

| RESEARCH ARTICLE**Financial Transparency and Its Effect on Income Utilization and Infrastructure Development
Towards the Design of a Policy Manual among State Universities and Colleges in Region II****John Almar Cureg***Master of Business Administration, Adamson University, Manila, Philippines***Corresponding Author:** John Almar Z. Cureg, **E-mail:** jimmy472425@gmail.com/john.almar.cureg@adamson.edu.ph**| ABSTRACT**

This study explored the effect of financial transparency on income utilization and infrastructure development among State Universities and Colleges (SUCs) in Region II with the aim of enhancing financial policy and governance mechanisms. Applying a mixed method design using criterion sampling approach, quantitative data were collected through structured survey administered to 111 respondents while qualitative data were gathered from open-ended survey responses, and documentary analysis of Budget and Financial Accountability Reports (BFARs) further substantiated the findings. Descriptive results reveal that financial transparency was rated very high indicating strong compliance and accountability, and income utilization was perceived as very efficient. Nonetheless, though infrastructure development was assessed as very developed, documentary verification disclosed limited budget allocation and moderate to low utilization and disbursement rates portraying implementation delays and sustainability concerns. Multiple linear regression results further reveal that financial transparency significantly affected income utilization but did not predict infrastructure development. This implies that infrastructure outcomes rely more on budget prioritization, procurement efficiency, absorptive capacity, and long-term capital investment planning, rather than transparency alone. Moreover, qualitative insights stressed the need for need-based allocation, strengthened monitoring and evaluation, continuous capacity development, and stricter compliance with financial policies. And it further concludes that transparency reinforces income utilization.

| KEYWORDS

Financial Transparency, Income Utilization, Infrastructure Development, State Universities and Colleges.

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The operational and developmental requirements of the SUCs call for an efficient way of handling generated income, such as tuition and other related fee collections. SUCs are indispensable for economic and social development and accessible education in particular for developing parts of the country, but the ability of SUCs to use and manage financial resources transparently often times has implications on the extent by which they are able to attain the mission. With the importance of generated income funds, a study on the implication of financial transparency on generated income use and infrastructure development is of interest, standing compelling due to the current situation of financial constraint to development in some cases. Through examining the current landscape, it is the goal of this study to develop potential solutions that can reinforce financial policies and ensure that the revenues generated aid in advancing the mission and strategic direction of the SUC where the money is obtained and to reduce the amount used for non-direct program expenses.

Lack of transparency and accountability in the management of funds have significant implications for effective financial governance in public higher education in enhancing institutional effectiveness and stakeholder trust (Shah & Nair, 2020). Lessons suggest that openness of the use of tuition revenue funds can enhance trust among parties. Greater transparency in managing internally generated income of SUCs is crucial as it enhances the use of income for institutional growth. On the contrary, the research study

carried out by Olaitan and Wang (2022a) investigated how internally generated income from tuition fees, financial and organizational bases and policies could be applied to achieve school operation priorities and development targets. This perspective is supported by the SUCs' goals for campus expansion and academic activities through income generation. Furthermore, transparent financial disclosure and complete audits create trust amongst stakeholders and insure conformity to institutional mission, according to Kang et al. (2023). "Clear" financial condition is significantly associated with long run financial sustainability among SUCs (Kwon & Lee, 2023). The logic is that sound financial reporting and stewardship of revenue funds generated through tuition fees underpin good governance. Thus, in line with the SUCs desire to establish greater financial transparency and fiscal responsibility.

Study established that income utilization directly influences the growth of institutions, therefore the viability of SUCs operations and their infrastructure program rests heavily on prudential management of internally generated revenues from tuition and other school fees. Public University strategic objectives are served best by good planning and use of income (Martinez & Lopez, 2021). What is also apparent from the Gravett and Solomon (2021) study, is that internally generated income (IGI) is an essential source for upgrading and development of agency, which, ultimately lead to the quality of education and student welfare. This intuition fits the development goals of SUCs where the income allocation mechanism would improve the agency development and the student welfare. Furthermore, Chen et al. (2023) revealed enhanced infrastructure and academic service provision due to parting of funds in accordance with institutional objectives, thus emphasizing the importance of accountability in financial dealings.

One of the most important progress in education sector is infrastructure- the construction of new buildings, renovation of old ones, purchase of new technology, and upgrading campus facilities, creates a better learning environment. Johnson et al. (2022) assert that student learning outcomes and institutional competitiveness are directly influence by the quality of infrastructure in higher education institutions. Moreover, the results when financial resources are allocated to infrastructure projects, are enhanced academic achievement and campus environment according to Smith and Rogers (2023) who also mention how important it is to connect income utilization and financial transparency to infrastructure development outcome.

Based on the foregoing studies, it is evident that financial transparency, effective financial practices and proper budget planning are crucial within the public schools. Nevertheless, further study is necessary to explore the specific relationships among the variables – financial transparency, income utilization, and infrastructure development within the SUC context through the stakeholders' perceptions ensuring empirical contribution to the field.

Furthermore, while the studies conducted provide general understanding of the topic, minimal focus has been provided to the particular issues and policy refinements applicable to SUCs in order to attain its developmental objectives using internally generated income funds. Further study will be conducted to incorporate the theoretical frameworks of this research to understand the link among the variables. This research seeks to fill this gap by proposing targeted policy enhancements for SUCs, establishing a framework that promotes accountability, sustainable growth, and effective utilization of generated income.

1.2 Statement of the Problem

The research was conducted to investigate the effect of financial transparency on generated income utilization and infrastructure development of SUCs in Region II.

In particular, this study sought to answer the following:

1. What is the level of financial transparency of SUCs in Region II as assessed by respondents in terms of:

- 1.1 Financial Reporting Quality;
- 1.2 Disclosure Practices; and
- 1.3 Accessibility?

2. What is the extent of income utilization of SUCs in Region II in terms of:

- 2.1 Budget Allocation;
- 2.2 Efficiency in Fund Utilization; and
- 2.3 Financial Accountability?

3. What is the status of infrastructure development of SUCs in Region II in terms of:

- 3.1 Project Completion Timeliness;
- 3.2 Quality of Infrastructure Projects; and
- 3.3 Sustainability and Maintenance of Developed Facilities?

4. Does the level of financial transparency affect income utilization and infrastructure development of SUCs in Region II?

5. From the results of the study, what can be proposed to improve the level of financial transparency?

1.3 Hypothesis

At 0.05 margin of error, this study tested the hypothesis:

H₀: Financial Transparency does not significantly affect the income utilization and infrastructure development of the SUCs in Region II.

1.4 Significance of the Study

This study investigated the effect of financial transparency on income budget utilization and infrastructure development of SUCs in Region II, thus, its effect to the agency is measured. The financial policies and transparency measures concerning the use of

tuition and other school fees, free higher education subsidy, and other related income can be clarified. By doing so, this can support enhanced financial transparency, which is crucial for fostering stakeholder trust.

The following will benefit from this study:

State Universities and Colleges (SUCs) Region II. The results may serve as the benchmark to liberalize resources to implement the university vision and mission. It is meant to assist the SUCs Region II rationalize their budget allocations for the building of infrastructures for various facility, for quality buildings, technical and research equipment, and campus amenities. This will also help in improved financial management.

Students of SUCs Region II. Well-resourced strategic initiatives that are well managed, can result to more funding which can be spent on academics, teachers, and school facilities. Suggestions/recommendations will benefit the students in terms of upgraded facilities, safer learning environment, and greater access to education.

Employees of SUCs Region II. Improved financial management and more transparency could mean more money is available for professional development. But vastly better financial management and control is also good for the employees, to the extent that it can lead to better work for the agency's research and instruction.

Other State Universities and Colleges (SUCs). The study findings contribute to evidence-based knowledge on the connection between financial transparency and the use of internally generated revenue on infrastructure development by SUCs providing a room for policy and strategy decision with respect to prudent expenditure. Furthermore, if income budgets are managed in a responsible way and are transparently accounted for, it can generate trust among partners.

Philippine Association of State Universities and Colleges (PASUC). This also captures the image on how SUCs' internally generated revenues (IGR) were used to effect greater financial transparency as they serve as turn-around- bridges for infrastructure development of their communities. The result of this study can be used as basis/check-up model in the formulation of financial protocols/policies.

Commission on Higher Education (CHED). The said study shall serve as a situational analysis to CHED on fiscal operations and legal framework on the use of income of SUCs, and model for customizing the norms/mode of monitoring for ensuring good governance/transparency in the application of the income funds. The results may be applied for decision making. Policy Recommendations. Moreover, the findings can be used to assist the CHED in their decision-making, as they formulate policies and guidelines which are more aligned with the recent financial governance practice of SUCs.

Commission on Audit (COA). The study gaps in existing auditing practices for SUC use of income, will provide COA with data to further modify its standards. It improves the COA's capacity to enforce compliance with auditing requirements.

Congress of the Philippines. This provides the Committee on Appropriation information as basis for legislative debates relative to SUCs financial operation. Empirical data contribute for the crafting of legislative amendments to enable to implement stricter financial policies and enhance transparency in managing cash balances of SUCs from internally generated income fund.

Senate of the Philippines. This research can also be stepping stone for the Senate Committee on Finance for it to deliberate matters that are critical regarding SUCs financial management. This act shall set the stage for the devolution of financial policies which shall result in the maximization of the efficiency, accountability and transparency in the utilization of SUC revenues that eventually guarantees the achievement of the SUCs' developmental goals and objectives.

Local Universities and Colleges (LUCs). This can be very helpful to the herein mentioned SUCs in the way that similar with SUCs they experienced the same financial strain. The results could help to promote financial regulation of LUCs and guide the use of income from tuition and other school charges, as well as the free higher education subsidy. In addition, the results will contribute to understand how to develop a financial sustainability plan for LUCs to overcome future challenges.

Other Related Educational Institutions. The study will be useful to private higher education institutions, non-governmental organizations (NGOs) active in educational development, and politicians concerned with the financial stability of academic institution. Study's findings and recommendations can have an impact on educational policy reforms with the intention of enhancing financial transparency and supporting higher education infrastructural development.

Future researcher/researchers. The study will serve as useful reference and source of knowledge for future researcher/s with related topics on financial management challenges. It enables the researcher to make significant contribution to the field of knowledge.

And the study has social value because it aims to make SUCs more open and accountable with money, and can also lead to better policies and ensure that institutions run better by examining how budget information is being shared and used. This will make sure that public resources are used in a fair and effective way for the benefit of stakeholders and the community as a whole.

The "Public Higher Education Reform Roadmap," created in 2012, has the same goal which is to make SUC more efficient by getting the most out of its resources and using them more wisely in the SUC sector. The results and recommendations can be used to advocate for policy changes within institution and throughout the educational sector.

1.5 Scope and Limitations

The study involved five (5) SUCs in Region II which aims to examine the impact of financial transparency on the utilization of generated incomes (GI) from tuition, other school fees, and the free higher education subsidy, as well as on infrastructure development.

The research used quantitative surveys supported by descriptive and inferential statistics to capture a comprehensive picture of the spending of income. This was supported by qualitative information through the utility of open-ended questions to confirm outcomes achieved using close-ended questions. Respondents are from the governance level and middle management, director/section/unit heads for the data related to financial transparency, the usage of income and the development of infrastructure for the purpose of the various response perspectives from the implementation of how the generated income supports infrastructure development.

The study was limited to the CY 2024 revenue financial transparency, revenue use, and infrastructure planning. Conclusions and suggestions are SUCS specific in Region II and have no immediate application or generalization to other institutions or situations. Due to resource constraints and time limitations, the sample size was limited, potentially restricting the full range of stakeholder perspectives. The depth of the analysis depends on the availability of data and relevant documents. Thoroughness of the results of the study may be affected by any gaps in these sources. The influence of external economic, political, or regulatory factors on financial transparency practices in income utilization is not thoroughly examined in this study.

Nevertheless, this does not include equally critical concern - the reliability, accuracy and integrity of the agency's Financial Accountability Reports (FARs) that are submitted to Commission on Audit (COA) and Department of Budget and Management (DBM).

1.6 Definition of Terms

The following terminologies are operationally defined to help readers comprehend the study.

Accessibility. This is how simple it is for interested parties to obtain financial information through official websites, official documents or public posts.

Budget Allocation. Refers to funds allocated to the SUCs different programs, projects and activities consistent with their priorities and strategic goals.

Disclosure Practices. The SUCs' practices to disclose financial information such as income sources, expenditures, or financial statements publicly for information of stakeholders.

Efficiency in Fund Utilization. This pertains to SUCs' capacity to use the available funds at their disposal while reducing waste.

Financial Accountability. This pertains to the responsibility in preparing and submitting financial reports and be answerable for the administration and utilization of income generated. In this study, it is link to financial transparency processes as implemented by SUC ensuring that the expenditure from income generated fund is aligned with the university goals and objectives.

Financial Policies. Refer to the existing laws, rules and regulations, and practices that govern the allocation, management, and reporting of financial resources.

Financial Reporting Quality. The degree to which financial reports accurately represent the financial status and performance of the SUCs, which refers to completeness, timeliness, consistency and compliance with accounting rules.

Financial Transparency. It pertains to the transparent, open, and responsible disclosure of financial transactions and income utilization to stakeholders.

Generated Income. It pertains to the revenues collected by SUC from tuition, miscellaneous, and other school-related fees, as well as the free higher education subsidy. These include, but are not limited to, matriculation, laboratory, library, and athletic fees, medical/dental, student services etc; and the financial subsidy from free higher education for students covered by R.A. 10931. This constitutes special trust fund under SB 164 account classified as Fund Cluster 05.

Income Utilization. Refers to the SUC allocation and expenditure of generated income funds from tuition, other school fees, and subsidy from free higher education, focusing on the programs and projects like infrastructure development and related operating maintenance.

Infrastructure Development. Refers to the maintenance, development or enhancement of the physical structures and assets at certain SUCs. It includes: (1) the construction of new buildings, (2) the renovation of existing buildings, (3) the purchase of new technologies, and (4) the improvement of campus facilities. This includes structural development which are immovable. The study examines in which generated revenue impacts these endeavors.

Project Completion Timeliness. The extent to which the planned and executed infrastructure projects are finished within the allotted timeline.

Quality of Infrastructure Projects. The completed buildings' structural safety, usability and end-user satisfaction consistent with specifications and regulatory requirements.

State Universities and Colleges (SUCs). The government-funded educational institutions that operate under the Philippines Commission on Higher Education (CHED) laws, which have the authority to collect fees and generate income for their operational needs. This study focuses on how SUCs manage and utilize these funds effectively.

Sustainability and Maintenance of Developed Facilities. The ability of SUCs to guarantee infrastructure functionality and long-term environmental sustainability and functionality of infrastructures through responsible use, regular maintenance and repairs.

Tuition and Other School Fees. These are charges imposed to students upon enrollment, such as matriculation fees, library, computer, laboratory fees, ID, athletic, admission, development fee, guidance, medical/dental, socio-cultural, and other related fees; and the national subsidy for tuition and school fees of students eligible to free higher education which are covered by R.A. 10931 otherwise known as the "Universal Access to Quality Tertiary Education".

1.7 Related Literature

This review aims to provide context to support the analysis of significant subjects. Relevant literature that provides important insights and basic concepts for the study is therefore included in this section.

1.7.1 Financial Transparency. With the aims of strengthening accountability in the Philippines SUCs, Delos Santos (2020) explores the importance of internal audit in the financial practices of SUCs regarding financial transparency and accountability. The paper underscores a dependence on internal auditing in seeing through to the actual use that the money appropriated, whether as tuition and other fees, is actually used as it should and as it ought; and further posits that constitutional challenges on SUCs however dilute the role that internal audits ought to play, internal audits are claimed to be critical in the issues of financial service parity and transparency. The latter would facilitate the creation and development of capacity of resource management and utilization of Actual and Plan to enable any expansion, as could be in the area of infrastructure development. The implications of the findings were inferred in terms of effectiveness of policy on resources generated from tuition and other fees, effectiveness in financial business practices such as internal audits for the establishment of their effective utilization of incomes and accountability. However more research still must compete the void by including the three variables, financial transparency and income use and infrastructure development and also study the transparency to income use and infrastructure development not only in the SUCs in Region II. Villanueva and Santos (2020)'s study emphasized the importance of a strict financial policies in generating and meeting the requirements for government subsidy and income as a way of ensuring that government subsidy and internally generated fund are properly put to use. How the Universal Access to Quality Tertiary Education Act (RA 10931) which freed tuition affected budgeting and financial management in SUCs, is examined, and noted the shift from collecting tuition fees to generating income from alternative sources which treated as special trust fund affected how higher education institutions manage their finances. Further study should be done to look at the effect of financial transparency practices on utilization of income generated. According to Soriano (2022), SUCs are implementing tougher financial policies progressively to resolve concerns brought up in audit findings to guaranty the proper use of tuition fee revenue funds. The policy amendments intended to improve financial responsibility in SUCs are examined by Soriano (2022) and the particular attention given is the influence of RA 8292 (Higher Modernization Act of 1997) and its modifications which were intended for accountability and transparency of financial operations within these institutions; thus, financial transparency is progressing along with good governance objectives. Thorough study is suggested for a more institution specific data and more focus on real outcomes is beneficial. According to Brenya et al. (2023), public institutions efficient operation depends on enhanced accountability and transparency which are accompanied by strong internal control systems and effective leadership practices. The finding is relevant to the study since it stresses the significance of excellent leadership in the successful implementation of financial policies giving information on how public sector financial transparency practices is influenced by leadership, however, further study is recommended due to its shortcomings in relation to generalizability, methodological transparency and scope. The study of Ngare (2023) which underscored the significant role of financial transparency in enhancing resource utilization and infrastructure development with public higher education institutions, concludes that transparent financial resources management are essential for the growth and sustainability of universities particularly in optimizing infrastructure development. This stresses that transparent financial practices lead to improved budget utilization which enhances institutional operations including infrastructure development, that this is vital for effective resource allocation and management in public higher education which contributes to long-term growth and sustainability of universities by maximizing the use of financial resources. While this study addresses financial transparency and resource management, further study is needed to explore its direct impact on infrastructure development in SUCs such as new construction, renovations, or technology acquisition; focus on region-specific study particularly for SUCs in Region II which will address gap in understanding specific financial transparency practices.

1.7.2 Generated Income Utilization. Abellon et al. (2020) in the study on how school administrators handle allotted budget particularly for extracurricular activities and special programs emphasized that challenges faced by public school administrators in allocating funds to different projects to address demands and make sure that resources are effectively used to optimize student outcomes. It is concluded though school heads are aware of the financial management fundamentals, most are hampered by issues such as insufficient budget, red tapes and inadequate training, thus, resulting to inefficiency. Questionnaires and interviews with school administrators are the methods used in gathering the data and this may be improved by supporting the results with financial reports and including views through open-ended survey questions from fiscal administrators like budget officers who play vital roles in fund management. Thus, further study should be conducted to enhance financial procedures in the Philippine educational system. The World Bank's 2020 revision of Al-Samarrai's paper which explores on public education financial management focusing on how educational institutions manage operating budgets and its effects on infrastructure development and quality of education, emphasized how crucial the sound financial rules and procedures to guaranty the efficient use of operating funds which generally elevate the standard of instruction and the quality of educational facilities. Hence, the viability of educational institutions is dependent on the effective financial management, and better infrastructure and student performance are examples of enhanced educational outcomes that are positively correlated with efficient operational fund management. However, a more mixed methods approach could strengthen the findings since its relevance to particular scope may be limited, and filling this knowledge gaps will enhance understanding of how financial management techniques can be applied successfully.

to support learning objectives environment. Espiritu (2020) claims that financial management in educational institutions is affected by challenges which can result to inefficiencies and lack of transparency and the key elements that have effect on financial transparency and efficiency in public higher education are insufficient funds and delayed releases. This is relevant in assessing financial transparency practices at SUCs in Region II where issues exist that may hamper efficient resource allocation and infrastructure development. The capacity of administrators to anticipate and address unforeseen issues is hampered by inadequate planning which leads to reactive rather than proactive financial management, hence, Espiritu emphasizes the value of tackling these issues to increase transparency and guarantee that funds are efficiently used for infrastructure projects. While qualitative approach may have favorable results, there may be a need for future research that may use larger sample size and quantitative treatment, the impact of the problems and intervention and workable solutions could be discussed to improve the financial situation in terms of efficiency and transparency in the SUCs in Region II. According to Miranda and Perez (2021), administrators usually spent large portion of their maintenance operating expenses on mandatory and necessity expenditures like minor repairs, energy and water leaving insufficient fund for infrastructure projects which causes maintenance to be dragged off and school facilities unmaintained, wherein with the challenges brought insufficient funds and growing operational demands, this is relevant to infrastructure issues in institutions like SUCs in Region II. To ensure that budgets are both proactive and reactive to meet short-term as well as long-term developmental goals, thus, the study pinpoints the importance of proactive budget planning. Looking for better comprehension of the reasons behind budgetary priorities will aid in understanding issues that schools encounter. The main goal of the study is to analyze budget allocation patterns quantitatively, hence, adding qualitative techniques to examine financial transparency in deeper ways could improve the research. Infrastructure development is greatly affected by budgetary restrictions especially in developing countries according to UNESCO Report (2021) which put emphasis on the significance of sound financial management techniques in promoting institutional development and sustainability. Aside from compliance, financial transparency is vital for building trust among stakeholders like faculty, students and government oversight agencies, thus, this implies that the use of transparent financial procedures allocate resources effectively which redounds to enhanced academic performance and infrastructure growth. According to the study, Southeast Asean universities may find to meet their developmental goals if budget issues like insufficiency of funds, delayed payments and inefficient spending. Further study is suggested to thoroughly evaluate implementation issue using mixed-methods approach since only qualitative data is used in this research through surveys with the administrative leaders. Cruz (2022) examined how SUCs in Luzon, such as Isabela State University, have used revenue to update their facilities, and accordingly found that many SUCs put high priority on developing research facilities, improving classrooms and putting up student housing with their special trust fund. The study emphasizes the impact of these developments on the learning environment and institutional competitiveness also noted challenges related to fund allocation, where infrastructure projects often compete with operational and academic expenses. Nevertheless, while the study focuses on utilization of generated income in SUCs for infrastructure development, allocating financial resources such as tuition and other fees for improving facilities and enhancing institutional competitiveness, and exploring the challenges related to fund allocation as well as its impact; the proposed study addresses the gaps by narrowing its scope to SUCs in Region II providing more localized analysis, by assessing the perceived level of transparency in terms of financial reporting and accessibility, and determining the relationships among the variables involved.

1.7.3 Infrastructure Development. Development of more robust economic growth and development are crucial areas that require attention in infrastructure investment, eliciting Ekeocha et al. (2021b) show through a network in the public infrastructure investments relate each other and the outcome for productivity, efficiency and economic performance are boost from better infrastructure. Results imply that enhanced infrastructure boosts productivity, efficiency and of course economic performance which is related in analyzing the effect of infrastructure investments in education setting, and this implies that the effectiveness and efficiency can be improved through investments in educational structure like cutting-edge technology, modernized facilities and transportation services. Thus, higher enrollment, stronger research and quality education might result from enhanced infrastructure which ultimately redound local and national economic development. According to a study published by Miranda C. (2021), SUCs in the Philippines delve to Public-Private Partnerships (PPP) in financing infrastructures, thus, it assesses the results in terms of financial sustainability and institutional growth. It stresses the role of private sector participation in enhancing infrastructure projects, hence, it suggests thorough evaluation of viable PPP projects despite the limited public resources concluding that PPPs can address scarcity in SUCs funds for valuable infrastructure projects. PPP arrangements assist SUCs acquire technical expertise from private partners aside from providing additional funding and the collaboration expedite implementation, and improves project efficiency but this depends on the SUCs ability to enter into complicated financial agreements. The study by Pradhan et al. (2021) provides link between stakeholders' perceptions financial policies and infrastructure projects showing the contribution of financial inclusion to economic development because this enables wider access to finance valuable infrastructure initiatives, thus, the same rules could be used to evaluate how tuition and other fees revenue contribute in financing infrastructure upgrades. This study is crucial since stakeholders like students, faculty and general public assess implementation of infrastructure projects by finding how transparent are the financial management practices, thereby, making the information be used to make comparisons to better understand how stakeholders perceive utilization of revenue generated for infrastructure development with respect to transparency. Irshad et al. (2022) on their study on how stakeholders include public officials, leaders and the general public view infrastructure expenditures which asserts that public support in infrastructure projects can elevate when the benefits

are clearly conveyed thereby accelerating economic growth. Thought the study highlights information on the infrastructure valuable role it plays in economic growth, its limitations regarding generalizability, methodological and point of view needs further study although it displays that infrastructure investments and economic growth are positively correlated. By addressing these criticisms could result in more thorough understanding of how infrastructure development can be used in order to drive economic growth since infrastructure may have an impact on education performance. Internally generated income is more supportive funding for capital projects than external funding according to the findings of the empirical study conducted by Abdulkarim et al. (2023) which usually affected by inefficiencies and bureaucratic obstacles and showed that areas with more internally generated revenue typically had better infrastructure development results, thus, emphasizes the importance of enhancing local revenue structures to guarantee sustainable development. The study shows a strong relationship between capital expenditures and internally generated income (IGI) which indicates the pattern of revenue and expenditure in Northeastern Nigeria, however, further study is suggested to widen the scope and inclusion of qualitative viewpoints for more thorough evaluation. According to the study of Indira and Chandrasekaran (2023) which stress the challenges that could impede effective infrastructure development like delayed projects implementation, insufficient funds and legal restrictions emphasizing that sustained economic growth requires well-developed infrastructure, the development of infrastructure has been essential to economic development of India especially in promoting urbanization, enhancing trade and access to services. Though the Indian context shows how revenue is used to fund infrastructure development and this focuses on urban settings, thus, further study be done for the perceptions of stakeholders on infrastructure initiatives in the university settings to include middle managers like directors and section heads. Relative to the study of Wang et al (2024) where the residents are more satisfied whey they actively participate in green-blue spaces particularly in places where access is limited. The perceptions that infrastructure investments like new building or renovated facilities could be connected to how accessible and advantageous these developments are to various user groups, this may not apply to other kinds of infrastructure like educational facilities as this concentrates on urban green-blue spaces. While this finding is useful in evaluating generated income usage for infrastructure, further study may be done to assess stakeholders' responses in the university setting especially how they perceive the tuition and related fees support infrastructure developments.

1.7.4 Financial Policy Implementation. By looking at various institutions, the Gabriel et al. (2020) gain significant understanding into how financial policies are applied and how they affect resource allocation procedures concluding that transparent financial procedures can improve budget allocation and resource management, thus, transparency promotes confidence among stakeholders to include funding agencies, teachers and students to facilitate better resource allocation. Organizations that aspire to enhance their financial management should give top priority to transparent processes because doing so can help improve the standard of education according to the study. There is a need for further study with respect to the design and methods to give room for improvement though this study shows how critical transparency is to effective resource management, and also more thorough suggestions to improve financial procedures in higher education by employing varied sample and mixed techniques in gathering data. According to Llanes and Santos (2020), the need for SUCs to widen their internally revenue generation from tuition and other school fees and other institutional resources to achieve long-term infrastructure growth is becoming more important though government funding remains vital for infrastructure projects. Though government support can be augmented by properly allocating tuition-generated income particularly for capital expansion, the timely implementation of project execution can only be improved with sound financial management techniques especially those that ensure accountability and transparency. The study mostly concentrates on financial concerns without thoroughly examining the results, thus, further evaluation on the non-financial elements like administrative capability or project management quality may also be done to identify its impact on infrastructure outcomes. Tolbe (2020) conducted a local study titled "Management Practices and Economic Benefits of the Income Generating Projects of the State Universities and Colleges". This study is related to the present study in terms determination of the level of practices of the State Universities and Colleges in Region I in the management and operation of their Income-Generating Projects (IGPs) and assessment of the economic benefits derived from their IGPs along employee benefits, generation of employment, improvement of school facilities, and project expansion. While the study examined the financial management and economic benefits of Income-Generating Projects, further study is needed to address the gap by evaluating financial transparency which is vital for assuring effective income utilization in the context of different region, and examining the relationships of the involved variables. The concentration of the study of Garcia (2021) is the effect of DBM National Budget Circular (NBC) No. 583 on financial operations and accountability as well as how it improves financial management and resource allocation in certain organization, wherein some SUCs modified the rules to suit their operational environments which improved resource allocation and budget planning but others however, had difficulty complying since they were unfamiliar with its terms and failed to get enough financial management training. Nevertheless, it is proposed that though NBC 583 may improve financial accountability and efficiency, since the effects may vary depending on how well each institution is able to apply the rules, further study should be done to determine the effect of this to capital expenditures of the institution. Government audits are essential to guarantee that SUCs uphold a high adherence to financial rules and regulations according to Ramos (2021), thus, the study looks at how audits may disclose inefficient expenditure, bottlenecks in budget allocation and recommendations for better financial management, highlighting the value of audits in fostering accountability, transparency and responsible financial management in higher education institutions. Moreover, organizations with effective internal auditing systems resulted to efficient utilization of funds particularly in areas like educational

resources, staff perks and infrastructure development, emphasizing that regular audits can improve financial discipline since when audits results are communicated, institutions are more likely to take corrective action. However, though the study stresses the value of audits in fostering financial responsibility and transparency in SUCs, this might be improved by incorporating qualitative data to support the quantitative results of the study.

1.7.5 Challenges. The study of Mendoza (2020) focuses on how different levels of government subsidy affect these institutions' operational effectiveness and financial transparency especially with regard to spending priorities, revenue generation and resource allocation, and thus, investigates how government budget allocation affects Philippine SUCs' financial management procedures, and due to the limited government funding support, SUCs are frequently compelled to put operating costs above infrastructure development which resulted to unequal resource use. Moreover, many SUCs experience operational inefficiencies despite government funding support which indicates that financial policies should be consistent with institutional objectives for development growth. Hence, understanding the financial challenges that SUCs encounter especially when balancing government subsidy and internally generated income is made possible by Mendoza, however, future studies may be conducted by taking into account mixed-method approach to address the complicated financial dynamics within SUCs. According to Garcia and Perez (2021), the investment and policy focus should be directed toward sustainable infrastructure development since this is essential to increase the quality of education and overall performance in SUCs, and although there are many chances for Philippine SUCs to construct sustainable infrastructure like by utilizing government funds, collaborating more with private sector and implementing sustainable practices, there are still plenty of challenges to be tackled which includes lack of funds, technical know-how and bureaucratic issues, as well as limited ability of SUCs to successfully plan and carry out sustainable projects. Nevertheless, a more comprehensive study is needed to address the pressing issues like enhancement of more transparent policies. According to Santos and Reig (2022), even though revenue diversification necessitates careful financial management and strategic planning, this can reduce reliance on government support and increased capacity for infrastructure projects and better sustainability are correlated with the ability to generate additional income from various sources, thus, this presents both a challenge and opportunity for universities as they must weigh the advantages of new revenue sources like private partnership and commercialization of research outputs against their reliance on conventional revenue sources. However, the existence of institutional and bureaucratic barriers preventing many public universities from implementing these mechanisms are quite similar to the present study by looking into the financial transparency and infrastructure spending of tuition fees in SUCs Philippines and thus, relevant to the infrastructure development challenges, financial management and transparency showing certain possible ways to increase revenue sources to mitigate the budgetary constraints. Therefore, additional research is required to better understand specific aspects of financial transparency that may influence income use and infrastructure provision within education. Barlis (2023) believes that proper budgetary monitoring and auditing which had enhanced financial accountability and transparency and concluded that the effectiveness of congregation in dealing with financial challenges revolves around effective financial management practices. And those systems are used to identify and lessen financial risks especially in financial internal audits, so effective resource management by the congregation was also linked to their ability to establish oversight systems such as financial checks and balances to ensure that money was spent wisely. Though the study showed the need of internal controls and financial management in solving the issues, more research one is the need to expand it and more validated methodology to the relevance outside of the religious groups.

1.8 Synthesis

Similar to the issues addressed in this work with respect to financial transparency in the income utilization of SUCs, some papers discussed financial management and resource allocation of schools. Abellon et al. (2020) analyzed how special program financing and the Tertiary Education Subsidy are budgeted across Philippine educational institutions. As SUC was established not only to make the most efficient use of resources for infrastructure, but to increase transparency, this research underlines the importance of such policy to follow their ultimate objectives and raise concerns about fund handling. Unlike SUCs that depend on Internally-Generated Income (IGI), this method shifts emphasis on multiple funding mechanisms as opposed to just the amount of money the institution earns.

The significance of effective and transparent management of resources in the educational institutions is pointed out according to several studies (Espiritu, 2020; Miranda & Perez, 2021; Llanes & Santos, 2020). These results contribute to the work of SUCs to strengthen their financial management in improving transparency, accountability, and organizational effectiveness in the long run. These findings add strength to the observations reported in these studies.

Budget delays and financial constraints are addressed by Espiritu (2020) and Miranda and Perez (2021) however, the current study goes further by providing a deeper step by echoing policy recommendations that should be directed to the particular income generating dynamics of SUCs and not of financial management problems.

Finally, research on how financial policies affect infrastructure and education quality was conducted by Al-Samarrai (2020) and UNESCO (2021) which are important in the attempt of SUCs to use generated funds to develop infrastructure. Differences in context can be noted between SUCs-related research – searching for solutions that are suitable to the institutional and regional conditions in the Philippines, versus Al-Samarrai's study across the world. Specifically proposing practice-based policy upgrades, which directly respond to the different revenue sources and institutional requirements of SUCs, this study intends to fill the gap the literature has discovered therefore, contribute to the knowledge domain on financial management of SUCs Philippines.

1.9 Theoretical Framework

The generated income utilization in public higher education institutions especially in SUCs, is crucial in strengthening financial transparency practices and infrastructure development. Alongside, the study applies the principles four (4) theories in addressing the research questions. These are the Resource-Based View (RBV) Theory, Agency Theory, Financial Accountability Theory, and the Public Financial Management (PFM) Theory. These theories provide a foundation for analyzing the effect of financial transparency on income utilization, and infrastructure development within the context of SUCs in Region II.

The RBV theory upholds income utilization as one of the funding sources in attaining the agency's competitive advantage and infrastructure development within the agency (Barney & Mackey, 2021). This theory supports that an institution's ability to sustain its competitive advantage depends on its effective utilization of internal resources, and the financial resources, transparency practices, and infrastructure investments are considered strategic assets.

Agency theory aligns with how financial transparency and accountability lessen the issues regarding financial information, thus, gaining the trust of stakeholders. This theory emphasizes the principal-agent relationship, especially in delegating financial management functions (Hendrastuti & Harahap, 2023). Applying to SUCs, the principals are the government agencies as the oversight agencies, whereas the agents refer to the SUC administrators, emphasizing accountability and transparency in financial management. This theory supports the assessment of financial reporting quality, disclosure practices, and accessibility, as well as how SUCs allocate and utilize funds, thus, enhances institutional trust, resulting to better infrastructure development.

In contrast, Financial Accountability theory highlights the importance to enhance accountability to increase financial transparency, income utilization and trust (Khan & Khandaker, 2021). As the paper also investigates income utilization in terms of spending expenditure, fund utilization efficiency, and financial accountability in order to ensure funds towards sustainable infrastructure growth, this theory is relevant to the re-bolstering of the legitimacy of the value of responsibility and transparency in the administration of public funds, and a tool for the establishment of a yardstick upon whose pedestal the timing, quality, and sustainability of infrastructure projects can be viewed. Therefore, exploring the impact between financial transparency toward infrastructure development in order to find the gap and inefficient of fund management.

In the end, PFM theory emphasizes the significance of accountable financial procedures to help meet the development goals and goals of the agency. This theory inspired a base for the analysis on how important are the budgeting, financial planning and use practices in the public sphere (Allen et al., 2020). If found that financial transparency has effect on use of income and infrastructure or otherwise, then these concept surfaces to guide good financial management principles. Therefore, improved financial policies is recommended to effect financial transparency, accountability and infrastructure sustainability in SUCs from the results of this study.

Combining the foregoing theories gives a foundation in analyzing the effect of financial transparency on optimizing income utilization and infrastructure development in SUCs, and the expected output is a set of policy recommendations that will enhance financial management practices ensuring institutional growth and development.

1.10 Conceptual Framework

Figure 1 shows the research paradigm based on the principles of Resourced-Based View (RBV) theory, Agency theory, Financial Accountability theory and Public Financial Management (PFM) theory.

The study assessed the perceptions of respondents on financial transparency, income utilization, and infrastructure development in SUCs Region II. It also aims to determine the effect of financial transparency on income utilization, and infrastructure development and thus, enable to propose financial policy.

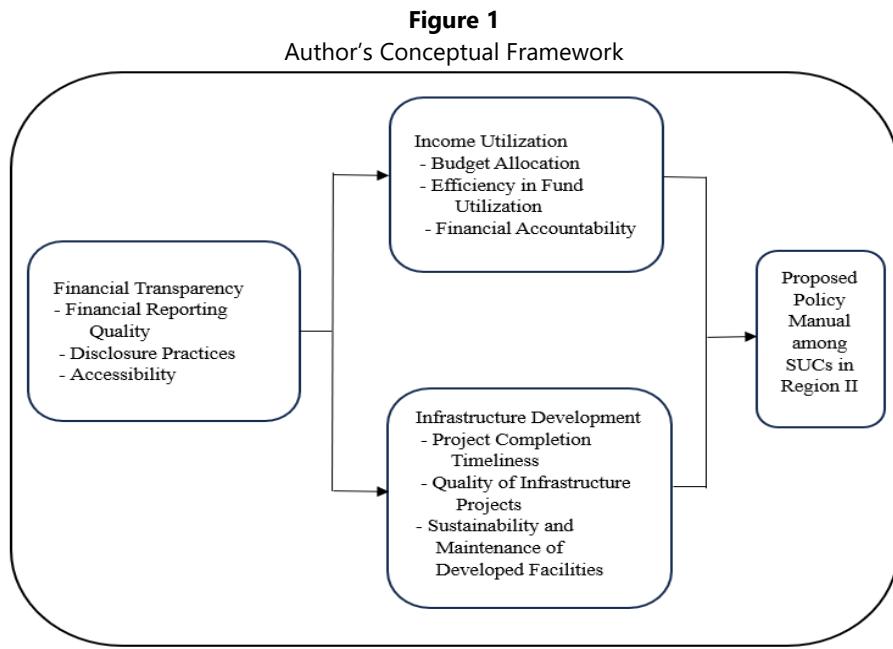
The framework rotates among the three (3) variables, the financial transparency as the independent variable, the income utilization and infrastructure development as dependent variables.

The financial transparency component consists of three elements: financial reporting quality, disclosure practices, and accessibility, which measure how well financial information is presented and made available to stakeholders. And the proposed financial transparency is expected to improve the decision-making process and utilization.

The income utilization component determines how financial resources are allocated and managed, focusing on budget allocation, efficiency in fund utilization, and financial accountability, which ensures that proper utilization of available resources is maximized to support infrastructure projects.

The infrastructure development component includes project completion timeliness, the quality of infrastructure projects, and the sustainability and maintenance of developed facilities. These indicators reflect the effectiveness of financial practices assuring that infrastructure projects are completed on time, meet quality standards, and are maintained for long-term usage.

The framework demonstrates that improved financial transparency directly influences the generated income utilization, and affects infrastructure development. And thus, the expected outcome is the proposed financial policy that will improve financial management and infrastructure growth in SUCs ensuring accountability and sustainability.



2. METHODS

2.1 Research Design

To answer the objectives and hypothesis, the study employed descriptive and inferential research design using mixed method which entail quantitative approach of data gathering and management, and treatment, and was substantiated through qualitative data.

The study utilized descriptive research design since it aims to explore the level of financial transparency, extent of income utilization and infrastructure development of SUCs Region II. The goal of descriptive research is to precisely and methodically explain a population, situation, or phenomenon (Sileyew, 2020). According to him, this can answer what, where, when, and how questions, but not why questions. Also, quantitative approach was employed as supported by Apuke (2020) stating that one of the characteristics of quantitative approach is the emphasis on measurements which is the use of statistical analysis for the treatments of data collected through questionnaires. Additionally, qualitative method was utilized as this descriptive approach is highly flexible and allows the collection of data that directly answers practical questions (Sutton & Austin, 2021). It is particularly useful for policy-related studies, where the aim is to gather comprehensive, participant-driven insights.

The study primarily relied on primary data which were collected through structured questionnaires with top and middle managers, and fiscal administrators and were substantiated using open-ended question to gather their insights on financial transparency, income utilization, and infrastructure development. Furthermore, financial reports like Financial Accountability Reports (FAR) No. 2, 2-A and 5 that would substantiate transparency, utilization, and infrastructure development were obtained to further support the data. FY 2024 FAR No. 2 and FAR No. 2-A reports display the actual approved budget, utilizations and disbursements, and FAR No. 5 shows the report of revenue and other receipts. In addition, data from DBM official website specifically from Budget of Expenditures and Sources of Financing (BESF) for FY 2024 actual data (in summary) on internally generated fund from tuition and other related fees, and infrastructure development expenditures were downloaded.

Descriptive statistics like frequency counts and percentages were used to categorize data under demographic profile as to gender and years of stay in SUC. With respect to the respondents' answers regarding financial transparency, income utilization, and infrastructure development, the study applied weighted mean and standard deviation to ascertain respondents' overall assessment and further supported through financial reports like FY 2024 FAR No. 2 and FAR No. 2-A, and inclusion of open-ended question in the survey questionnaire to support the results from the close-ended questions. And for the inferential analysis, multiple linear regression was utilized to know if financial transparency predicts income utilization and infrastructure development.

Based on the findings, gaps and challenges in financial transparency, income utilization, and infrastructure development were identified through open-ended questions for the recommendations proposed and qualitative interpretation of findings. The results were used as guide in the formulation of proposed policies aimed at enhancing financial transparency practices to optimize income utilization and support infrastructure development.

Descriptive design allows for an exploration of current practices and stakeholder perceptions while ensuring that the proposed policies are rooted through quantitative data and were substantiated using open-ended question included in the survey questionnaire. Thus, this provides a robust framework to answer the research questions systematically and effectively.

2.2 Data Management

The researcher allotted time and effort in progressing the survey. To enable to systematically collect the data, the researcher seek approval from the Dean of Graduate Studies; and upon recommendation by the research adviser, secure Ethical Clearance from the University Ethics Review Committee (UERC). Upon approval from UERC, the instrument was subjected to pilot testing and administered to 30 respondents who were not covered by the sample. After the reliability test, the researcher identified the target respondents, and the instrument were made accessible to the respondents via electronic google forms and send the link through messenger/email of the respondents considering the utmost confidentiality of whatever information given.

The study ensured a systematic approach to data management by categorizing and handling data based on their source, methods, and form.

Primary data was utilized for this study. Primary data include firsthand information gathered directly from selected respondents through structured survey questionnaires incorporating an open-ended question for substantiation. The focus is their perceptions of financial transparency, income utilization, and infrastructure development. Furthermore, financial accountability reports specific to internally generated income from tuition and other related fee collections that would support the variables under study was also obtained to support the data collected through the survey.

To obtain a comprehensive grasp of the subject, both quantitative surveys and qualitative data was utilized. In gathering quantifiable information related to financial transparency, income utilization, and infrastructure development, structured questionnaires were used. These quantitative data are analyzed using statistical methods. An open-ended question was included in the last part of the survey questionnaire for qualitative data about suggestions pertaining to financial policies. To support the results of the survey, financial reports were obtained through the SUC official website and this was done to confirm the transparency accessibility of the SUCs financial reports.

The collected data was organized into numerical, textual and categorical data. Responses in the surveys was tabulated and analyzed statistically. Qualitative responses from open-ended survey question were analyzed to identify the themes and areas for improvement. Perceptions on financial transparency, income utilization, and infrastructure development were categorized for descriptive analysis.

Furthermore, the reliability, accuracy, and integrity of the data were ensured to analyze utilization of generated income and propose financial policy.

2.3 Sampling Design

To warrant the reliability of data analysis, criterion sampling approach was employed.

2.3.1 Sample Population

Study's population consists of institutional personnel within State Universities and Colleges (SUCs) Region II who are directly involved in financial transparency, income utilization, and infrastructure development. To have a comprehensive view of budget handling within the selected SUCS, the roles of key personnel under governance and oversight levels are considered, such as the Board of Regents (BOR), University/SUC President, and Internal Audit Unit Head, aside from the operational level managers - the Directors/Unit Heads from Budget and Accounting, and Planning & Development and General Services.

Criterion sampling, a subtype of purposive sampling, was adopted in this study to identify respondents who possess the necessary qualifications, roles, and knowledge relevant to the study's objectives. BOR, SUC President, Internal Audit Head, and Directors and Section/Unit Heads of the Budget and Accounting, Planning & Development, and General Services Offices in selected SUCs were specifically chosen based on their direct involvement in financial transparency, income utilization and infrastructure development, to ensure generalizability results. Respondents were purposely selected based on the following criteria: hold managerial, supervisory, or governance role directly related to financial reporting, budget allocation, income utilization, or infrastructure planning and development; actively involved in the approval, oversight, or implementation and monitoring of financial and infrastructure projects, programs and policies. Also, to make sure that only people who are willing to participate throughout the data collection period were included, criterion approach was taken into consideration during the selection process.

2.3.2 Respondents

The target respondents were specifically chosen according to their positions and significance to the research question. Target respondents comprise of three levels based on the inclusion criteria: (1) Governance Level – a representative from the Board of Regents (BOR) and the University/SUC President, who have the power to make decisions about financial policies and budget approvals; (2) Oversight Level – the Internal Audit Unit Directors/Heads, who keep an eye on how money is spent and give an independent financial evaluation; and (3) Operational Level – Directors and section/unit heads of the Budget and Accounting Offices and the Planning & Development and General Services Offices, who directly carry-out and monitor budget allocations, financial reporting, and infrastructure projects.

These respondents were selected due to their expertise and direct access to the factors under study. Their viewpoints are crucial for understanding the perception of financial transparency and their impact on revenue utilization and infrastructure advancement.

The number of respondents in this study is shown in Table 1.

Table 1
Target Respondents of the Study

Category	Sample Size					
	<u>BSC</u>	<u>CSU</u>	<u>ISU</u>	<u>NVSU</u>	<u>QSU</u>	<u>Total</u>
A. BOR, SUC President, Internal Audit, Budget and Accounting						
Governance Level						
Board of Regents (Representative)	1	1	1	1	1	5
University/SUC President	1	1	1	1	1	5
Oversight Level						
Internal Audit Director/Head	1	1	1	1	1	5
Operational Level (Finance - Budget and Accounting)						
Director - Finance	1	1	1	1	1	5
Section/Unit Heads	1	17	17	3	5	43
Sub-total	5	21	21	7	9	63
B. Planning/Development and General Services						
Operational Level						
Director/s	1	1	1	1	1	5
Section/Unit Heads	1	17	17	3	5	43
Sub-total	2	18	18	4	6	48
Total	7	39	39	11	15	111

The total number of respondents as shown above is 111: 63 for the first type of survey questionnaire – BOR, SUC President, Internal Audit, Budget and Accounting; and 48 for the second type – Planning/Development and General Services. The figure is determined by applying the criterion sampling method wherein eligible personnel across the identified governance, oversight, and operational levels are included; thus, the methodology ensures that the insights of relevant stakeholders in financial decision-making, monitoring, and implementation are adequately represented in the study.

The characteristics of the State Universities and Colleges (SUCs) in Region II that participated in the study are presented on Table 4. It offers some insights on their SUC Level, campus count and establishment year and shows the varying profiles of these institutions in relation to size, level and establishment.

Table 2
Profile of State Universities and Colleges (SUCs) Region II

SUC	SUC Level	Number of Campuses	Year Established
Batanes State College	I	1	2004
Cagayan State University	III	9	1978
Isabela State University	IV	9	1978
Nueva Vizcaya State University	IV	2	2004
Quirino State University	II	3	2012

Batanes State College (BSC) is SUC Level I with one campus and established in 2004. However, Cagayan State University (CSU) and Isabela State University (ISU) were established in 1978 with Level-III and IV status, respectively, having the highest number of campuses at nine (9), each of which also illustrates broadness in service area and coverage.

Furthermore, Nueva Vizcaya State University (NVSU) with two (2) campuses, established in 2004 is SUC Level IV. On the other hand, Level II QSU (Quirino State University) which was established in 2012 and has three (3) campuses is perceived to be an expanding institution in the educational arena of the region.

Table 3
Demographic Profile of Respondents in terms of Gender

Gender	Frequency	Percent (%)
Male	66	59.46
Female	43	38.74
Prefer not to say	2	1.80
Total	111	100.00

Table 3 shows the demographic characteristic of the 111 participants by sex. These data indicate that 59.46% of the total number of participants is comprised of male while only 38.74% is female, depicting an overrepresentation of male populace among the surveyed SUCs. Only 1.80% participants of the whole small sample size chose "Prefer not to answer" which shows gender privacy commitment.

The frequencies show that there are a statistically reliable number of male and female personnel who were requested to respond in the study which means that both male and female voices matter in the aspects such as financial transparency, use of income, and infrastructure development within SUCs. The response of the 'gender not stated' in some cases is a reflection on the commitment to adhering to ethical considerations and safeguarding participants.

Altogether, the gender composition gives a balanced basis in analyzing the level of financial management practices across different demographic groups within the SUC system.

Table 4
Demographic Profile of Respondents in terms of Years of Stay in the SUC

Years of Stay in the SUC	Frequency	Percent (%)
1-10 years	64	57.66
11-20 years	26	23.42
21-30 years	16	14.41
31 years and above	5	4.50
Total	111	100.00

Table 4 presents demographic profile of the respondents in terms of their years of stay in the SUC. Majority of the respondents (57.66%) have been with their respective institutions for 1-10 years which indicates that most participants are relatively new to the SUC system but already possess adequate experience to provide meaningful insights on financial transparency, income utilization, and infrastructure development. Relatively, this large proportion of new personnel may be attributed to the creation of new positions under Revised Organization and Staffing Standards (OSS) for SUCs – Phase I per DBM National Budget Circular No. 589 dated May 25, 2022, which to the hiring of a significant number of administrative and support staff in recent years.

Respondents with 11-20 years of service comprise 23.42%, while those who have been in the SUC for 21-30 years account 14.41%. These clusters contain older workers who might have gained significant experiences with financial and administrative procedures, such that they could provide deep knowledge. Furthermore, only 4.50% have been working more than 31 years which is also dataset wise evidence of the lowest represented group regarding employees with long job tenures.

In general, the frequency distributions indicate a good mixture of respondents with varying numbers of years' experience which enable both those newly appointed and more experienced employees to have their views considered. This diversity adds to the expansiveness of the study in order to draw insights from wide range of experiences and perspectives that is beneficial for improving transparency on use of finances, utilization of income and infrastructure development in SUCs.

2.3.3 Research Instrument

Structured survey questionnaire served as primary tool for gathering data using 4-point Likert scale, and an open-ended question was included to confirm the results from closed-ended questions as the supporting method to address the particular study objectives.

The questionnaire was developed in two types: (1) BOR, SUC President, Internal Audit, Budget and Accounting Offices; and (2) Planning & Development and General Services Offices. Each type of the instrument was designed to assess their insights on financial transparency, income utilization, and infrastructure development and aligned with the respective roles and responsibilities of the target respondents. And this consists of both quantitative and qualitative components which is in line with the study's mixed method approach.

For the BOR, SUC President, Internal Audit, Budget and Accounting Offices as shown in appendix A, this focused on the financial transparency and income utilization with the following parts: Part I – SUC Profile used to identify the institutional characteristics like SUC name, level, campus count; Part II – Respondent's Profile which used to gather the background data on the respondent's gender and years of stay in the SUC; Part III deals with Perceived Level of Financial Transparency; Part IV focuses on Assessment of Income Utilization; and Part V - Open-Ended Question which used to solicit qualitative inputs on recommendations for enhancing financial policies.

For Planning & Development and General Services Offices which is shown in appendix B, this was designed to assess infrastructure development of the SUC, and contains the following: Part I – SUC Profile; Part II – Respondent's Profile; Part III is regarding the Infrastructure Development; and Part IV – Open-Ended Question which seek suggestions for improving financial policies related to infrastructure development.

Survey questionnaire was custom-designed to capture data on financial transparency, income utilization, and infrastructure development. It is structured to be user-friendly, logically sequenced, and easy for respondents to answer. Questions were tied to research's statements of problem to assure relevance and comprehensiveness.

The survey instrument had undergone face and content validation by a panel of experts to ensure relevance, clarity and adequacy of the items. After the receipt of the ethical clearance from the University Ethics Review Committee (UERC), a pilot test was then conducted to 30 respondents who were not included in the final sample. Internal consistency of the items was validated by Cronbach's Alpha to confirm reliability and inter-item consistency. According to Taherdoost (2020), Cronbach's Alpha value of 0.70 or above is considered acceptable in social science research, to validate the instrument's reliability. Items that fall below this threshold was revised in order to improve reliability.

In order to ensure compliance with institutional and national ethical standards and to protect the rights and welfare of all participants, pilot testing and any form of data collection commenced only after the issuance of Ethical Clearance from the appropriate ethics review board, the University Ethics Review Committee (UERC).

2.3.4 Control Procedure

In terms of validity of the data, the questionnaire was carefully reviewed by 4 professional experts to ensure that the instrument geared towards gathering responses to the statements of the problem formulated, while pre-test was administered to 30 respondents in higher education administration, who were not part of the study sample to ensure that the content is clear and understandable, the flow and sequencing of questions are appropriate and reliable.

Cronbach's alpha (α) coefficient was employed to measure reliability of information gathered, and SPSS was used in analyzing the data to guarantee statistical integrity. Results showed Cronbach's alpha value of 0.8423 on the level of financial transparency and income utilization which is an indicative of a good reliability, and 0.9468 on infrastructure development demonstrating an excellent reliability. The coefficient ranges from 0 to 1, with < 0.60 typically denotes poor / unacceptable reliability, 0.60-0.69 implies questionable reliability, 0.70 – 0.79 generally demonstrates acceptable reliability level, 0.80 – 0.89 indicates good reliability and 0.90 or greater an excellent level. A 0.70 or higher Cronbach's Alpha value is generally considered acceptable for social sciences research which indicates good internal consistency among the items measuring the same construct (Mohajan, 2020).

2.4 Statistical Treatment

In analyzing the data collected, the following tools were employed:

Frequency Distribution. This was used to present the categorical data to describe the respondents' profile such as the gender and years of stay in SUC. It is a visual representation of how often a value occurs in a dataset and is helpful in organizing and presenting data for easier interpretation.

Percentage (%). This statistical treatment determines the distribution of data categorically grouped according to respondents' profile.

Weighted Mean. This is useful when giving levels of importance or weight to certain responses within the assessment wherein the values of the responses and frequency or weight assigned to each response are considered making it a refined measure of central tendency. It is used to assess responses on sub-variables of the three main variables, thus, providing more accurate representation of the perceptions by considering for the response distribution.

Ranking. It is the assigning of ordinal numbers to items from highest to lowest based on the weighted mean value to improve the interpretability of data.

Standard Deviation is used to gauge how spread out the observation is derived from the average.

Multiple Linear Regression is applied to explore the effect of the three sub-variables of financial transparency – the financial reporting quality, disclosure practices, and accessibility on income utilization and infrastructure development using SPSS software.

For statement of the problem number 1, responses on financial transparency weighted mean, standard deviation and ranking were employed to determine the overall respondents' perception.

As to statement of the problem number 2, weighted mean, standard deviation and ranking were utilized to analyze the respondents' assessment on income utilization.

With respect to status of infrastructure development for statement of the problem 3, data were also evaluated using descriptive statistics, such as weighted mean, standard deviation and ranking, to summarize extent of development.

To determine the significant effect of financial transparency on income utilization and infrastructure development, the study employed multiple linear regression analysis using survey ratings under SOPs 1-3.

For problem statement number 5 which deals with formulation of proposed policies aimed at enhancing financial practices to support infrastructure development and ensure transparency, through identification of the gaps and challenges in financial transparency and income utilization, qualitative data were gathered through open-ended survey question or qualitative inputs to identify common themes and insights.

Table 5
4-point Likert Scale

Numerical Value	Weighted Mean Range	Adjectival Equivalent
4	3.26 - 4.00	Strongly Agree (SA)
3	2.51 - 3.25	Agree (A)
2	1.76 - 2.50	Disagree (D)
1	1.00 - 1.75	Strongly Disagree (SD)

Note. Adapted from *Quantitative Research: Methods and Designs for the Social Sciences and Education* (p. 105), by A. B. De Guzman and E. A. Tan, 2020. Copyright 2020 by C&E Publishing.

Table 6
Quantitative and Qualitative Equivalents

Rating	Range	Verbal Interpretation	Adjectival Rating		
			<u>Level of Financial Transparency</u>	<u>Assessment on Income Utilization</u>	<u>Status of Infrastructure Development</u>
4	3.26 - 4.00	Strongly Agree (SA)	Very High (VH)	Very Efficient (VE)	Very Developed (VD)
3	2.51 - 3.25	Agree (A)	High (H)	Efficient (E)	Developed (D)
2	1.76 - 2.50	Disagree (D)	Low (L)	Inefficient (I)	Less Developed (LD)
1	1.00 - 1.75	Strongly Disagree (SD)	Very Low (VL)	Very Inefficient (VI)	Not Developed (ND)

2.5 Ethical Considerations

Because these are so crucial in any research study, the researcher followed ethical principles to assure integrity, fairness, and respect for all participants throughout the data collection process.

2.5.1 Conflict of Interest

The researcher reveals no conflict of interest. There were no financial, institutional, or personal relationships that could have influenced the conduct or results of this study.

2.5.2 Privacy and Confidentiality

Personal and institutional information obtained throughout the study was treated strictly confidential. Identifiable information was anonymized; survey responses were coded; and data were stored securely in password-protected digital files and accessible only by the researcher solely for academic purposes. To further protect the privacy of the respondents, the confidentiality of participants' responses and identities were protected by providing them with the opportunity to respond anonymously.

2.5.3 Informed Consent Process

Participation by the respondents in the survey was voluntary and informed consent is sought before collecting information. Respondents were provided electronic copy of Informed Consent Form (ICF) through Google form, citing the purpose of the study, procedures, risks, and benefits, and may withdraw at any time without consequence. The confidentiality and ethical guidelines were upheld throughout the process.

2.5.4 Vulnerability and Possible Risk

While no research is entirely without risk, this study is expected to pose only minimal or low risk to participants and may experience slight or psychological discomfort like fatigue from answering survey questions or mild emotional discomfort to certain items. These risks are considered negligible and manageable. Nevertheless, in order to protect the well-being of the participants, appropriate safeguards have been adopted. The study is structured to reduce probable risks, thus, avoiding vulnerability and too much pressure.

2.5.5 Recruitment

To qualify as a survey participant in this study, one has to agree to answer the survey questions provided and have a managerial, supervisory, or governance involvement in some aspect of financial transparency.

The sampling of study respondents was carried out on a Criterion sampling basis to make sure that qualified people with applicable expertise are chosen for the survey. All respondents have the right to know that their participation won't be used against them in any way. If case there are questions about the survey, contact information shall be provided.

2.5.6 Assent

There were no minors in the survey. The study subjects were adults who hold official positions in SUCs Region II to ensure that the participants can legally and ethically make informed consent. They were provided an Informed Consent Form (ICF) before accomplishing the survey to ensure voluntary participation.

2.5.7 Benefits

Proposed financial policies for institutional growth will be gained from this study which indirectly will be for the welfare of the participants and the community as well; hence, respondents are not expected to gain personal benefits directly.

2.5.8 Compensation, Incentives, or Reimbursements

No monetary reward, incentives, and/or compensation involved for participating in this study. Participation was entirely voluntary. The participants were not be paid or reimbursed; however, reimbursable expenses for attending (e.g. travel costs), if necessary, may be reimbursed.

2.5.9 Community Consideration

The findings and recommendations from the study will be an instrument to develop a more transparent institutional growth strategy, wherein the results will be shared not only to SUCs Region II but to the entire industry of education.

2.5.10 Expected Output

Improved financial policy framework is the expected result of this study, and it will contribute to increase the financial transparency of SUCs, enhance efficiency in the use of generated income and upgrade infrastructure development.

2.5.11 Collaborative Study Terms of Reference

The study shall be conducted in collaboration with the five SUCs in Region II to ensure mutual responsibility and ethical standards are observed and this shall include the BOR-representative, University/SUC President, Internal Audit Director/Head, and Directors and Section/Unit Heads of the Budget and Accounting, and Planning & Development and General Services Offices.

Privacy will be uppermost and information obtained will be kept confidential and participation will be voluntary. No personal or institutional data will be shared without consent and the results will be reported in the aggregate.

The proponent will be in coordination with the participating SUCs and obtain approvals to contact respondents and to access materials needed for the study. Data collection will be in compliance with institutional and ethical guidelines. And findings and recommendations from the research will be communicated to the relevant systems for possible adoption, if necessary.

This will be consistent with ethical standards for academic research including data integrity, and respect for participants. And it will be conducted under the guidance of a thesis adviser and approved by the ethics committee when needed.

Based on the above ethical issues, this study adhered to upholding the rights of the participants, building and enhancing trust to the research process as well as the development of reflective institution.

3. RESULTS

This chapter presents the findings derived from the gathered data as input in drawing a feedforward control chart for SUCs in Region II. Results are reported by the study variables: degree of financial transparency, use of income from tuition and other related fees including the free higher education subsidy, and physical infrastructure development in the participating SUCs.

3.1 Level of Financial Transparency

The descriptive statistics results of the perceived level of financial transparency in terms of financial reporting quality, disclosure practices, and accessibility are shown in Tables 7 to 9.

3.1.1 Financial Transparency in terms of Financial Reporting Quality

The analysis in relation to the level of financial transparency in terms of the quality of financial reporting is presented in Table 7.

Table 7
Level of Financial Transparency in terms of Financial Reporting Quality

Financial Reporting Quality (SOP 1.1)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. Financial reports are prepared accurately and free from misstatements.	3.60	0.5249	Very High	4
2. Financial reports comply with COA, DBM, and CHED policies, rules and regulations.	3.81	0.3958	Very High	1
3. Financial reports are submitted on time.	3.60	0.5831	Very High	4
4. The financial reports clearly present income sources and expenditures.	3.75	0.5070	Very High	2
5. Financial statements are regularly reviewed and updated.	3.73	0.4821	Very High	3
Overall	3.70	0.3933	Very High	

The results suggest that all metrics were rated as very high with an overall weighted mean of 3.70 ($SD = 0.3933$), demonstrating strong compliance with established financial standards and regulatory requirements. These indicate that respondents believe that generally, SUCs in Region II display a high level of accountability and adherence to government financial regulations.

Compliance to COA, DBM and CHED policies ($WM = 3.81$, $SD = 0.3958$) registered the highest weighted mean score across all indicators and ranked first, indicating strong commitment on regulatory compliance in accord with the national government requirements for public higher education. Relatively, SUC B got the highest mean score of 3.90 described as "Very High" for this indicator emphasizing its strong internal controls and compliance mechanisms. This finding is consistent with Soriano's (2022) claim that legislative action such as R.A. 8292 further strengthened the requirements for transparency and accountability of SUCs. The next high mean score, however, in clarity of sources of income and expenditures ($WM = 3.75$, $SD = 0.5070$) complements Ngare's (2023) study that transparent reporting enhances budget utilization and promotes sustainable resource management in public higher education institutions.

Nevertheless, the lowest rated indicators though still described as relatively very high were "Financial reports are prepared accurately and free from misstatements" ($WM = 3.60$, $SD = 0.5249$) with SUC A's weighted mean score of 3.20 though still described as "High" as the lowest among the SUCs in Region II, indicating possible issues on the technical staffing, workload distribution, or internal review processes; and "Financial reports are submitted on time" ($WM = 3.60$, $SD = 0.5831$), with SUC B registered the lowest mean score of 3.52 though still "Very High", implying potential administrative or logistical snags. The results reflect that while compliance is strong, operational challenges exist in report accuracy and timeliness.

Thus, the results showed an uneven implementation capacity across SUCs in Region II despite high policy compliance. Therefore, SUCs in Region II may benefit from improved control measures on their internal processes as previously pointed out by Delos Santos (2020), that internal audits improve quality of financial reporting by maintaining accurate and unambiguous spending of money.

3.1.2 Financial Transparency in terms of Disclosure Practices

Table 8 shows the level of financial transparency in terms of disclosure practices.

Table 8
Level of Financial Transparency in terms of Disclosure Practices

Disclosure Practices (SOP 1.2)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. The SUC discloses financial information to all relevant stakeholders.	3.65	0.5725	Very High	3
2. There is transparency in reporting tuition and other related fee collections, including free higher education.	3.75	0.4388	Very High	1
3. Budget allocation and spending are clearly disclosed.	3.68	0.5336	Very High	2
4. Audit findings and corrective actions are publicly disclosed.	3.43	0.6651	Very High	5
5. Procurement and bidding processes are made available for review.	3.62	0.5214	Very High	4
Overall	3.63	0.4421	Very High	

The results reveal an overall weighted mean of 3.63 ($SD = 0.4421$) which is described as very high, indicating that SUCs in Region II maintain strong disclosure practices, consistently disclose relevant financial information and display a strong commitment to openness and accountability in financial management. With highest rated disclosure indicator as ranked first, the financial information is perceived by the stakeholders as being made available and accessible with very high level of transparency in tuition-related reporting ($WM = 3.75$, $SD = 0.4388$), demonstrating strengthened emphasis by SUCs in Region II on clearly communicating tuition-related information particularly the implementation of Universal Access to Quality Tertiary Education Act. Along with this highest rated indicator, SUC D obtained the highest SUC mean score of 3.86 demonstrating its effective disclosure mechanisms and proactive communication with stakeholders. This is consistent with Villanueva & santos (2020), who found that R.A. No. 10931 required SUCs to adjust financial disclosure mechanisms due to changes in income sources, to report more clearly on income sources aside from tuition.

In addition, the strong ratings for procurement and bidding transparency ($WM = 3.62$, $SD = 0.5214$) reflect improvements in internal control systems, which are emphasized by Brenya Bonsu et al. (2023). According to their study, good leadership and strong internal controls significantly influence public-sector transparency which is reflected in the SUCs' performance.

On the other hand, the indicator - public disclosure of audit findings and corrective actions ($WM = 3.43$, $SD = 0.6651$) was the lowest-rated indicator though still within the very high descriptive level, reflective of a slightly weak area within transparency practices, which implies that while audit processes are conducted, the extent to which the findings and corrective actions are disclosed to the public is relatively less emphasized. For this indicator, SUC E registered the lowest SUC mean score of 2.89 described as only "High", portraying potential institutional constraints related to the sensitivity of audit information, or may be cautious disclosure practices, and this indicates that transparency in audit related area still requires institutional strengthening. And this gap supports the observation of Delos Santos (2020) that internal audit services in SUCs may still be limited by structural constraints.

3.1.3 Financial Transparency in terms of Accessibility

Table 9 displays the level of transparency in terms of accessibility. The table reveals an overall weighted mean of 3.50 ($SD = 0.4818$) which is described as very high, implies that the stakeholders perceive SUCs in Region II as highly accessible in providing financial information, though this dimension is ranked lowest among the three transparency sub-variables.

Table 9
Level of Financial Transparency in terms of Accessibility

Accessibility (SOP 1.3)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. Financial reports are available through multiple channels (e.g., website, bulletin board, public reports).	3.33	0.6222	Very High	5
2. Financial documents are written in a clear and understandable manner.	3.62	0.5214	Very High	1
3. Stakeholders can request financial documents when needed.	3.57	0.5879	Very High	3
4. The SUC conducts open forums or meetings regarding financial matters.	3.60	0.5831	Very High	2
5. There is an established process for stakeholders to raise financial transparency concerns.	3.37	0.7252	Very High	4
Overall	3.50	0.4818	Very High	

The highest rated indicator with respect to comprehensibility of financial documentation ($WM = 3.62$, $SD = 0.5214$) demonstrating the SUCs' efforts in assuring that financial information is presented in a manner comprehensible to both internal and external stakeholders, and this reinforces Soriano's (2022) observation that modern transparency reforms are imperative not only in terms of disclosure but using financial documentation more digestible and comprehensible as well which could be a prerequisite for future development in the emerging markets. And among the five SUCs, SUC B obtained the highest mean score of 3.76 for this indicator which displays commendable clarity in financial documentation and reporting.

The next highly rated indicators were on the conduct of open forums or meetings relating to financial matters ($WM = 3.60$, $SD = 0.5831$) and stakeholders can request needed financial documents ($WM = 3.57$, $SD = 0.5859$). This is confirmed by Brenya et al. (2023) who stipulated that leadership effectiveness is highly related to reinforcing open communication and stakeholder participation.

Nonetheless, the least rated indicator was the existence of financial reports available from varied platforms ($WM = 3.33$, $SD = 0.6222$) although remains very high category as presented in the Table, indicating that efforts should be carried out to enhance the circulation of financial reports via digital and non-digital platforms. SUC E posted the lowest mean score of 3.22 for this indicator interpreted as only "High", revealing challenges related to digital infrastructure, website maintenance, or updating system of publicly accessible financial information. This agrees with Ngare (2023) who asserted that transparency process and accessibility to financial information are essential in the management of resource and institutional viability. Cost-effectiveness and access of financial information influence the degree to which the stakeholders comprehend and influence financial governance.

The results implied that the availability of SUCs Region II financial data is acceptable, but even though accessible still needs room for improvement. Thus, this is consistent with the emerging transparency models that emphasize digital access, stakeholders' involvement and accessibility of explanatory information.

3.1.4 Summary Results of Level of Financial Transparency

Table 10 summarizes the overall level of financial transparency.

Table 10
Summary Results - Level of Financial Transparency

Financial Transparency (SOP 1)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
Financial Reporting Quality	3.70	0.3933	Very High	1
Disclosure Practices	3.63	0.4421	Very High	2
Accessibility	3.50	0.4818	Very High	3
Overall	3.61	0.3952	Very High	

The overall level of financial transparency among SUCs in Region II was very high, with an overall weighted mean of 3.61 (SD = 0.3952), demonstrating strong adherence to sound financial governance practices in terms of financial reporting quality, disclosure practices, and accessibility. Financial reporting quality (WM = 3.70, SD = 0.3933) was ranked highest among the three sub-variables, reflecting strong regulatory compliance, having SUC B as the highest SUC average weighted mean of 3.77 highlighting effectiveness of reporting mechanisms and internal controls, and SUC E as the lowest average mean score of 3.63 signifying variations in the reporting efficiency across SUCs in Region II.

Followed by disclosure practices (WM = 3.63, SD = 0.4421), with SUC D obtaining the highest average score of 3.74, and SUC E having the lowest average score of 3.38, underscoring that while financial disclosures are well institutionalized, audit related transparency remains less implemented area. And the ranked last was accessibility (WM = 3.50, SD = 0.4818) with SUC B registering highest average score of 3.64 for this indicator, and SUC D as the lowest with average weighted mean score of 3.40 pointing to limitations in dissemination platforms, digital access, and systematic public posting of financial information. Generally, these rankings reflect the trends in the related literature wherein the quality of financial reporting is strengthened by internal controls and audits according to Delos Santos (2020) and Soriano (2022). In addition, Villanueva and Santos (2020) stressed that disclosure practices are improving due to the policy-driven reforms. As supported by Ngare (2023), accessibility although strong, often lags behind reporting and disclosure in public institutions. Thus, the results display that SUCs in Region II have established robust financial transparency practices aligned with national goals of accountability and good governance; however, opportunities still remain to broaden accessibility channels and deepen audit-related disclosures.

However, results indicate that while SUCs perform well in reporting accuracy, compliance, and submission, though still very high, institutional capacity, communication practices, and dissemination mechanisms continue to influence how transparency is operationalized at the SUC level.

3.1.5 Financial Transparency Matrix: Quantitative Results Supported by Secondary and Qualitative Data

Table 11 shows the level of financial transparency matrix for the comparison of quantitative survey results, secondary data, and qualitative responses from survey questionnaire open-ended questions.

Table 11
Financial Transparency Matrix

Particulars	Quantitative Data	Secondary Data	Qualitative Data
Data Source	Survey Questionnaire	FY 2024 Budget and Financial Accountability Reports (BFARs) posted on official SUC website under the Transparency Seal; If not available, financial reports obtained from the concerned SUCs and DBM Region II	Survey Questionnaire Open-Ended Responses
Indicators/ Themes	Financial Reporting, Disclosure, and Accessibility	Compliance with BFARs posting requirements (FY 2024); Completeness and Consistency of uploaded financial reports	Transparency in Budgeting and reporting; Monitoring and evaluation of income utilization Needs-based allocation for infrastructure; Compliance with financial policies; Participatory budgeting and planning
Key Findings	Survey results for level of financial transparency show a "Very High" rating (Overall WM = 3.61). Financial Reporting Quality ranked highest (WM = 3.70), followed by Disclosure Practices (WM = 3.63), and Accessibility (WM = 3.50) as ranked lowest.	Website postings review disclosed uneven compliance with BFARs posting requirements. Two SUCs in Region II posted only 4 out of 10 BFARs for FY 2024. One SUC posted 8 BFARs. One SUC had no BFARs posting at all. And only one SUC uploaded the complete set of BFARs.	Respondents stressed the need to institutionalize transparent budgeting and reporting systems (f = 41). Raised concerns for stronger monitoring and evaluation of income utilization (f = 33). Suggestions for needs-based allocation for infrastructure development (f = 28). Concerns on adequate funding for facilities maintenance (f = 25) and strict compliance with financial policies (f = 22).

Results reveal strong regulatory compliance with financial disclosure and accountability standards among SUCs in Region II.	Findings show disparity between perceived transparency and verified public disclosure, inconsistent with survey's very high score.	Respondents highlighted participatory budgeting, continuous capacity building for finance staff, and strengthened resource generation to sustain transparency and accountability.
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Financial transparency findings among SUCs in Region II show a different picture of high perceived level of transparency contradicted with uneven documentary compliance, wherein the quantitative survey results revealed a very high level of financial transparency in terms of financial reporting quality, disclosure practices, and accessibility, reflecting strong awareness of accountability standards, whereas the qualitative responses signify stakeholder recognition of transparency as an essential mechanism for effective income utilization and infrastructure development, thereby confirming the finding of Delos Santos (2020) and Ramos (2021) who emphasized the need for more institutional support towards better sustainability of reporting in the long-term, and that internal controls, audits, and verifiable disclosures are essential to guaranty that transparency is not just procedural but operational.

With respect to inconsistency in BFARs posting, this aligns with the finding of Soriano (2022), who stressed that while financial transparency policies are relatively strong, actual implementation differs significantly across institutions. Related sentiments are also expressed in the work of Bonsu et al. (2023) who illustrated the important role of leadership, plus a capable human capital in achieving transparency in finance.

Nonetheless, verification of secondary data shows that inconsistencies exist between perceived transparency and actual public disclosure specifically the Budget and Financial Accountability Reports (BFARs) posting under the Transparency Seal, such that one SUC fully complied with BFARs posting requirements, others posted only partial or non-compliance, exhibiting disparity between policy compliance and verifiable accountability. Thus, the disagreement implies that transparency in SUCs remains stronger at the procedural and perceptual part than in the actual implementation and documentation. Wherefore, the results affirm that transparency alone is not sufficient to ensure optimal income utilization and infrastructure outcomes. These are consistent with the results of Villanueva and Santos (2020) and Ngare (2023), who stressed stronger internal audit, participatory decision-making, enhanced leadership and control, better access to information and rationalized budgeting. On the other hand, in the findings of Mendoza (2020) and Garcia and Perez (2021), the transparency deviations may also be affected by systematic challenges such as limited resources, technical capacity concerns, and mandatory institutional priorities, which influence adherence with disclosure requirements. In addition, while internally generated income is increasingly essential for infrastructure development as mentioned by Llanes and Santos (2020) and Reigh (2022), the effective and efficient utilization depends on strong transparency and accountability mechanisms. Hence, transparency goes beyond compliance and thus requires the development of a method or process needed to enhance accessibility and understandability, as mentioned by Soriano (2020). Taken together, these studies highlighted strengths and gaps in the financial transparency of State Universities and Colleges (SUCs) in Region II.

3.2 Extent of Income Utilization

Tables 12 to 14 show the results of the descriptive statistics of income utilization in terms of budget allocation, efficiency in fund utilization, and financial accountability.

3.2.1 Income Utilization in terms of Budget Allocation

Descriptive statistical results on the utilization of income as to budget allocation can be seen in Table 12.

The results imply that there was an overall weighted mean value of 3.55 (SD = 0.4547), which is generally very efficient perceived level of budget allocation indicating that SUCs in Region II effectively aligns financial resources with institutional priorities particularly in academic, research and infrastructure based on the government regulatory policies.

Table 12
Extent of Income Utilization in terms of Budget Allocation

Budget Allocation Accessibility (SOP 2.1)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. Allocate income effectively across academic, research, and infrastructure development.	3.67	0.5080	Very Efficient	2
2. Budget priorities align with the strategic development plans of the agency.	3.65	0.4806	Very Efficient	3

3. The allocation of funds for infrastructure project is based on actual institutional needs.	3.63	0.5765	Very Efficient	4
4. Income from tuition and other related fees, and free higher education subsidy is transparently allocated and utilized.	3.71	0.4895	Very Efficient	1
5. There is sufficient funding provided for infrastructure maintenance and upgrades.	3.06	0.8400	Efficient	5
Overall	3.55	0.4547	Very Efficient	

The majority ratings were between 3.63 and 3.71, which is an indication that income was very efficiently distributed in relation to the strategic goals of the university. The highest rated indicator was that of transparent allocation and use of tuition and other similar fees (WM = 3.71, SD = 0.4895), which is indicative to the extent to which regulatory requirements were met. For this indicator, SUC A registered the highest institutional mean score of 3.80 demonstrating an effective budget planning and alignment with regulatory requirements. This finding is similar to the study of Cruz (2022) who explained that SUCs put priority on facility improvement and learning environment upgrading using wisely the internally generated income. Furthermore, this is also in line with the findings of World Bank (2020) that underlined the necessity to apply sound financial practices for maximizing operational funds utilization.

In contrast, the least rated component "There is sufficient funding provided for infrastructure maintenance and upgrades" (WM = 3.06, SD = 0.8400), though still rated as efficient shows that resource inadequacies remain a constraint in allocating funds for long-term infrastructure upkeep. Among the five SUCs in Region II, SUC E obtained the lowest mean score of 2.56, though still described as "Efficient" suggests that there is insufficient funding for maintenance probably due to mandatory operating demands. Budget allocation mechanism was indeed considered very efficient, nonetheless, there were some areas particularly infrastructure maintenance reveal funding limitations and this is consistent with the findings of Espiritu (2020) and UNESCO (2021). According to Miranda and Perez (2021), and Mendoza (2020), when resources are limited, infrastructure and maintenance are usually not prioritized over the mandatory operating expenditures.

3.2.2 Income Utilization in terms of Efficiency in Fund Utilization

In terms of efficiency in fund utilization on the extent of income utilization, the descriptive statistics results are shown in Table 13.

Table 13
Extent of Income Utilization in terms of Efficiency in Fund Utilization

Efficiency in Fund Utilization (SOP 2.2)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. The SUC utilizes its income efficiently for infrastructure projects without excessive delays.	3.19	0.6185	Efficient	4
2. The SUC ensures that funds allocated for infrastructure development are fully used for their intended purpose.	3.57	0.5598	Very Efficient	2
3. Financial transactions related to income utilization follow standard procurement, accounting and auditing procedures.	3.73	0.4474	Very Efficient	1
4. Cost-effectiveness is considered in infrastructure project planning and execution.	3.57	0.5879	Very Efficient	2
5. There are effective monitoring and evaluation systems to track income utilization.	3.49	0.6444	Very Efficient	3
Overall	3.51	0.4681	Very Efficient	

This dimension likewise obtained an overall weighted mean of 3.51 (SD = 0.4681) described as very efficient fund utilization, emphasizing the sound application of financial procedures across SUCs in Region II.

The indicator "Financial transactions related to income utilization follow standard procurement, accounting, and auditing procedures" got the highest score (WM = 3.73, SD = 0.4474) which emphasizes strong compliance with prescribed financial regulations. Of the five SUCs, SUC A obtained the highest mean score of 3.80, thus, emphasizing adherence to accounting and auditing standards, and strong internal controls. The next high rated indicators were ensuring that funds are fully used for their intended purpose (WM = 3.57, SD = 0.5598); and cost effectiveness in project planning and execution (WM = 3.57, SD = 0.5879), and these results are consistent with the World Bank (2020) emphasis that the sound financial procedures lead to higher institutional sustainability and improve infrastructure outcomes.

Thus, the foregoing results underpin the arguments of Ramos (2021) and Gabriel et al. (2020) who mentioned that compliance with standard procedures enhances efficiency and accountability in the public institutions.

Conversely, the indicator "The SUC utilizes its income efficiently for infrastructure projects without excessive delays" (WM = 3.19, SD = 0.6185) got the lowest score described as "Efficient", indicates challenges in the project execution timelines. SUC E, though still "Efficient" posted the lowest institutional rating with mean score of 2.56, highlighting to procedural delays may be caused by procurement bottlenecks, planning gaps, or administrative capacity concerns.

This finding aligns with Abellon et al. (2020) who stressed that administrators often struggle inefficiencies possibly due to procedural concerns and inadequate training, and also with Espiritu (2020) who argued that budget and insufficient funds are the major constraints to efficient financial management in public higher education.

3.2.3 Income Utilization in terms of Financial Accountability

Descriptive statistics results on the extent of income utilization in terms of financial accountability are shown in Table 14.

Table 14
Extent of Income Utilization in terms of Financial Accountability

Financial Accountability SOP 2.3)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. Financial transactions related to income utilization are properly documented and recorded.	3.76	0.4293	Very Efficient	1
2. Financial reports are regularly prepared to ensure accountability in income utilization.	3.76	0.4293	Very Efficient	1
3. Income utilization decisions are made based on clear policies and guidelines.	3.67	0.5080	Very Efficient	2
4. Stakeholders including faculty and students, are informed about financial matters affecting infrastructure development.	3.41	0.6632	Very Efficient	4
5. Financial reports on income utilization are made accessible to relevant stakeholders.	3.56	0.5321	Very Efficient	3
Overall	3.63	0.4329	Very Efficient	

The income utilization sub-variable was able to show the best performance level with an overall weighted mean equal to 3.63 (SD = 0.4329), which means that the system displays a very efficient level of financial accountability.

Indicators with the highest weighted mean were "Financial transactions related to income utilization are properly documented and recorded" (WM = 3.76, SD = 0.4293), and this is led by SUC B with the highest score of 3.81, and "Financial reports are regularly prepared to ensure accountability in income utilization" (WM = 3.76, SD = 0.4293) with SUC D produced the highest weighted mean score also of 3.86. These confirm the effectiveness of documentation and reporting systems, thus, echoing the findings of Garcia (2021) and Ramos (2021) relative to the role of financial policies and audits in reinforcing accountability. Furthermore, the next highly rated indicator was policy-based decision-making process (WM = 3.67, SD=0.5080), which supports the suggestion of UNESCO (2021) that trust environment is created when transparent and accountable systems exist for all stakeholders including faculty, students and oversight agencies.

The lowest-scored item was "Stakeholders, including faculty and students, are informed about financial matters affecting infrastructure development" (WM = 3.41, SD = 0.6632) with SUC E obtained the lowest weighted mean score of 3.22 described as only "Efficient" denoting inadequate financial information dissemination to stakeholders. This finding is consistent with UNESCO (2021) and Cruz (2022), who stated that transparency is not only procedural but also communicative which needs proactive stakeholders' involvement in order to create trust and institutional support. Espiritu (2020) found relative to established documentation systems that gaps in communicating and planning prevent transparency and stakeholder interaction. Thus, the data clearly show that while SUCs in Region II are very efficient in accountability processes like documentation, reporting, policy-based decisions, there is a need to strengthen stakeholder communication, transparency practices, and personnel capacity which are consistent with UNESCO (2021) and Espiritu (2020).

3.2.4 Summary Results of Extent of Income Utilization

Table 15 exhibits the summary results of the extent of income utilization with an overall weighted mean of 3.56 (SD = 0.4213) described as very efficient.

Table 15
Summary Results - Extent of Income Utilization

Extent of Income Utilization (SOP 2)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
Budget Allocation	3.55	0.4547	Very Efficient	2
Efficiency in Fund Utilization	3.51	0.4681	Very Efficient	3
Financial Accountability	3.63	0.4329	Very Efficient	1
Overall	3.56	0.4213	Very Efficient	

The highest ranked dimension was financial accountability (WM = 3.63, SD = 0.4329), with SUC A as the highest average weighted score of 3.72 and SUC E as the lowest obtaining 3.51 average rating. Followed by budget allocation as the second ranked (WM = 3.55, SD = 0.4547), with SUC A average score of 3.88 as the highest and SUC C as the lowest average rating of 3.38. And last but not the least, efficiency in fund utilization (WM = 3.51, SD = 0.4681) as the lowest ranked component, with SUC A again as the highest average weighted mean of 3.80 and SUC C (WM = 3.40) as the lowest average rating. However, even if SUCs in Region II are perceived as very efficient in utilizing resources in terms of budget allocation, fund use, and financial accountability, there are still issues that hinder the efficiency which are inadequate funds for infrastructure development, and low participation rate of stakeholders.

The participating SUCs perform well in accountability, followed by budget allocation, and lastly fund utilization. The findings of UNESCO (2021) and the World Bank (2020) were confirmed by highest score in accountability which reflects that SUCs give significance to proper documentation and compliance to regulatory standards. Moreover, the strong rating in budget allocation component which is related to the findings of Miranda & Perez (2021) and Cruz (2022), is an indication of systematic planning. Nonetheless, the lowest score for efficiency mirrors with the related studies by Espiritu (2020) and Abellon et al. (2020) who cited insufficient funds, delays, and operational constraints as barriers to efficient spending.

3.2.5 FY 2024 Budget Utilization Rate (BUR) under SB 164 among State Universities and Colleges (SUCs) in Region II

To support the quantitative results, FAR No. 2 and FAR No 2-A financial reports were scrutinized as to SUCs Region II budget utilization rates as shown in Table 16.

Table 16
Budget Utilization Rate (BUR) among State Universities and Colleges in Region II for FY 2024 (SB 164)

SUC	Approved Budget ('000)	Utilizations ('000)	Disbursements ('000)	Utilizations/Obligations BUR	Disbursements BUR
A	5,998	4,159	3,569	69.34%	85.81%
B	333,021	309,522	284,571	92.94%	91.94%
C	345,929	264,692	235,406	76.52%	88.94%
D	162,192	109,103	55,462	67.27%	50.83%
E	67,762	65,007	57,597	95.93%	88.60%
Total	914,902	752,483	636,605	82.25%	84.60%
Disbursements vs. Approved Budget					69.58%

Note. Data were compiled by the researcher from the FY 2024 Budget and Financial Accountability Reports, specifically *Financial Accountability Report (FAR) No. 2* and *FAR No. 2-A*, obtained from Transparency Seal website postings of the concerned State Universities and Colleges (SUCs). Financial reports not available through SUC Transparency Seal were obtained directly from the concerned SUCs and from Department of Budget and Management (DBM) Region II. Amounts are expressed in thousand pesos ('000), and exclusive of budget for revenue derived from Income Generating Enterprises (IGEs). Budget Utilization Rate (BUR) was computed as the ratio of utilizations/obligations and disbursements to the approved budget. Efficiency ratings were interpreted using the following scale: 55% & below = Very Inefficient; 56%-70% = Inefficient; 71%-85% = Efficient; 86% & above = Very Efficient.

Overall obligations BUR of 82.25% was calculated by getting the proportion of utilizations over the approved budget, and disbursements BUR of 84.60% was also computed by dividing the disbursements by the utilizations amount. However, disbursements versus available budget resulted only to 69.58%. Analysis showed efficient levels of utilizations/obligations and disbursements relative to utilizations, but inefficient disbursements when measured against the total approved budget, which unexpectedly deviated from the survey results of very efficient levels of utilization.

3.2.6 Income Utilization Matrix: Quantitative Results Supported by Secondary and Qualitative Data

Comparison of quantitative survey results, secondary financial reports, and qualitative inputs from survey open-ended questions is illustrated in Table 17.

Table 17
Income Utilization Matrix

Particulars	Quantitative Data	Secondary Data	Qualitative Data
Data Source	Survey Questionnaire	FY 2024 Financial Accountability Reports (FAR No. 2 and FAR No. 2A)	Survey Questionnaire Open-Ended Responses
Indicators/Themes	Budget Allocation, Fund Utilization Efficiency, and Financial Accountability	Approved Budget; Utilizations/Obligations BUR; Disbursements BUR; and Disbursements vs. Available Approved Budget	Budget planning and reporting; Monitoring and evaluation of income utilization; Needs-based allocation; Adequacy of funding for facilities and maintenance; Strict compliance with financial policies; Participatory budgeting; and Capacity building and resource generation.
Key Findings	The overall extent of income utilization is "Very Efficient" (WM = 3.56). Financial Accountability ranked highest (WM = 3.63), followed by budget allocation (WM = 3.55), and fund utilization efficiency (WM = 3.51) as the lowest.	Review of FY 2024 FAR No. 2 and FAR No. 2-A reveal an overall Utilizations/Obligations BUR of 82.25% and Disbursements BUR of 84.60% reflecting only "Efficient" budget execution. Furthermore, disbursements relative to total approved budget attained only 69.58% described as inefficient, indicating unutilized funds and implementation constraints.	Open-ended survey responses reinforce the need to institutionalize transparent budgeting and reporting, strengthen monitoring and evaluation at the campus level, and adopt needs-based allocation, particularly for infrastructure development and maintenance.
	The respondents confirms that income utilization is primarily driven by compliance oriented financial management, strong internal controls, and	Documentary results reveal gap between perceived "very efficient" utilization and actual financial execution levels, depicting delays, absorptive capacity issues, or procedural bottlenecks.	Participants underscored adequate funding for facilities, strict compliance with financial policies, stakeholder participation in budget planning, and continuous capacity building of finance personnel.

adherence to regulatory policies.

Based on the available data, the study findings display different picture in the utilization of income generated among the SUCs in Region II, wherein survey rating of very efficient income utilization deviated with that of the efficient level of actual financial execution as revealed in secondary FAR 2 and FAR 2-A data, aside for the concerns raised by qualitative inputs. The respondents quantitatively scored income utilization as "Very Efficient" (WM = 3.56) specially in financial accountability and budget allocation which show strong in financial management. In contrast, analysis of FY 2024 FAR No.2 and FAR No. 2-A disclosed that although obligations/utilizations (82.25%) and disbursements relative to utilizations (84.60%) achieved efficiency level. However, the actual disbursements relative to approved budget got only 69.58%, reflecting implementation constraints. This disparity reflects the arguments of Abellon et al. (2020), Espiritu (2020), and Mendoza (2020), who highlighted bureaucratic processes and limited absorptive capacity as the persistent obstacles that weaken the planned budget translation into completed expenditures despite administrators' know-how of sound financial management principles. These findings are substantiated by the qualitative insights mentioning the need for strengthened monitoring and evaluation, needs-based allocation, participatory budgeting and capacity building.

According to UNESCO (2021) and Miranda and Perez (2021), when the resources are limited, the infrastructure and sustained maintenance are usually sacrifice over the mandatory operating expenditures. And when the execution bottlenecks exist, the level of efficiency as perceived may be magnified over the actual utilization results, as identified by Cruz (2022) and Llanes and Santos (2020) emphasizing the role of internally generated revenue in the infrastructure development.

Quantitative data and qualitative responses disclose that though SUCs in Region II are highly compliant and cost-efficient, yet timeliness and resource sufficiency remain issues. Literature similarly identified insufficient resources and limited financial flexibility as challenges affecting efficient fund utilization in education systems (Abellon et al., 2020; Espiritu, 2020; and World Bank (2020).

Thus, the foregoing findings confirmed the prior related studies and at the same time address the disparity through the integration of quantitative survey results, financial documentary verification, and stakeholder qualitative responses, in order to have a thorough overview of how financial transparency shape the income utilization of SUCs in Region II.

3.3 Status of Infrastructure Development

The descriptive statistics results for infrastructure development in terms of project completion timeliness, quality of infrastructure projects, and sustainability and maintenance of developed facilities are shown in Tables 18 to 20.

3.3.1 Infrastructure Development in terms of Project Completion Timeliness

Table 18 exhibits the perceived status of infrastructure development in terms of project completion timeliness.

Table 18
Status of Infrastructure Development in terms of Project Completion Timeliness

Project Completion Timeliness (SOP 3.1)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. Infrastructure projects are completed within the planned timeframe.	2.96	0.5819	Developed	5
2. Delays in infrastructure projects are minimized through effective financial planning.	3.46	0.5819	Very Developed	1
3. Procurement processes for infrastructure projects are completed efficiently.	3.38	0.6058	Very Developed	3
4. The institution ensures that all financial transactions for projects are processed without unnecessary delays.	3.44	0.5421	Very Developed	2
5. Infrastructure projects are implemented according to the scheduled timeline stated in the project plan.	3.02	0.6011	Developed	4
Overall	3.25	0.4720	Developed	

With the overall weighted mean of 3.25 (SD = 0.4720) described as developed for the project completion timeliness, this means that SUCs in Region II generally implement infrastructure projects within the reasonable timeframes. Indicators on minimizing delays through effective financial planning (WM = 3.46, SD = 0.5819) as the highest rated indicator, efficient procurement processes (WM = 3.38, SD = 0.6058), and timely processing of financial transactions (WM = 3.44, SD = 0.5421) were all rated very developed. The foregoing highest rated indicator reveals effectiveness of financial planning mechanisms in minimizing project delays, with SUC E (WM = 3.83) as the highest, reflecting strong budgeting discipline, and alignment of financial resources with project schedules.

Nonetheless, the other two indicators on completion within planned timeframe (WM = 2.96, SD = 0.5819) as the least rated component with SUC C registering the lowest weighted mean of 2.83, and implementation according to scheduled timeline (WM = 3.02, SD = 0.6011), wherein both are interpreted as developed, indicates that the actual project execution still experiences slippages despite the strong procedural systems.

Relatively, delays in project implementation are common due to insufficiency of funds, and bureaucratic procedures and constraints, as argued by Indira and Chandrasekaran (2023) and Abdulkarim et al. (2023). This also coincides with that of Espiritu (2020) who found that budget unavailability and administrative inefficiencies hamper the project timelines, despite sound planning.

3.3.2 Infrastructure Development in terms of Quality of Infrastructure Projects

Table 19 displays the descriptive data on the perceived status of infrastructure development in terms of quality of infrastructure projects. The overall weighted mean of 3.33 (SD = 0.5145) interpreted as very developed, exhibits that SUCs in Region II deliver infrastructure projects that meet quality standards.

Table 19
Status of Infrastructure Development in terms of Quality of Infrastructure Projects

Quality of Infrastructure Projects (SOP 3.2)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. Infrastructure projects meet the required engineering and safety standards.	3.38	0.5310	Very Developed	2
2. The materials used in infrastructure projects are of high quality and appropriate for long-term use.	3.23	0.6270	Developed	4
3. Completed infrastructure projects enhance the overall functionality of the SUC.	3.50	0.5835	Very Developed	1
4. The quality of construction work is regularly inspected and monitored.	3.31	0.6890	Very Developed	3
5. Stakeholder feedback is considered in assessing the quality of infrastructure projects.	3.23	0.7506	Developed	4
Overall	3.33	0.5145	Very Developed	

Indicators like functionality (WM = 3.50, SD = 0.5835) as the highest rated component, the engineering and safety standards (WM = 3.38, SD = 0.5310), and inspection and monitoring practices (WM = 3.31, SD = 0.6890), were all rated by the respondents as very developed. The indicator "Completed projects enhance overall functionality of the SUC" as the highest rated item reflects the positive contribution of infrastructure to SUC operations and service delivery, with SUC D recording the highest weighted mean of 3.75, reflection of well-designed facilities that effectively support instruction, research, and student services. This supports Ekeocha et al. (2021b), who insisted that infrastructure investments foster productivity, efficiency, and institutional growth which are the attributes revealed in SUCs' improved physical environment. On the other hand, the lowest rated indicators both described as "Develop" were material quality (WM = 3.23, SD = 0.6270), and stakeholder feedback considered in assessing project quality (WM = 3.23, SD = 0.7506), with SUC C as the lowest, registering weighted mean scores of 2.94 and 3.06, respectively, showing concerns related to material durability and limited stakeholder participation in quality assessment. This difference is in agreement with the study of Pradhan et al. (2021), who emphasized that the stakeholders' perception is a

key factor for evaluating infrastructure outcomes; they also highlighted the importance of a transparent financial actions about infrastructure. Thus, stakeholder involvement and continuous evaluation must be improved despite the generally high result of the quality of SUC infrastructure, and this is also in line with the findings of Wang et al. (2024) and Pradhan et al. (2021) who asserted that inclusive financial and infrastructure processes elevate stakeholder satisfaction and infrastructure functionality.

3.3.3 Infrastructure Development in terms of Sustainability and Maintenance of Developed Facilities

Table 20 displays the perceived status of infrastructure development in terms of sustainability and maintenance of developed facilities.

Table 20
Status of Infrastructure Development in terms of Sustainability and Maintenance of Developed Facilities

Sustainability and Maintenance of Developed Facilities (SOP 3.3)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
1. The university has a well-defined maintenance plan for all infrastructure projects.	3.08	0.7390	Developed	4
2. Infrastructure projects are designed to be environmentally sustainable.	3.27	0.6098	Very Developed	3
3. Regular inspections and repairs are conducted to maintain existing facilities.	3.33	0.6302	Very Developed	2
4. Adequate funding is allocated for the upkeep of infrastructure projects.	3.02	0.8119	Developed	5
5. Infrastructure projects are designed to meet the long-term needs of students and faculty.	3.38	0.6724	Very Developed	1
Overall	3.22	0.5281	Developed	

Data results disclosed an overall weighted mean of 3.22 ($SD = 0.5281$) described as developed for sustainability and maintenance, implies that SUCs prioritize long-term usability of infrastructure during the planning stage, though relatively lowest component among the three sub-variables. The indicators with high ratings interpreted as very developed were designed for long-term needs ($WM = 3.38$, $SD = 0.6724$) as the highest ranked area, regular inspections and repairs ($WM = 3.33$, $SD = 0.5310$), and environmentally sustainable design ($WM = 3.27$, $SD = 0.6098$). With the highest rated indicator "Infrastructure projects are designed to meet the long-term needs of students and faculty", SUC A recorded the highest SUC rating ($WM = 4.00$), revealing strong alignment between infrastructure design and user needs.

On the other hand, the indicator adequate funding for upkeep ($WM = 3.02$, $SD = 0.8119$) registered as the lowest, highlighting critical concern in post construction sustainability, with SUC C posted the lowest score of 2.61 reflecting budget limitations in maintenance funding.

This affirms the allegation that due to limited funding, SUCs often prioritize mandatory operating expenditures over sustained maintenance, as mentioned by Mendoza (2020) and Garcia and Perez (2021).

Though sustainability elements are considered in the design and inspection, still maintenance planning and funding requirements remain as detriment, consistent with UNESCO (2021) findings that inadequate funds and inefficient spending impair infrastructure sustainability in Southeast Asian universities. Indira and Chandrasekaran (2023) also claimed that infrastructure sustainability requires continuous funding and long-term planning, which are the areas wherein SUCs in Region II demonstrate only moderate performance.

3.3.4 Summary Results of Infrastructure Development

Table 21 shows the summary results of the perceived status of infrastructure development.

Table 21
Summary Results - Status of Infrastructure Development

Infrastructure Development (SOP 3)	Weighted Mean	Standard Deviation	Adjectival Rating	Rank
Project Completion Timeliness	3.25	0.4720	Developed	2
Quality of Infrastructure Projects	3.33	0.5145	Very Developed	1

Sustainability and Maintenance of Developed Facilities	3.22	0.5281	Developed	3
Overall	3.27	0.4693	Very Developed	

The overall weighted mean of 3.27 (SD = 0.4693) described as very developed, indicates that the infrastructure development in SUCs Region II is progressing well, with quality of infrastructure projects (WM = 3.33, SD = 0.5145) was ranked first, indicating positive contribution of infrastructure to SUC operations and service delivery, posting SUCs B and D as the highest rated at both 3.50, and SUC C as the lowest under this component; followed by project completion timeliness (WM = 3.25, S = 0.4720) described as "Developed" and recording SUC E as the highest average weighted mean of 3.47 and SUC D as the lowest at 3.05 average score; and the lowest rated dimension was sustainability and maintenance (WM = 3.22, S = 0.5281) described also as developed, with SUC A at 3.70 average rating as the highest within this component and SUC C as the lowest at 2.93 average score, indicating budget limitations in sustained maintenance.

The findings are consistent with the related studies by Ekeocha et al. (2021b), who stressed that high quality infrastructure is associated with improved performance; Indira & Chandrasekaran (2023), who mentioned that timeliness challenges reflect funding and bureaucratic constraints; and UNESCO (2021) and Abdulkarim et al. (2023), who invoked that sustainability difficulties align with identified inadequacies in maintenance funding and long-term planning. Furthermore, the results are consistent with UNESCO (2021), Miranda (2021) and Wang et al. (2024) highlighting the needs in infrastructure development which include not only construction but also sustainability, finance and stakeholder participation.

3.3.5 FY 2024 Budget Allocation for Infrastructure Development under Fund SB 164 among SUCs in Region II

To further substantiate the quantitative survey results, the budget allocation of infrastructure development is shown in Table 22 using the compiled financial reports.

Table 22
Infrastructure Development FY 2024 Budget Allocation (SB 164) among SUCs in Region II

SUC	Approved Budget ('000)	Infrastructure Development Allocation ('000)	Percent Allocation
A	5,998	-	-
B	333,021	38,706	11.62%
C	345,929	42,952	12.42%
D	162,192	80,113	49.39%
E	67,762	374	0.55%
Total	914,902	162,145	17.72%

Note. Data were compiled by the researcher from the FY 2024 Budget and Financial Accountability Reports, specifically *Financial Accountability Report (FAR) No. 2A*, obtained from Transparency Seal website postings of the concerned State Universities and Colleges (SUCs). Financial reports not available through SUC Transparency Seal were obtained directly from the concerned SUCs and from Department of Budget and Management (DBM) Region II. Amounts are expressed in thousand pesos ('000). Percent Allocation was computed as the ratio of infrastructure development allocation to the approved budget.

Computed data display a minimal allocation for infrastructure development which is 17.72% based on the total approved budget, thereby, impedes the developmental progress of SUCs in Region II. The budget allocation was prioritized on mandatory expenditures which subsequently affects the infrastructure sustainability and maintenance.

3.3.6 FY 2024 Budget Utilization Rate for Infrastructure Development under Fund SB 164 among SUCs in Region II

Table 23 shows the budget utilization rate for FY 2024 Infrastructure Development among SUCs in Region II. The budget utilization rates were also calculated, since this clearly portray the status of implementation of infrastructure development.

Table 23
Infrastructure Development Budget Utilization Rate (BUR) among SUCs in Region II for FY 2024 (SB 164)

SUC	Approved Budget ('000)	Utilizations ('000)	Disbursements ('000)	Utilizations/Obligations BUR	Disbursements BUR
A	-	-	-	-	-
B	38,706	34,583	25,190	89.35%	72.84%
C	42,952	21,292	10,521	49.57%	49.41%
D	80,113	48,582	8,873	60.64%	18.26%
E	374	342	342	91.44%	100.00%
Total	162,145	104,799	44,926	64.63%	42.87%
Disbursements vs. Approved Budget					27.32%

Note. Data were compiled by the researcher from the FY 2024 Budget and Financial Accountability Reports, specifically *Financial Accountability Report (FAR) No. 2A*, obtained from Transparency Seal website postings of the concerned State Universities and Colleges (SUCs). Financial reports not available through SUC Transparency Seal were obtained directly from the concerned SUCs and from Department of Budget and Management (DBM) Region II. Amounts are expressed in thousand pesos ('000). Budget Utilization Rate (BUR) was computed as the ratio of utilizations/obligations and disbursements to the approved budget. Ratings were interpreted using the following scale: 55% & below = Very Low; 56%-70% = Low; 71%-85% = High; 86% & above = Very High.

As shown in the table above, the overall obligations utilization rate is 64.63% indicative that 35.37% of the planned infrastructure development was not implemented in FY 2024. Some possible reasons for delay in the implementation and execution were funding unavailability, problems in the procurement process due to deficiencies in the program of works wherein bidding process cannot push through if not settled, etc. Disbursements BUR is 42.87% which means that majority or 57.13% of infrastructure development utilizations were not yet completed in FY 2024. Thus, documentary data are contrary to the quantitative results as very developed level of infrastructure development.

3.3.7 Infrastructure Development Matrix: Quantitative Results Supported by Secondary and Qualitative Data

In order to substantiate the survey results, comparative data are presented in Table 24 for a more comprehensive understanding of the nuanced pattern of quantitative and qualitative results.

The matrix depicts that the infrastructure development survey result is not aligned with the budgetary and implementation documents particularly FAR No. 2-A and the computed BUR. Survey results, documentary analysis, and qualitative inputs indicate a deviation between perceived and actual infrastructure development among SUCs in Region II.

Table 24
Infrastructure Development Matrix

Particulars	Quantitative Data	Secondary Data	Qualitative Data
Data Source	Survey Questionnaire	FY 2024 Financial Accountability Report (FAR) No. 2-A	Survey Questionnaire Open-Ended Responses
Indicators/Themes	Project Completion; Timeliness, Quality of Infrastructure Projects, and Sustainability and Maintenance of Developed Facilities	Approved Budget; Infrastructure Development Budget Allocation; Utilizations/Obligations BUR; Disbursements BUR; and Disbursements vs. Available Approved Budget	Transparency in budgeting and reporting; Monitoring and evaluation of infrastructure utilization; Needs-based allocation and funding adequacy; Compliance with financial policies; Capacity building and resource generation.
Key Findings	Overall survey results (WM = 3.27) reveal a "Very Developed" level, with quality of infrastructure projects ranked highest (WM = 3.33), followed by project completion timeliness (WM = 3.25). But though still at a "Developed" level,	Documentary analysis depicts that only 17.72% was allocated for infrastructure development out of the total approved budget reflecting limited prioritization. Infrastructure implementation was moderate with obligations BUR of 64.63% indicating that 35.37% of planned projects were not implemented in FY 2024.	Qualitative responses confirm the secondary data, emphasizing insufficient funding, project implementation delays, and the needs-based allocation.

sustainability and maintenance (WM = 3.22) ranked lowest.	Disbursements BUR was only 42.87% revealing that majority of infrastructure projects were not yet completed within 2024. Disbursements relative to total approved budget accounted only 27.32% which is very low, signifying unutilized cash.	High rating results underscore a strong compliance-oriented financial management, but still need to strengthen project completion timeliness, stakeholder participation, and sustainable maintenance financing.	With the delays attributed to funding constraints, procurement bottlenecks, and deficiencies in programs of work, the findings contradict the overall survey results of a very developed infrastructure status.	Respondents stressed strengthening monitoring systems, ensuring adequate maintenance funding, strict adherence to financial policies, and fortifying administrative capacity. Concerns for optimizing income generation to support infrastructure development further reflect perceived implementation gaps.
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Generally, infrastructure development specifically on project quality showed a "Very Developed" survey results. Nevertheless, secondary data from FY 2024 BFARs accounted only an allocated fund of 17.72% of the total approved budget, with low utilization (64.63%) and very low disbursement (42.87%) relative to utilization, indicating delays and incomplete project execution.

Additionally, actual disbursement relative to the total approved budget accounted a very low level of 27.32% signifying unutilized cash balance. Similarly, qualitative inputs support the documentary results, as respondents raised concerns on insufficient funding, procurement bottlenecks, and prioritization of mandatory expenditures as constraints to infrastructure sustainability and maintenance, thereby highlighting the importance of improving local revenue since sustainability requires long-term funding, thereby, affirming the findings of Abdulkarim et al. (2023), who emphasized how internal revenue affects infrastructure completion.

Though infrastructure projects in SUCs Region II are procedurally well managed, still timely completion remains a challenge, thereby mirroring both national and international literature on institutional delays, bureaucratic constraints and funding limitations (Indira & Chandrasekaran, 2023; Ekeocha et al., 2021b). Nonetheless, there is a gap in infrastructure maintenance because of inadequate financing and planning. Project timeliness likewise depends on the flow of financing and monitoring given that SUCs in Region II have good infrastructure quality and project implementation systems, however, they are still faced with structural problems. The challenges are related to sustainability and maintenance of infrastructure, revealing needs for financing, planning, and participatory evaluation.

Furthermore, while prior studies of Miranda (2021), Llanes & Santos (2020), and Gabriel et al. (2020) emphasized the role of transparent financial policies, internally generated revenue, and alternative financing mechanisms like PPPs in elevating infrastructure development, the present findings imply that policy intent and stakeholder confidence are not aligned by absorptive capacity, execution efficiency, and infrastructure sustainability prioritization, signifying the need stronger governance, realistic infrastructure planning, and reinforced implementation controls within SUCs in Region II.

3.4 Effect of Level of Financial Transparency on Income Utilization and Infrastructure Development

The inferential statistics results of multiple linear regression are shown in Tables 25 and 26 revealing the effect of financial transparency sub-variables on income utilization and infrastructure development, at 0.05 margin of error.

3.4.1 Effect of Financial Transparency on Income Utilization in terms of Budget Allocation, Efficiency in Fund Utilization, and Financial Accountability

Tables 25 presents the results of multiple linear regression analysis on how the financial transparency sub-variables affect the use of income in SUCs Region II.

Table 25
Effect of Level of Financial Transparency on Income Utilization
 Multiple Linear Regression

Dependent Variable	Parameter	B	Std. Error	T	Sig.	Interpretation	Decision
Budget Allocation	Constant	0.166	0.315	0.53	0.60	Not Significant	
	Financial Reporting Quality	0.224	0.119	1.88	0.07	Not Significant	Accept Ho
	Disclosure Practices	0.361	0.131	2.74	0.01	Significant	Reject Ho
	Accessibility	0.355	0.111	3.21	0.00	Significant	Reject Ho

Efficiency in Fund Utilization	Constant	0.265	0.375	0.71	0.48	Not Significant	
	Financial Reporting Quality	0.298	0.142	2.10	0.04	Significant	Reject Ho
	Disclosure Practices	0.199	0.157	1.27	0.21	Not Significant	Accept Ho
	Accessibility	0.407	0.132	3.08	0.00	Significant	Reject Ho
Financial Accountability	Constant	0.516	0.271	1.90	0.06	Not Significant	
	Financial Reporting Quality	0.014	0.103	0.14	0.89	Not Significant	Accept Ho
	Disclosure Practices	0.497	0.113	4.40	0.00	Significant	Reject Ho
	Accessibility	0.360	0.095	3.78	0.00	Significant	Reject Ho

Relative to income utilization in terms of budget allocation among SUCs in Region II, the results of regression show that financial transparency partially influenced the budget allocation efficiency, wherein financial reporting quality ($B = 0.224$, $p = 0.07$) did not significantly influence the budget allocation whereas disclosure practices ($B = 0.361$, $p = 0.01$) and accessibility of financial data ($B = 0.355$, $p = 0.00$) significantly affected the budget allocation decisions with accessibility determined as the most influential variable in this regard.

Once the institutions disclose information relative to budget expenditures, status of projects, and the results of audit, administrators are able to make timely decisions over funds utilization, and thus in line with the respondents' comments that inclusive budgeting systems are key to linking financial allocations to development plans. Meanwhile, Ramos (2021) pointed out that impactful and publicly available audit reports lead to remedial actions and better use of funds.

With accessibility found as the strongest predictor, reveals that financial information viewed on websites or other digital platforms directly enhances transparency as well as supports bottom-up budgeting, on-time decision making and expenditure monitoring. This agrees with the open-ended survey response theme that regular checking of performance against budget is very important at the institutional level.

Likewise, Llanes and Santos (2020), mentioned that accessible financial data enables SUCs to better allocate revenues, particularly for infrastructure expansion, and Gabriel et al. (2020) further suggested that clear disclosure practices and accessible financial data enable a more responsive and effective allocation of funds. This is also consistent with the argument of Abellon et al. (2020) that budget allocation inefficiencies often stem from procedural and accessibility limitations.

On the other hand, transparency dimension financial reporting quality ($B = 0.224$, $p = 0.07$) had no significant effect on budget allocation, suggesting that despite of SUCs producing accurate and compliant reports, these may not be used in operational decision-making relative to budget allocation. This finding aligns with Gabriel et al. (2020), who insisted that transparency mechanisms alone do not guarantee improve resource allocation unless they are internalized into managerial practice. Therefore, disclosure practices and accessibility significantly affected budget allocation, while financial reporting quality alone did not ($p > 0.05$), and income utilization particularly budget allocation improved not simply for the reason that financial data existed, but because the financial information was visible, comprehensible, and regularly disclosed.

As to income utilization in terms of efficiency in fund utilization, the results as shown in Table 25 indicate that both financial reporting quality ($B = 0.298$, $p = 0.04$) and accessibility ($B = 0.407$, $p = 0.00$) significantly influenced income utilization where accessibility again was determined as the most influential variable, whereas disclosure practices ($B = 0.199$, $p = 0.21$) did not significantly affect the fund utilization. The results indicate that the accuracy and timeliness of financial data boost the utilization of funds which is consistent with Espiritu (2020) who highlighted public financial management efficiency is navigated by sound reporting systems and timeliness of fund availability, thus, further upheld by the finding of Soriano (2022) who argued that improvements in financial procedures result to operational efficiency.

Table 25 also displays the regression results of financial transparency sub-variables on income utilization in terms of financial accountability, wherein financial reporting quality did not demonstrate a significant effect with p -value of 0.89 ($B = 0.14$), while disclosure practices ($B = 0.497$, $p = 0.00$) and accessibility ($B = 0.360$, $p = 0.00$) strongly demonstrated significant influence on financial accountability. The results signify that financial accountability is reinforced when financial data are disclosed openly and can be easily access, supporting the findings of Delos Santos (2020), Brenya Bonsu et al. (2023) and Ramos (2021), who stressed that the core mechanisms for accountability in the public sector are transparency and accessibility, therefore, emphasizing that accountability extends beyond compliance reports to stakeholder involvement and transparency of financial data.

To sum up, the results are consistent with other literature that financial transparency does indeed affect income utilization, specifically disclosure practices and accessibility. However, financial reporting quality alone does not always affect income utilization. Thus, this supports Ngare (2023) who claimed that for transparent financial system to have an effect on financial performance, this must be made into actionable and accessible information that can easily be understood and implemented.

3.4.2 Effect of Financial Transparency on Infrastructure Development in terms of Project Completion Timeliness, Quality of Infrastructure Projects, and Sustainability and Maintenance of Developed Facilities

Table 26 presents the results of multiple linear regression analysis on how the financial transparency sub-variables affect infrastructure initiatives in SUCs Region II.

Table 26
Effect of Level of Financial Transparency on Infrastructure Development
 Multiple Linear Regression

Dependent Variable	Parameter	B	Std. Error	t	Sig.	Interpretation	Decision
Project Completion Timeliness	Constant	2.673	0.677	3.95	0.00	Significant	
	Financial Reporting Quality	0.174	0.247	0.71	0.48	Not Significant	Accept Ho
	Disclosure Practices	-0.493	0.326	-1.51	0.14	Not Significant	Accept Ho
	Accessibility	0.503	0.252	1.99	0.06	Not Significant	Accept Ho
Quality of Infrastructure Projects	Constant	2.653	0.745	3.56	0.00	Significant	
	Financial Reporting Quality	0.162	0.272	0.60	0.56	Not Significant	Accept Ho
	Disclosure Practices	-0.458	0.358	-1.28	0.21	Not Significant	Accept Ho
	Accessibility	0.497	0.277	1.79	0.08	Not Significant	Accept Ho
Sustainability and Maintenance of Developed Facilities	Constant	2.217	0.776	2.86	0.01	Significant	
	Financial Reporting Quality	0.197	0.283	0.70	0.49	Not Significant	Accept Ho
	Disclosure Practices	-0.202	0.373	-0.54	0.59	Not Significant	Accept Ho
	Accessibility	0.286	0.289	0.99	0.33	Not Significant	Accept Ho

In the case of infrastructure development in terms of project completion timeliness as shown in Table 26, the regression data depict that financial transparency did not significantly affect project completion timeliness. Financial transparency dimensions - financial reporting quality ($B = 0.174$, $p = 0.48$), disclosure practices ($B = -0.493$, $p = 0.14$), and accessibility ($B = 0.503$, $p = 0.06$), were all not significant predictors ($p > 0.05$) of infrastructure development – project completion timeliness.

Given the acceptance of the null hypothesis, the financial reports which conformed to reportorial requirements did not necessarily influence the completion of infrastructure project. This supports Indira and Chandrasekaran (2023) which is a proof that reports exist in order to comply with formal regulations yet do not assure operational improvements; and Mendoza (2020) who argued that delayed implementation may be affected by regulatory constraints and funding availability. Disclosure helps improve the utilization of funds, but this alone does not have a clear effect on infrastructure performance, as that may be influenced by operational constraints like availability of resources, technical capacity, procurement procedures, and bureaucratic procedures. Moreover, accessibility which was not significant demonstrates that while visible financial data helps inform infrastructure planning, it is not strong enough to independently influence infrastructure outcomes. This is a reflection of the findings of Garcia and Perez (2021) and Miranda (2021), who stressed that infrastructure development varies more on funding sufficiency, timely fund releases, technical expertise, and bureaucratic efficiency, other than on transparency alone.

With respect to infrastructure development in terms of quality of infrastructure projects, the results reveal that this did not significantly influence by financial transparency sub-variables with financial reporting quality ($B = 0.162$, $p = 0.56$), disclosure practices ($B = -0.458$, $p = 0.21$), and accessibility ($B = 0.497$, $p = 0.08$) were all statistically insignificant.

This shows that the quality of infrastructure projects not only depends on transparency practices alone but rather influenced by other factors such as contractor's capability and financial standing, technical standards, and projects management

effectiveness. This result accords with Miranda (2021) and Garcia and Perez (2021), who stressed the importance of institutional capacity, technical know-how and other financial alternative means to achieve quality infrastructure. However, it differs from Ngare (2023), whose finding showed that transparency supplements infrastructure quality.

Furthermore, the multiple regression results reveal that none of the financial transparency dimensions affected the sustainability and maintenance of developed facilities. The dimensions - financial reporting quality ($B = 0.197, p = 0.49$), disclosure practices ($B = -0.202, p = 0.59$), and accessibility ($B = 0.286, p = 0.33$) were all statistically not significant, hence, accept the null hypothesis ($p > 0.05$), and therefore indicative that the long-term sustainability and maintenance rely on institutional commitment, maintenance policies, and funding adequacy, rather than transparency alone.

Nonetheless, transparency is not the only factor considered in infrastructure development, though it is necessary for financial accountability. And this is consistent with the results of Santos and Reig (2022) and Abdulkarim (2023) who pointed out internally generated income and revenue diversification are the factors for maintaining infrastructure initiatives.

Overall, financial transparency three dimensions did not statistically predict infrastructure development in terms of project completion timeliness, infrastructure quality, and sustainability and maintenance, and this asserts the findings of Ngare (2023) and Ekeocha et al. (2021b), who stressed that while transparency affects income utilization, it does not independently translate into measurable infrastructure development outcomes in the context of SUCs in Region II.

3.5 Proposed Financial Policy

Quantitative results of the study showed a very high level of financial transparency, very efficient income utilization, and so with the infrastructure development, nonetheless, documentary reviews conducted especially in the BFARs website posting revealed contradictions in actual compliance. Thus, suggesting gap between perceived transparency by the respondents versus the verified public disclosure despite the very high perceptual ratings.

Likewise, with the income utilization and infrastructure development, data substantiation revealed deviations in the results. The proposed financial policy matrix translates the relationships among financial transparency, income utilization and infrastructure development into an implementable and sustainable financial governance policy for SUCs in Region II.

Cumulatively, the proposed policies express the need for SUCs to adopt systems that are transparent, well-coordinated, and responsive to institutional priorities. In order to provide solid foundation for improved financial stewardship, there is a need to fortify transparency-driven budgeting, compliance mechanisms, monitoring system, and technical capacities. Eventually, the suggested policies serve as the strategic intervention in assuring that generated revenues are optimize in support of SUCs' missions to produce exemplary graduates, scholarly research capacities and campus modernization.

The Financial Policy as per Table 27 is hereby proposed to institutionalize existing good practices into a formal written policy, promote uniform financial governance policy implementation across SUCs in Region II, reinforce compliance and verification mechanisms, and assure continuity and sustainability of financial governance regardless of change in leadership. This can be attained through institutionalization, standardization, monitoring, sustainability, and compliance enforcement. This policy proposal shall be incorporated in the financial operations and administrative manuals and be subjected to approval by the respective governing boards of the SUCs in Region II.

Table 27
Matrix for Proposed Financial Policy

Key Area	Objective	Proposed Policy Provisions	Unit Responsible	Expected Outcome
1. Financial Transparency	Institutionalize verified financial transparency	BFARs and financial statements mandatory website posting; Set posting deadline; Past 5-year posting in SUC transparency seal; and Compliance certification by IAU per quarter	Budget Office, Accounting Office, Internal Audit Unit (IAU), ICT in-charge of posting	-Sustained and verified transparency compliance
2. Income Utilization	Standardize income utilization practices	Prioritize allocation for instruction, research, extension, student services and infrastructure development; Set BUR threshold; and Monitoring of quarterly utilization reports through digital dashboards.	Key Result Area (KRA) Directors, Budget Office, Accounting Office	-Optimum and strategic income utilization
3. Infrastructure Development	Assure prioritized and sustainable infrastructure development	Set criteria for infrastructure prioritization; and Segregate procurement for infrastructure and equipment.	Project Development Office, Planning Office, Procurement Office	-Priority-based and planned infrastructure development
4. Compliance and Monitoring	Reinforce compliance, monitoring, and auditing	Conduct of financial policy compliance audit annually; and Catch-up plan and corrective measures to address the gaps.	IAU, Offices concerned	-Reinforced institutional accountability

5. Continuity and Sustainability	Foster long-term policy continuity	Mandatory 3-year policy review; and Conduct orientation and continuous training.	Administrative Services Office, Finance Office	-Long-term financial stability across SUCs in Region II
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3.5.1 Financial Transparency

Mandatory and uniform financial disclosure practices shall be adopted to affirm sustained compliance and transparency requirements and to reinforce public trust and accountability, with the aim of institutionalizing verified financial policy across SUCs in Region II by ensuring complete, timely, and accurate disclosure of financial information in compliance with national regulatory standards, with the following provisions:

- Mandatory posting of Budget and Accountability Reports (BFARs) and audited financial statements on the official SUC website under the Transparency Seal.
- Post financial reports on the set deadline consistent with the national government reporting timelines.
- Maintain at least five (5) years trend of financial postings accessible through Transparency Seal.
- Quarterly verification of posted reports shall be conducted by Internal Audit Unit (IAU) and compliance checklists shall be reported to the management governance level.

3.5.2 Income Utilization

In order to standardize income utilization practices and to guaranty that generated revenue fund is consistent with the mandates and development priorities, income utilization shall prioritize instruction, research, extension, student services, and infrastructure development, to include in the policy provisions the following:

- Prioritize income allocation on the core functions and development initiatives in conformity with the approved institutional plans. And consider academic demand, campus population, and facility condition.
- Set Budget Utilization Rate (BUR) threshold for efficient use of funds.
- Prepare quarterly income utilization reports regularly, and monitor through digital dashboards to reinforce oversight and decision-making.
- Adopt multi-year income utilization and capital expenditure plans to assure sustainability.
- Use the disclosed financial data in budget planning, income programming, and performance evaluation.

3.5.3 Infrastructure Development

Infrastructure development shall be based on actual needs, priorities, and budget availability to ensure that planned initiatives are funded, with the following provisions:

- Prioritization criteria for infrastructure development shall be established taking into consideration the urgency, impact, sustainability, and absorptive capacity.
- To enhance efficiency, monitoring, and accountability, procurement for infrastructure projects shall be separated from that of equipment.
- Strategic development and capital investments plans shall be the bases for infrastructure projects.
- Enhance the project management systems to guaranty cost efficiency, and project quality and completion timeliness.

3.5.4 Compliance, Monitoring & Evaluation, and Reporting

To strengthen strict adherence with the approved financial policies by regular monitoring, auditing, and corrective actions, the following provisions shall be included:

- Conduct of financial policy compliance audit annually by the Internal Audit Unit (IAU).
- Address the identified gaps and deficiencies, if any, through catch-up plans and corrective action mechanisms.
- Submit compliance audit report, and financial and performance reports annually to SUC top management and Board of Regents for action.

3.5.5 Continuity and Sustainability

Periodic review and continuous enhancement of financial policies shall be conducted through capacity-building initiatives in order to promote long-term continuity and sustainability of financial governance practices among SUCs in Region II, thus, inclusion of the following policy provisions:

- Conduct of mandatory policy review every three (3) years to assure relevance and responsiveness to emerging needs.
- Ensure conduct of regular orientation programs and continuous capacity building to administrators, finance, planning, procurement, and engineering personnel, and seek technical assistance from partner agencies if needed.
- Integrate this policy into the SUC financial governance, and any amendments shall be subject to approval by the SUC governing board and subsequently communicated to all concerned units.

This shall take effect only upon approval by the SUC governing board and shall be adopted to financial operations relating to transparency, income utilization, and infrastructure development.

3.6 Summary of Qualitative Responses from Survey Open-Ended Questions

Table 28 shows the summary of the qualitative themes generated from the open-ended survey responses, emphasizing the respondents' concerns in connection to financial transparency, income utilization, and infrastructure development, and providing support to the quantitative and documentary results of the study.

Table 28
Summary of Qualitative Themes from Survey Open-Ended Responses

Theme	Frequency	Sample Respondent Quotation
1. Strengthening Transparency in Budgeting and Reporting	41	- "Institutionalize a transparent budget planning and reporting system that aligns allocations with development goals."
2. Improved Monitoring and Evaluation of Income Utilization	33	- "Regular monitoring of budget utilization at the campus level is needed to assess financial performance."
3. Needs-Based Allocation for Infrastructure Development	28	- "Our campus receives limited funds despite high demand. Allocation must be based on actual needs."
4. Adequate Funding for Facilities and Maintenance	25	- "There must be adequate funding for building maintenance and improvements."
5. Strict Compliance with Financial Policies	22	- "There should be adherence to financial policies and guidelines at all times."
6. Participatory and Consultative Budget Planning	17	- "Stakeholders should be involved in budget planning to ensure funds match the needs of programs."
7. Capacity Building in Financial Management	14	- "Personnel need financial management training so they can implement policies effectively."
8. Strengthened Resource Generation	11	- "The institution must maximize income generating projects to support infrastructure development."

4. DISCUSSIONS

From the findings of the study, this chapter summarizes the conclusions, recommendations and implications related to the research objectives. The conclusions link together these findings with degrees of clarity and application in SUCs Region II. The recommendations provide concrete measures for enhancing the financial management system and making better use of revenues generated in support for institutional development. Eventually, it explores the implications of the research with a view to its significance in terms of enhancing financial governance and local infrastructure initiatives.

4.1. Conclusion

Transparency is quite high among SUCs in Region II which signifies a certain level of corporate awareness, inclusive reporting and accountability practices.

Internal controls and compliance mechanisms are performing effectively, as shown by the research of Soriano (2022) and Delos Santos (2020), who argued that the positive effects are derived from strengthened policies and auditing structures. Nevertheless, despite high perceptual ratings, documentary verification of the Transparency Seal postings on the SUC website revealed inconsistencies with actual compliance levels, there exists a gap between the transparency as perceived transparency and the verified public disclosure practices. Thus, this result underlines the importance of reinforcing compliance verification and accountability mechanisms.

Furthermore, the need for deeper institutional transparency and participatory financial management as shown in the qualitative responses is indicative that there exist gaps in the disclosure, accessibility, and stakeholder involvement. This also aligns with that of Ngare (2023) and Brenya Bonsu et al. (2023), who emphasized the need for constant improvement of the clarity in reporting, policy alignment and communication. According to Villanueva and Santos (2020), transparency must constantly adapt to changes in the income structure brought about by national policies like R.A. 10931. Therefore, there is still a need for SUCs in Region II to further enhance transparency for clarity and comprehensibility in order to gain stockholder confidence.

As to the utilization of income, the result also displayed a highly efficient rating which therefore aligned with the priorities of the institution particularly in instruction, research, extension, student services, and operational support.

Generally, quantitative results show a very efficient income utilization of SUCs in Region II, indicating tight compliance with rules for procurement, auditing and financial management, but documentary verification showed only efficient use of resources, thus, discrepancies abound between what respondents expected and the documents revealed. There exist issues in infrastructure maintenance and need-based resource allocation, though budget allocation in context is fine in nature. This mirrors the findings

of Miranda and Perez (2021), Espiritu (2020), and UNESCO (2021) with respect to the operational constraints in educational institutions as well as inadequate financial support.

To the contrary, based on the gathered data from qualitative replies through open-ended survey as can be seen in Table 28, several modifications were raised by the respondents like the need-based allocation, campus level monitoring, continuous capacity building for finance staff, and strict enforcement of financial regulations. Qualitative data stressed the need for reinforcing monitoring and assessment which are essential for timely project implementation and better utilization of income. To ensure efficient income utilization and effective implementation of policies, financial personnel must be kept abreast through continuous capacity building, as pointed out by Abellon et al. (2020). Therefore, while SUCs in Region II do demonstrate strong income utilization as part of standard operating procedures, still their technical capability could be enhanced to further improve the budget utilization, and strengthen financial regulations compliance.

Given the timeliness of project completion, quality and sustainability of projects, the overall infrastructure development of SUCs in region II was also rated very high, an indicative of modern techniques and safety standard for the projects, and generally increases campus functionality and helps students learning environment. However, on the other side, further results reveal the weak links in terms of long-term sustainability such as inadequate maintenance plans, limited funds for the upkeep, and variations in the timeliness of project completion. Additionally, despite the very high ratings by the respondents, verified documents demonstrated low implementation of planned infrastructure development with also very low completion rate. Furthermore, respondents raised concerns on limited and uneven funding allocation, and the need to strengthen planning and monitoring in the campus level, and insisted that infrastructure allocation must be based on actual needs especially those campuses with high student population but limited facilities. This supports the view of Abdulkarim et al. (2023) that both the internally generated income and effective capital expenditure planning have a great impact on the infrastructure development.

On the other hand, though infrastructure development remains supported by generated income, regression results show that financial transparency did not significantly predict infrastructure development. This implies that infrastructure outcomes depend on other factors such as funding policies, regulatory requirements, and long-term capital planning beyond just transparency alone. These results also coincide with Miranda (2021) and Indira and Chandrasekaran (2023), who pointed the significance of private sector partnership, adequate funding and structured maintenance systems in sustaining infrastructure initiatives. Taken together, the findings underscore that infrastructure development is advancing, however, this requires thorough planning, maintenance funding and even allocation.

Based from the inferential analysis, hypothesis testing reveals that financial transparency significantly affected income utilization in general but did not predict infrastructure development of SUCs in Region II at 0.05 margin of error. The analyses generated two different results for the dependent variables which are the income utilization and infrastructure development.

The study regression results generally show that the two components of financial transparency which are the disclosure practices and accessibility had a significant effect on income utilization. While financial transparency is a critical determinant of income utilization in SUCs Region II, disclosure and accessibility mechanisms have a stronger influence than reporting quality alone. And efficient income utilization is achieved when financial information is timely, understandable and accessible to decision makers and stakeholders. The results give rise to the rejection of null hypothesis and confirms transparency factors significantly influence how revenue is managed and used within SUCs in Region II.

The findings imply that if SUCs make budget, expenditure, and report of audit results transparent and therefore open to stakeholders, this leads to a more efficient use of fund and produce more accurate information. This conclusion is echoed by Gabriel et al. (2020), Ramos (2021), and Llanes and Santos (2020) who all insisted that when financial information is made transparent, responsible management of funds is reinforced and financial resources allocated better.

With respect to the dimension of financial reporting quality ($p = 0.07$) under the income utilization budget allocation, and under financial accountability ($p = 0.89$), which were both not significant, means that except in conjunction with financial reporting disclosure practices and accessible to stakeholders, income utilization was not totally influenced by the quality of financial reporting.

Nonetheless, of the three transparency dimensions, none significantly predicted the development of infrastructure, hence, the study accepts the null hypothesis for infrastructure development, and this is therefore more related to the adequacy and timeliness of funding, technical capacity, procurement or project management systems, as well as the availability of maintenance budget. Cumulatively, financial transparency alone was not a significant determinant of infrastructure development in SUCs Region II, though it served as supporting governance framework, it did not directly influence infrastructure timeliness, quality, or sustainability.

Since the regression analysis outcome indicates that transparency displayed no substantial impact on infrastructure development, this result aligns with the findings of Miranda (2021), Garcia and Perez (2021), Mendoza (2020), and Indira and Chandrasekaran (2023) who stressed that infrastructure outcomes usually rely on structural, financial, and bureaucratic restrictions rather than transparency alone. The results suggest that transparency may be necessary, but it is not sufficient for successful infrastructure development. Qualitative themes like needs-based allocation, adequate maintenance budgets and participative planning stress

the importance of transparency for stakeholders, nevertheless, respondents were actually more concerned with regard to lack of funds, how resources were allocated, lack of technical expertise, and the limited stakeholder participation.

With the overall perceived high ratings of existing practices, the output then of this study is not corrective in nature but developmental and institutional which is policy development specifically institutionalization, standardization, verification, and sustainability mechanisms to reinforce financial governance. The proposed Policy Framework translates the confirmed relationships into structured, implementable set of policies designed to strengthen transparency-driven income utilization and to support infrastructure planning through evidenced-based, needs-oriented mechanisms for SUCs in Region II.

4.2 Recommendations

Based on the findings of the study, it is inferred that financial transparency in SUCs Region II significantly improved income utilization efficiency, but it did not however directly affect infrastructure development which may be influenced by other factors such as capital outlay availability, procurement processes, and regulatory requirements. Thus, transparency helps but is not an all-inclusive factor driving change on its own terms, nor it is decisive. Though SUCs in Region II were quantitatively highly compliant with certain standards, qualitative open-ended survey inputs, however, identified some areas for improvement.

The following recommendations are meant to guide SUCs, policy makers, and administrators in fortifying financial governance mechanisms to enhance the performance of institutions and achieve continued growth.

1. Institutionalize Financial Transparency Through Reinforcing of Compliance Verification Mechanisms

In order to address the noted inconsistencies between the perceived transparency by the respondents and actual documentary compliance, SUCs should reinforce the digital transparency systems, internal audit verification, and compliance monitoring despite the very high levels of transparency. The disparity suggests financial information verification is needed to address the imbalance between perceived and actual transparency of the BFARs website postings. With regular internal audits, automated compliance monitoring checklists, and third-party verification of the posted financial reports, to ensure that financial transparency practices are both credible and sustainable. The accessibility of financial reports will boost stakeholders trust and confidence.

2. Strengthen Strategic Income Utilization as the Primary Driver of Infrastructure Development

Monitoring and evaluation system should be established to track budget utilizations and disbursements for prompt decision making, and be integrated into financial management practices.

Though infrastructure development was not directly predicted by financial transparency, it is supported by internally generated income, SUCs should prioritize strategic, needs-based income allocation frameworks, wherein the generated income should be programmed through long-term infrastructure three-year capital expenditure plans aligned with enrollment trends, campus priorities, and maintenance requirements to guaranty timely, functional, and sustainable infrastructure development.

3. Enhance Technical and Project Management Capacity for Infrastructure Implementation

The infrastructure projects low completion rates and delays indicate the need to toughen the project management, engineering, and technical capabilities. In order to improve the cost efficiency, timeliness, and the quality of infrastructure projects funded from internally generated income, there should be continuous capacity building for planning, finance, procurement, and project monitoring units; and develop project monitoring dashboard to track timeline adherence, budget utilization, and procurement progress.

4. Integrate Transparency with Participatory and Performance-Based Budgeting

Financial disclosure outputs and stakeholder feedback should be used as inputs in income utilization planning, implementation, and monitoring processes, and this shall be explicitly integrated in the budget allocation and utilization policies.

Infrastructure development remains crucial when integrated with participatory decision making and performance monitoring, despite the statistically not significant effect of transparency. To assure that the disclosed financial information reaches budgeting and infrastructure decisions, transparency mechanisms should be linked to stakeholders' consultation, performance indicators, and post-project evaluations.

5. Adopt Needs-Based and Campus-Specific Infrastructure Planning

Since the results reveal that infrastructure outcomes relied more on planning adequacy, technical capacity, and fund availability than on transparency alone, SUCs should establish demand-based budgetary framework systematically aligning budget allocations with campus-specific priorities, student population growth, infrastructure condition, and program requirements. Findings which are supported by qualitative insights, reveal that schools with high number of students often face limitation in funding to maintain and improve physical infrastructure. Hence, budget planning should incorporate evidence-based assessments to provide equitable and effective allocation of funds across campuses.

6. Institutionalize the Proposed Financial Policy Framework Across SUCs in Region II

With the strong existing financial practices in SUCs Region II, the policy interventions should focus on institutionalization, and not corrective action. The proposed financial policy developed in this study should be adopted through Board approved institutional policy, to provide practical governance tool that translate empirical findings into an actionable financial and infrastructure management practices. This focuses on verification, standardization, sustainability, and evidence-based income utilization with the aim of reinforcing accountability mechanisms. Improving infrastructure planning systems, and sustaining effective income utilization, thereby ensuring long-term financial governance and infrastructure resilience among SUCs in Region II.

In addition, due to the emerging digital transformation, governance, and infrastructure needs, the proposed financial policy shall be subjected to a regular 3-year review by the SUCs in order to assure its relevance to the occurring new developments.

7. Future Researchers to Further Explore the Financial Governance and Development in SUCs

Further mixed-method studies may explore the mediating factors such as the procurement systems, project management, technical capacity, and strategic planning, to examine why transparency influences income utilization but not directly affect infrastructure development. Researchers are encouraged to employ longitudinal and comparative studies across other regions to verify whether the observed relationships are consistent across institutional and regional contexts.

To pave the way for future researchers in other regions to engage in exploring additional variables on different scales which can be generalized, this study leaves promising direction. The use of mixed methodology (quantitative statistics with qualitative insights) to examine the long-term impact of policy and in-depth analysis into internal audit practices will further clarify how financial transparency in higher education institutions sustains over time, to what extent transparency impact institutional sustainability.

4.3 Implications of the Study

The findings and output of the study are significant which provide important influence for financial governance, implementing policies, administrative management, and future research for SUCs in Region II. The very high level of financial transparency and its great influence on income utilization support the assumption of Agency Theory which emphasizes that transparency and disclosure seem to reduce information asymmetry between SUC administrators and the government, thereby improving financial constraints for property maintenance, loss prevention, as well as proper management of budgets.

This study fills an essential gap with empirical evidence to the effect that financial transparency had a significant influence on income utilization but did not lead towards infrastructure development. This aligns with Agency Theory and Financial Accountability Theory in which accountability in return leads to greater efficiency within the organization, and also upholds the Resource-Based View (RBV) Theory which highlights that when SUCs are transparent about the income and expenditures, they can more effectively manage revenues as a strategic source. In contrast, the fact that transparency has no significant influence on infrastructure development indicates that the effectiveness in infrastructure provision is determined not by transparency but by other factors such as budget prioritization capital outlay availability, procurement processes and rules. From the point of view of Public Financial Management (PFM), transparency can only lift financial efficiency, nevertheless, this must go hand in hand with strategic planning and policy support to have an impact on infrastructure development. Thereby, based from the findings, it confirms that that transparency is necessary for efficient use of income while infrastructure development needs an additional policy planning mechanism not just transparency alone. Likewise, the proposed policy framework focuses on priority-based income utilization, BUR thresholds, and strategic infrastructure programming, which is in accordance with RBV, Financial Accountability, and PFM principles.

In contrast, though transparency did not significantly affect infrastructure development, the very high scores remain vital in fostering public trust, institutional credibility, and ethical governance, aligned with Agency Theory and Financial Accountability Theory. Even though transparency does not directly influence physical development, still it serves as a support mechanism for accountability and proper utilization of income. Inconsistency between transparency high ratings and the actual BFARs website posting compliance indicates that verification mechanism, internal audit certification, and digital disclosure systems must be reinforced, thus, this supports the role of transparency as a monitoring and accountability tool rather than direct driver of infrastructure development.

Moreover, this study has social implications. With the increased transparency comes greater accountability to the administrators, faculty members, students and community stakeholders alike. If the institutions are operating more efficiently and effectively given their financial resources, the public are more likely to provide educational support as well as for research endeavor and capital projects, since it is through financial transparency that good governance is established, and that strictly enforced financial frameworks are needed to align policies and implementation. When an actual Proposed Financial Policy Framework emerges, SUCs must not only satisfy transparency related requirements but also keep their directions toward policy-driven priorities, provide verification mechanisms as required, and produce strategic arrangements for generated income to transform into concrete infrastructure outcomes.

On the other hand, while transparency did not directly influence infrastructure development, the findings indicate that policy focus should not be limited to transparency compliance only, priority must be given also on income utilization efficiency, fund prioritization and expenditure control, and strategic infrastructure investment planning which are the key principles under Public Financial Management Theory and Financial Accountability Theory. The proposed policy developed in this study therefore serves as policy-level mechanism that integrates transparency, accountability, and utilization efficiency, thus making it a replicable governance model for SUCs in Region II as well in other regions.

In this regard, future researchers are encouraged to examine other mediating variables like capital outlay availability, procurement systems, project management, project implementation technical capacity, and strategic planning structures. In order to further confirm these theory-based relationships, there is a need for longitudinal to capture the long-term effects and comparative research across other regions to determine if the observed relationships are consistent.

Nonetheless, despite the use of survey with qualitative inputs, and documentary substantiation, this study has its limitations. One is that the study is based on self-reported survey responses wherein this may be subject to social desirability bias and institutional sensitivity given the nature of financial transparency and accountability, and thus, contributed to the very high ratings obtained in most of the indicators. Another is that despite the conduct of documentary analysis wherein the verification process was based only on the available BFARs website postings and official institutional documents, hence, the entire internal financial processes within may not be fully captured. Additionally, this study was limited only to SUCs in Region II, thereby restricting the generalizability of the findings to the other regions. Since this study focused only on the three variables which are the financial transparency, income utilization, and infrastructure development, other relevant factors were not included which may significantly affect infrastructure development like the procurement efficiency, contractor's capability, and project management systems. However, this study remains significant despite the limitations since the outcome is a Proposed Financial Policy Framework which is empirically governance oriented and directly applicable to the reinforcement of financial management and infrastructure planning among SUCs in Region II.

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