



## **REVENUES AND EXPENSES OF THE NATIONAL CENTER FOR CONSTRUCTION LABORATORIES FOR THE YEAR 2021**

**Qusay Ahmed Dawoud**

Accounts Manager / General Authority for Monitoring the Allocation of Federal Imports  
[Qusayahmed70@gmail.com](mailto:Qusayahmed70@gmail.com)

<b>Article history:</b>	<b>Abstract:</b>
<b>Received:</b> 26 <sup>th</sup> December 2023	The key to the true success of any institution or government department lies in the degree of interconnection between the administration and the employees of that department and each employee's knowledge of his responsibility towards his second home (the institution to which he belongs) and his keenness to perform the tasks entrusted to him with precision and honesty.
<b>Accepted:</b> 22 <sup>th</sup> January 2024	So, This research aims primarily to identify the administrative and financial department and the tasks assigned to the National Center for Construction Laboratories in detail, in addition to the statement of financial position for 2021, which includes revenues and expenses.
<b>Published:</b> 28 <sup>th</sup> February 2024	The research reached a set of conclusions, the most important of which are: There is a discrepancy in revenues, as the increase in revenues for some laboratories is due to the nature of the work environment in that governorate, the size and diversity of projects, and the construction movement in it, in addition to the direction of the local administration in that governorate, which imposes reliance on reputable government agencies about construction inspections for existing projects. In that governorate, it refused to rely on private (private) examining bodies. As for laboratories with low revenues, this is due to the governorate councils' directive to rely on private (private) laboratories and university laboratories to conduct the examination.
	The research was recommended to the need to support the centre financially and morally by governmental and non-governmental agencies because it provides an essential and pivotal service in the field of construction and development, especially since some of the projects that the centre contracts with are infrastructure projects for Iraq in all governorates.

**Keywords:** Revenues, expenses, Organizational Chart, Laboratory equipment



## **INTRODUCTION:**

Human civilization has achieved the organization of life in all fields (social, economic, and cultural), and from it bodies and institutions derive their existence and the source of their powers and upon whom they base their legitimacy. To the extent that the lives of people and societies are organized within the circle of the law and under its respect, the closer it is to the concept of state departments.

The National Center for Construction Laboratories is considered one of the most important effective departments in determining the good quality of construction materials used in construction. It was established according to Law No. (143) of the year (1976), and was reconstituted according to Law No. (65) of the year (1987) and in the year (1997). Law No. (22) was issued, according to which the center was transformed into a public company, which is an economic production unit wholly owned by the state. It enjoys legal personality and financial and administrative independence. It operates according to economic principles and is linked to the Ministry of Housing and Construction. The main center is in Baghdad and has branches in the governorates. Bylaws No. (17) for the year (2000) were adopted, according to which the directorates were transformed into departments, and it was published in the Iraqi newspaper Al-Waqa'i No. (3871) on (3/26/2001). According to the letter of the Ministry of Construction and Housing No. (7387) dated (4/5/2004), the center was considered centrally funded by the Ministry of Finance after it was self-financing, and the Baghdad Center for Building Research was merged with the National Center for Construction Laboratories in (2004) to become its name. The National Center for Construction Laboratories after it was named the National Center for Laboratories and Construction Research, and achieving the goals of the Center leads to an increase in the national or national income of Iraq.

In this field of research, I would like to discuss in detail the Administrative and Financial Department and the tasks assigned to the department, in addition to the statement of the financial position for the year 2021, which includes revenues and expenditures.

### **1. Organizational Chart**

The organizational structure of the unit, the internal system, and a statement of the extent to which there is a guide to the job description

After the decision to merge between the Ministry of Construction and Municipalities and the Ministry's directives to submit proposals for the organizational structure of each formation in light of the merger and cancellation, the organizational structure of the center was approved in the year (2016), and in the year (2020) the job description of the center was approved by the Ministry of Planning / National Center for Administrative Development. After merging some of the technical, financial and administrative divisions and preparing an organizational structure according to it, as shown in the accompanying Figure No. (1), which explains in detail the center's facilities, starting with the top of the administrative pyramid represented by the Director General and his office, then the office of the Assistant Director General down to all the departments and laboratories affiliated with it, and for each department. One of the center's departments is no less important than the rest of the departments, as shown in the following figure.

The center has a main headquarters in Baghdad, in which there are central departments, the Baghdad Central Laboratory, and the Soil Investigation Department, which specializes in conducting soil tests. The center has (14) construction laboratories distributed in the governorates (Basra, Babylon, Holy Karbala, Saladin, Maysan, Dhi Qar, Kirkuk, Muthanna, and Wasit), , Najaf, Diwaniyah, Diyala, Nineveh, Anbar), in addition to the central administration of the 6th Expressway Project, all of which are administratively, technically, and financially linked to the center's headquarters in Baghdad, in addition to the presence of sub-laboratories in some districts, such as (Khanaqin / Diyala, Hindiyah / Karbala Laboratory) which are administratively linked. Technically and financially, in the two central laboratories in the governorates of (Diyala and Holy Karbala), respectively.

Tasks of the administrative and financial department

### **2. Administrative and Financial Department:**

The relationship between the employee and the institution to which he belongs is an (administrative) relationship, which is often for the benefit of the administration or institution in terms of rights and duties on the one hand, and the procedures and laws that pertain to the employee on the other hand. The administrative and financial department is considered one of the important departments and is the pillar on which a lot falls. One of the tasks related to the continuity of the center's work and its employees.

#### **First: The financial tasks of the department:**

The goals and responsibilities of the Financial Division revolve around establishing financial balance, maintaining the financial progress of work in the center, and organizing incoming and outgoing cash flows.

In the year (2012), the center became centrally funded, relying entirely on the allocation of the operational budget in the name of the National Center for Construction Laboratories, and it has the right to benefit from its revenues at a rate of (50%) of the revenues for the purposes of support and development in accordance with the annual federal



budget law, as Article (19) stipulates that the Minister of Finance The federal government has the right to increase the approved appropriations necessary to cover the costs of the work carried out by the National Center for Construction Laboratories and the National Center for Engineering Consultation affiliated with the Ministry of Construction, Housing, Municipalities and Public Works, up to (50%) of the revenues generated from the implementation of these works, as an exception to Section (1) of the Financial and Debt Management Law. General No. (95) of (2004) or any other law that replaces it, provided that the amounts are spent to develop the two centers and support their technical and administrative staff within the classification of accounts for grants, subsidies, debt service and other expenses.

In 2021, general budget instructions were issued, which stipulate that all of the Center's revenues, at a rate of (100%), should be transferred to the Ministry of Finance. After objection by our Center, Cabinet Resolution No. 416 of 2021 was issued, which indicates confirmation of the necessity of implementing the provision of Article (16) of the Ministry of Construction Law. And Housing No. (33) of 2012, as it is a special text that restricts all the texts set forth in the Federal Financial Management Law and the Federal General Budget Law, and this decision was distinguished by the Supreme Judicial Council / Federal Court of Cassation No. (6561) Civil Authority / 2022 that the center is entitled to benefit from a percentage ( 50% of its generated revenues to cover its work, and this percentage will be used when the budget law for the year 2023 is approved to develop the center and its employees.

The financial administration is considered part of the overall management of the center, as it is usually entrusted with the responsibility of managing the financial affairs of the center in coordination with the other functions of the center. The most important functions that fall on the responsibility of the Administrative and Financial Department are financial planning and achieving appropriate revenues for the purpose of meeting the needs and requirements of all departments and laboratories.

In light of the above, the most prominent tasks carried out by the financial part of the department can be identified, which are:

- 1- Financial planning (annually estimating the center's financial needs).
- 2- Meeting financial needs to purchase laboratory equipment and testing supplies.
- 3- Financing decisions (financing laboratories through available monthly allocations).
- 4- Preparing rewards programs according to entitlement.
- 5- Electronic archiving.
- 6- Preparing monthly salary lists for employees (permanent and contract) and disbursing them using electronic payment cards

In addition to many other tasks, the most prominent of which is providing monthly and annual statements of the revenues and expenses of the departments and laboratories affiliated with the center, in detail, to know the amount of the difference between them. With organizing employee files and preserving their rights, the table below shows most of the tasks assigned to the administrative and financial department:

**Table No. (1) Financial tasks of the department**

N	The division or unit	tasks
1	Expenses Division:	Maintaining the daily record, reconciling the trial balance, organizing the instruments, preserving their bonds and registration adjustments, keeping the advances record, tax deposits, and suppliers' record, keeping the expenses record, keeping the bank record, following up on the movement of the balance and the revenue record.
2	The Fund	is the secretariat of the Fund and is authorized to review the banks' current accounts for our center, maintain the Fund's register, and prepare a record of receipts.
3	Revenues Unit	matching laboratory revenues, the Debt Follow-up Committee, making legal seizure decisions, and matching an accountant's record/6 for revenues.
4	Public Accounts Division	follows up on financial allocations, correspondence with the Ministry and the Ministry of Finance, prepares final accounts, matches expenditure and revenue reports, the annual final consolidation record, allocations record, and enters data into the government system.
5	Payroll Division:	Preparing the salaries of all the center's employees (employees and contracts) with all their monthly variables and disbursing them via electronic



		payment cards (MasterCard or Visa Card), organizing the necessary data for this according to the required morphological formulas, preparing statements of monthly deductions from employees' salaries, organizing the necessary forms for that, and preparing accounting entries. Necessary to maintain a register of salary creditors, a register of pension contributions, a register of social welfare, and authorization to review the financing transactions by the Ministry of Finance, prepare financial statements and write them in the service book of those referred to retirement, and prepare certificates of the last salary.
6	Warehouse Division:	Maintaining and following up on inventory balances for all work supplies, disbursing them, organizing bills of exchange, and completing warehouse entry and exit transactions.
7	Assets Unit:	Maintaining the assets register, matching it with the annual inventory, following up on the transfer of assets between laboratories, entering the purchase vouchers for furniture and equipment in the relevant records, and following up on the write-off of assets.
8	Inventory accounts unit:	Posting incoming and outgoing warehouse documents, organizing the necessary monthly entries, reconciling inventory balances annually, and following up on write-offs.
9	The follow-up unit	Follows up on all paper and electronic mail and administrative orders issued and received from and to the department and keeps the necessary records for that.

## **Second: Administrative tasks of the department:**

**It is represented by many effective and important tasks, as shown in the following table:**

**Table No. (2) Administrative tasks of the department**

1	Individuals Unit:	Issuing all orders for leaves, transportation, placement within the center, rewards, punishments, thanks, receipt and delivery of cars, allocations, additional hours, geographical location allocations, position allocations, danger allocations, and issuance health records.
2	Data Unit:	Updating all of our center's data, including staff, contracts, promotions, and bonuses, calculating contract service, preparing all positions related to staff and contracts, withdrawing and auditing the fingerprint of attendance and departure, the network system for individuals, the system for those removed from service, the leave and balances program for the headquarters and laboratories, auditing it annually, and the employee data follow-up system that is networked with the ministry. Issuing orders to calculate higher certificates, issuing orders for circulars, receiving and delivering e-mail to departments and laboratories, and issuing orders to form committees.
3	Staffing Unit:	Approving staffing, appointments, transfers outside the center, changing job titles, and issuing orders to calculate academic certificates during service.
4	The political dismissal unit	Promoting political dismissal transactions, calculating the duration of the political dismissal, creating job grades for the politically dismissed, and reappointing and appointing the politically dismissed.
5	The Retirement Unit	Organizes retirees' transactions, the electronic form for retirees, the electronic retirement suspensions form, resignation orders, retirement circulars, printing all books pertaining to the unit, issuing service extension orders, approaching the Social Security Department and the rest of the departments for the purpose of adding any service to the permanent staff, issuing death orders, and registering promotions, and they are authorized to review the Authority. National Pension and State Employees' Retirement Fund
6	Management Unit:	Issuing internal and external books, importing external books, governorates and the ministry, distributing mail to departments and governorates, dispersing books, copying, keeping books in personal files,



		archiving personal files, printing administrative books, and verifying publications. The barcode form that relates to the authenticity of publications.
7	The follow-up unit	<p>receives and delivers mail from the department, governorates, and ministry mail, and follows up on vacation card files to the center's headquarters.</p> <p>8 Services Division: Turning on and off the electricity generator, dispensing stationery, the department's needs, gardens, cleaning, organizing the fuel dispensing form for drivers, and organizing the duties of drivers leaving to complete the center's work.</p>

### **3. ACCREDITATION AND QUALITY AT THE NATIONAL CENTER FOR CONSTRUCTION LABORATORIES:**

Accreditation of the National Center for Construction Laboratories

In the year (2017), the National Center for Construction Laboratories / Baghdad Central Laboratory obtained the accreditation certificate (ISO/IEC17025) coded (TL009) for its field of work in conducting physical and chemical laboratory tests for construction works. The accreditation was renewed in (2022) according to the updated standard specification, valid until the year (2024) with 38 laboratory tests by the Ministry of Planning / Iraqi Accreditation Authority. Work is underway to obtain it for the rest of the laboratories.

The staff of the Quality Management Division at the National Center for Construction Laboratories took it upon themselves to convey the true picture of the concept and culture of quality to all employees at the center, as it adopted the international standard (ISO/IEC 17025) for the reliability of testing and calibration laboratories to raise the level of work of our laboratories to keep pace with their global counterparts.

Work was done to accredit the Baghdad Central Laboratory, one of the laboratories of the National Center for Construction Laboratories / Ministry of Construction, Housing and Public Municipalities / which is one of the long-established government institutions in the field of testing various construction materials by adopting the latest international and national specifications approved by qualified and experienced staff in their field of work, where the efforts paid off. By obtaining the national accreditation certificate numbered (TL 009) from the Iraqi Accreditation Authority in the field of structural and metallurgical examinations in accordance with the standard specification (ISO/IEC 17025). The accreditation certificate was obtained for the first time on 1/19/2017, and the center's accreditation was renewed in accordance with the requirements of the specification. Updated (ISO/IEC17025:2017) on April 12, 2022, effective until April 12, 2024. The senior management at the center is seriously pursuing expanding the scope of accreditation to include the largest possible number of tests and obtaining accreditation for provincial laboratories by simplifying procedures for the purpose of improving The quality of government services and contributing to the development of service provision centers represented by laboratory tests for construction materials.

### **4. LABORATORY EQUIPMENT:**

Ensuring the continuity of the center and laboratories' work depends on the provision of equipment, as these devices are in continuous development, in addition to the fact that their continuous use causes deterioration and malfunction, which requires their purchase periodically as needed.

During the years (2019 and 2020), many laboratory equipment were purchased through the central and sub-purchasing committees from the center's allocations, and during the years (2021 and 2022), many laboratory equipment were also purchased through the investment budget of the Department of Buildings, which will be detailed later and briefly. For the purpose of developing and meeting the center's needs, as follows:

First: The most important laboratory equipment purchased during the year 2019

- 1- Cube breaking device for Nineveh Laboratory
- 2- Asphalt core cutting device for Nineveh Laboratory
- 3- 2 cement vibrating devices for Nineveh Laboratory and Diyala Laboratory
- 4- Chemical container vibrating device for the soil investigation department

Second: The most important laboratory equipment purchased during the year 2021

Many laboratory equipment were purchased during the year 2021, including polymer tar inspection devices, based on the investment plan. The lists of devices were organized by us and the equipment was prepared in coordination with the Department of Buildings and in accordance with Contract No. (25/2021), as shown below:

- 1- Asphalt burning furnace for Salah El-Din Laboratory
- 2- Cement vibrator for Babel Laboratory
- 3- Cement mixer for Al-Muthanna laboratory
- 4- Cement mortar penetration device for Babel Laboratory



5- Various cement molds for all laboratories and as needed

Third: The most important laboratory equipment purchased during the year 2022

Many laboratory equipment were purchased during the year 2022. The lists of equipment were organized by us and the equipment was prepared in coordination with the Department of Buildings, as shown below. Note that all of the following devices were deposited in the central warehouses and disbursed to the laboratories as needed:

- 1- Dynamic shear inspection device
- 2- A device for checking the flexural behavior of asphalt
- 3- Compression and tension testing device for cement models
- 4- A device for checking the initial and final cohesion of cement
- 5- Automatic ball and ring inspection device
- 6- Digital penetration testing device
- 7- Viscosity testing device for asphalt mixture
- 8- Flash point testing device
- 9- Digital ductility testing device
- 10- Compression testing device
- 11- Rotary asphalt road device
- 12- A device for finding cracks in the asphalt mixture
- 13- Total specific gravity device for asphalt
- 14- Iron tensioning device (1000KN)
- 15- Iron tensioning device (60KN)
- 16- Obsolete vessel pressure device
- 17- Pressure asphalt burner device
- 18- Distillation device
- 19- Rotary fine plate screening furnace
- 20- Laboratory oven 75 liters
- 21- Digital scale
- 22- Digital scale
- 23- Platinum eyelid
- 24- Vapor exhaust
- 25- Water bath 40 liters
- 26- Strain gauge
- 27- Set of weights
- 28- Electric mixer 5 liters
- 29- Mixer
- 30- Data reader

The laboratories most in need of laboratory equipment are the Nineveh Laboratory and the Anbar Laboratory due to their severe damage as a result of the security events that those two governorates witnessed during the past years, in addition to the Maysan Laboratory, the Muthanna Laboratory, and the Wasit Laboratory due to the presence of private (private) laboratories in those provinces, which are examined through a council. Governorate .

## **5. REVENUES AND EXPENSES OF THE NATIONAL CENTER FOR CONSTRUCTION LABORATORIES FOR THE YEAR 2021:**

### **Income and expenses**

The following table shows the volume of revenues and total operating expenses for the year 2021 for each of the center's laboratories in addition to the Baghdad Central Laboratory and the Soil Investigation Department. This table is the result of collecting the center's monthly revenues and operating expenses attached within Appendix No. (1), which includes tables number (12) and by table For every month of Table No. (1) Statement of 100% annual revenue and 50% of revenue with expenses for the year 2021

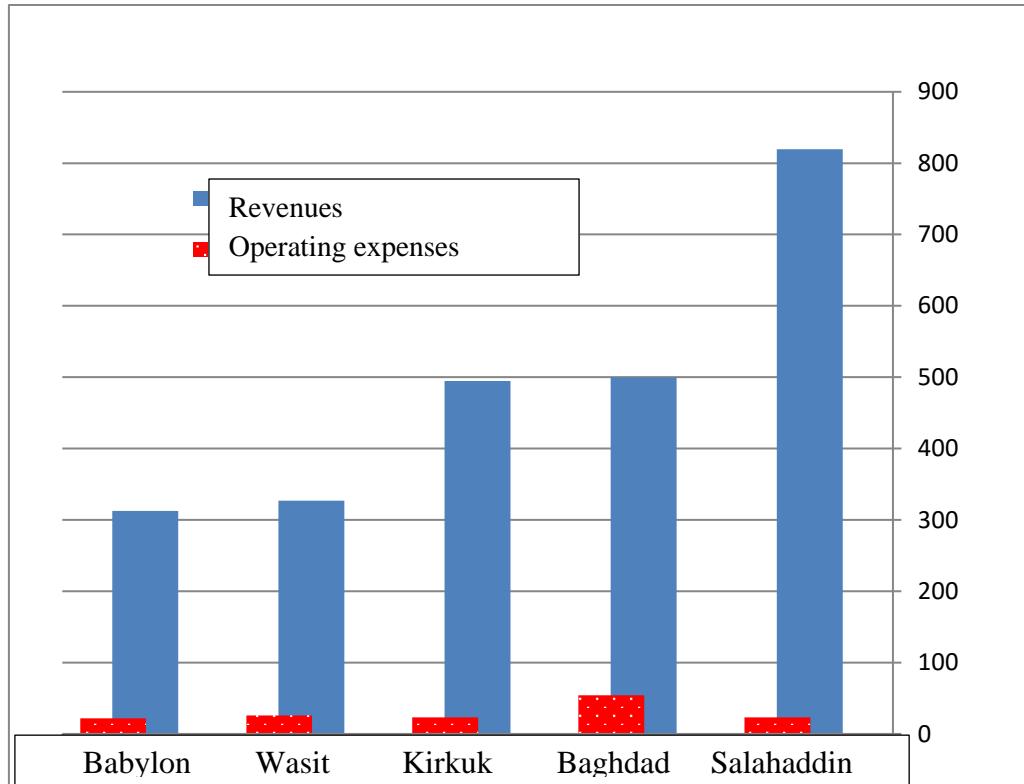
N	Entity name	Revenue received 100% for the year 2021	Revenue received for previous months 100%	Revenue received for previous years 100%	Total revenue received for the year 2021	Revenue received 50% for the year 2021	Operating Expenses for the year 2021	الفرق
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1	Central headquarte rs	0	0	0	0	0	40466436 9	404664369-
2	Soil investegati on	235681588	0	0	235681588	117840794	34838750	83002044
3	Baghdad laboratory	499506660	0	0	499506660	249753330	54391900	195361430
4	Nineveh Laboratory	123150000	0	0	123150000	61575000	16417150	45157850
5	Saladin Laboratory	763863000	55683500	0	819546500	409773250	23268500	386504750
6	Kirkuk laboratory	494552250	0	0	494552250	247276125	23079250	224196875
7	Diyala laboratory	229486550	22657183	0	252143733	126071867	19286550	106785316. 5
8	Anbar laboratory	10708250	0	16800000 0	178708250	89354125	12954000	76400125
9	Babylon Laboratory	278981975	33461250	0	312443225	156221613	21821600	134400012. 5
10	Karbala Laboratory	279113500	9768000	4500000	293381500	146690750	23978270	122712480
11	Najaf Laboratory	240598667	0	5000000	245598667	122799334	19768500	103030833. 5
12	Al- Muthanna Laboratory	100707750	0	0	100707750	50353875	14464660	35889215
13	Diwaniyah Laboratory	195144450	746550	0	195891000	97945500	22115000	75830500
14	Dhi Qar Laboratory	106670375	22319250	0	128989625	64494813	19242541	45252271.5
15	Wasit Laboratory	326964500	0	0	326964500	163482250	26054025	137428225
16	Maysan Laboratory	43735750	4300000	0	48035750	24017875	19554450	4463425
17	Basra	115225325	0	0	115225325	57612663	34840950	22771712.5
18	Express Traffic/6th edition	10731250	0	0	10731250	5365625	10955500	5589875-
total		4,054,821,8 40	148,935,7 33	177,500,0 00	4,381,257,5 73	2,190,628,7 87	801,695,9 65	1,388,932,8 22

Below is a chart showing the total revenues and expenses for five laboratories (Salah al-Din Structural Laboratory, Baghdad Central Laboratory, Kirkuk Structural Laboratory, Wasit Structural Laboratory, Babel Structural Laboratory) during the year 2021 and for comparison purposes.

Figure No. (1): Revenues and expenses of the five highest-revenue laboratories



The disparity in revenues between laboratories is not due to the availability or non-availability of laboratory equipment or staff, but rather to the nature of the work environment in that governorate, as the increase in revenues in some governorates is due to the size and diversity of projects in that governorate and the construction movement there, in addition to the administration's direction. The local government in that governorate imposes reliance on reputable government agencies with regard to construction inspections of existing projects in that governorate and its refusal to rely on private inspection authorities.

#### CONCLUSIONS AND RECOMMENDATIONS:

The research reached a set of conclusions and recommendations, as shown below:

##### Conclusions:

- 1- The key to the true success of any institution or government department lies in the degree of interconnection between the administration and the employees of that department, and each employee's knowledge of his responsibility towards his second home (the institution to which he belongs) and his keenness to perform the tasks entrusted to him with precision and honesty.
- 2- The accuracy of the work of the administrative and financial department in any governmental or private institution leads to ensuring the rights of the institution and its employees, and thus their performance of their duties with high efficiency.
- 3- In a statement of revenues compared to expenditures, it shows some governorates with high revenues and others with low revenues. This is due to the availability of job opportunities in the governorate, and a number of private laboratories have come online, as a number of government institutions have begun to rely on these private laboratories, which are in many of its examinations of materials are often inaccurate and do not conform to the specifications issued by the Central Organization for Standardization and Quality Control.
- 4- The center's revenues during the year 2021 amounted only to (4.38) billion dinars, while the operating expenses for that year amounted to (0.8) billion dinars. This indicates the high productivity of the center and its effective contribution to the country's national product.



- 5- The Salah al-Din Laboratory is considered the most productive laboratory, as its revenues for the year 2021 amounted to (819.5) million dinars, representing (18.7%) of the center's total revenue in that year, followed by the Baghdad Central Laboratory, with revenues amounting to (499.5) million dinars, representing (11.4%) of the revenues. The total for that year was followed by the Kirkuk Laboratory, with a revenue of (494.5) million dinars, at a rate of (11.3%) of the total revenue, followed by the Wasit Laboratory, with a revenue of (326.9) million dinars, at a rate of (7.5%) of the total revenue, followed by the Babylon Laboratory, with a revenue of (312.4) million, at a rate of ( 7.1%) of the total revenue for that year. This increase in revenue compared to the rest of the other laboratories is due to the size of the service and investment projects established in those governorates.
- 6- Operating expenses for the year 2021 at the center's headquarters amounted to (405) million dinars, representing (51%) of the total operating expenses for that year, which amounted to (802) million dinars. This increase is due to the fact that the center is managed centrally, which includes many departments, as shown in the organizational structure.
- 7- There is a discrepancy in revenues, as the increase in revenues for some laboratories is due to the nature of the work environment in that governorate, the size and diversity of projects in that governorate, and the construction movement in it, in addition to the direction of the local administration in that governorate, which imposes reliance on reputable government agencies with regard to construction inspections for existing projects. In that governorate, it refused to rely on private (private) examining bodies. As for laboratories with low revenues, this is due to the directive of the governorate councils there to rely on private (private) laboratories and university laboratories to conduct the examination.
- 8- The Center, as an exclusive examining body, has contracted with large and important investment and service projects, such as the draft Iraqi-Chinese agreement to build a thousand schools in all governorates of Iraq, under the general and direct supervision of the General Secretariat of the Council of Ministers. This demonstrates the importance of the Center as an examining body for construction materials and its position among other examining bodies that provide the same services. .

#### **Recommendations:**

The researcher recommends a set of recommendations, the most important of which are the following:

- 1- The need to support the center financially and morally by governmental and non-governmental agencies because it provides an important and pivotal service in the field of construction and development, especially since some of the projects that the center contracts with are infrastructure projects for Iraq in all governorates.
- 2- Educating investors and contracting companies through directing the Council of Ministers to them and to all ministries on the necessity of dealing with an official examining body of a governmental nature, especially since the center provides an integrated service that begins before construction through soil investigation examinations and continues until after construction through the post-construction structural evaluation, in addition. To laboratory tests during construction.
- 3- Purchasing more necessary laboratory equipment and training workers to use them, which allows the center to expand its scope of work and develop new structural tests to compete with local and regional laboratories.
- 4- Identifying the reasons for the decline in revenues of some laboratories and not others and addressing them, especially the Al-Muthanna and Anbar construction laboratories and the 6th Express Transit Project.
- 5- Supporting the administrative and financial department at the center by involving employees in specialized financial and training courses on modern computer systems and providing modern electronic and office equipment. anagement, Comprehensive Guide 2023