KANSAS LEGISLATIVE
DIVISION *of*
POST AUDIT

Assessing the Impact of Permanent Work from Home Options

August 2023

Introduction

Representative Tory Marie Blew requested this audit, which was authorized by the Legislative Post Audit Committee at its April 22, 2022 meeting.

Objectives, Scope, & Methodology

Our audit objectives were to answer the following questions:

1. How many state employees could potentially work from home all or part of the time?
2. What impact would permanent work from home options have on state costs, hiring, and productivity?

To answer these questions, we collected and analyzed staffing information from executive branch state agencies in the spring of 2023. We worked with the agencies to understand the number of staff already working from home and the potential for more staff to work from home. We also conducted a literature review and interviewed 7 state agency officials and officials from 2 other states. More specific details about the scope of our work and the methods we used are included throughout the report as appropriate.

Important Disclosures

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. Overall, we believe the evidence obtained provides a reasonable basis for our findings and conclusions based on those audit objectives.

Audit standards require that auditors and audit organizations should avoid situations that could lead reasonable and informed third parties to perceive that the auditors and audit organizations are not independent and thus are not capable of exercising objective and impartial judgment on all issues associated with conducting the engagement and reporting on the work. The reader should be aware that our office has a telecommuting policy and allows employees to work from home. We do not think this had any effect on our ability to assess the potential work from home capabilities and issues experienced in executive branch agencies.

Our audit reports and podcasts are available on our website (www.kslpa.org).

State agencies reported about 30% of state employees currently work from home all or part of the time, but it's possible up to about 45% of employees could work from home going forward.

<u>**Background**</u>

The State of Kansas currently employs about 18,000 employees across 81 state executive branch agencies, boards, or commissions.

- For the purpose of our audit, we identified 81 state agencies, boards, or commissions under the executive branch of the Kansas state government. Throughout our report we will refer to these entities as agencies. These agencies range in size from very small (1 or 2 employees) to very large (around 2,000 employees).

- These agencies serve a wide range of functions. Their responsibilities can vary from overseeing prisons to tax collection to wildlife management and so on.

- The 81 state agencies also employ a variety of professions. Examples include scientists, law enforcement officers, transportation professionals, engineers, case managers, attorneys, historians, doctors, corrections officers, park rangers, or accountants.

As of Spring 2023, state agencies have discretion to create their own work-from-home policies.

- There are no statutes governing work from home in state agencies. However, the Department of Administration instructs agencies that have work-from-home options to have an official telework policy. Agencies can either create their own policy or adopt the Department of Administration's policy. These policies should not conflict with any other state regulations regarding full-time state employees.

- Over half (56%) of all state agencies have their own work-from-home policies. Other agencies have either adopted the Department of Administration policy (25%) or do not allow employees to work from home (19%). This is based on agencies self-reporting information to us in Spring 2023. This work is described in more detail later in the report.

- We reviewed the policies for 26 agencies in detail. We chose a variety of agencies, big and small, and both in-house policies and Department of Admin polices. We noted similarities and differences across the agencies.

- Most of the 26 agency policies we reviewed consider working from home a benefit that employees can earn. Employees must meet specific performance and home office criteria to work from home. For example,

employees must be meeting or exceeding their performance objectives to work from home and cannot have received a reprimand in the last 12 months. Home office criteria may include having an office away from other domestic activities and having internet access.

- Additionally, most of the 26 agency policies we reviewed also indicated that employees must also have a job compatible with working from home. Meaning, the job is portable and can be performed effectively outside the work site. Policies we reviewed required the approval of supervisors for an employee to work from home. The amount of time an employee can work from home may be limited by a specific agency's policy or be set through employee/employer agreement.

Some state jobs are better suited for working from home than others.

- Not all agencies have the same mission or purpose. This affects the ability of agency employees to work from home. For instance, the Kansas Highway Patrol reported to us that its position as a public safety agency requires that staff (including support staff) be on-site. This allows them to use all resources possible in support of field personnel. On the other hand, staff at agencies like the Office of the State Bank Commissioner and the Department of Administration are better suited for working from home. This is because many of these agencies do a lot of administrative and financial work that can be completed off-site.

- Some aspects of jobs prevent employees from utilizing a work-from-home arrangement. About 45% of agencies indicated to us in an information request that a job's appropriateness for working from home was a barrier to allowing more employees to work from home. For example, the Kansas Historical Society told us that a lot of their work requires staff to be in person. Employees working from home could not tend to artifacts. Our information request and the responses of agencies are described in more detail later in the report.

<u>**Work-From-Home Estimate**</u>

We used staffing information reported by 81 executive branch state agencies to estimate the number of current and potential positions that could work from home.

- Our audit objective asked us to determine how many state employees currently work from home, and how many employees could work from home going forward. For this work we focused on executive branch state agencies. We did not examine legislative agencies because as legislative staff, we cannot objectively evaluate other legislative agencies. We also did not examine the judicial branch or the 6 state universities.

- We asked the 81 executive branch agencies (with approximately 18,000 employees) to provide us with information about their employee make-up, how many employees currently work from home, and how many could potentially work from home. Officials from all 81 agencies responded to our request for information. Details about these 81 agencies and what they told us are in **Appendix B.**

According to agency officials, roughly 30% (about 5,500) of executive branch state employees work from home either all or part of the time as of April 2023.

- There are 2 types of work-from-home arrangements. The first is to work from home full-time. The second is to work a combination of on-site and at home. This is called a hybrid model. Some employees working a hybrid schedule may come into the office certain days a week and work from home the other days. Other employees on a hybrid schedule may travel to a job site on certain days and work from home the remainder. For example, case workers may work from home except when they're required to make an in-person house visit.

- The agencies responding to our request for information in Spring 2023 reported that around 30% (5,500) of the roughly 18,000 state employees work from home either in a hybrid or full-time capacity. This breaks out to about 2,000 (11%) employees that work from home full-time and about 3,500 (19%) that work from home in a hybrid capacity.

- The percentage of employees working from home varied between agencies. It was anywhere between 0% to 100% of all employees, but on average it was 45%. 16 agencies had no staff working from home. 10 agencies had all staff working from home either in a hybrid or full-time capacity. These 10 agencies had under 20 employees. The remaining agencies had a combination of staff working fully on-site and staff working from home either in a hybrid or full-time capacity. **Appendix B** has more information on each agencies work-from home-composition.

Agencies estimated that an additional 15% of state employees (about 2,500) could potentially work from home going forward.

- We also asked state agencies to estimate how many additional employees could work from home either full-time or in a hybrid capacity. For our work, we were asked to look at how many more positions could become work-from-home. The scope of our work did not include reviewing if any reductions were appropriate.

- Agencies estimated that around 1,500 current positions could become full-time work-from-home positions. They also estimated that around 1,000 could become hybrid work-from-home positions. The number of employees each agency estimates could work from home is also found in **Appendix B**.

- Agencies' estimates seemed reasonable compared to other information we reviewed. We conducted two additional data reviews to determine whether agencies' estimates were reasonable. First, we analyzed state job titles and descriptions to identify positions that could reasonably work from home. Second, we asked agencies to classify their employees by their responsibilities (i.e., tasks that could be done anywhere versus on-site work). The results of this work were reasonably close to the agencies' estimates.

- We didn't ask agencies specifically why they have not increased the number of employees who could work from home. However, we asked agencies about their barriers to allowing more employees to work from home. The most frequent reported were team cohesion and productivity concerns. Other unique barriers agencies identified included citizen perceptions and equity between employees holding different types of positions. Also, Department of Administration and Department of Labor officials both told us that they have employees who are eligible to work from home, but they prefer to work on-site.

Permanent work-from-home options could help the state hire and retain staff, have limited impact on productivity, and have a mixed impact on costs.

We reviewed several reports and studies and interviewed agency officials from Kansas and other states to understand the impact of staff working from home.

- Our objective asked us to evaluate the impact permanent working from home had on productivity, staffing, and costs. For our audit, we defined permanent as the continuation of the state's current work-from-home policies and practices.

- We interviewed 7 state agencies. We chose these agencies because they represented about 40% of state employees and were a mix of large and small state agencies. These agencies were:

  o The Kansas Department for Children and Families
  o The Kansas Department of Health and Environment
  o The Kansas Department of Labor
  o The Kansas Department of Revenue
  o The Kansas Department of Transportation
  o The Kansas Historical Society
  o The Kansas Office of the State Bank Commissioner

- We also reviewed the answers from the 81 state agencies who responded to our information requests. We asked the agencies what they perceived to be the benefits and barriers of employees working from home. 68 agencies

provided responses to those particular questions. Their responses were on behalf of 81 agencies in total. For example, the Department of Corrections gave one response on behalf of themselves and the 9 correctional facilities.

- We conducted a literature review of studies and reports examining the impacts of working from home. Our literature review looked at academic research as well as government reports and audits from organizations like the U.S. Government Accountability Office and the National Institute of Health. We ultimately relied on 5 key resources that studied the impact of working from home. These resources included independent research, analyses of work-from-home research, and survey results. Those 5 sources are listed in **Appendix A**.

- We also spoke with officials from the Arizona and Michigan state administration offices. We chose these two states because they had experience with offering work-from-home options to state employees. Michigan has offered work from home since the early 2000s and Arizona since around 1990. Roughly 40 - 50% of employees in those states work from home in some capacity.

Working from home may help state agencies <u>hire</u> more employees than they otherwise could.

- State agency officials we spoke to told us working from home has increased the talent pool for hiring. Officials told us that this is because work from home is considered a benefit and allows the state to be competitive in hiring. Additionally, state agencies can hire individuals from across the state and are not limited to specific regions. For example, Kansas Department of Labor is based in Topeka and officials told us they were able to hire attorneys from Garden City (about 300 miles away).

- Multiple agencies said access to more applicants was a benefit. We gave agencies the option to select from a variety of benefits to allowing employees to work from home. 38% of the 68 Kansas agencies responding to our information request picked an increase in the talent pool as a benefit of allowing work-from-home options.

- In our literature review, 1 report we reviewed indicated that allowing employees to work from home naturally increases an organization's talent pool. This is because candidates from different regions and backgrounds can apply. The report also said surveys have shown that workers equate hybrid work as a benefit and workers may be willing to take a job with a "slightly lower salary" if hybrid work were an option. The other 4 reports did not look at the topic of hiring.

- Michigan and Arizona officials also said that there was a natural increase in the talent pool. Michigan officials told us they were finally able to hire a specialized position that had been open for 5 years by allowing work-from-

home options. However, officials from both Michigan and Arizona also cited some challenges to hiring work-from-home positions. Officials told us they found it more difficult to learn about potential employees, some interviewees do not show up to remote interviews, and in one instance, an employee was hired and never showed up to work.

Working from home also helped state agencies <u>retain</u> their current employees.

- State agency officials told us that work from home had some positive impacts on staff retention. 6 of the 7 agencies said they have seen less staff turnover since they began offering work-from-home arrangements.

- Multiple agencies reported to us that retention was a benefit. We gave agencies the option to select from a variety of benefits to allowing employees to work from home. 49% of the 68 Kansas agencies responding to the information request said that a benefit of allowing employees to work from home was increased employee retention. 66% said another benefit was increased employee job satisfaction.

- The literature we reviewed also suggested working from home could help with staff retention. 2 reports showed that working from home could help reduce employee turnover and increase employee satisfaction. Another report said that opportunities to work from home was an important retention tool. Finally, another study found that when government employees were denied the opportunity to work from home, they were more likely to report an intention to leave. The fifth report we used did not focus on retention.

Although difficult to assess, working from home appears to have limited impact on staff <u>productivity</u>.

- Our audit objective also asked us to evaluate work from home's impact on productivity. However, agencies did not have clear productivity data for all their staff. That's because productivity can be difficult to measure, especially across different types of jobs. For example, it's simpler to measure a job with narrow, regular outputs such as number of calls handled each hour than to find the quantifiable outputs of a budget analyst who may have a variety of tasks to complete over time.

- Agency officials we spoke to told us that it was challenging to find ways to measure how work-from-home impacts productivity across a variety of jobs. However, based on their general observations, officials told us working from home has not negatively impacted staff productivity. Their observations were based on things like employee performance, higher staff retention rates, fewer sick days used, and feedback from direct managers. The Kansas Department of Revenue said they use debt collection data and speed of income tax refund distributions to assess productivity, but we did not audit these metrics.

- In fact, officials from 4 of the 7 state agencies told us that in their opinion working from home had a positive impact on productivity. These agencies cited fewer sick days used, more time to complete work instead of traveling, and increased employee happiness leading to better employee performance. However, officials were not able to quantify these results. The other 3 agencies told us they saw no changes in productivity with their current work-from-home policies.

- Agencies that responded to our information request reported mixed results on the impact of working from home on productivity. We gave agencies the option to select from a variety of benefits and barriers to allowing employees to work from home. 31% of the 68 Kansas agencies responding to our information request said that a benefit of allowing employees to work from home was increased employee productivity. However, around 37% to 44% expressed that concerns about productivity were a barrier to allowing more employees to work from home full or part-time. (In following up with our 7 agencies, 2 told us their concerns were largely based on how to measure productivity for staff working from home or that some positions were not appropriate to being productive at home.)

- 4 of the 5 reports that we reviewed discussed employee productivity. They all found that overall, remote workers are equally, if not more, productive than their on-site counterparts. Increases in productivity were linked, in part, to employees taking fewer sick days and breaks than their in-office counterparts as well as employees experiencing fewer distractions. This then increased the employees' amount of time working. However, 2 of the reports also indicate that several factors affect productivity, including the job role, employee characteristics, and employee preferences. The fifth report we used did not address productivity.

- State officials in Michigan and Arizona told us they hadn't seen any changes in productivity with employees working from home. Michigan officials told us they have seen no changes in efficiency of state work since the COVID-19 pandemic and as a larger number of staff began working from home. Further, officials from Arizona told us they conducted a satisfaction survey after the COVID-19 pandemic as more employees began to work from home. The results suggested there wasn't a difference between employees who worked from home and those who work in the office in terms of their motivation and productivity. However, neither state had data on productivity for us to review.

Working from home appears to have some short-term cost increases.

- Our audit objective also asked us to evaluate work from home's impact on costs. Ultimately, it's difficult to assess the exact dollar impact working from home had on state agencies. That's because the agencies we spoke to hadn't completed detailed cost analyses. However, agency officials we spoke to

reported a mix of both cost increases and savings from allowing employees to work from home.

- Agency officials from the 7 state agencies we reviewed in detail reported cost increases for items like laptops and technology to support working from home. Officials told us that they either paid for these expenses with ARPA funds or from within their existing budget. Agencies also shared with us some of their policies to limit costs. For example, the Department of Transportation provides their employees with 2 monitors to use at the location of their choice. The Department will not purchase an additional monitor for home use. The Office of the State Bank Commissioner will not cover at-home office supplies if physical space is available for employees to use.

- Very few agencies reported cost as a barrier to allowing more employees to work from home in our information request. We gave agencies the option to select from a variety of barriers to allowing employees to work from home. Only 4% of the 68 agencies said cost was a barrier in allowing employees to work from home in a hybrid schedule and 6% said cost was a barrier in allowing employees to work from home full-time.

- Reports we reviewed indicated up-front costs increased, but cost savings could be found through office space reductions, reducing employee turnover, and reducing operational costs. 1 report we reviewed said working from home can result in both cost increases and decreases. Working from home can require different IT equipment and systems (for example: laptops, cell phones, accessibility equipment, VPN, remote file servers, and virtual communication services) than those required for in-office work. It noted that upfront costs were typically less than the savings achieved. The same report, as well as 2 others, indicated that cost savings were also found by reducing office space, reducing employee turnover, and reducing operational costs. The other 2 reports did not address costs.

- Michigan and Arizona state officials said they provided equipment like laptops to their employees. However, officials from both states reported that they were able to save some money by consolidating some of their office space. For example, Arizona reported saving around $1.2 million by moving the state's Medicaid program to virtual offices. It should be noted that Michigan and Arizona have offered flexible work arrangements for many years and have focused policies directing work-from-home initiatives.

Cost increases could be offset by reducing office space, but this has yet to occur in Kansas.

- Reducing state office space can also impact state costs. As such, we worked with the Department of Administration to understand current office space

utilization, and whether state agencies have reduced their space since moving to a work-from-home model in 2020.

- Most state agencies have not reduced their physical office space since the COVID-19 pandemic began in 2020. While 4 of the 7 state agencies we spoke to said they had reduced or are in the process of reducing office space, this does not appear to be the norm. 77% of the 68 agencies responding to our information request reported that they have not changed their office space since the COVID-19 pandemic. 13% decreased their office space, 4% were unsure, and 6% have increased their space. However, KDHE was an agency that increased their office space, but this had to do with adding employees to their agency.

- Agencies had some, but very limited space reductions. For example, the Office of the State Banking Commissioner renegotiated leases to reduce office space in Lenexa and Wichita when they moved those positions to work from home.

- Department of Administration officials told us agencies are hesitant to make major changes. Department of Administrations officials said that agencies are concerned that the state's work-from-home policy may change in the future, requiring much more in-person work. Downsizing now may lead to challenges if that were to occur. This challenge was also echoed by other state agency officials who spoke to us.

- Department of Administration officials also told us that some agencies lease office space. Breaking these types of leases may result in significant financial repercussions paid by the state. Leases are often for long periods of time and may include clauses that require agencies to pay future rents to the landlord to break the lease.

- With time and planning agencies may be able to reduce office space going forward.

Conclusion

Working from home is an option offered by many public and private entities. Whether a position is suited for working from home largely depends on the job type and an agency's mission. Overall, we found that working from home had some positive impacts on the state's ability to hire and retain staff. Working from home's impact on staff productivity is difficult to assess due to a lack of universal productivity measures. However, at a high-level, working from home didn't appear to negatively impact productivity. Finally, we found that working from home may have some short-term cost increases for things like equipment and software. However, it's possible those costs could be offset with savings from reduced office

space. Although Kansas has not yet significantly reduced office space, other states with more years of experience with working from home sited long term cost savings.

Recommendations

We did not make any recommendations for this audit.

Agency Response

On July 3, 2023, we provided the draft audit report to the Kansas Department for Children and Families, the Kansas Department of Administration, the Kansas Department of Health and Environment, the Kansas Department of Labor, the Kansas Department of Revenue, the Kansas Department of Transportation, the Kansas Historical Society, and the Kansas Office of the State Bank Commissioner. Because we did not make any recommendations, written responses from the agencies were optional. No agencies chose to submit a response.

Appendix A – Cited References

This appendix lists the major publications we relied on for this report.

1. Are Teleworkers Less Likely to Report Leave Intentions in the United States Federal Government Than Non-teleworkers Are? (January, 2013). *James Gerard Caillier.*

2. Does Working From Home Work? Evidence from a Chinese Experiment (February, 2015). *Nicholas Bloom, James Liang, John Roberts, Zhichun Jenny Ying.*

3. Leveraging Mobility, Managing Place. (June, 2010). *General Services Administration Public Buildings Service.*

4. The Future of Work. Behavioral and Social Science-Informed Considerations for a Hybrid Work Environment. (January, 2023). *Beth K. Jaworski, PhD; Sarika Parasuraman, PhD, MPH; Jessica Gowda, MS; Erica Spotts, PhD; Dana Schloesser, PhD; Christine M. Hunter, PhD.*

5. Working in the digital economy: A systematic review of the impact of work from home arrangements on personal and organizational performance and productivity (October, 2022). *Amy Hackney, Marcus Yung, Kumara G. Somasundram, Behdin Nowrouzi-Kia, Jodi Oakman, Amin Yazdani.*

Appendix B – State Agencies' Reported Total Staffing and Future Work-From-Home Capacity

We asked agencies to tell us their number of current employees (as of Spring 2023) and how many of those employees work from home both full-time and in a hybrid capacity. This appendix has the information reported to us by agencies. The number of work-from-home staff reported in the table includes full-time and hybrid staff.

Agency	Total Staff	Total Staff Working from Home in Spring 2023 (a)	Additional Possible Staff Working from Home (a)
Department of Corrections (b)	2,819	22	0
Department for Children and Families	2,275	1,937	400
Department of Transportation	2,164	313	570
Department of Health & Environment	1,502	805	495
Department of Revenue	1,095	676	0
Kansas Highway Patrol	734	0	0
Larned State Hospital	523	7	0
Department of Wildlife & Parks	456	0	100
Parsons State Hospital & Training Center	431	0	0
Department of Administration (c)	404	276	0
Kansas Neurological Institute	400	0	15
Department of Labor	396	260	176
Osawatomie State Hospital	365	0	0
Department of Agriculture	327	179	17
Kansas Bureau of Investigation	325	72	0
Kansas Commission on Veterans' Affairs	301	14	38
Office of the Adjutant General	297	1	0
Department of Commerce & Tourism	292	115	0
Department on Aging and Disability Services	250	180	150
Kansas Indigents Defense Services State Board	243	15	201

Agency	Total Staff	Total Staff Working from Home in Spring 2023 (a)	Additional Possible Staff Working from Home (a)
Kansas Department of Education	228	73	202
Kansas School for the Deaf	196	0	0
Kansas Corporation Commission	162	75	0
Kansas Attorney General	148	23	60
Kansas Insurance Department	118	60	20
Office of Information Technology	117	89	10
Office of State Bank Commissioner	110	107	2
Kansas Historical Society	109	0	19
Kansas Public Employees Retirement Board	99	72	0
Kansas Racing & Gaming Commission	82	22	10
Kansas School for the Blind	81	16	18
The Kansas Lottery	78	37	5
Office of the State Fire Marshal	71	64	5
Kansas Board of Regents	62	58	0
Kansas State Board of Healing Arts	57	44	0
Correctional Industries	50	0	15
Secretary of State	36	7	0
Kansas State Treasurer	32	22	0
Board of Nursing	27	17	10
Kansas State Fair Board	27	2	0
State Library of Kansas	25	0	13
Kansas Health Care Stabilization Fund	21	0	0
Board of Pharmacy	20	14	6
Kansas Water Office	18	18	0
Board of Cosmetology	16	5	6
Kansas Human Rights Commission	15	8	0
Kansas Sentencing Commission	15	15	0
Kansas Board of Tax Appeals	15	10	0
Emergency Medical Services	14	0	0
Office of Administrative Hearings	14	1	0
State Gaming Agency	13	10	0

Agency	Total Staff	Total Staff Working from Home in Spring 2023 (a)	Additional Possible Staff Working from Home (a)
Department of Credit Unions	12	12	0
Real Estate Commission	12	11	5
Kansas Long Term Care Ombudsman	11	9	0
Kansas Behavioral Sciences Regulatory Board	10	3	7
Kansas Governmental Ethics Commission	9	6	0
Kansas Commission on Peace Officers' Standards & Training	8	6	2
Kansas Citizens' Utility Ratepayer Board	7	6	1
Kansas Division of the Child Advocate	5	2	6
Pooled Money Investment Board	5	5	0
Board of Veterinary Examiners	4	4	0
Kansas State Board of Technical Professions	4	4	4
Board of Accountancy	3	0	0
Board of Mortuary Arts	3	3	0
Dental Board	3	0	0
KanCare Ombudsman Office	3	0	1
Board of Barbering	2	0	0
Kansas Real Estate Appraisal Board	2	0	0
Abstracters' Board of Examiners	1	1	0
Kansas Board of Hearing Aid Examiners	1	1	0
Kansas Optometry Board of Examiners	1	1	0

(a) Work from home staff numbers include both hybrid and full-time work-from-home employees

(b) Includes the 9 state correctional facilities

(c) Includes the Division of the Budget

Source: Self-reported by state agencies (unaudited)