BUDGET

Continued from Page 1A

Rather than having to make 17% cuts, that amount was reduced to 8%.

Witty said the Legislature is expected to meet on June 15 to begin considering how to deal with the expected decline in state revenue as a result of the coronavirus pandemic.

"We won't know for a while exactly what the revenue package is going to be," he told the Board.

Witty reminded the group that lawmakers do have access to $1.7 billion through the Education Stability Fund and the Rainy Day Fund to help backfill some of the lost revenue.

He recalled, however, that during the recession about a decade ago, lawmakers were quick to use the money in the first year of the biennium and came to regret that decision during the second year. For that reason, Witty said he expects the legislators to take a more cautious approach this time.

He again pointed to the solid financial ground the Baker School District is standing on thanks to entrepreneurial endeavors the school board and administrators began about a decade ago, such as development of the Baker Web Academy, Baker Technical Institute, contracting services to others districts and aggressively seeking grants.

The budget approved Tuesday night totals $68,073,037, with a general fund budget of $53,446,122.

Budget Board members posed several questions to District administrators and school board members during the session. Wes Price asked which items were most highly requested by staff and parents in planning sessions before the budget was finalized.

Witty said funding for mental health services and parental involvement were top priorities.

"That requires staffing," he said. "If the Student Investment Account had been fully funded, staff would have been hired."

But adding positions might require reducing them later on if the economy doesn't recover as quickly as hoped, Witty said. Capital improvements, on the other hand, are one-time expenses.

"Once you make a personnel expenditure ... and you have to (reduce the workforce) it's not particularly good on morale," Witty said.

The District does still plan to add one full-time behavioral specialist to help address the issues of concern at the lower grade levels, he added.

Price next asked which items were funded that were not seen as high priority needs by parents and community members.

Michelle Glover, the District's business manager, pointed to the unexpected need to upgrade sanitation practices and to provide personal protective equipment throughout the district, which is estimated to cost $270,000.

That expense includes the addition of one full-time janitor, who will divide time between Baker Middle School and South Baker Intermediate School, with some time also dedicated to the North Baker building, Witty said.

Between 20% and 25% of the District's staff falls into the category of those with health concerns that could put them at risk of COVID-19 complications, he said.

The Oregon Health Authority, the District's liability insurance provider and the worker's compensation insurance program all expect the District to provide a safe environment for the staff and students, Witty said.

Included in the sanitation costs are increased use of the Vitol Oxide product the District has used for the past three years to disinfect buildings and buses. The maintenance staff will keep an eye on minimizing the labor involved, Witty said. The District also plans to install automated faucets and soap and towel dispensers in the restrooms.

Equipment to routinely test temperatures of staff and students daily also will be purchased for use in classrooms and on buses. Parents will be informed that if their students come to school with an elevated temperature they will be required to take them home.

"That will protect the staff and provide a quality, healthy environment for them and for other kids," Witty said.

The superintendent took the Board through a list of items included in a 5-year facility plan and pointed out projects that have been put off until later because of the adjusted revenue forecast. Grant funding will help accomplish some of those projects, however.

Witty announced Tuesday that since the last Budget Board meeting, the District had been awarded a $2.3 million seismic rehabilitation grant to make repairs to the Baker Middle School building beginning in the summer of 2021-22.

Window replacements, roof work and concrete repair are some of the items that have been delayed.

Witty said the District has also heard concerns about the District's upkeep of its buildings and grounds.

"I do believe that in the last 2½ to 3 years we have done a good job," Witty said. "There is a ton of deferred maintenance here."

Some roofs and heating systems in the District's older school buildings will need to be replaced at some point, for example, he said.

The District also hears complaints about the number of administrators on the payroll, an issue Witty says he has heard complaints about throughout his career.

The superintendent noted that there is a need for more administrators in the modern school environment because of the changes in education over the years.

"The regulations and oversight have changed dramatically since I first started in 1986," he said.

Just last spring, the District hired a full-time athletic director in the hope of helping the community's economic development efforts prosper.

Mike Rudi, a member of the Budget Board who also serves on the Sports Complex Board, had high praise for Buell Gonzales Jr., who had worked to bring a district all-star tournament to Baker City this summer among other projects.

"We would have had a significant increase in revenue that we would have turned around and put back into the budget, not only for the Sports Complex, but for other things," Rudi said.

"The potential is there," he said. "It's sad we had to get the coronavirus in the first year."

Witty said that because the future of school sports is unknown at this time, Gonzales will spend "a good chunk of his time" as dean of students at Brooklyn Primary School, sharing the role with Angela Lattin in the coming year.

Budget hearing

The public will have one more chance to comment on the budget before it is adopted by the Board. A budget hearing is scheduled at 5:45 p.m. Thursday, June 18, just prior to the monthly Board meeting.

More information and a copy of the budget is available online at www.5j.org or by calling the District Office at 541-524-2260.

TESTING

Continued from Page 3A

And if somebody isn't sick, they won't have viral RNA in their nose, so there won't be any genes to amplify. That means false positives are extremely rare.

But false negatives are a different story.

In a health care setting, a lot can increase the chances of a false negative: how the person is tested, how the sample is stored, how it's shipped, how long it takes for the sample to be processed, and even when a person is tested during the course of their illness.

"These tests should be done by labs with expertise," Akkari said.

Akkari's hospital system, like many others, has avoided tests run by major corporations like LabCorps and Quest. Instead many larger hospitals and health systems have created RT-PCR tests they control from start to finish. But some potential errors can't be avoided. And they start the second a swab is stuck several inches up a person's nose.

Oregon Health & Science University Photo/Kristyna Wentz-Graff

Medical assistant Jillian Zalunardo works with a patient being tested for COVID-19 at the OHSU drive-thru testing site in Hillsboro.

How are we gathering samples?

RT-PCR tests have one big problem, Jeanne said: "You can have the virus, but if you don't get enough of it in the sample, it won't show up on the tests."

The way samples are taken can have a big impact on that. Think back to a time you jumped into a pool and got water up your nose. Now imagine a swab reaching up into that same, painful place. You might flinch or draw back before there's enough sample of your mucus on the swab.

And then there are health care workers, who might be hesitant to stick a swab far enough up someone's nose to get a proper result.

"It's not just about the lab running the test, it's about the person who's performing it, how long they swab for, what techniques they have. Are they swabbing both sides of the nose?" Jeanne said.

For most of March and April, testing swabs were in short supply. Some hospitals reported using a nasal wash for the sample, increasing the chance of a false negative.

Research shows that samples collected with a certain type of deep-reaching swabs, called "nasopharyngeal swabs," give the most accurate test results. Specimens collected with combined front-of-the-nose and throat swabs or nasal washes are considered less effective.

OHA was not able to collect data on how samples for tests were taken, Jeanne said, so it's unclear how widespread sampling problems were, or how that could have impacted our overall test count.

Was the sample handled properly?

Once a sample is taken, more potential problems arise. Until mid-April, many Oregonians reported waiting over a week to learn the results of their COVID-19 tests. It was an early sign that those results might not be accurate.

Most of the delayed tests were shipped to far-away laboratories or were conducted by commercial labs like Quest Diagnostics, which has been processing tests from around the country.

A long delay shouldn't necessarily impact the accuracy of a test, but that all depends on how the sample is handled, Akkari said.

"I don't know what most commercial labs are doing, but here at Legacy, we recommend that a test be run, at most, 72 hours after it was collected," Akkari said. And it needs to be kept at near-freezing temperatures until then. That's because viral RNA is extremely fragile.

"More than fragile, actually, and much more fragile than DNA," she said. "The whole world is full of these RNases" — special molecules that break up RNA, sort of like a cleaning service in your cells.

Jeanne said that if a viral sample is going to take more than 72 hours to be tested, it should be frozen at 70 degrees below zero Celsius. That's colder than the average temperature during sunless Antarctic winters.

But given the myriad ways RT-PCR specimens are shipped to commercial labs (ideally, by courier, but occasionally by mail), Jeanne said it's entirely possible samples aren't being frozen before they're shipped, or they thaw in-transit.

But he doesn't know if that actually happened. That information hasn't been passed on to public health departments like his. Health care workers across the country have voiced concerns about how test samples are shipped. But lacking hard data, it's just one more thing that could go wrong.

Once the samples arrive at the lab, they need to be stored — again, at temperatures well below freezing. At one point, Quest reported a backlog of 160,000 tests, received and waiting to be tested.

"If Quest and LabCorps [had] a big backlog — and they did — I would wonder if they were freezing samples or how," Jeanne said.

And then there's the process of extracting the RNA from the virus and purifying it. Once RNA is purified it's much more stable. But the chemicals to extract RNA are in short supply, contributing to the testing shortages, said Ben Dalziel, an epidemiologist at Oregon State University. He is involved in a survey that aims to track the spread of COVID-19 in Corvallis.

If a lab doesn't have the supplies to extract RNA, the samples could have been slowly degrading.

In recent weeks, commercial labs seem to have caught up with the flood of COVID-19 tests coming in. Jeanne said turnarounds are back to what he considers a reasonable amount of time: about four days.

Who is getting tested, and when?

Until recently, testing capacity for COVID-19 was very limited in Oregon. Even as that capacity increased, strict criteria kept the number of people who qualified for tests low.

Very few people with mild or moderate symptoms were getting tested. And many people were told to stay home and ask for a test again if they got sicker. Most tests were going to the sickest patients, and that's a problem, because they're the most likely to get false negatives. That's because of a weird fluke in how the new coronavirus behaves.

As COVID-19 progresses, the coronavirus takes up residence in different places in your body, Akkari explained. And as the virus moves through your body, it's less likely to be detected by a standard nasopharyngeal swab, because it's just not there anymore.

According to a scientific literature review, an RT-PCR test for COVID-19 is at its most accurate about three days after symptoms appear, with a false negative rate of about 22%. The false negative rate climbs slowly as the disease progresses. By the time patients are feeling very ill, 16 days after symptoms start, as many as 66% of swabs come back with false negatives.

The Oregon Health Authority is continually updating its testing guidelines. Patients with mild symptoms can now get tested. Jeanne said that's caused the number of tests conducted to climb rapidly.

But most people with a sniffle, cough or headache wait it out and see if they get better — they don't want to seem like hypochondriacs and rush straight to their doctor's office. But the sooner people get tested, the more accurate their test results will be.

Rapid tests: fairly new, dropped by some clinics

There's one way to avoid false negatives produced by poorly handled samples: Collect the sample and do the test right away on-site. That's why most hospitals with laboratories run their RT-PCR tests in-house.

But many hospitals and doctor's offices don't have in-house laboratories. And that's led to an increased call for rapid tests, which don't require a lab and can be completed before a checkup is even finished. The federal government only just sent Oregon the supplies needed to run these tests.

The Trump administration touted the coronavirus rapid tests manufactured by Abbott. Its machines and kits were sent to health departments around the country. In Oregon, those tests are being deployed to rural areas without labs close by or are being used in emerging COVID-19 hotspots. Deploying rapid tests where they're needed is a key part of Oregon's plan to reopen.

COVID-19 rapid tests are fairly new, and they haven't been held up to the same standard of performance that tests for other diseases have. Abbott claims that the false negative rate for their ID NOW rapid test is as low as .02%.

But the Cleveland Clinic conducted a study that found that the tests could miss up to 48% of infections. It also found issues with the accuracy of other COVID-19 rapid tests. Although Abbott says the false negatives were due to user error, the Cleveland Clinic and others have stopped using their tests.

The high false negative rates with rapid tests for other, more established diseases, has further fueled skepticism. The Food and Drug Administration has officially cautioned the public about the accuracy of Abbott's tests for COVID-19 and is investigating further.

The bottom line

Combined, all these factors can lead to a high number of false negatives that undermine the accuracy of COVID-19 testing. But as companies, clinicians and hospitals enter the pandemic's third month, some accuracy issues have resolved. The rise of in-house and close-to-home tests is an example.

"The in-state testing from clinical hospital labs tends to be very fast," Jeanne said. "They're turning around within a day."

Because turnaround times can't be guaranteed by commercial labs, which process tests from across the country, OHA isn't including them in their testing goals: Good contact tracing relies on fast test results. It's the number of tests that can be processed in-state that really matters. Before Oregon could reopen, the Oregon Health Authority wanted to be able to process at least 15,000 tests in-state per week. That goal has been reached.

As Oregon continues to reopen, models will depend on the accuracy and availability of tests going forward. Those models are supposed to warn us before an outbreak becomes uncontrollable.

But those models also depend on the accuracy of Oregon's past tests. As the coronavirus pandemic progressed in Oregon, OHA deployed a common strategy: retroactively updating Oregon's models to make future projections more accurate.

In a few more months, once all the death certificates have been processed, the OHA's Center for Health Statistics may start to review the deaths in Oregon from the first quarter of this year. If they do, they'll look for patients who died with symptoms similar to those caused by COVID-19. Maybe some questions will be answered.

"That would be a good project for our team to take on," said Jennifer Woodward, the center's state registrar. "But not right now."

Like so many other things during this pandemic, the data just isn't there yet.