrastructure%20Investment%20and%20the%20Kansas%20Economy%20Final%2011-12-08.pdf
What was the Opportunity Cost of the Bank of KDOT?

- Cutting taxes lowered Kansas expenditures on public roads.
  - Those expenditures have a higher multiplier effect and ROI.
  - In some cases, the multiplier is as high as 2 – 5.
- Although correlation is not causation, it is likely that disinvestment in our transportation infrastructure contributed to lower economic growth.
  - My back of the envelope calculations are roughly 2%.
Deferred Maintenance on the Unemployment Insurance System
Do you Remember 1977?

- Jimmy Carter was President
- Robert Bennett was Governor of Kansas

IBM System 370/Model 145 mainframe
Introduced in 1977.
The Kansas UI System runs on a Mainframe that was installed in 1977.
The Unemployment Insurance IT Infrastructure

• The Kansas UI system is actually three systems:
  • Mainframe, Web Portal and Siebel Customer Relationship Management System
• The Mainframe runs on a specialized version of COBOL.
• The code works, but it is difficult to update.
• In the past, KDOL employees would fix UI claims manually when the mainframe system would not accommodate these unusual cases.
  • When the CARES Act was introduced, the UI system could not adjust to these changes.
  • KDOL employees couldn’t manually process thousands of claims.
How Did we Get Here?

- 2004 KDOL received bonding authority of $21 million to upgrade the Unemployment Insurance benefit system.
- 2007 $26 million of Reed Act money authorized for UI modernization. Modernization continued for the remainder of the decade.
  - Modernization did have problems.
  - Two contracts were terminated.
  - Project was behind schedule.
2011 was a Turning Point

Brownback administration lays off 85 Kansas Dept. of Labor employees

Dept. of Labor says layoffs are ‘fiscal necessity’

Source: Lawrence Journal World

Gov. Sam Brownback’s administration on Friday laid off 85 state employees at the Kansas Department of Labor.

- UI System Modernization was cancelled in December 2011 despite the system being obsolete. $51 million had been spent.
Kansas Department of Labor Funding & FTE

- 2011 marked the beginning of significant disinvestment in the Kansas Department of Labor.
- FTE fell by 159 people between 2011-2019.
COVID Created a Perfect Storm

- Huge amounts of unemployment
- New CARES Act programs such as Pandemic Unemployment Assistance (PUA) were difficult to manage on the KDOL antiquated system.
- Fraudsters targeted PUA and other programs nationwide.
How Did we Get Here?

- Instead of spending the money necessary to fix the Unemployment Insurance System, say a total of $75 million dollars, we ignored the problem.
- It cost the state a minimum of $290 million in UI Fraud.
  - $290 million > $75 million it would have taken to fix the system.
- Governor Kelly is now budgeting $37 million to fix the system.
- Federal funds may also be used to shore up the system.
Deferred Maintenance in Higher Education
Deferred Maintenance Expenses at KU

- KU has $207 million in deferred maintenance now.
  - $32 million is related to infrastructure such as roads, parking lots, electricity, sewer and water.
  - Malott Hall, built in 1954, requires $10.7 million in maintenance.
- In 10 years KU’s costs could balloon to $1.4 billion.
“Kansas has a huge backlog of deferred maintenance, from buildings to computers to infrastructure. Pushing back maintenance schedules is a seemingly painless way to balance budgets without tax increases or cuts to popular programs. In truth, the pain is simply hidden. Over time it saddles the state with multi-billion-dollar liabilities and an inability to cope with crises such as the pandemic.”

Read more here: https://www.kansas.com/opinion/guest-commentary/article249947829.html#storylink=cpy
Conclusions

- Infrastructure investments matter.
- Expenditures on roads have large multiplier effects (2-5 times the expense).
- Opening the bank of KDOT may have slowed economic growth in the state.
- Failure to update the UI system cost the state hundreds of millions of dollars.
- Federal funding may help address this pressing need.
Thank You!