



## Legislative Council Staff

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## Memorandum

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February 22, 2019

**TO:** Joint Technology Committee Members

**FROM:** Jean Billingsley, Senior Research Analyst, 303-866-2357  
Joint Technology Committee (JTC) Staff

**SUBJECT:** JTC Staff Analysis of JBC-Referred FY 2019-20 Budget Request  
Colorado Department of Revenue  
R-01 GenTax Support Enhancements

### Summary of Request

The Colorado Department of Revenue (DOR) is requesting \$1.4 million, 6.0 full-time employees (FTEs) in DOR, and 6.0 FTEs in the Governor's Office of Information Technology (OIT) to support the state's tax administration system, GenTax. The FY 2019-20 DOR operating budget request is phase one of the following three phases:

- phase one adds GenTax FTEs to maintain and support the GenTax system, and the state tax administration;
- phase two addresses areas of deficiency in the GenTax system; and
- phase three addresses non-statutory reporting requests.

### Reason for Referral

This memorandum responds to the December 11, 2018, letter from the Joint Budget Committee (JBC) to provide a technical review of the DOR FY 2019-20 GenTax Support Enhancements operating budget request (request).

The JBC also asked the JTC to review the possibility of implementing: (1) a state-owned tax data warehouse to generate tax reports; and (2) a severance tax administration module independent of the GenTax system. These requests will be addressed in a separate staff memo, and at future JTC meetings.

## Staff Analysis

Staff recommends funding the DOR request for the first fiscal year, with another JTC review during the FY 2020-21 operating budget request cycle to assess the GenTax phase one progress. Staff also recommends that DOR or OIT provide the JTC periodic status reports, including updates on: (1) its progress toward meeting staff recommendations in Appendix A: Staff Recommendations; (2) GenTax assessment findings; and (3) GenTax technical debt.<sup>1</sup>

DOR requests funding to add GenTax resources so that it can accurately and efficiently administer taxes while maintaining the security of the GenTax system. DOR says that it is working to resolve the current problems with GenTax and cannot do that without building an internal GenTax technical team. DOR further explains that it has insufficient knowledge of the detailed technical aspects of GenTax because maintenance, other than infrastructure, has been handled through its vendor. DOR further explains that it cannot commit to a high-level timeline for each of the three phases at this time since phase one goals consist of training new state technical resources.

## Request Details

*Justification.* In October 2018, DOR engaged OIT to review the backlog of items in the GenTax queue. The assessment included a review of the contract with the GenTax vendor, internal and external audits, employee surveys and interviews, and an analysis of other state tax policies and procedures. The OIT assessment team also conducted interviews with the steering committee and quality management team, which provide governance and oversight for the GenTax system. The assessment's recommendations include realigning GenTax roles and responsibilities, improving the GenTax queue workflow, and implementing a new governance and support structure.

JBC staff explains that the DOR operating request is a substantial increase in the annual funding of GenTax system maintenance as it comes at a cost of 50 percent more than the annual maintenance contract with the vendor. However, DOR says the FY 2019-20 request will fund phase one's goal to add GenTax resources for its tax administration and to reduce the risk of relying on the vendor's technical GenTax knowledge. Even so, DOR explains that due to the complexity of GenTax, a state developer may not become proficient in the system for one or two years. DOR also says that phases two and three, to address areas of deficiency in the GenTax system and meet non-statutory reporting requests, will begin at a later date to be determined.

*Phase one.* DOR survey results found that no other state uses a 100 percent outsourcing method for GenTax maintenance. To increase state employee knowledge of GenTax, DOR is creating new

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<sup>1</sup> Software system technical debt is defined as any requirement that a system does not provide, and can range from trivial to critical. Any stakeholder dissatisfaction with an application can be considered as part as that system's debt. All software systems carry some technical debt, and the level of technical debt that a system has sometimes gets worse over time as the system and the requirements grow. The challenge is to manage the technical debt so that critical or work stoppage issues are handled and communicated to stakeholders appropriately. Options to reduce technical debt may include a more cost-effective approach that requires replacing the application rather than continuing to invest in the existing system.

positions (see Appendix B: Additional FTE Descriptions and Justifications). DOR justifies the need for additional staff by explaining it has about 622 service requests to change the GenTax custom code and by describing the critical nature and complexity of some of these service requests. DOR also says that it has experienced about an annual 3 percent increase in individual returns, and a 5 percent increase in business returns, with no new FTEs to handle the increase.

*Itemized cost information.* DOR's current budget is \$5.7 million General Fund for the contracted, annual operating expense, paid to the GenTax system vendor. The request asks for an additional \$1.4 million in FY 2019-20, annualized to \$2.8 million General Fund for 26.0 FTEs that will be shared between DOR and OIT (see Appendix C, DOR Operating Request Itemization). Even so, the request covers only phase one, and does not include any additional costs for phases two and three. DOR does not provide estimates for phase two or three.

## **Program and GenTax System Summary**

In 2008, DOR undertook a project to modernize Colorado's income tax administration software and database. Completed in 2012, the project resulted in the GenTax system, a software solution supported through a maintenance and support contract with Fast Enterprises, Inc. Even though DOR currently employs Fast Enterprises contractors to make changes in the GenTax system code, the GenTax system is hosted at a state data center managed by OIT.

The Taxation Business group, within DOR, is charged with the collection, administration, audit, and enforcement responsibilities pertaining to all taxes, fees, bonds, and licenses under Colorado's tax laws. The division is primarily funded from General Fund appropriations, but does receive some moneys from the Highway Users Tax Fund and federal programs. Other divisions within DOR include Taxation and Compliance, to assist in tax collection, Taxpayer Services, which administers the state's tax programs, and the Office of Research and Analysis, which prepares a tax profile and expenditure report for the state as required by statute.

The DOR Taxation and Compliance team in the Taxation Business Group has 14 GenTax staff, consisting of 13 analysts, and 1 administrator. The team is transitioning to a department-wide oversight structure within the Executive Director's Office (EDO). Staff resources related to this request would similarly be located within the EDO. The existing team's primary responsibility is as a liaison between DOR and the vendor.

## **Appendix A Staff Recommendations**

In FY 2019-20, staff recommends that DOR and OIT consider, or continue, the following:

- Phase one hires an operational lead to be the liaison between OIT and the vendor. Staff recommends that DOR and OIT continue to establish and review the vendor management roles and responsibilities in order to leverage OIT's technical and IT security expertise.
- The request does not include a project manager. DOR should consider managing all three GenTax phases using a project management methodology. Staff recommends that DOR and OIT continue their partnership to not only train OIT developers in maintaining GenTax, but also actively involve the OIT Program Management Office for project management services.
- DOR explains that it cannot provide estimated start or end dates for any of the three phases described in the request. Staff recommends that high-level planning and development of timelines for all three phases should begin in FY 2019-20, and then be subsequently reported to the JTC. Staff recommends possibly breaking the three phases into smaller manageable projects with a refined scope to develop and track milestone dates.
- DOR and OIT should consider scheduled, internal technical audits of the GenTax system, and provide those planned audit dates and results to the JTC.
- DOR should continue to actively involve OIT's information security, enterprise architecture and, data governance departments. Since GenTax processes and stores federal tax information, it must comply with federal and state regulations. The OIT data governance group may be able to assist with improving the data stored in the GenTax system; thereby, improving its reporting capabilities.
- Staff recommends that DOR and OIT continue to review and improve the policies, procedures, methodologies, and tools with the goal of reducing its technical debt.
- Staff recommends that DOR and OIT, with the assistance of the vendor, assess the current scale of the GenTax technical debt in FY 2019-20, including statutory and non-statutory report requests.
- DOR explains that the items in the GenTax queue may include duplicates and obsolete items. Staff recommends that the queue's items should continue to be evaluated and updated, including work effort estimates.

*Prepared by Legislative Council Staff.*

**Appendix B**  
**Additional FTE Descriptions and Justifications**

Functional Area	FY 2019-20 FTE	FY 2020-21 FTE (annualized)	Responsibilities	Justification
System Documentation & Change Requests	6 OIT Development	13 OIT Development	Address current backlog of over 700 system change requests and 30 strategic enhancements.	State is currently unable to support the tax system without contract developer resources. State developer resources bring the ratio of contractor to state developer in-line with other states.
Configuration Documentation & Testing	2 DOR Business Analysts	8 DOR Business Analysts	Testing of developer system changes prior to deployment and documenting software configuration.	Quality Assurance and system testing is currently performed by production line employees. Additional business analysts will free up production line employees for other mission critical activities.
Ongoing Training	2 DOR Training Specialists	2 DOR Training Specialists	Develop and update DOR-wide training to keep users informed of changes and system capabilities.	Currently there is minimal training. Standardized training reduces variability in processing and minimizes workarounds.
Vendor Relations and System Support	1 DOR Systems Operational Lead	1 DOR Systems Operational Lead	To coordinate DOR-wide efforts to manage the support team, prioritize system work, and serve as the point of contact with the vendor.	Broad coordination across all DOR divisions in collaboration with OIT and the vendor does not currently exist and is critical to ensure all stakeholders are included and provide their expertise.
System Reporting and Monitoring	0 DOR Statistical Analysis	1 DOR Statistical Analysis	Testing and optimizing of reports, data capture, and mapping system data.	Management reports are unmaintained or unavailable. Enhanced reporting provides accountability and precision for management and policy decisions.
System Documentation	1 DOR Technical Writer	1 DOR Technical Writer	Create and maintain system documentation written at a business-conversation level.	System architecture documentation is not currently available. Creation and maintenance of this documentation provides accountability and technical expertise and mitigates risks of complete system failure.
Total	12 FTE	26 FTE		All proposed FTE are required to increase accountability and expertise as well as mitigate risk of complete system failure.

Source: Colorado Department of Revenue FY 2019-20 Operating Budget Request, pages 3-4.

**Appendix C  
DOR GenTax Support Enhancements Itemization**

Position/Role	Classification	FY 2019-20		FY 2020-21		FY 2021-22 (No One-Time)	
		FTE	\$ Amount	FTE	\$ Amount	FTE	\$ Amount
Development-OIT	Lead/Program Manager	1.0	\$140,654	1.0	\$140,654	1.0	\$140,654
	Sr. Database Administrator	0.0	\$0	1.0	\$140,654	1.0	\$140,654
	Sr. Application Support	1.0	\$126,535	2.0	\$253,070	2.0	\$253,070
	Application Support II	2.0	\$204,829	4.0	\$409,662	4.0	\$409,662
	Application Support I	1.0	\$92,252	4.0	\$369,008	4.0	\$369,008
	Quality Assurance	1.0	\$83,289	1.0	\$83,289	1.0	\$83,289
<b>OIT Personal Services Subtotal</b>		<b>6.0</b>	<b>\$647,559</b>	<b>13.0</b>	<b>\$1,396,337</b>	<b>13.0</b>	<b>\$1,396,337</b>
Business Analysts (2 Lead, 6 subordinates)-DOR	Analyst V	0.0	\$0	2.0	\$207,058	2.0	\$207,058
	Analyst IV	2.0	\$168,688	6.0	\$506,063	6.0	\$506,063
Trainers (2 Training and Content Delivery)-DOR	Training Specialist IV	2.0	\$168,688	2.0	\$168,688	2.0	\$168,688
Vendor Relations Coordinator/Production Support Coordinator-DOR	Operational Supervisor	1.0	\$111,640	1.0	\$111,640	1.0	\$111,640
System Reporting and Monitoring-DOR	Statistical Analyst III	0.0	\$0	1.0	\$91,578	1.0	\$91,578
Technical Writer for System Documentation-DOR	Analyst IV	1.0	\$84,344	1.0	\$84,344	1.0	\$84,344
<b>DOR Personal Services Subtotal</b>		<b>6.0</b>	<b>\$533,360</b>	<b>13.0</b>	<b>\$1,169,371</b>	<b>13.0</b>	<b>\$1,169,371</b>
<b>Total Personal Services</b>		<b>12.0</b>	<b>\$1,180,919</b>	<b>26.0</b>	<b>\$2,565,708</b>	<b>26.0</b>	<b>\$2,565,708</b>
Regular FTE Operating Expenses-OIT			\$3,000		\$6,500		\$6,500
Telephone Expenses-OIT			\$2,700		\$5,850		\$5,850
PC, One-Time-OIT			\$7,380		\$8,610		
Office Furniture, One-Time-OIT			\$20,838		\$24,311		
<b>OIT Operating Subtotal</b>			<b>\$33,918</b>		<b>\$45,271</b>		<b>\$12,350</b>
Possible Lease (220 sqft/FTE * \$30 sqft)-DOR			\$171,600		\$171,600		\$171,600
Regular FTE Operating Expenses-DOR			\$3,000		\$6,500		\$6,500
Telephone Expenses-DOR			\$2,700		\$5,850		\$5,850
PC, One-Time-DOR			\$7,380		\$8,610		
Office Furniture, One-Time-DOR			\$20,838		\$24,311		
<b>DOR Operating Subtotal</b>			<b>\$205,518</b>		<b>\$216,871</b>		<b>\$183,950</b>
<b>Total Operating</b>			<b>\$239,436</b>		<b>\$262,142</b>		<b>\$196,300</b>
<b>Grand Total</b>		<b>12.0</b>	<b>\$1,420,355</b>	<b>26.0</b>	<b>\$2,827,850</b>	<b>26.0</b>	<b>\$2,762,008</b>

Source: Colorado Department of Revenue FY 2019-20 Operating Budget Request, page 9.