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SOCIALIST REPUBLIC OF VIETNAM

Results-Based National Urban Development Program in the Northern Mountains Region

Technical Assessment

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PREPARED BY

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List of Abbreviations

CPC	City People's Committee
DLI	Disbursement Linked Indicator
DPI	Department of Planning and Investment (Province)
FY	Fiscal Year
GoV	Government of Vietnam
IRR	Internal Rate of Return
MOC	Ministry of Construction
MOF	Ministry of Finance
MUDP	Management Board of Urban Development Projects
NPV	Net Present Value
NUDP	National Urban Development Program
O&M	Operations and Maintenance
PAP	Program Action Plan
PforR	Program-for-Results Financing
PMU	Project Management Unit
POM	Project Operational Manual
PPC	Provincial People's Committee
PPT	Project Preparation Team
PPTAF	Project Preparation Technical Assistance Facility
RBNUDP-NM	Results-Based National Urban Development Program in the Northern Mountains Region
SAV	State Audit of Vietnam
TABMIS	Treasury and Budget management Information System
UDA	Urban Development Agency (of MOC)
US$	United States Dollar
VND	Vietnamese Dong
VOC	Vehicle Operation Cost

Executive Summary

Description of the Program

1. The proposed Results-Based National Urban Development Program in the Northern Mountains Region (RBNUDP-NM or the "Program") will assist the Government of Vietnam (GoV) in developing the implementation framework for its national urban program. It will do this by piloting a performance-based transfer system that will provide participating cities with a combination of much needed resources along with a clarification of implementation responsibilities, a results-based orientation, improved planning and a strengthening of oversight and accountability through audits and verification activities. The Program Development Objective is to strengthen the capacity of participating Northern Mountains cities to plan, implement and sustain urban infrastructure. The World Bank's Program-for-Results (PforR) lending instrument is to be used for this operation. The Program targets seven cities (Dien Bien Phu, Bac Kan, Cao Bang, Thai Nguyen, Hoa Binh, Tuyen Quang and Yen Bai) with a total budget of US$300 million (US$250 million IDA; US$50 million counterpart).

Strategic Relevance

2. Vietnam is urbanizing rapidly and the Government of Vietnam (GoV) has recognized that it has only one chance to "get urbanization right." Over 30 percent of the population lives in cities and urban population is growing by 3.4 percent annually. Urbanization has great potential to foster inclusive growth, poverty reduction and environmental sustainability. Poorly managed urbanization can result in economic bottlenecks, increased inequality and environmental damage. The GoV thus faces physical, financial and institutional challenges in successfully managing the urban transition.

3. Decentralization in Vietnam is a gradual and uneven process. The city administrations (CPC) have a key emerging role but responsibilities remain fragmented between different levels and agencies of government. Cities have limited own-source revenues and depend on the national and provincial levels for financing as well as for oversight of many important decisions.

4. The National Urban Development Program (NUDP) promotes efficient, sustainable and equitable urban development. NUDP will be implemented through regional sub-programs of which RBNUDP-NM (the Program) is the first. The Program will therefore develop and pilot the implementation framework of the NUDP in seven Northern Mountains cities.

5. The Northern Mountains region is historically important but is one of the poorer regions of Vietnam with growth indicators lagging behind the country as a whole. Since 1999, the Northern Mountains region has had the lowest income per capita in the country.[1] The cities have a key role in regional development as economic and administrative hubs and as engines of growth. Strengthening the development of these urban centers is a high priority for the GoV, but there is a widening gap between these cities need for urban infrastructure investments and their resources. For this reason GoV requested financing support from the World Bank, initially in 2011.

6. Improved urban infrastructure and strengthened city capacity to plan, manage and maintain infrastructure investments are expected to stimulate private investments leading to inclusive economic growth. This will enhance the economic opportunities available to low income residents of the cities and the surrounding rural areas. Improved infrastructure will directly improve public health and the quality of life of poor and low income urban residents.

Institutional Context

[1] Government Statistics Office, Monthly average income per capita at current prices by residence and by region (17/09/2013).

7. Intergovernmental functional and fiscal assignments in Vietnam result in a residual duplication of powers and functions between tiers that can delay or complicate investment coordination and reduce accountability for investment selection and timely results. City budgets are subordinate to the budget of the province, which are in turn subordinate to the national budget. This can result in a lengthy budget planning process in which resource availability is only confirmed late in the preceding year. The functions of revenue administration and public expenditure management are often tightly intertwined. Cities have limited powers to set tax rates and tax revenues are remitted upwards and then partially refunded on a shared basis. Grant revenues are primarily based on the assessed gap between own source revenues and authorized expenditures, subject to resource availability, and supplemented by tightly earmarked transfers. This framework is unpredictable and results in spending gaps and delays. Cities can raise non-tax revenues, in particular from the sale of land leases, but this raises governance concerns. Inter-governmental fiscal analysis is complicated by limited information disclosure and weak accounting and reporting formats.

8. These challenges are not unique to Vietnam, and they are subject to complex, long-term and non-linear public sector reform processes. The design of the Program contributes to the eventual resolution of these issues through clearly assigning implementation responsibilities, particularly to PMUs reporting to CPCs, clarifying planning, financing, reporting and oversight arrangements (including timelines), requiring mandatory public disclosure and strengthening complaints handling mechanisms through DLI's and the Program Action Plan. Targeted capacity building and technical assistance activities support these requirements. These measures will strengthen the framework for public expenditure management in participating cities.

9. The seven Program cities reported total revenues amounted to US$154.8 million in 2012 (or US$189 per capita), which have grown by an average of 23 percent per year since 2010. Core[2] own source revenues of the participating cities account for 54.5 percent of total revenues and amounted to US$ 103.48 per capita in 2012. Tax revenues, drawn from a combination of VAT, income and property taxes account for the largest share of all revenues (28 percent or US$ 53.10 per capita) and have grown at over 28 percent per year. Rapid revenue growth has also been reported in land-based revenues (rentals and leasing), which has grown at an average of over 21 percent per year and now accounts for 20 percent of all revenues. Transfers from provinces provided similar nominal revenues to tax revenues (US$57 per capita in 2012), and have grown at a similar average rate since 2010 (29 percent per year). The growing significance of own-source revenues, and of land-based revenues in particular, is strongly influenced by activity in Tuyen Quang and Thai Nguyen (two of the larger participating cities). The latter, in particular, has seen a significant decline in transfers while needing to respond to rapid population growth.

10. The seven participating cities reported total expenditures of US$154.8 million in 2012 (or US$189 per capita). Total spending has grown at an average of 25.2 percent since 2010, though annual growth slowed to 19.5 percent in 2012. Recurrent costs and outward transfers to other tiers of government absorb 76 percent of total spending and have grown most strongly since 2010. Personnel expenditures (in four cities for which data is available) accounted for an average of 52.1 percent of recurrent spending since 2010. Specific data on operations and maintenance expenditures is not reported. Specifically, no dedicated financial or operational arrangements are in place to support effective asset management (planned asset maintenance, rehabilitation and replacement), although this is considered a budget priority. Immediate spending needs on salaries and day-today operations has thus increasingly squeezed out non-capital asset management expenditures (i.e., planned maintenance) and capital investments (including rehabilitation and replacement) since 2010. Some evidence of inadequate maintenance, for example of urban roads, was observed during field visits. Capital investments have declined to 24 percent of total expenditures, despite an average growth rate of 14.8 percent. Capital spending growth has also been volatile, with a decline of 0.3 percent between 2011 and 2012. Total capital spending amounted to US$38 million in 2012 (or US$46 per capita).

[2] This category excludes rollovers for which disaggregated information on original source is not available.

11. The consolidated fiscal position of these cities presents both challenges and opportunities. Current levels of capital expenditures are insufficient to support current levels of urban growth, and operational expenditures appear to give limited priority to effective asset management practices. Few cities have in place adequate plans or financing for effective asset management to ensure the sustainability of investments. This has led to accumulated shortfalls in the provision of infrastructure that in turn may create constraints to local economic performance and is felt most directly by poor households. This situation is unlikely to be alleviated by either a reduction in recurrent expenditure pressures or increases in existing government transfers. Larger cities, which are experiencing more rapid population growth, typically receive lower levels of transfers per capita and thus already experience these challenges most directly. Most cities have begun to take measures to address this through securing increases in core own-source revenues to finance expanded maintenance and capital expenditures. Specific strategies have been improved revenue administration on local taxes and fees, and the utilization of land-based financing mechanisms, through land incorporation, servicing and leasing arrangements that have the capacity to both provide an immediate source of capital finance and grow the local tax base. However, the acquisition of land for these purposes raises governance concerns.

Expenditure Framework

National urban program

12. Government has been responding to rapid urban growth with both institutional reforms and financing. Since 1986, a program of decentralization has gradually devolved authority for urban governance and service delivery to City People's Committees. This has been accompanied by fiscal transfers to cities, which have been routed via the provinces, typically via discrete project-based grants and a growth in local level spending in response to demand.[3] This approach has resulted in significant progress in access to basic urban infrastructure services. An estimated 75 percent of urban households have access to water services (from 35 percent in 1997), 67 percent have access to toilets (from 17 percent), and 8 larger cities now have waste water treatment plants (from a baseline of zero). At a national level, 96 percent of households have access to electricity services, and over 90,000 km of roads have been paved in the last decade.[4]

13. However, massive challenges remain as urban populations continue to expand and their spending power increases. The residual shortfall in access to services needs to be addressed, while networks require expansion to accommodate growth in households and their demands. The number of vehicles on urban roads has more than doubled in the last decade, while still only 8 percent of waste water is currently treated. It is estimated that an additional 50 million m^2 of housing stock will be required each year to 2020. The above gaps will drive demand for associated bulk, connector and internal infrastructure services.

14. Government has established ambitious national targets for addressing these urban investment needs by 2020 (see Decision No. 1659/QĐ-TTg), including expanding access to:

- Water supply to 90 percent of households, providing 120 liters / person / day and reducing non-revenue water to between 10 percent and 25 percent, depending on the class of town;
- Sewerage and drainage systems to over 80 percent of urban catchment areas, with at least secondary treatment of 60 percent of waste water (rising to 100 percent and 70 percent respectively by 2025);

[3] Disaggregated financial data on urban investment is not available by sector, national transfers are not fully disclosed by target area, and provincial and city level reporting is not aggregated nationally nor does it fully account for sources of revenues. Budgeting practices and functional overlaps also significantly complicate financial analysis.

[4] World Bank, 2013(a), Assessment of Financing Framework for Municipal Infrastructure.

- Solid waste collection and disposal services to 90 percent of households and firms (with 100 percent coverage for hazardous waste);
- Street lighting to over 85 percent of urban roads outside of the largest urban centers (and 100 percent within them);
- Housing to 75 percent of the urban population, with an average floor area per person of 29m2;
- Road space to between 20 percent and 30 percent of urban land (depending of class of town), and expanding access to public transport services; and
- Urban green spaces per person to between $4m^2$ and $15m^2$, depending on the class of town.

15. These targets will require large but as yet poorly quantified amounts of investment. Initial estimates suggest that US$1.5 billion is required *annually* for water supply, wastewater and low-income housing investments. Other estimates suggest that at least US$1 billion is required annually just for wastewater investments.[5] Disaggregated estimates for energy and transport investment needs are not available.

16. It is not currently possible to quantify the total amount of investment in urban infrastructure at present. Investments are financed from a mixture of general purpose and specific national transfers and locally collected revenues at provincial and local level. These are increasingly complemented by sub-national borrowing and land sales / leases. The Infrastructure Finance Review notes that despite these uncertainties, there is a significant shortfall between investment needs and available resources (estimated at between 50 percent and 60 percent for the whole infrastructure sector nationally), and significant policy, regulatory and local capacity weaknesses that will need to be addressed. Capacity-building programs, for example, have typically provided only generic training on technical topics, rather than focused on improving results through strengthening the public expenditure management cycle.

The National Urban Development Program (NUDP)

17. Government adopted the National Urban Development Program (NUDP) (Decision No. 1659/QĐ-TTg of the Prime Minister) in 2012 to address this lack of coherence in the management of urbanization, and to provide a programmatic focus to efforts to achieve the 2020 targets. The objective of the NUDP is to promote an efficient, sustainable and equitable process of urban development by improving levels of access to basic urban services (water supply, sewerage and drainage, solid waste management, public lighting, roads and public transport, environmental services and public space), expanding the provision of serviced land for high-density housing and economic activities, and through integrated urban upgrading of low-income urban areas. The NUDP recognizes the importance of developing effective planning, financing, implementation and monitoring systems, particularly at the local level, to ensure the efficient execution and sustainability of required investments in urban infrastructure. It specifically notes the importance of strengthening urban management through improving mechanisms for investment planning and works management, increasing public awareness of local government roles and responsibilities, building the capacity of local officials and encouraging new mechanisms to finance infrastructure.

18. Importantly, the NUDP is the "umbrella" program of government that aims to coordinate and focus the current efforts by all levels of government in addressing the urbanization challenge. The Prime Minister thus assigned responsibility for program coordination and implementation to the Ministry of Construction (MOC), and established a multi-departmental Steering Committee (headed by the Minister of Construction) to supervise the execution of the program. It thus complements

[5] Vietnam Urban Wastewater Review. World Bank, 2013.

existing government programs (such as the Urban Upgrading program) rather than replaces them.[6] The NUDP therefore has no direct financing from government, as its operating costs are met within the existing baselines of implementing agencies and investment costs are already allocated elsewhere.

19. Progress with the implementation of the NUDP has been slow in the first year of its implementation. This has been due to the limited attention paid to the design of detailed implementation modalities. MOC has recognized this, and initiated a stocktaking exercise in May 2013 across all provinces on NUDP implementation. A concluding workshop in December 2013 found that, overall, provinces across the country have started to align their implementation of urban development activities with the NUDP's core principles and that a revision to implementation modalities and timelines is necessary, specifically to align financing mechanisms, capacity support and national oversight systems with NUDP objectives and to account for variations in progress between classes of cities. Government is now proposing to implement the NUDP incrementally through a series of regional sub-programs that will provide a comprehensive package of performance-based fiscal support, capacity support and enhanced oversight. The RBNUDP-NM ("the Program") would be the first regional implementation of the NUDP. In addition, the MOC is now preparing to issue a circular to further clarify and guide the process of development, appraisal and approval for urban development programs, including the strategic planning and prioritization of urban investments in the context of overall city development priorities and broader city master plans.

The Results-Based National Urban Development Program in the Northern Mountains Region (RBNUDP-NM)

20. The RBNUDP-NM has been prepared in response to this evaluation. The Program will assist government to introduce a regionally-focused, results-based support framework directly within the NUDP, through a performance-based transfer, capacity support and improved national oversight systems. The Program operates at two levels: (a) in selected cities within the target region, through performance transfers and capacity support activities; and (b) at the national level in strengthening systems of program management for the NUDP, policy development and oversight. These activities will influence both the continuing implementation of the NUDP, and also the framework for all government expenditures on urban development (including, as a first step, assisting government to quantify existing financing arrangements and investment needs).

21. Program expenditures are estimated to total US$300 million. US$280 million will constitute the performance-based transfer system and finance infrastructure investments specified in the investment menu. This includes US$50 million in counterpart contributions from the participating cities. US$20 million will support MOC activities, including the provision of capacity support (training and technical assistance) to participating cities, the development of national policy and implementation frameworks, and the strengthening of oversight systems (see Table 1). Note that city level expenditures include direct recurrent costs associated with the implementation of sub-projects under the Program.

Table 1: Program Expenditure Framework (US$ millions)

	2015	2016	2017	2018	2019	2020	Total
*Estimated expenditures by cities including IDA and counterpart funds**							
Thai Nguyen City	13.50	31.00	19.50	8.00	6.00	1.00	79.00
Cao Bang City	8.50	3.50	12.00	5.00	3.00	0.50	32.50
Bac Kan City	6.00	8.50	5.50	5.00	3.00	0.50	28.50
Dien Bien Phu City	4.00	10.00	10.00	5.50	2.50	0.50	32.50
Yen Bai City	5.50	2.50	14.50	9.00	2.50	0.50	34.50
Tuyen Quang City	4.00	3.00	12.00	15.00	6.00	0.50	40.50

[6] The absence of financial data in existing government programs makes it impossible to evaluate the size of actual expenditures that are within the framework of the NUDP (i.e., transfers supporting urban development).

	2015	2016	2017	2018	2019	2020	Total
Hoa Binh City	3.00	1.50	10.50	8.00	8.50	1.00	32.50
Sub-Total for cities	***44.50***	***60.00***	***84.00***	***55.50***	***31.50***	***4.50***	***280.00***
Estimated national level Ministry of Construction Expenditures by Type							
National Policy Development	1.00	1.00	1.00	1.00	1.00	2.00	7.00
MOC Staffing and Capacity Development	2.00	2.00	2.00	2.00	1.00	1.00	10.00
Annual Audits (SAV)	0.50	0.50	0.50	0.50	0.50	0.50	3.00
Subtotal for MOC	***3.50***	***3.50***	***3.50***	***3.50***	***2.50***	***3.50***	***20.00***
Total for Program	**48.00**	**63.50**	**87.50**	**59.00**	**34.00**	**8.00**	**300.00**

* Expenditures by cities include recurrent expenditures associated with sub-project management. Vietnamese public sector accounting practices require these costs to be included in sub-project cost estimates and budget provisions.

Program expenditures in the context of participating CPCs

22. As a level of government, CPCs have a range of functions that are not directly related to urban development. The total expenditures of CPCs amounted to US$154.8 million in 2012 (or US$189 per capita), and have grown by an average of 25 percent per year since 2010. Expenditures on urban infrastructure investments (capital investments including direct project management costs) accounted for 24 percent of this expenditure (US$38 million, US$46 per capita) and have grown at an average of only 15 percent since 2010. Personnel expenditures (in four cities for which data is available) accounted for an average of 52.1 percent of recurrent spending since 2010. City expenditures are financed through a mixture of local taxes and fees (34 percent) which are subject to revenue-sharing arrangements with provincial governments, transfers from provinces (30 percent), land sales and leases (21 percent) and accumulated savings (15 percent).

23. These existing CPC expenditures are expected to continue. On average, the Program will add an additional US$5.5 million to the annual expenditures of each city, or US$ 47 per capita. This constitutes about 24.8 percent of total CPC expenditures in 2012, and 101 percent of their capital spending baseline. However, this is anticipated to decline sharply due to ongoing growth in existing revenues and expenditures outside of the Program. If the current rate of growth and expenditure composition is sustained over the Program period (to 2020), CPC expenditures are projected to increase more than seven fold by Fiscal Year (FY) 2020, with capital expenditures more than doubling. They will then far outstrip annual Program expenditures. This provides a critical window for the Program to enhance the effectiveness of these future CPC expenditures, in line with NUDP objectives.

Program Institutional Arrangements

24. The Program will be implemented using the institutions and procedures applicable to infrastructure investments funded through the annual budget of the CPC. In this system, the provincial level (PPC and its departments) has a number of important oversight and quality assurance functions. At the national level, MOC will be responsible for policy, support, oversight and capacity development while the Ministry of Finance will transfer funds through the State Treasury (in a segregated account) to the CPC. State Audit of Vietnam (SAV) will undertake verification audits of the DLIs, using external service providers.

25. The MOC, through the Urban Development Agency (UDA), will coordinate the performance-based transfer Program, including the provision of capacity support to and oversight of participating cities, and the ongoing development of national policies and programs for urban development. The MOC has a clear mandate to perform these functions. Among other responsibilities, Decree No. 62/2013/NĐ-CP designates MOC as the central agency responsible for setting policies, standards and guidance on urban planning, and for guiding and inspecting the implementation of construction

activities (including those of sub-national governments). The MOC performs these functions through its UDA, which has considerable experience in issuing guidelines for cities and supporting them with infrastructure projects.

26. The performance-based transfer instrument and assessment mechanisms of the Program will be a new function for the MOC. One of the goals of the first phase of the NUDP is to prepare the MOC to replicate the results-based approach nationwide in the future. This will require the MOC to institutionalize its capacity to manage the performance-based transfer mechanism, design and deliver capacity support that assists the city administrations to improve the cost-effectiveness of planning and implementation of infrastructure investments, to continuously monitor progress and outcomes, and review and adapt relevant policy and regulatory frameworks as circumstances change. The effective performance of these functions will benefit from using clearly defined, measurable, and achievable results as a reference framework. Key skills areas that will be required include medium-term investment planning as well as ex-ante appraisal and ex-post evaluation of investments. The capacity development provided by MOC to the cities on these topics and others will be primarily through specialized consultants. It is anticipated that the MOC will also require support to analyze and integrate lessons learned in the first phase of the NUDP into the national roll-out, and to effectively report on Program implementation. The Program design supports the programmatic strengthening of MOC through sub-indicators in DLI 4 and required PAP actions. Activities necessary to strengthen the capacities of MOC in these functions will be included in the annual capacity plan. This integrated approach is assessed as adequate to ensure effective Program implementation.

27. The cities have identified sub-projects from their master plans and five-year plans, to be implemented under the Program. The cities will review and update their implementation plans annually and will consolidate the activities for the coming year into the annual budget plan of the CPC. An annual verification of performance relative to the Program DLIs will take place early in the subsequent year and disbursements are likely to be released around mid-year. Actual transfers made will reconcile allocated disbursements against advances for each disbursement period. CPCs will thus need to anticipate the achievement against the DLIs (and so the amount of the annual disbursement) in their annual budgeting process and adjustment process.

28. The CPC will assign sub-project preparation, procurement and contract administration tasks to the PMU. The CPC's will be responsible for local planning, sub-project selection and execution, and reporting. The Assessment identified areas for long-term capacity strengthening for CPCs in city planning, contract administration, asset management, revenue management and monitoring and evaluation systems. The majority of sub-project implementation functions will be delegated to the PMU within CPCs. Budget planning and financial management tasks will be undertaken by the Finance and Planning Unit. The PMUs are well established and in most cases have stable and experienced leadership and a good understanding of the regulatory framework for preparation, procurement and implementation of urban infrastructure investments. The larger investments handled by the PMU in the past are of similar size and complexity to the larger Program sub-projects. However, the Program investments will represent a considerable increase in workload and efficient implementation will be crucial to ensuring cash flow under the performance-based transfer system. The PMUs will need to strengthen their overall capacity as well as strengthen procedures in key areas including quality assurance of technical designs, environmental and social impact assessment and mitigation, procurement packaging and competitiveness, and efficient and effective contract administration. DLI 1.1 incentivizes compliance with the annual planning cycle, while DLI 1.2 will incentivize adequate staffing of the PMUs. DLI 2 establishes clear criteria for sub-project selection and compliance with key elements of investment management (including parameters for sub-project selection, screening, procurement and financial management) that are linked to the Program Action Plan and supported by technical process improvements in the POM. Capacity support activities will strengthen the capabilities of the CPCs and PMUs to comply with these requirements through a results-focused annual capacity plan. This integrated system of incentives and support to CPCs and their PMUs is assessed to provide a credible framework for ensuring effective and compliant expenditures in the Program.

29. The MOF will clarify the fund transfer arrangements through a guidance note that will be finalized prior to negotiations. The MOF will transfer funds to CPCs, following advice from MOC, through the State Treasury into a dedicated line item of the CPC account. MOF and State Treasuries have established capacity and systems to manage these transfers. Provinces have a number of important oversight and approval functions that are exercised through relevant departments. These roles are generally performed adequately and will continue in the Program. The SAV will undertake verification audits of the DLIs, alongside the annual Program audit. The effective performance of this function is subject to timely reporting by CPCs and MOC, as well as adequate capacity in SAV to undertake non-financial results verification. The Program design addresses these issues through establishing clear reporting timelines associated with disbursements, and enabling SAV to utilize the external service providers to incrementally strengthen its verification capabilities.

30. The performance-based transfers, along with contributions from the participating cities, will fund the construction of local infrastructure, social and environmental related studies, compensation costs, and operation costs associated with management of the infrastructure investments. At the national level, expenditures will include Program administration, capacity development activities implemented by MOC (primarily through specialized consultants), and verification audits undertaken by the SAV.

31. Cities will receive allocations of performance-based transfer funds according to population size, totaling US$230 million while the proposed sub-project investments total about US$280 million. Therefore, the cities will need to mobilize finance from other sources, including own-source revenues and transfers from national and provincial governments to fill the gap. It is important to note that the transfer allocations under the Program will be in addition to the existing national fund transfers and will not replace the transfers.

32. The Program design emphasizes the importance of strengthening the sustainability of investments, both through incrementally improved asset management regimes and securing additional local resources for maintenance and capital expenditure programs. DLI 3.1 requires CPCs to undertake Asset Condition Assessments and develop basic Asset Management Plans before 2017. Cities are subsequently required to ensure that sub-project investments in the Program are in full service two years after completion. DLI 3.2 requires each city to achieve a 12 percent annual increase in own source revenues (defined as taxes and fees, but excluding land and rental incomes due to governance concerns). Capacity support will be provided to cities to meet these requirements. Ensuring the long-term sustainability of investments is a complex, multi-faceted challenge for all local governments. The sustainability measures in the Program are thus assessed as adequate to enhance the sustainability of expenditures within and beyond the Program implementation period. Measurement constraints prevent the use of financial indicators of operations and maintenance expenditures, nor will these necessarily provide a more suitable proxy for efficient asset management practices.

33. Cities will receive fixed annual disbursements of performance-based transfers, subject to achievement of the DLIs, with the first disbursements occurring in mid-2016. The size of the annual disbursements has been estimated based on expenditures projected from the Cities' sub-project lists and implementation plans. Cities will be entitled to receive advances of up to 25 percent of the undisbursed portion of their total allocation, with the first advance occurring in early 2015.

34. Initial estimates of sub-project costs have been based on a unit cost norm system of MOC. Examination of these initial cost estimates reveals some discrepancies and possible over-estimation in some cases. Final cost estimates will be calculated using input-based cost norms which will be rigorously checked and this is expected to prove adequate for cost control purposes. Works contracts will be let by competitive tendering but current practices do not result in a high level of price competition; the Program will include actions to strengthen competition through improved bid evaluation procedures. MOC cost norms for consultant fees for preparation and construction

supervision appear to be below market rates and this could be counter-productive for efficiency and technical quality.

35. Cash-flow projections based on the projected expenditures relative to annual advances and disbursements of the performance-based transfers was conducted to identify of potential liquidity shortfalls overall and at the city level. The projected disbursement schedule was adjusted for each city to minimize liquidity constraints. This projection does indicate that cities will still need to mobilize significant amounts of counterpart financing. Because the transfer disbursements lag behind expenditures, the maximum cumulative financing gap (i.e., cumulative expenditures minus cumulative advances and disbursements) is likely to occur in 2019. The residual shortfalls does, however, pose a significant risk to Program implementation and can be further reduced or eliminated by adjustments to implementation plans, effective cash-flow management at the city level and bridging finance where appropriate. In particular, cities will need to closely manage and monitor compliance with the requirements of the Program that may influence disbursements, ensure effective project management arrangements remain in place throughout Program implementation, access capacity support as needed and prepare careful cash flow forecasts. Where necessary, cities should also identify counterpart funds sufficient to meet their final needs and if necessary, short-term loan financing.

Technical Soundness of Investments

36. Sub-projects eligible for transfer funds are selected from the master plans and screened using a set of pass/fail conditions and prioritization criteria. Compliance with these conditions and criteria will be confirmed at the feasibility study phase and will form part of the DLI verification process. This system is considered adequate to ensure that the sub-projects represent high priority investments for the CPC and the city residents.

37. The largest and most technically complex sub-projects are bridges. The bridges will use simply supported span constructions with standard specifications and design details. Proper geotechnical investigations will be important to ensure appropriate design of foundations and to avoid construction delays that can occur if unforeseen conditions are encountered. As with all hydraulic works, bridges must be carefully designed taking into account maximum flood conditions and considering the impacts of climate change. Hydraulic design should avoid or mitigate scour and erosion caused by changes to river flow at the bridge location.

38. The assessment concludes that the proposed sub-projects are technically appropriate and are within the capacity of the CPC to implement, with the assistance of expert consultants for feasibility study, design and construction supervision. Key measures to ensure technical quality will include stronger procedures to recruit the best qualified available consultants, thorough checking of designs and cost estimates and strengthened contract administration and technical supervision procedures. The PAP requires increased use of competitive selection procedures for consultants. The Program Operational Manual (POM) prescribes best practice contract administration procedures and MOC should provide training to the PMU in these procedures.

Results Framework, Monitoring and Evaluation

39. The draft Program Results Framework identifies four PDO level indicators: asset management plans adopted and infrastructure in full service two years after completion; total number of beneficiaries (disaggregated by gender); number of cities that have fully implemented Enhanced Annual City Plans on schedule and with acceptable quality and adoption of an Implementation Strategy for the National Urban Development Program. Intermediate indicators have been identified for four Results Areas: (a) Institutional Strengthening at City Level; (b) Delivery of Infrastructure Services in Participating Cities; (c) Sustainable Infrastructure Investments; and (d) National Policy, Support and Oversight. The implementation period is anticipated to be six years from 2015 to 2020. DLIs have been identified for each Results Area.

40. DLIs will be monitored through the annual verification audits conducted by SAV. To ensure adequate and timely information for oversight and support of implementation it is recommended to establish a simple Program MIS based either on proprietary software or on a spread sheet system. The MIS will track physical and financial progress, achievement of capacity development targets and will also capture compliance with PAP actions including public disclosures and complaints procedures.

41. City PMUs do not have specialist monitoring and evaluation (M&E) capacity at present. M&E capacity, either within PMU or at CPC level, should be strengthened to focus on: (a) systematic tracking of results; (b) monitoring of key transparency indicators; and (c) later in the Program, development of a capacity for assessing the economic and social impacts of completed infrastructure investments. It is recommended that cities should carry out an impact assessment of completed infrastructure as an input to the Program mid-term review and to learn lessons for planning and implementation of future investments.

Economic Analysis

42. The physical outputs of the Program are public goods that will stimulate economic growth and facilitate orderly management of urbanization. Initial sub-projects selected from the master plans have been screened using a set of pass/fail conditions and prioritization criteria.[7] A cost-benefit analysis was conducted for a sample of 78 of the proposed sub-projects, accounting for about 85 percent of sub-projects by number and value, and using the Net Present Value (NPV) and the Internal Rate of Return (IRR) indicators to evaluate economic viability for the period up to 2039.

43. The tangible benefits of the sub-projects will consist mainly of reduced journey times and operating costs within the urban areas. Intangible benefits include improved living conditions for urban residents, particularly the residents of low-income areas. The integrated package of investments will stimulate private investment by reducing costs of doing business, improving transport links, improving access to land for development and increasing the attractiveness of the urban environment. Poor and low-income residents of the cities will benefit directly from investments in social infrastructure and environmental improvements. Urban economic growth will create employment opportunities in the cities and the surrounding rural areas. Development of the cities will improve access to services for both urban and rural residents. Therefore, the Program investments are expected to contribute to poverty alleviation and inclusive economic growth.

44. The Program is assessed to be economically viable. Economic modeling has shown the road and bridge sub-projects (60.8 percent of the total) to have positive NPVs. Social infrastructure investments will deliver intangible benefits and selection of these sub-projects by the cities is considered as an indication that the implicit value of these investments is equivalent to that of the transport sub-projects. The IRR of all appraised sub-projects is 22 percent. A sensitivity analysis accounted for decreases and increases of 20 percent in benefits and costs, given that all sub-projects are at the pre-feasibility study phase. The overall IRR of all sub-projects in seven cities remains satisfactory even in the worst case scenario, with the exception of one Low Income Area sub-project (Hoa Binh) and one road sub-project (Cao Bang) where "worst-case" IRRs fall below 12 percent.

45. World Bank support will assist the Government to develop a programmatic, results-based approach to urban development through the NUDP, to strengthen country systems for planning and implementation of infrastructure investments and to address key policy and regulatory issues.

[7] Compliance with these conditions and criteria will be confirmed at the feasibility study phase and will form part of the DLI verification process. This system is considered adequate to ensure that the sub-projects represent high priority investments for the CPC and the city residents.

A. Program Description

National urban program

46. Government has been responding to rapid urban growth with both institutional reforms and financing. Since 1986, a program of decentralization has gradually devolved authority for urban governance and service delivery to City People's Committees. This has been accompanied by fiscal transfers to cities, which have been routed via the provinces, typically via discrete project-based transfers and a growth in local level spending in response to demand[8]. This approach has resulted in significant progress in access to basic urban infrastructure services. An estimated 75 percent of urban households have access to water services (from 35 percent in 1997), 67 percent have access to toilets (from 17 percent), and 8 larger cities now have waste water treatment plants (from a baseline of zero). At a national level, 96 percent of households have access to electricity services, and over 90,000 km of roads have been paved in the last decade.[9]

47. However, massive challenges remain as urban populations continue to expand and their spending power increases. Residual shortfall in access to services needs to be addressed, while networks require expansion to accommodate growth in households and their demands. The number of vehicles on urban roads has more than doubled in the last decade, while still only 8 percent of waste water is currently treated. It is estimated that an additional 50 million m2 of housing stock will be required each year to 2020. The above gaps will drive demand for associated bulk, connector and internal infrastructure services.

48. Government has established ambitious national targets for addressing these urban investment needs by 2020 (see Decision No. 1659/QĐ-TTg), including expanding access to:

- Water supply to 90 percent of households, and 120 liters / person / day and reducing non-revenue water to between 10 percent and 25 percent, depending on the class of town;
- Sewerage and drainage systems to over 80 percent of urban catchment areas, with at least secondary treatment of 60 percent of waste water (rising to 100 percent and 70 percent respectively by 2025);
- Solid waste collection and disposal services to 90 percent of households and firms (with 100 percent coverage for hazardous waste);
- Street lighting to over 85 percent of urban roads outside of the largest urban centers (and 100 percent within them) ;
- Housing to 75 percent of the urban population, with an average floor area per person of 29m2;
- Road space to between 20 percent and 30 percent of urban land (depending of class of town),and expanding access to public transport services; and
- Urban green spaces per person to between 4m^2 and 15m^2, depending on the class of town.

49. These targets will require large but as yet poorly quantified amounts of investment. Initial estimates suggest that US$1.5 billion is required *annually* for water supply, wastewater and low-income housing investments. Other estimates suggest that at least US$1 billion is required annually just for wastewater investments[10]. Disaggregated estimates for energy and transport investment needs are not available.

[8] Disaggregated financial data on urban investment is not available by sector, national transfers are not fully disclosed by target area, and provincial and city level reporting is not aggregated nationally nor does it fully account for sources of revenues. Budgeting practices and functional overlaps also significantly complicate financial analysis.

[9] World Bank, 2013(a), Assessment of Financing Framework for Municipal Infrastructure

[10] Vietnam Urban Wastewater Review. World Bank, 2013 (b).

50. Disaggregated estimates for energy and transport investment needs are not available. The Infrastructure Finance Review notes that despite these uncertainties, there is a significant shortfall between investment needs and available resources (estimated at between 50 percent and 60 percent for all infrastructure sectors nationally), and significant policy, regulatory and local capacity weaknesses that will need to be addressed. Capacity-building programs, for example, have typically provided only generic training on technical topics, rather than also focusing on improved results through strengthening the public expenditure management cycle.

National Urban Development Program (NUDP)

51. Government adopted the National Urban Development Program (NUDP) (Decision No. 1659/QĐ-TTg of the Prime Minister) in 2012 to address the lack of coherence in the management of urbanization, and to provide a programmatic focus to achieving the 2020 targets for urban service delivery. The objective of the NUDP is to promote an efficient, sustainable and equitable process of urban development by improving levels of access to basic urban services (water supply, sewerage and drainage, solid waste management, public lighting, roads and public transport, environmental services and public space), expanding the provision of serviced land for high-density housing and economic activities, and through integrated urban upgrading of low-income urban areas. The NUDP recognizes the importance of developing effective planning, financing, implementation and monitoring systems, particularly at the local level, to ensure the efficient execution and sustainability of required investments in urban infrastructure. It specifically notes the importance of strengthening urban management through improving mechanisms for investment planning and works management, increasing public awareness of local government roles and responsibilities, building the capacity of local officials and encouraging new mechanisms to finance infrastructure.

52. The NUDP is an "umbrella" program through with the Government aims to coordinate and focus current efforts by all levels of government in addressing the urbanization challenge. The Prime Minister thus assigned responsibility for program coordination and implementation to the Ministry of Construction (MOC), and established a multi-departmental Steering Committee (headed by the Minister of Construction) to supervise the execution of the program. It thus complements existing government programs (such as the Urban Upgrading Program). Until now, the NUDP has not had designated resources, as its operating expenses have been covered by budgets of implementing agencies and resources for infrastructure investment have been channeled through existing transfer mechanisms or own-source revenue. It is not possible to estimate past or current annual urban development expenditures in Vietnam. The NUDP has sought to leverage these expenditures without specific program expenditures assigned to it, operating through existing government agencies and budgets. This fundamental weakness in the government program of expenditures will be addressed through the Program, which establishes a dedicated resource envelope and implementation modalities for the NUDP.

53. Progress with the implementation of the NUDP has been slow in the first year of its implementation. This has been due to the limited attention paid to the design of detailed implementation modalities. MOC has recognized this, and initiated a stocktaking exercise in May 2013 across all provinces on NUDP implementation. A concluding workshop in December 2013 found that, overall, provinces across the country have started to align their implementation of urban development activities with the NUDP's core principles and that a revision to implementation modalities and timelines is necessary, specifically to align financing mechanisms, capacity support and national oversight systems with NUDP objectives and to account for variations in progress between classes of cities. Government is now proposing to implement the NUDP incrementally through a series of regional sub-programs that will provide a comprehensive package of performance-based fiscal support, capacity support and enhanced oversight. The Results Based National Urban Development Program in the Northern Mountains Region (RBNUDP-NM - the proposed Bank-supported operation) would be the first regional implementation of the NUDP.

Results-Based National Urban Development Program in the Northern Mountains Region (the Program)

54. The RBNUDP-NM, the Government will introduce a regionally focused, performance-based transfer program with capacity building support for participating cities and improved national oversight systems. The Program operates at two levels: (a) in selected cities within the target region, through performance transfers and capacity support activities; and (b) at national level by strengthening program management systems, urban policy development, and oversight. These activities will influence both the continuing implementation of the NUDP and the framework for all government expenditures on urban development (including, as a first step, assisting the Government to quantify existing financing arrangements and investment needs).

55. Program expenditures are estimated to total US$ 300 million and the implementation period is anticipated to be six years from 2015 to 2020. US$ 280 million will constitute the performance-based transfer system, financing infrastructure investments and project management activities by CPCs as specified in the investment menu. This includes US$ 50 million in counterpart contributions from the participating cities. US$ 20 million will support MOC activities, including the provision of capacity support (training and technical assistance) to participating cities, the development of national implementation frameworks, and the strengthening of oversight systems (see Table 12). Note that city level expenditures include direct recurrent costs associated with the implementation of sub-projects under the Program. Program Expenditures will consist of:

a) Construction costs of priority infrastructure investments through budgets of participating Cities;
b) Associated costs of services for social and environmental related studies pertaining to the infrastructure investments;
c) Compensation costs associated with the infrastructure investments;
d) Operating costs of the City administrations associated with management of the infrastructure investments;
e) Costs of program administration and capacity development activities implemented by MOC;
f) Costs of verification audits undertaken by the State Audit of Vietnam (SAV).

Program expenditures in the context of participating CPCs

56. City People's Committees (CPCs) will plan and implement sub-projects in the Program. As these cities are the project owners for individual sub-project investments, the funding under Results Area 2, above, will be reflected in the revenues and expenditures of the CPC annual budgets. Sub-project implementation will be undertaken by Project Management Units (PMUs) reporting to CPCs. Existing asset management arrangements will continue. Provinces will continue to play their role in the approval of city plans and budgets.

57. As a level of government, CPCs have a range of functions that are not directly related to urban development. The total expenditures of CPCs amounted to US$ 154.8 million in 2012 (or US$ 189 per capita), and have grown by an average of 25 percent per year since 2010. Expenditures on urban infrastructure investments (capital investments including direct project management costs) accounted for 24 percent of this expenditure (US$ 38 million US$ 46 per capita) and have grown at an average of only 15 percent since 2010. Personnel expenditures (in four cities for which data is available) accounted for an average of 52.1 percent of recurrent spending since 2010. City expenditures are financed through a mixture of local taxes and fees (34 percent) which are subject to revenue-sharing arrangements with provincial governments, transfers from provinces (30 percent), land sales and leases (20 percent) and accumulated savings (15 percent).

58. These existing CPC expenditures are expected to continue. On average, the Program will add an additional US$ 5.5 million to the annual expenditures of each city, or US$ 47 per capita. This constitutes about 24.8 percent of total CPC expenditures in 2012, and 101 percent of their capital spending baseline. However, this is anticipated to decline sharply due to ongoing growth in existing revenues and expenditures outside of the Program. If the current rate of growth and expenditure composition is sustained over the Program period (to 2020), CPC expenditures are projected to increase more than seven fold by FY2020, with capital expenditures more than doubling. They will then far outstrip annual Program expenditures. This provides a critical window for the Program to enhance the effectiveness of these future CPC expenditures, in line with NUDP objectives.

B. Program Strategic Relevance

National Context

59. During the last 10 years, Vietnam has maintained a significant growth rate of 7.5 to 8 percent and has attained middle-income country status. This strong economic growth performance has been accompanied by rapid urbanization. Over 30 percent of the population currently lives in urban areas, and this is growing by 3.4 percent annually. Globally, this process of urbanization has proved unstoppable and has the potential to generate significant opportunities for growth, poverty alleviation and environmental sustainability. Urban centers provide agglomeration economies that can enable economic dynamism, scale for the financing and development of major facilities, and can provide a growing source of tax receipts. Yet, poorly managed urbanization processes can lead to growing inequality, environmental damage and bottlenecks to economic growth as the provision of urban land and infrastructure fails to keep pace with demand. Inadequate or poorly planned land development can create inefficient urban forms and exclude poor people from effective participation in the benefits of urban growth.

60. Urbanization involves significant changes beyond the national demographic profile and economic structure, including transitions in welfare and basic service delivery needs, the physical form of urban areas and the administrative arrangements for urban management. The Vietnam Urbanization Review [11] (2012) emphasizes the influential and cross-cutting nature of the administrative transition (the overarching policies, institutional and management practices central to urbanization) in ensuring that Vietnam is able to maximize the benefits of the urbanization process. The Government has recognized that it has "only one chance to get urbanization right" (Deputy PM Nguyen Sinh Hung, 2009).

61. The Government of Vietnam faces physical, financial and institutional challenges in the successful management of urbanization. Physical challenges include ensuring efficient allocation and management of land; management of residential settlement patterns, efficient and effective planning of public investments to ensure service delivery and stimulate private sector investment; ensuring a high standard of construction of public infrastructure to avoid incurring an excessive financial burden for maintenance and repair in the future; and ensuring environmental sustainability.

62. Except for the largest cities, Vietnam's urban centers have limited capacity to mobilize finance for investment in urban development. Therefore this investment is heavily dependent on transfers from the national budget which are managed and allocated at the provincial level. Vietnam faces the challenge of financing a large and growing demand for urban infrastructure investment within the constraints of sound macro-economic management and the need to ensure an equitable and efficient allocation of available finance. In turn, the current financing framework does not provide the cities with a predictable medium-term financing plan for investments nor adequate discretion in

[11] Vietnam Urbanisation Review: Technical Assistance Report. World Bank November 2011

selection of priority sub-projects. A World Bank report[12] examined reforms to budgetary allocation norms introduced in 2006 and concluded that these had had a positive effect, including increasing the capital resources available to the less developed provinces, but city administrations remain dependent on project-by-project allocations at the province level and other unpredictable sources to finance their capital investment plans.

63. Responsibility for planning, financing and management of urban infrastructure development in Vietnam is split between national, province and city levels and between various sectoral agencies at each level. The fragmentation of responsibilities leads to unpredictable planning decisions, duplication of responsibilities particularly technical oversight of projects, and delays in the budget execution process.

Northern Mountains Cities

64. The growth of the Northern Mountains cities presents a significant opportunity to support regional growth and poverty reduction. The region is historically important but lagging, and faces significant development challenges, including a rapid growth in the size of urban centers. These urban centers play a key role in local area development, serving as economic and administrative hubs and are increasingly the engines of regional economic growth. However, there is a widening gap between their need for urban infrastructure investments and the available financial resources. City and provincial administrations tasked with urban development and management functions are currently weak, fragmented and under-resourced. They are unable to respond adequately to changing local needs, are unable to leverage local resources effectively for sustained investment and asset management, and – despite clear evidence of capabilities in some areas - have generally weak capacity and incentives to deliver investments on time and within budget.

65. The strategic challenge facing these cities, as with others in Vietnam, is to establish an effective urban management and implementation model, including a sound framework for predictable financing of their significant infrastructure investment needs. The Government of Vietnam (GoV) identified this challenge as early as 2011, requesting the World Bank to finance a US$250 million "Urban Upgrading Project for Northern Mountain Area" that prioritized the cities of Dien Bien Phu, Bac Kan, Cao Bang and Thai Nguyen. In July 2013, the GoV added three more cities (Hoa Binh, Tuyen Quang and Yen Bai). World Bank support will assist government to develop the implementation framework for the wider National Urban Development Program (NUDP).

Relevance of Strengthening Capacity of Cities

66. Smaller cities in Vietnam have limited own-source revenues and are largely dependent on transfers from central and provincial governments to finance their annual budgets and associated investment programs. Although they are assigned responsibility to implement certain types of capital investment they have traditionally had only limited discretion in planning and financing capital works. As the cities grow their resources will increase and there will be an increasing need for capacity for efficient, responsive and accountable planning and implementation of infrastructure works of increasing size and complexity. Therefore, limitations on capacity in this area could become an important constraint to growth.

67. Through a combination of performance-based transfers which will provide the cities with the incentive to strengthen and efficiently utilize capacity, and targeted capacity support in key areas including planning, procurement and contract management, the Program will assist the cities to develop the sustainable capacity required to support future growth.

[12] Assessing Fiscal Implication of the Recent Changes in Poverty Lines and Revision of Allocation Norms of Capital Expenditures and Resources for Targeted Programs. World Bank June 2011

68. Therefore, the experience gained from implementation of the Program, the increased city revenues arising from economic growth stimulated by the infrastructure investments and the strengthened capacity arising from the Program capacity development activities will all enhance the ability of the city administrations to plan and execute similar investments in the future. The systems of planning, financing, implementation, reporting and results verification established or strengthened under the Program will serve as a template for the extension of performance-based transfers through the National Urban Development Program to cities at a similar stage of development nationwide.

Relevance of Investments to Poverty Reduction and Sustainable Growth

69. The Northern Mountains region is one of the poorest regions of Vietnam with about 44 percent[13] of the population living below the national poverty line, as compared with a national average of 20.7 percent[14]. Since 1999, the Northern Mountains region has had the lowest income per capita in the country.[15] Poverty rates in the urban areas are generally lower than in the surrounding countryside although a significant proportion of the urban population remains poor or dependent on low, insecure incomes and with inadequate access to social infrastructure and services.

70. Urban growth and development generates improved employment opportunities for both urban residents and for rural dwellers in surrounding areas, many of whom are likely to migrate to the cities in search of new opportunities in any case. By supporting the development of urban transport infrastructure the Program will encourage and facilitate the private investment needed to promote growth and employment. Better developed urban centers will support markets and services needed to stimulate growth in agriculture, natural resources and tourism that will directly improve economic opportunities in the rural areas of the Northern Mountains region.

71. The Program will also support investments in improved infrastructure (roads, electricity supplies, water supplies, drainage and sewerage and street lighting) in identified low income areas of the Northern Mountains cities, thus preferentially targeting the poorer sections of the community. The Program will support an improved urban environment through investments in surface drainage improvements with associated landscape enhancement. The Program will support construction of kindergartens, schools and community buildings to improve social services to city residents.

C. Institutional Context

Role of Ministry of Construction

72. The Ministry of Construction (MOC) is a central agency of the Government of Vietnam that performs state management functions in the areas of construction planning, architecture, construction activities, urban development, urban infrastructure and industrial parks, economic zones, hi-tech parks, housing, offices, real estate market, construction materials, as well as public services under its jurisdiction as prescribed by law. According to Decree No. 62/2013/NĐ-CP, these functions include setting policy, standards and guidelines for urban planning, as well as guiding and inspecting the implementation of construction processes and activities including those under the executive power and ownership of sub-national governments (People's Committees). The Ministry proposes these policies and guidelines for the Prime Minister's approval and issuance on the one hand and, on the other hand, issues the final opinion on related subject matters for sub-national governments to use as a basis for implementation in their respective area.

[13] World Bank Vietnam Poverty Assessment 2012 Table 4.1
[14] Ibid, Table 3.1
[15] Government Statistics Office, Monthly average income per capita at current prices by residence and by region (17/09/2013).

73. Under the leadership of the Minister and 7 Vice-Ministers of Construction, there are 9 departments, 6 agencies, and 5 institutes, in addition to the Ministry's Front Office, the Inspectorate, and 3 media and information functions. Among these offices, the Urban Development Agency (UDA) is assigned to assist the Minister to perform the Ministry's functions in the field of urban development. Specifically, the Agency develops policy documents and guidelines for the Ministry to submit for the Prime Minister's approval, and guides sub-national People's Committees in the implementation of urban development and construction programs as per approved plans. The UDA is authorized to prepare and implement urban development programs and projects that are under the jurisdiction of the Ministry.

74. In this capacity, UDA is directly responsible for Ministry's functions with regards to a *National Urban Development Program for the period of 2012-2020* (NUDP) per Decision No. 1659/QĐ-TTg, dated 11/7/2012, in which MOC is assigned to chair the Steering Committee and to serve as the standing agency to host, coordinate and supervise activities under NUDP. These activities include development of urban housing; urban rehabilitation and upgrading; management of new urban development areas; and urban technical infrastructure development.

75. The UDA is divided into five units of which the Management Board of Urban Development Projects (MUDP) is one. MUDP supports the Director General in preparing annual and 5 years budget plans for urban surveys and planning projects. These plans are normally submitted by the Director General to forward to the Minister or higher authorities for approval and implementation. The Board is responsible for investment plans and procedures regarding the planning, implementation and monitoring of ODA funded projects (including hiring consultants) and sometimes acts on behalf of local governments and other Ministries. The Board is a legal body which has a stamp for commercial activities and an account in the National Treasury and Bank.[16]

City Mandates and Functions

76. Decentralization has been ongoing in Vietnam since the "Doi Moi" policy reform of 1986, gradually delegating powers down the government's four-layer unitary system from the central to provincial, district, and communal governments. The subnational public administration operates in a system of dual subordination. The local executive government - the People's Committees (CPC) – at all subnational levels are accountable to the respective legislative body – the People's Council – at the same level and the People's Committee at the higher level. This assessment focuses on the city executive agency (the City Peoples Committee, CPC) as the sub-project owner in the Results-based National Urban Development Program in the Northern Mountains Region.

77. The CPC government structure and functions are delineated in the following key legal documents: the 1992 Constitution (under revision); Law on Organization of the Government (No. 32/2001/QH10 on 12/25/2001); Law on Organization of People's Council and People's Committee (No. 11/2003/QH11 on 11/26/2003); and Decree No. 14/2008/ND-CP on 02/04/2008 on the organization of specialized bodies of People's Committees of rural districts, urban districts, provincial towns or cities. In this regard, the central government reserves the ultimate power to decide on the key structure and functions of the CPC. However, with decentralized power, the provincial People's Committee may adjust and delegate more functions on an ad hoc basis, subject to the approval from the People's Council of the same level.

78. CPCs are principally responsible for the planning, implementation, and operation of public infrastructure under the city's jurisdiction. According to Articles 100 and 108 of the Law No. 11/2003/QH11, the CPC develops and executes the approved city master plan (to be approved by the Provincial People's Committee), as well as operating or supervising the operation of assigned urban infrastructure including urban lighting, water supply and drainage, urban transport and safety, and

[16] Information from UDA website

environmental sanitation. The CPC oversees construction activities and policies and manages the land and housing funds in its jurisdiction.

79. Overlapping functions remain among different levels of the government, however, as a residual from the era of central control. It is important to understand that decentralization is a long term process. The Program will enhance this process, providing additional momentum by bringing to the cities a combination of much needed resources with clarification of implementation responsibilities, a performance-based orientation through the Disbursement-Linked Indicators, and an enforcement of accountability through audits and verification activities.

City Planning Framework

80. The City People's Committees do not have full autonomy to prepare and implement development plans and budgets. Most key decisions are subject to approval from the provincial level. The city budget is subordinate to the provincial and ultimately, the national State budget. In practice, however, the CPCs are able to prepare plans, select and implement investments without being subjected to excessive interference by higher levels of government.

81. CPCs approve long term master plans which are prepared their Urban Management Units (with the assistance of consultants), but which are subject to additional approval by the PPC (or in case of higher level cities, by the Prime Minister). The master plans are public documents and public consultation is a mandatory part of the preparation of the plans. However, based on field observations, the effectiveness of disclosure to residents and businesses that will be affected by the plans appears to be limited. The general practice of public consultation in planning should be strengthened. In particular it will be essential that residents who will be subject to resettlement or otherwise affected by construction works are adequately informed consistent with the guidelines specified in the Environmental and Social Systems Assessment (ESSA). The disclosure of Enhanced Annual City Plans is proposed as a sub-indicator of DLI 1 (Institutional Strengthening).

82. Based on the approved master plan, cities prepare five-year implementation plans which are also approved by the PPC. The key unit responsible for coordination of the plan is the Urban Management Unit. The five-year plans set targets and identify key investments but do not allocate resources for implementation. Most cities (with the partial exception of Thai Nguyen amongst the cities participating in the Program) depend entirely on transfers from the province and ultimately, from the national budget to finance investments. There is no predictable medium-term expenditure framework and so investments, selected from the plan, have to be programmed once funds become available in the annual budget. The amount available may not be known until December of the previous year. Investments with a multi-year implementation period may be started, only to halt due to lack of fund allocations in subsequent budgets, or be disrupted by in-year delays in the disbursement of allocated funds from provinces.

83. Through these performance-based transfers, the Program will introduce results-based dimensions to the cities' planning system for infrastructure development. Currently, without a predictable medium-term expenditure framework, investments selected from the five-year plan can only be programmed once funds become available in the annual budget and this practice, in effect, makes the annual plan largely a list of ad hoc investments with available funding. In this context, the Program will help improve the cities' planning system with a predictable source of results-based financing in the medium-term that requires the cities to: (a) prioritize and select only the most needed and feasible investments from a long wish list; (b) sequence these investments in a timeline (i.e., several annual plans, that are both practical and strategic) to ensure completion and, in the case of under-performance in some areas, to avoid to minimize liquidity constraints. Such practice will incrementally reshape planning activities from a perfunctory exercise into a meaningful process to efficiently use public resources for the city's development.

City Fiscal Framework

84. City People's Committees are not fully autonomous budget entities. Not only do provincial governments retain significant powers to approve tax rates and expenditure levels, but the functions of revenue administration and expenditure management are often tightly intertwined. Tax revenues, in particular, are shared revenues that are collected locally, remitted upwards and then partial re-funded. Grant revenues are primarily based on the assessed gap between own source revenues and authorized expenditures, subject to resource availability. These grants are supplemented by earmarked transfers. Inter-governmental fiscal analysis is weakened by current accounting and reporting formats and practices that complicate data consolidation and aggregation[17].

85. The revenues and expenditures of the seven participating cities were assessed, using actual financial information reported by the cities for the period 2010 to 2012. There is a significant variation in fiscal position and performance between cities, generally based on population size.

Revenues

86. The seven Program cities reported total revenues amounted to US$ 154.8 million in 2012 (or US$ 189 per capita), which have grown by an average of 23 percent per year since 2010. Core[18] own source revenues of cities account for 54.5 percent of total revenues and amounted to US$ 103.48 per capita in 2012. Tax revenues, drawn from a combination VAT, income and property taxes account for the largest share of all revenues (28 percent or US$ 53.10 per capita) and have grown at over 28 percent per year. Rapid revenue growth has also been reported in land-based revenues (rentals and leasing), which has grown at an average of over 21 percent per year and now accounts for 20 percent of all revenues. Transfers from provinces provided similar nominal revenues to tax revenues (US$ 57 per capita in 2012), and have grown at a similar average rate since 2010 (29 percent per year). The growing significance of own-source revenues, and of land-based revenues in particular, is strongly influenced by activity in Tuyen Quang and Thai Nguyen (two of the larger participating cities). The latter, in particular, has seen a significant decline in transfers while needing to respond to rapid population growth.

Table 2: Consolidated Actual Revenues & Expenditures of Participating Cities in US$ (2010 – 2012)

	2010	2011	2012	Avg Annual Growth (%)	Proportion (2012) (%)	Per capita (2012)
CONSOLIDATED REVENUES (ALL CITIES)						
Taxes	27,839,491	38,219,866	43,390,807	27.9	28.0	53.10
Fees	7,520,171	10,006,929	9,785,216	15.1	6.3	11.98
Land-based (Leases)	21,984,927	32,439,780	31,375,095	21.4	20.3	38.40
Other and BFF	15,378,782	18,437,515	23,910,153	27.7	15.4	29.26
Transfers	30,198,978	30,490,879	46,343,749	26.7	29.9	56.72
Total Revenue	**102,922,349**	**129,594,969**	**154,805,020**	**25.2**	**100.0**	**189.46**
CONSOLIDATED EXPENDITURES (ALL CITIES)						
Recurrent	51,545,165	63,183,374	90,005,717	37.3	58.1	110.16
Capital	29,119,283	39,269,186	37,739,587	14.8	24.4	46.19
Other (Transfers &Savings)	22,257,879	27,142,409	27,059,716	10.8	17.5	33.12
Total Expenditures	**102,922,326**	**129,594,969**	**154,805,020**	**25.2**	**100.0**	**189.46**

[17] Reported annual surpluses in revenues relative to expenditures are overstated due to accounting practices used in the treatment of shared revenues, savings and rollovers between years.

[18] This category excludes rollovers for which disaggregated information on the original source is not available.

% growth		*25.9%*	*19.5%*	*22.7%*		

Expenditures

87. The seven participating cities reported total expenditures of US$ 154.8 million in 2012 (or US$189 per capita). Total spending has grown at an average of 25.2 percent since 2010, though annual growth slowed to 19.5 percent in 2012. Recurrent costs and outward transfers to other tiers of government absorb 76 percent of total spending and have grown most strongly since 2010. Personnel expenditures (in four cities for which data is available) accounted for an average of 52.1 percent of recurrent spending since 2010. Specific data on operations and maintenance expenditures is not reported. Specifically, no dedicated financial or operational arrangements are in place to support effective asset management (planned asset maintenance, rehabilitation and replacement). Immediate spending needs on salaries and day-today operations has thus increasingly squeezed out non-capital asset management expenditures (i.e., planned maintenance) and capital investments (including rehabilitation and replacement) since 2010. Capital investments have declined to 24 percent of total expenditures, despite an average growth rate of 14.8 percent. Capital spending growth has also been volatile, with a decline of 0.3 percent between 2011 and 2012. Total capital spending amounted to US$ 38 million in 2012 (or US$ 46 per capita).

Issues

88. The consolidated fiscal position of these cities presents both challenges and opportunities. Current levels of capital expenditures are insufficient to support current levels of urban growth, and operational expenditures appear to give limited priority to effective asset management practices. Few cities have in place adequate plans or financing for effective asset management to ensure the sustainability of investments. This has led to accumulated shortfalls in the provision of infrastructure that in turn may create constraints to local economic performance which is felt most directly by poor households. This situation is unlikely to be alleviated by either a reduction in recurrent expenditure pressures or increases in existing government transfers. Larger cities, which are experiencing more rapid population growth, typically receive lower levels of transfers per capita and thus already experience these challenges most directly. Most cities have begun to take measures to address this through securing increases in core own-source revenues to finance expanded maintenance and capital expenditures. Specific strategies have been improved revenue administration on local taxes and fees, and the utilization of land-based financing mechanisms, through land incorporation, servicing and leasing arrangements that have the capacity to both provide an immediate source of capital finance and grow the local tax base. However, the acquisition of land for these purposes raises governance concerns.

89. The analysis of city-level revenue and expenditures for the last few years highlighted that there are surpluses in revenues relative to expenditures, indicating that cities' funds are being carried over. This could be due to a number of reasons. First, it could be due to late receipt of transfers in the calendar year. Second, in any infrastructure sub-project involving land resettlement, the city is expected to finance the resettlement compensation. Because cities sometimes find it difficult to raise the resources for the compensation, the spending of the central share gets delayed. Finally, it could be due to accounting practices. This issue should be closely monitored during the course of the Program so that Program design can be adjusted if necessary.

90. The Program design emphasizes the importance of strengthening the sustainability of investments, both through incrementally improved asset management regimes and securing additional local resources for maintenance and capital expenditure programs. DLI 3.1 requires CPCs to undertake Asset Condition Assessments and develop basic Asset Management Plans before 2017. Cities are subsequently required to ensure that sub-project investments in the Program are in full service two years after completion. DLI 3.2 requires each city to achieve a 12 percent annual increase in own source revenues (defined as taxes and fees, but excluding land and rental incomes due to

governance concerns). Capacity support will be provided to cities to meet these requirements. Ensuring the long-term sustainability of investments is a complex, multi-faceted challenge for all local governments. These measures are assessed as adequate to enhance the sustainability of expenditures within and beyond the Program implementation period. Measurement constraints prevent the use of financial indicators of operations and maintenance expenditures, which will not necessarily provide a more suitable proxy for efficient asset management practices.

Transfer size relative to budget

91. The proposed provision of a performance-based transfer to participating cities for infrastructure investment will provide an average annual allocation of US$ 5.48 million per city, or US$ 47 per capita. The population-weighted allocation of the transfer between cities will address the bias in the current distribution of transfers towards smaller towns.

Table 3: Maximum IDA Performance-based transfer Allocations to Participating Cities (under DLI's 1, 2, and 3; for 6 Years) *

City	Population	Total (US$ million)
Thái Nguyên	330,707	61.01
Điện Biên Phủ	69,586	26.65
Cao Bằng	84,421	28.61
Bắc Kạn	38,012	22.50
Hòa Bình	93,400	29.78
Tuyên Quang	110,120	31.99
Yên Bái	90,830	29.46
Total	**817,076**	**230.00**

* The table shows the maximum IDA fund envelope that each city is eligible to receive under DLI's 1, 2, and 3, assuming that they achieve the Program results in full. This does not include the additional US$ 50 million of counterpart funds.

92. In aggregate the transfer will double existing levels of capital expenditure in 2012, though this contribution will decline over time due to the effects of compounding growth in other revenues. These are currently growing at 25 percent per year. Although no significant under-expenditures are reported in comparing budgeted to actual expenditures in all cities since 2010, this increase in resources may outstrip the spending capacity of participating cities. This is assessed elsewhere.

93. There is also a risk that increased transfer revenue may displace the own-source revenue efforts of cities, reducing the sustainability of the investments financed via the Program and of their investment programs as whole once this support is withdrawn. This risk is mitigated by the performance requirements in the proposed transfer associated with DLI 3.2, which incentivize improved collection of core own-source revenues over time.

94. An assessment was undertaken to calibrate the appropriate target level for revenue improvement in accordance with DLI 3.2. Own source revenues for CPCs currently include taxes, fees and proceeds from land sales and leases. However, it was considered appropriate to exclude land sales and leases (including housing rentals) from the calculation of the indicator. This is because these revenues are show extreme volatility between years (i.e. there are large single transactions in only some years, and in some cities), which makes its annual application problematic. In addition, there are governance concerns associated with the social effects of the acquisition and disposal of this land (particularly for poor and peri-urban households who might be displaced). Revenues from taxes and fees are also better placed to fund ongoing asset management costs (planned maintenance as well as refurbishment and replacement of assets). The results of this analysis are shown in Table 4 below, indicating that a 12 percent year-on-year increase in defined own source revenues (taxes and fees) is a sufficiently simple and appropriate target for all Program cities. This performance benchmark will encourage poorly performing cities to adjust their revenue management practices, while ensuring that

better performers maintain their current performance levels. Cities will be supported to achieve this target through capacity support activities in the Program.

Table 4: Assessment of Own Source Revenue Performance and Targets

Items (USD)	2010 (US$)	2011 (US$)	2012 (US$)	Avg Annual Growth (%)	Proportion of All Revenues (2012) (%)	Rev / Cap (2012) (US$)	12% increase in revenue in 2013	
							Nominal additional	Per capita additional
Dien Bien Phu	4,890,174	5,886,234	7,009,486	21.7	46.8	2.14	841,138	0.26
% growth		*20.4%*	***19.1%***					
Cao Bang	2,608,693	3,647,142	4,110,819	28.8	31.7	1.04	493,298	0.12
% growth		*39.8%*	***12.7%***					
Thai Nguyen	11,296,636	19,247,812	21,534,362	45.3	35.3	1.39	2,584,123	0.17
% growth		*70.4%*	***11.9%***					
Bac Kan	1,821,156	2,009,673	2,193,067	10.2	22.3	1.23	263,168	0.15
% growth		*10.4%*	***9.1%***					
Tuyen Quang	4,766,184	5,553,307	5,581,329	8.6	28.4	1.08	669,759	0.13
% growth		*16.5%*	***0.5%***					
Yen Bai	4,648,948	6,381,513	7,421,252	29.8	39.0	1.74	890,550	0.21
% growth		*37.3%*	***16.3%***					
Hoa Binh	5,327,872	5,501,114	5,325,710	0.0	30.6	1.21	639,085	0.15
% growth		*3.3%*	***-3.2%***					
Total Revenue	35,359,662	48,226,795	53,176,023	**25.2**	**34.4**	1.38	6,381,123	0.17
% growth		*36.4%*	*10.3%*	*23.3%*				

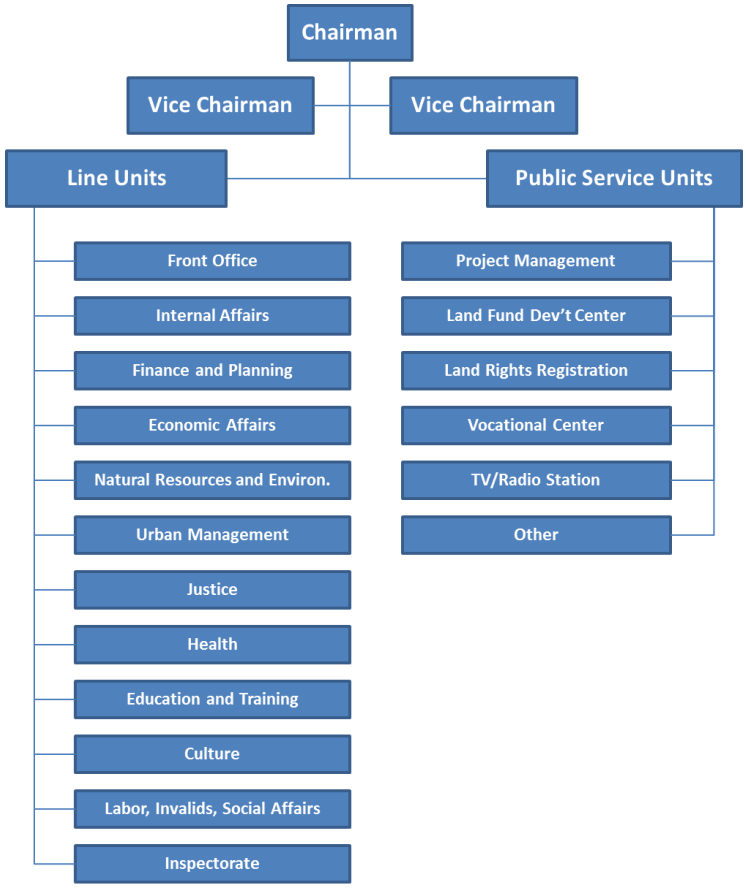
95. A final risk is that "free" transfer resources may be put to less productive use than own-source revenues, resulting in assets that are of limited value and a drain on the recurrent budget of the city. These risks are addressed through performance requirements for improved planning and demonstrable utilization of assets.

CPC Administrative Structure and Staffing

Structure

96. Participating cities, classified as district-level administrative units, are all organized according to the Law No. 11/2003/QH11 and Decree No. 14/2008/ND-CP. Each CPC is headed by a Chairman and 2-3 Vice Chairmen dividing up the management responsibilities over a number of line units (also known as *đơn vị quản lý hành chính* or public administrative management units) and public service units (or *đơn vị sự nghiệp*). Line units help the CPC realize its "state management tasks in the locality… and ensure a unified management of the sector," while public service units include services such as hospital, schools, TV/radio station, etc.

Figure 1: Administrative Structure of the CPC



97. Line unit staff are expected to be specialists in their respective field in order to provide technical (sectoral) advice or help the CPC leadership perform their assigned functions described above. For example, the Urban Management Unit develops the city master plan in coordination with the land use plan developed by the Natural Resources and Environment Unit, and advises the CPC on the management of city urban infrastructure. In reality, cross-unit collaboration is still weak, creating shortcomings in the CPC performance.

98. It is important to note that although the 2005 State Audit Law requires internal auditing to be implemented in every organization using state budget, funds, and assets, there are no implementation guidelines to clearly define the internal auditing functions, roles and responsibilities, and currently there is no active leadership on the implementation of internal auditing within the public sector.

Staffing

99. Depending on the size of the city, the participating CPCs employ between about 150 – 480 staff on a permanent and contractual basis, including both professional and support staff. On average CPCs in the Program employ 1.8 staff members per 1000 residents, although this varies by population size. Each unit is headed by 1-4 managers (often 1 Head and 0-3 Vice-Heads of Unit). Line units tend to be small in size (5-25 staff) while public service units can host up to 45-50 staff members. Unlike in larger city governments, the participating CPCs do not fill all their allocated permanent posts, especially for line units. This situation is mainly because of a restriction on public administrative management units hiring professional staff on a contractual basis (*hợp đồng*) beyond their allocated headcount for permanent staffing (*biên chế*), except for support positions such as driver, cleaning, etc., according to Decree 68/2000/ND-CP.

100. Staff turnover is typically quite low, and usually due to transfer across government units outside of the CPC. In those situations, replacement can come from other external government units or from new hiring but mostly the former. CPCs report that it should not take more than 6 months for these vacancies to be filled. Line unit staff can also be seconded to other units, including public service units, to fill capacity gaps. In the context of the RBNUDP-NM this is particularly important because these sectoral experts can strengthen the capacity of the PMU (a public service unit), bringing in technical expertise particularly in financial management, urban management and transport engineering.

Staffing of Key Units for Implementation of the Program

101. Staffs with functions related to the RBNUDP-NM are mainly assigned to the Finance & Planning and the Project Management Units (especially the one tasked with basic infrastructure construction, as in the case of cities with more than one PMU). Table 5, below, summarizes the staffing of these units in participating CPCs. Except for the case of the Finance and Planning Units in Bac Kan and Tuyen Quang, all other units employ about 3-4 managers to oversee about 10-20 staff. Overall, staff have backgrounds relevant to their respective function: 67 percent and above with at least a university degree and an average of 9.8 to 21.1 years of experience in their field.

102. The PMUs are mainly staffed by technical staff with transport and general infrastructure construction backgrounds (35 – 66 percent of PMU staff) and lack specialists to handle environment and social safeguards. Most staff have basic procurement training and some PMUs include procurement sections in their structure but in practice it seems there is limited specialization. Any of the technical staff may take on environmental impact assessment, social impact assessment or procurement responsibilities as needed. This approach will not be adequate for implementation of the Program and the PMUs will need some professional specialists to handle the procurement workload and to meet the standards that the Bank expects in these areas. It is fortunate that the PMUs are public service units and can create and manage contractual employments (in addition to receiving seconded staff) to fill these gaps.

Table 5: Staffing Levels of City Finance and Planning Units and City PMU

City	Total CPC Staff	Staff / 1000 population	Finance & Planning					Project Management							
			Management	Staff	Total	% w/ uni .degree	Avg. # experience	Management	Transport	Infra/ Constr	Procurement	Acct/ Other	Total	% w/ uni .degree	Avg. # experience
Bac Kan	153	4.0	1	5	6	100	12.2	3	2	4	5	3	17	82	10.4
Cao Bang	177	2.1	2	5	7	71	10.7	3	2	4	2	4	15	100	9.7
Dien Bien Phu	105	1.5	3	9	12	75	14.9	3	4	5	7*	3	15	67	13.1
Hoa Binh	183	2.0	4	7	11	91	16.8	2	3	5	--	3	13	92	14.3
Thai Nguyen	498	1.5	4	19	23	100	11	3	4	2	3	8	20	100	15.5
Tuyen Quang	114	1.0	3	8	11	100	21.1	8	7	13	2*	5	33	94	13.5
Yen Bai	225	2.5	3	13	16	88	9.8	3	4	4	9	2	22	100	12.8
TOTAL	**1,455**	**1.8**	**20**	**66**	**86**	**89**	**13.8**	**25**	**26**	**37**	**19**	**28**	**135**	**91**	**12.8**

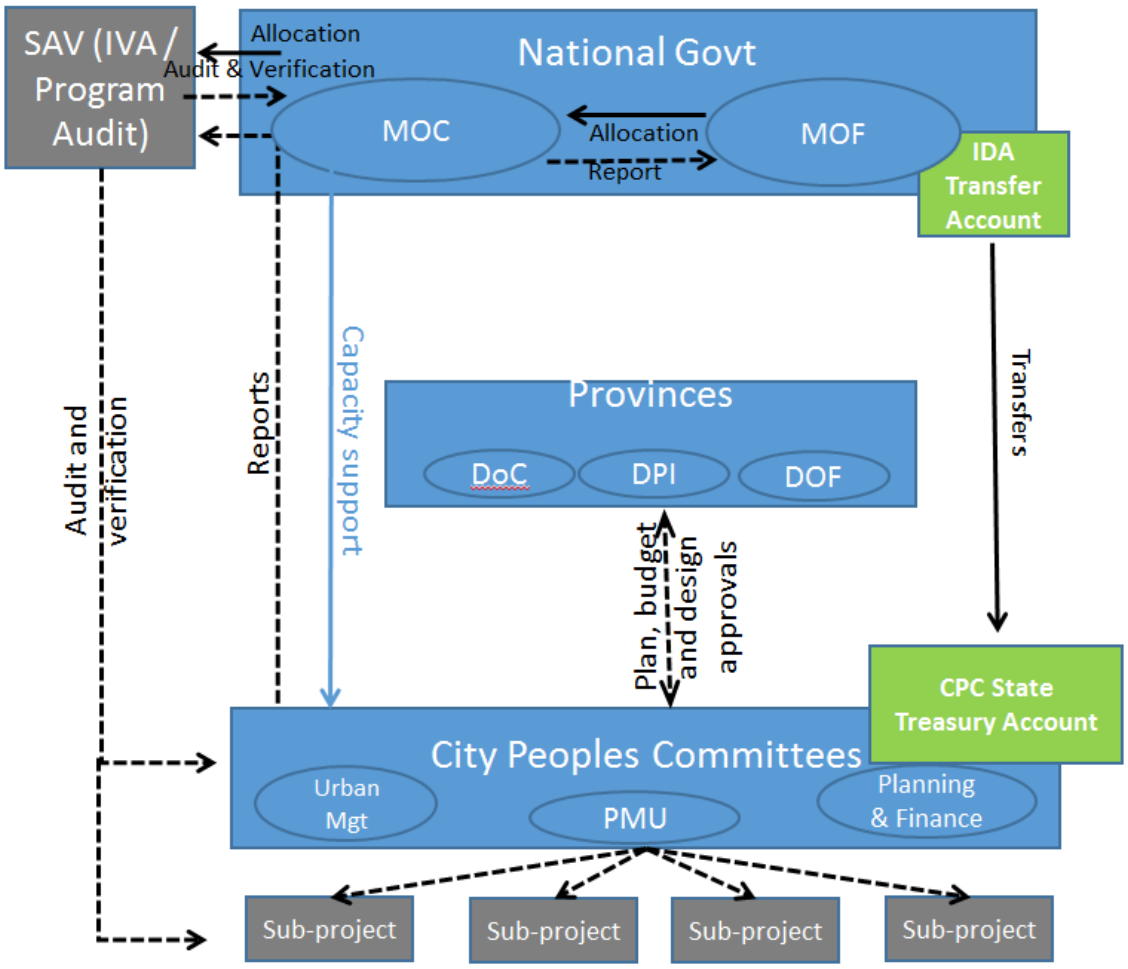
** Staff double-counted with other expertise*

D. Program Institutional Arrangements

General Implementation Arrangements

103. The Program will be implemented through the planning, budgeting and implementation arrangements applicable to infrastructure investments funded through annual budget of the CPC. In this system, the Provincial People's Committee (PPC) has a number of important oversight functions in budget planning and implementation. The Ministry of Finance will be responsible for the transfer funds to the cities through the State Treasury system. The Ministry of Construction (MOC) will coordinate the Program and will ensure proper use of the funds and financial and physical reporting. MOC will also be responsible for capacity development activities carried out under the Program at both city level and in leading the further development of national urban policies and programs. The State Audit of Vietnam (SAV) will undertake annual verification of results and Program financial audits of participating cities in accordance with international audit practice, though contracts with qualified firms.

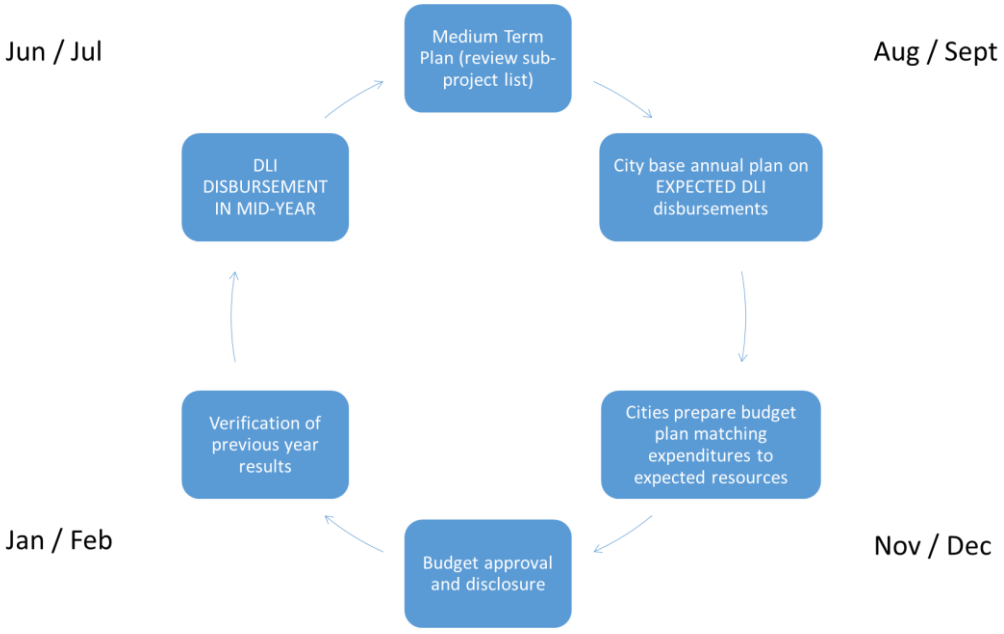
Figure 2: Institutional arrangements for Program Implementation



104. The participating cities have identified priority sub-projects to be financed by the Program, by selecting priority investments from their existing master plans and five-year investment plans (see Section E below). The cities have prepared implementation plans indicating the planned dates for preparation and implementation of each sub-project. During Program implementation, the cities will review and update these plans annually as part of their annual budget planning cycle, which begins around mid-year. In doing so, the cities will need to review: (a) any exogenous factors that could necessitate changes to the outline plans; (b) progress to date, particularly with ongoing multi-year sub-

projects and with preparation of sub-projects scheduled for implementation in the next year; and (c) financing, taking into account the planned annual allocation, the expected achievements of the DLIs, and availability of finance mobilized at the city or province level. The cities will then consolidate the annual plan with the annual budget which is approved by the City People's Council in December. The verification of the DLIs will take place during the first quarter of the following year, so actual release of disbursements (which will be reconciled against advances on an annual basis) will take place in the middle of the subsequent year. Cities will need to adapt the timing of procurement and implementation to match the availability of funds. The general budget planning cycle of the Program is illustrated in Figure 3.

Figure 3: Program Budget Cycle



105. Program funds will be transferred by the Ministry of Finance to a special purpose account operated by CPC (Planning and Finance Unit) at the State Treasury. Financial management arrangements of the Program are described in detail in the Fiduciary Assessment Report.

Roles of Program Implementing Institutions

Role of Ministry of Construction

106. The Ministry of Construction, as the designated coordinator of the National Urban Development Program, will be the lead agency coordinating the Program and acting as lead interlocutor with the Bank on behalf of the Government of Vietnam. The Ministry of Construction will assign Program coordination responsibilities to its Urban Development Agency (UDA).

107. The MOC is responsible for activities contributing to Results Area 4 of the Program: Policy, Support, Oversight and Capacity Development. In this role, MOC will:

a) Review lists of sub-projects proposed by the cities to ensure that the sub-projects comply with the eligibility criteria and the prioritization criteria;

b) Ensure that adequate arrangements are in place for implementation of the Program at the provincial and city level before funds are released;

c) Finalize the amounts of annual advances and disbursements to the cities based on the annual allocations and achievement of results measured by the Disbursement-Linked Indicators;

d) Provide technical advice and support to the cities;

e) Conduct regular monitoring visits to the cities;

f) Monitor the implementation of the Program investments including physical and financial progress reports, and compile reports for submission to the SAV and the World Bank; and

g) Design and deliver capacity development activities to strengthen the capacity of the city administrations.

108. The MOC will develop an Implementation Strategy for National Urban Development Program which will draw upon the experience of implementing the Program in the Northern Mountains cities and will establish an implementation framework for the NUDP in other regions.

109. The MOC will carry out the tasks described above using its own staff resources assisted by consultant services as needed.

Role of the State Audit of Vietnam

110. The State Audit of Vietnam (SAV) will be responsible to contract independent audit firms to conduct the annual verification of results which will consist of financial and technical audits and will verify achievement measured by each of the Disbursement-Linked Indicators (DLIs). The SAV will report the results of the Verification Audits to the Ministry of Finance (MOF).

Roles of the Provincial Peoples' Committee

111. The Provincial Peoples Committee (PPC) has the role of approving the master plan and annual budget plan of the CPC, must approve implementation of investments at a number of key steps and receives and consolidates financial reports.

112. The PPC of the relevant provinces have taken a leading role in preparation of the Program, in some cases by creating a Project Preparation Team (PPT) led by a senior member of the PPC administration. Close engagement of the CPC with the PPT in the preparation phase will be key to a smooth handover of responsibilities to the cities and their PMUs for implementation.

113. During implementation the PPC will continue to perform a number of important oversight, approval and technical support roles. The key department for coordinating these roles will be the Provincial Departments of Planning and Finance. The Department of Planning and Investment acts as a clearing house, bringing in other technical departments (for example, Department of Transport and Department of Construction) as needed to review the proposals prepared by the cities.

114. Roles to be undertaken by the PPCs will include:

a) Review and approval of the annual budget plan of the CPC, including financial provision for Program investments;

b) Outline planning approval for Program sub-projects;

c) Review and approval of Project Investment Reports including basic designs (for larger sub-projects, in accordance with applicable thresholds) and review of Technical and Economic Reports including detailed designs (for smaller sub-projects);

d) Review of detailed designs and cost estimates through the appropriate technical department, most often Department of Construction (DOC);

e) Review and approval of procurement plans;

f) Procurement monitoring;

g) Oversight and technical support during implementation; and

h) Ensuring the liquidation (final closing) of contracts in a timely manner.

Role of the City People's Committee

115. The CPC will be the budget holder and implementing agency for Program investments. The City People's Committee will assign the principle technical and administrative responsibilities for sub-projects to the city Project Management Unit (PMU) and will ensure that the PMU is adequately staffed and resourced to carry out its functions. Financial management will be undertaken by the City Planning and Finance Unit.

116. The CPC will prepare the annual work plan and budget plan for the Program, consolidated with the annual budget plan of the city. The annual budget is submitted for adoption by the City People's Council after approval by the PPC. The Program annual work plan and the annual budget are disclosed after adoption.

117. The CPC will be responsible for final adoption of feasibility studies and basic designs, detailed designs and cost estimates and procurement plans after these have been approved by the PPC and its technical departments.

City Project Management Unit

118. The city PMUs will be responsible, under the authority of the CPC, for the following tasks:

a) Preparation of the annual work plan of the Program and submission to the CPC for approval;

b) Preparation of sub-project concept notes and work plans including terms of reference of sub-project preparation consultants;

c) Preparation of sub-project feasibility studies, including necessary social and environmental impact assessments, and preparation of outline designs, through engagement of qualified external consultants;

d) Preparation and submission to the CPC of the Project Investment Report (for larger sub-projects) or the Technical and Economic Report (for smaller sub-projects);

e) Preparation of detailed designs and cost estimates, through engagement of qualified external consultants;

f) Preparation of tender documents;

g) Preparation of the Procurement Plan;

h) All procurement actions including advertising, receiving and opening of bids and tender evaluations following proper rules and procedures, or identification of the best available qualified consultant, contractor or supplier where sole source procurement procedures apply, and making recommendations to the CPC for award of contract. Procurement procedures and applicable laws and regulations are described and assessed in the Fiduciary Systems Assessment;

i) Contract administration;

j) Technical supervision, through engagement of a qualified external consultant;

k) Verifying contractor's claims for payment, and issuing payment instructions to the City Finance Unit; and

l) Monitoring and proper reporting of physical progress of investments.

Role of the City Planning and Finance Unit

119. The City Planning and Finance Unit will be responsible for assessing the annual financing available for the Program including Program funds and own-source revenues and informing the preparation of the annual work plan, including:

a) Preparation of the annual budget plan of the city;

b) Entering spending limits for each sub-project into the State electronic accounting system, known as TABMIS;

c) Budget monitoring;

d) Managing a special purpose deposit account at the Provincial State Treasury, into which Program funds will be deposited and from which payments will be made;

e) Execution of payments;

f) Monthly reconciliation of accounts with Treasury records; and

g) Preparation of annual Program financial statements, to be ready for audit before February 15 of the following year.

Role of the State Treasury

120. The City branch of the State Treasury will combine the roles of banker and financial controller for Program funds as well as maintaining financial records of expenditures.

121. Program funds will be managed through a special purpose channel opened at the State Treasury which allows CPC to directly withdraw.

122. The State Treasury is responsible to determine that payments can legitimately be made from the State Budget (which includes the city budget) by checking that the expenditures that are listed in the approved budget estimates, are in line with State norms and standards, are approved by the authorized officer of the spending unit and are supported by adequate documentation.

123. State Treasury enters payment information directly into the TABMIS system, thus ensuring the sharing of information with the Planning and Finance Unit.

Sub-Project Preparation Process

124. The sub-project preparation process follows a number of well-defined steps with some variations according to the size, type and cost of investment. MOC categorizes construction works into classes I to III with the largest/most complex works considered as "special"[19]. MOC guidelines specify requirements for preparation and design of investments according to the cost of the investment and the works class.

125. At the first step, a Project Concept Note is prepared for approval by the PPC. The sub-projects in the lists submitted by the cities for inclusion in the Program have all reached this stage. The CPC then assigns the PMU to begin preparation of the design

126. For larger sub-projects with estimated cost over 15 billion VND[20] (i.e., about US$ 700,000) the PMU prepares a Project Investment Report. The Project Investment Report includes a technical feasibility study, an environmental impact assessment, land acquisition requirements, a social impact

[19] The classification system is defined in Annex I, Section III of Circular 10/2013-TT-BXD and depends on technical parameters according to the type of construction. For example, bridges with piles that are > 150m apart are "special" class, 100-150m Class I, 50-100m Class II and 25-50m, Class III.
[20] Specified in Decree 12.2009/ND-CP.

assessment including resettlement needs, and an outline technical design ("basic design") for the sub-project. At this stage the cost estimate of the sub-project is based on unit cost norms issued by MOC (Decision No. 725/QĐ-BXD dated 9th August 2012).

127. The Project Investment Report is submitted to the PPC for review. PPC assigns coordination of this task to the Department of Planning and Investment (DPI), which in turn may request relevant technical departments such as Department of Construction, Department of Transport, Department of Environment and Natural Resources, etc. to review and comment. DPI consolidates the comments and coordinates any necessary revisions before submitting the Investment Report to the PPC for approval.

128. The PMU then prepares a detailed design and cost estimate for the sub-project. The design will normally be prepared by external consultants on behalf of the PMU. The design must follow relevant standards and technical specifications. The detailed cost estimate is prepared based on input costs (labor, materials, etc.) using norms issued by MOC and regularly updated to reflect market prices.

129. Decree 15/2013 NĐ-CP dated 6th February 2013 on Quality Management of Construction Works specified that detailed designs must be submitted to the appropriate provincial technical department – most often this will be Department of Construction – for a design check. This represents a change from previous practice which was for the PMU to conduct its own design check either internally or by engaging a consultant. The decree does not appear to have been implemented up to the time of the city visits conducted by the assessment team in August-September 2013. The requirements of the decree will be implemented for the Program investments. Decree 15/2013 specifies a maximum of 40 days to complete design checks for Class I investments and 30 days for Class II investments. The design check will include a verification of the cost estimate. The output of the design check is a set of design documents stamped as reviewed and approved.

130. Following the design check, the final design is adopted by the CPC. The PMU prepares the tender documents.

131. For smaller or less complex sub-projects valued less than 15 billion VND, a single-stage document known as a Technical and Economic Report, and comprising a feasibility study and a detailed design, is submitted for review and approval by the PPC.

132. The procurement plan requires approval by the PPC after review by the DPI. Standard practice is for a procurement plan for each sub-project to be prepared separately, with procurement starting immediately once the plan is approved. Better practice would be for preparation and approval of periodic procurement plans showing all procurement actions to be undertaken during each budget year.

133. Under the revised Public Procurement Law, which was approved by the National Assembly in November 2013 and will be effective from July 1, 2014 (see the Fiduciary Systems Assessment), the threshold for open competitive tendering for works is 1 billion VND or about US$48,000. Therefore, it is expected that nearly 100 percent of works under the Program will be mandatorily procured by open competitive tendering. Procurement procedures are described and assessed in the Fiduciary Systems Assessment.

134. The sub-project preparation process, as described, is essentially sound but its effectiveness depends on the quality of the consultants engaged for the feasibility study, the design and the design checks, and also on the availability of adequate budget for essential field studies and surveys, including ground investigations for larger infrastructure. The Ministry of Construction applies fee norms to the hire of technical consultants by city administrations and it appears that these fee norms are well below market rates. The procurement rules permit single sourcing of consultants in most cases without any clear rules to ensure that the best qualified available consultant is selected.

135. Therefore, the Program should ensure that adequate arrangements are in place to guarantee proper and equitable selection of the best qualified available consultants and to ensure that both consultant fees and costs of surveys, ground investigations, etc. are adequately funded. In line with Decree 15/2013, design checks will be carried out at the provincial level, most likely by DOC. For all Program investments, the design check report should be kept on file and should be available for audit.

Sub-Project Implementation

136. For infrastructure investments financed through the city budget, CPC usually assigns contract management responsibility to the PMU.

137. Site supervision is assigned either to a consultant or to a member of the PMU staff, depending on the nature of the sub-project. There is a budget for quality control testing and tests are normally carried out by the laboratory of the Provincial Department of Construction. In the past the quality control testing was normally carried out under the contract of the construction contractor but a recently introduced guideline states that testing should be done under the contract of the supervision consultant instead.

138. Acceptance of works requires review and approval by a committee formed from various interested agencies – for large projects this can include Ministry of Planning and Investment. A financial and technical audit of the contract is carried out before final "liquidation" of the contract. This can take time and can in fact exceed the contractor's liability period.

139. The Program should take measures, through procedures to be adopted in the Program Operational Manual, to ensure the highest standard of technical supervision of construction. Poor construction supervision not only results in poor quality construction but encourages and rewards bad practice by contractors and impacts on procurement – if a bidder does not expect to have to fully honor the contract conditions, technical specifications and undertakings given regarding personnel, equipment and working practices, then the basis of bid evaluation is undermined.

140. A number of contract management procedures that are commonly applied are not conducive to ensuring the highest possible standards of construction work. These include:

a) Large advances – usually 25 percent to 30 percent of contract value but can be up to 50 percent - are routinely paid to contractors – it is not clear whether these large advances are necessary or adequately secured.

b) Payment procedures do not involve retention from each stage payment – good practice would be for retention to be deducted and held in a reserve account at each payment stage, rather than deducted only from the final payment.

c) Final acceptance ("liquidation") procedures can extend beyond the expiry of the contractor's liability period, in which case normal practice is to return the 5 percent retention to the contractor. Then, if any further liability of the contractor is discovered, it is necessary to recover the money through institutional or court proceedings, which can be very time consuming.

141. Work in progress or completed but not yet paid for is not recorded as a liability in the city accounts. It appears that in some cases city administrations may enter into contracts for consultancy or construction works despite a lack of sufficient funds to pay for the work to be carried out in the current budget year. The consultant or contractor then carries out the work in expectation of future payment, or in some cases implementation of the work is delayed until funds become available. Both of these practices are highly non-conducive to ensuring the quality of work carried out.

142. Advance payments may be justified to offset the contractor's mobilization costs and initial purchases of materials. Allowing advance payments may assist in increasing competition by allowing

contractors with limited financing to take part. However there is an obvious discrepancy between this practice and that of relying on contractors to pre-finance works when funds are not available. Cities should review the size of advance payments and settle on an appropriate level, sufficient to finance the contractor's start-up costs and properly secured, then this practice should be applied consistently to all contracts. The size of the advance should not become a matter for negotiation after the contract is awarded.

143. Program Operational Manual should include the following provisions to ensure a high quality of contract management and technical supervision:

a) Review rules for provision of advances to contractors; consider partially or wholly replacing these with mobilization payments;

b) Introduce stage-by-stage retention with retention amounts held in a ring-fenced account;

c) Allow release of retention on completion, in exchange for adequate security to be retained until completion of the "liquidation" process;

d) Ensure adequate cash-flow planning and that contracts cannot be signed until availability of funds to make payments is assured;

e) Ensure proper enforcement of contract conditions including liquidated damages where applicable;

f) Ensure that serious breaches of contract and/or contractor malfeasance automatically result in placing the contractor on Government and World Bank disbarment lists;

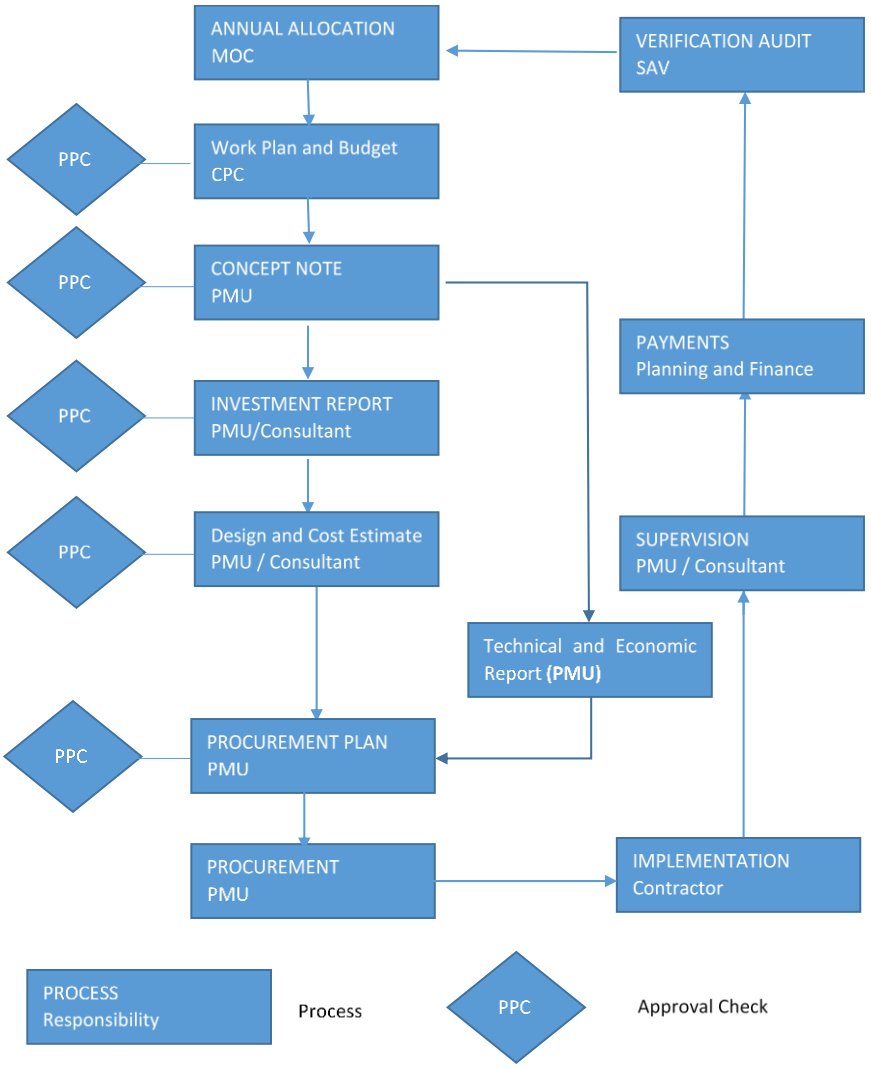
g) All contracts of a value above US$250,000[21] should be supervised by properly qualified independent consultants. Supervision consultants should be selected by a process ensuring that the best qualified candidate is selected and should be remunerated in a manner that does not create perverse incentives (supervision consultants should not lose financially by ordering necessary delays in the works, for example).

h) Ensure clear and systematic record-keeping by supervision consultants including all significant communications to the contractor and reports to the PMU on quality and quantity of works completed; and

i) Any construction defects or deviations from design and specification identified during technical audit and not found to have been specifically notified in writing by the supervision consultant to the PMU, to be automatically taken into account in evaluation of the consultant's qualifications for future supervision contracts. Serious cases should result in disbarment of the consultant from further work under the Program.

[21] This value is the current threshold for competitive tendering (although this threshold is likely to be lowered) and is chosen as a working definition of the upper limit of what can be considered as minor works.

Figure 4: Sub-Project Work Flow



Capacity and Experience of MOC

144. MOC has been a key counterpart of the World Bank, as well as other donors, in many urban infrastructure projects and technical assistance activities, most recently in areas of urban water supply development, urban upgrading, and urban governance. Within MOC, the UDA has been gradually growing in their role of overseeing major ODA projects in urban development. In the past 10 years, UDA – through the MUDP – has completed two large projects to improve urban environmental sanitation (including drainage, wastewater and solid waste) in seven cities of the central region totaling US$97 million, funded by ADB, AFD, and JFPR. MUDP has also benefited from various capacity development activities, most significantly a grant from DANIDA in 2004-2006 to strengthen its capacity in planning and managing the urban environment. The UDA has a strong team of 23 staff, including 12 technical specialists (60 percent with Master's degree, and the rest with Bachelor degree) with an average of 7 years of experience in urban planning, architecture, construction, and project management. This team is supervising a number of government and ODA projects, among which is the Mekong Delta Region Urban Upgrading Project (MDR-UUP - US$292 million) where the MOC has a major role to play in supporting six cities on implementation of urban infrastructure sub-projects, very similar to its role under the RBNUDP-NM.

Priority Needs for Strengthening Capacity of MOC

145. While the MOC and its agencies have considerable experience in setting guidelines for cities and supporting them with infrastructure projects, the performance-based transfer instrument and assessment mechanisms of the Program will be a new function. One of the goals of the first phase of the NUDP is to prepare the MOC to replicate the results-based approach nationwide in the future. The priority for strengthening within MOC should be to institutionalize the capacity to manage the performance-based transfer mechanism and, more broadly, the capacity of MOC to assist the city administrations to improve the cost-effectiveness of planning and implementation of infrastructure investments using clearly defined, measurable, and achievable results as a reference framework. Key skills areas will include medium-term investment planning as well as ex-ante appraisal and ex-post evaluation of investments. The capacity development provided by MOC to the cities on these topics and others will be primarily through specialized consultants. It is anticipated that the MOC will also require support to analyze and integrate lessons learned in the first phase of the NUDP to the national roll-out.

146. As part of the Program, the MOC will further develop national strategy for urban infrastructure development. A critical first step in this process is improved analysis of the overall framework for the financing of urban development. This will require data gathering, analysis and quantification (costing) of: (a) urban infrastructure investment needs in relation to backlogs in access to basic infrastructure, asset refurbishment and replacement requirements, and new asset creation required to support growth; and (b) current sources of finance for urban infrastructure investment, including own source revenues, transfers and leveraged financed (borrowing, partnerships and land / asset sales/leases). This is a critical but complex priority for the NUDP and may require technical assistance in the form of advisory services from international experts.

147. The Program will also support the SAV, with contracted national or international expertise as needed, to conduct an annual audit of city expenditures and Program expenditures and undertake the verification of DLIs in accordance with the verification protocol. Because SAV's expertise is in financial auditing, they will initially hire a professional firm to carry out the technical audit function and, through Program implementation, develop such capacity in-house for the longer term.

Performance of the City PMUs

148. The city PMUs have in most cases been established and operating with a stable and experienced leadership for a number of years. The PMUs have a thorough understanding of the rules and procedures applicable to the tasks that they are assigned. The PMUs are experienced in procurement under the Government of Vietnam procedures. The PMUs have in most cases handled individual sub-projects of similar size and complexity to the larger sub-projects projected under the Program. However, the volume of work under the Program will represent a considerable increase for most PMUs. The financial impact of delays, through the linkage of transfer funds to results under the Program arrangements, will represent a new challenge for the PMUs.

149. Although the largest sub-projects said to have been managed by the city PMUs in the past are up to around US$15 million value, the typical workload appears to be no more the three to five competitive procurements per year, plus a number of single source contracting actions for consultancies and small works, with a total capital budget executed by the PMU in the range US$2.5 million to US$5 million per year. Table 6 summarizes the number of works contracts (most of which require competitive tendering) and approximate value of procurements of works each year, implied in the preliminary implementation plans of the cities for Program sub-projects.

Table 6: Annual Volume of Procurement per City for the Program

	2015		2016		2017		2018	
City	#	Value (US$)	#	Value (US$)	#	Value (US$)	#	Value (US$)
Thai Nguyen	5	21,972,087	7	57,100,292	0	-	0	-
Cao Bang	3	11,962,300	0	-	7	20,518,798	0	-
Bac Kan	7	13,423,781	0	-	3	11,257,440	2	3,813,675
Dien Bien Phu	3	8,387,756	8	23,793,970	0	-	0	-
Yen Bai	4	7,913,471	0	-	13	23,666,785	1	2,650,000
Tuyen Quang	5	7,939,534	0	-	6	19,113,753	5	13,103,228
Hoa Binh	4	6,543,057	0	-	5	25,959,630	0	-
#: Number of works contracts planned to begin implementation each year *Value: total value of works contracts planned to begin implementation each year*								

150. The efficiency of execution of procurement and contract administration tasks by the PMUs appears to be satisfactory. Significant delays occur in implementation of investments but the primary reason for these delays appears to be shortage of funds (this risk in relation to the Program is discussed in Section F below).

151. The PMUs in most cases have around 10 to 20 staff (see Table 5) who can be a mixture of permanent and contract staff. PMUs use external consultants to carry out many technical tasks including design and supervision work, although in some cases these tasks may be undertaken in house, particularly for smaller projects. The majority of the PMU staff are engineers and in most cases they hold the Ministry of Planning and Investment certificate of competence in procurement. This certificate is awarded after a training course of only three days' duration but is only available to staff with engineer or equivalent qualifications and at least 3 years' professional experience. The PMUs generally include one accountant amongst their staff. However, PMUs are not responsible for financial management tasks, which are assigned to the City Planning and Finance Unit. Routinely, the PMUs prepare a financial report on completion of each sub-project and submit this report to the PPC Department of Planning and Investment. Although the PMUs are responsible for producing basic environmental and social impact assessments for investment sub-projects, they do not have staff who are specialized in these areas. The PMUs do not have staff specialized in monitoring and evaluation or IT.

Priority Needs for Strengthening the PMUs

152. The PMUs will contract most technical tasks including feasibility studies, design, environmental impact assessments and construction supervision to independent consultants. Therefore the tasks carried out directly by PMU staff will comprise: (a) work planning and procurement planning; (b) preparing terms of reference, recruitment, managing and reviewing the outputs of consultants; (c) preparation of tender documents for works; (d) procurement of works; (e) reviewing contractors' requests for payment and (6) monitoring, evaluation and reporting tasks.

153. The workload of recruitment and management of consultants will be considerable. Potentially, five separate consultant assignments may be required for a single sub-project: (a) feasibility study (Project Investment Report); (b) environmental impact assessment; (c) design and cost estimation; (d) design and cost estimate check; and (e) construction supervision. For larger sub-projects it is preferable to engage a consulting firm with the capacity to take on a number of these tasks under a single contract. Alternatively, similar tasks in relation to a number of different sub-projects could be consolidated in a single contract.

154. Level of expertise will be more important than gross staff numbers, particularly to enable the PMUs to review and absorb the recommendations of its consultants. Nevertheless, a significant administrative capacity will also be required.

155. It is suggested that at a minimum each PMU should be able to deploy the following staff able to work full-time or virtually full-time on Program activities:

a) Two design qualified engineers with at least 5 years' experience, led by one staff member with 10 years' experience, to be responsible for control and technical review of the sub-project preparation process';

b) One staff with University's degree in an appropriate discipline who will be responsible to coordinate and review environmental impact assessments and who will also coordinate social (including gender) and resettlement issues;

c) At least two qualified and experienced procurement staff led by one staff member with 5 years' experience led by one staff member with 10 years' experience. All procurement staff must have certificate of competence in procurement;

d) One qualified engineer with at least 7 years' experience who will be responsible for control and review of contract supervision activities;

e) One specialist in monitoring and evaluation, who should have an appropriate qualification and strong IT skills; and

f) Two general administrative assistants.

156. A rapid capacity needs assessment was carried out during Program preparation, and identified three broad areas for capacity building support at the city level, including: (a) infrastructure investment prioritization and planning; (b) management of infrastructure sub-projects, especially technical quality, procurement, and integration of environmental and social aspects; and (c) systems and mechanisms for operations and maintenance.

157. ***Infrastructure investment prioritization and planning***. A majority of surveyed staff indicated that they lack key technical skills necessary to translate city master plans into annual prioritized infrastructure development plans, especially in terms of integrating economic, environmental, and social development considerations. This reflects a concern among participating cities that prioritizing and planning will play an extremely important role in the Program, not only because it is part of a DLI but also because it will guide the implementation of infrastructure sub-projects. Participating cities understand that if they do not prioritize and plan well, they will not have enough liquidity to sustain implementation throughout the whole six years and can potentially fail in this Program. Therefore, cities stressed a need for hands-on, on-the-job training at the very beginning of the Program to help them identify priority investments and develop realistic and feasible annual plans for their implementation.

158. ***Management of infrastructure sub-projects***. City-level staff indicated that they expect training in all aspects of project management, including professional project management skills, technical assessment, procurement, financial management and accounting, social development, and environmental management in order to fulfil Program requirements. These trainings will include sessions on the additional requirements in the sub-project implementation procedures that are introduced by the Program Action Plan and how they are harmonized and integrated into the existing Government procedures. Among these areas, a few topics emerged as top priority – technical quality, procurement, and integration of environmental and social aspects.

- Technical quality: Applying technical knowledge into infrastructure sub-project management requires technical staff to develop relevant Terms of Reference in collaboration with social and environmental specialists to minimize negative impacts.

Technical staffs also asked for training in technical assessment of built infrastructure to ensure the verification process, and subsequently disbursement, could be done smoothly.

- Procurement: All cities consider procurement a challenging topic. Cities have sent staff to procurement training courses but the overall feedback is that these courses are not very effective in terms of preparing participants for real-life situations, and the supply of courses is inadequate vis-à-vis the demand and the complexity of the work. In the context of harmonizing existing Vietnamese procurement procedures with the proposed procurement actions under the Program Action Plan, especially given the number and scope of the procurement packages that cities will deal with under the Program, there is unanimous demand for hands-on training that uses real-life situations to help cities develop capacity for (a) competitive bidding; (b) bid evaluation; and (c) communication and response to concerns of bidders.
- Environmental and social management: Additional training was requested to support cities to build capacity in (a) carrying out social and environmental assessment; (b) implementing livelihood recovery mechanisms for the affected people; and (c) organizing community consultations.

159. ***Systems and mechanisms for operations and maintenance and revenue enhancement***. Most participating cities have experienced inadequate funding for the operation and maintenance of infrastructure, and transfers from the National Maintenance Fund are insufficient to meet the huge need. With new infrastructure being built under the Program, cities recognize that they will need an assigned management entity and sustainable funding mechanisms. While expenditure instruments such as an operation and maintenance (O&M) Fund may be appropriate, these will need to be complemented by efforts to maximize the collection of own source revenues. In addition, cities will require practical technical assistance to seek additional sources of capital finance, including land based revenue options, to sustain their capital investment programs beyond the Program implementation period. DLI 3 recognizes the importance of effective operational expenditures and own revenue enhancements to the longer terms sustainability of investments made in the Program through two sub-indicators. Technical assistance is needed to prepare policies and guidance for both O&M mechanisms and revenue enhancement strategies at the city level. This can be informed by best practices from Vietnam and elsewhere, and assistance will be tailored to specific types of infrastructure (roads, bridges, water & wastewater, social infrastructures, etc.), revenue management challenges and opportunities for capital financing that exist, depending on demand.

160. ***Annual Capacity Development Plan.*** While there are some topics for which a majority of the participating cities demand support (e.g., translating master plans into annual infrastructure development plans), the existing capacity and context of each of the cities are quite heterogeneous. It is also expected that the demand for capacity building activities will shift over time as initial needs are satisfied and new needs emerge. As such, to provide flexibility for adaptation to specific capacity building needs as the Program evolves, an annual Capacity Development Plan will be developed by MOC each year and submitted to the World Bank for review and approval. A template and required contents for the annual plan is included in the POM. At a minimum, it is anticipated that the plan will specify: (a) the capacity building activity topic; (b) objective and intended intermediate results; (c) target audience, including projected enrolment levels or participants; (d) delivery modality (i.e., class room-based training, distance learning, guidebook, "hands on" technical assistance, etc.); (e) timeline; and (f) assigned resources. Each activity will also include a 'measurable output' indicator to serve as a proxy for its contribution toward the achievement of DLI 4.

Table 7: Preliminary Capacity Development Plan

Capacity Building Activity		Modality
City Level		
Infrastructure investment prioritization and planning	Best practices in master planning	Group classes
	Economic/feasibility analysis	Group classes
	Capital investment planning	Group classes
	Social and environmental considerations in infrastructure planning	Group classes
	Targeting urban poverty through infrastructure investment	Group classes
	Infrastructure prioritization mechanisms	Technical assistance
	Developing an annual infrastructure plan	Group classes
	Developing an annual infrastructure plan	Technical assistance
Management of infrastructure sub-projects	Procurement planning and processes	Group classes
	Contract management	Group classes
	On-demand procurement assistance	Technical assistance
	Writing TORs	Technical assistance
	Infrastructure quality management	Group classes by infrastructure type
	Social and environmental assessment	Group classes
	Livelihood recovery mechanisms	Technical assistance
	Best practices in community consultations	Group classes
	Working with Ethnic Minorities	Group classes
Systems and mechanisms for operations and maintenance, revenue management and revenue enhancement	Basics of asset management	Group classes
	Asset management practices for Vietnamese cities	Policy notes
	Asset management practices for Vietnamese cities	Group classes
	Asset Condition Assessments	Technical assistance
	Asset Management Planning	Technical assistance
	Revenue management strategy review and recommendations	Technical assistance
	City-specific review of options for capital finance enhancement and transaction advisory support	Technical assistance
National Level		
Program implementation	Program management	Technical assistance
	Monitoring and evaluation	Technical assistance
	Procurement and contract management	Technical assistance
	Internal audit	Technical assistance
	Fraud and Corruption	Technical assistance
Policy formulation	Infrastructure investment and finance modelling and review for NUDP	Policy notes
Annual performance assessment	Technical audit	Technical assistance
Orientation		
Program introduction	Engaging city and provincial leaders	Retreat
	Engaging national leaders	Retreat

Consultants and Contractors

161. The total volume of works to be executed under the Program, though significant, is likely to be small compared to the total size of the market for civil works construction in the region and therefore should not exceed the capacity of available works contractors. Smaller sub-projects are likely to be executed by city or province based contractors while larger sub-projects are likely to attract bids from regional or national contractors. Therefore, provided that tenders are properly advertised with sufficient time allowed for bid preparation (contractors without local knowledge will generally require a longer bid preparation period) there should be no difficulty in attracting bids from qualified contractors with adequate capacity to execute the works.

162. In principle, the same argument applies to design and supervision consultants – there are many other schemes of similar size and complexity implemented in the region so it is evident that adequate capacity exists. However, the procedures routinely used by the city PMUs for engaging consultants may not ensure that the best available consultant is selected, and may not be adequate to cope with a large and sudden increase in work volumes. Essentially, it appears that most consultants are engaged using sole source procedures on the basis of the familiarity of the city PMUs with their work record. To avoid encountering capacity problems and to ensure selection of the best available candidates, the cities should either adopt competitive procurement procedures for selection of consultants (Quality and Cost Based Selection), or adopt a procedure including public advertisement for expressions of interest and a formal procedure for comparing the qualifications of interested candidates (Selection Based on Consultant's Qualifications).

163. The MOC operates a website including a "black list" of disbarred or suspended contractors and consultants. In addition, cities will also be required to conform to World Bank disbarment lists that will be provided to cities by the MOC and regularly updated. The city PMUs refer to this list and also maintain their own lists of sanctioned or disbarred contractors. Within the Program, technical audit of completed works should form part of the results verification process, and in cases of serious technical defects being identified, this should result in sanctions or disbarment of the responsible party (design consultant, contractor and/or supervision consultant) from further work under the Program.

E. Technical Soundness of Sub-Projects

Planning and Sub-Project Selection Criteria

164. Sub-projects included in the Program are selected from the master plans of the cities in conformance with selection criteria agreed with the MOC to ensure efficiency and effectiveness.

165. All cities included in the Program have master plans which are periodically updated. Table 8 shows the year of latest update of the master plans for each city.

Table 8: Most Recent Update of City Master Plans

City	Class	Year	Comment
Thai Nguyen	2	2005	Approved by Prime Minister. Currently requesting an update
Cao Bang	4	2004	An update is current being submitted to the PPC for approval, planned for February 2014.
Bac Kan	4	2012	
Dien Bien Phu	3	2011	
Yen Bai	3	2012	
Tuyen Quang	4	2007	An update is being prepared, planned for submission in early 2015
Hoa Binh	3	2011	Population to increase from 90,000 now to 140,000 – 160,000 by 2020

166. The city master plans are spatial development plans indicating proposed development zones for industrial, commercial, administrative and residential use and the necessary supporting infrastructure. The plans are developed by consultants under the supervision of the Urban Management Unit and are approved by the Provincial People's Committee, with the exception of the plan for Thai Nguyen which, in line with the Class 2 status of the city, is approved by the Prime Minister.

167. The master plans are based on an ambitious vision of future urban expansion and development and in all cases indicate surrounding rural or semi-rural areas that will become urbanized under the plans. In most cases the plans include expanding the administrative boundaries of the city to include neighboring rural communes. In several cases (for example Dien Bien Phu, Hoa Binh) the plans include re-location of the administrative functions of the city to a new site.

168. The master plans are based on projected population increases of up to 8 percent per year, which is considerably higher than the average rate of urban expansion (3.4 percent per year) quoted in the Vietnam Urbanization Report[22] .

169. The master plans do not appear to be strongly constrained by available resources, nor do they represent a commitment by the Government to mobilize the resources needed to implement the master plan within a specific timeframe. The master plans are periodically updated but this process does not imply completion of the previous plan. Investments from the master plan are included in five-year development plans, however it is only at the annual budgeting stage that resources from the State budget are committed. In some cases investments under the master plan with a multi-year implementation timeframe are begun and then postponed for one or more years due to the non-availability of funding to continue.

170. The master plans do not appear to include a strong sequencing element indicating the order in which investments will be implemented so as to ensure a phased, integrated expansion and to maintain connectivity of infrastructure. The five-year plans indicate intended timing but are not based on assured availability of funding and tend to concentrate all the investments in the first years of the plan. In this situation, projects begin when funding becomes available even though funding for necessary complementary investments (for example, a bridge creating access to a major new facility such as a hospital or university) has not been secured.

171. Participating cities will be required to prepare the various sub-projects (the infrastructure types included under the Program are shown in Table 9 below) to be funded under the Program in a participatory manner, with involvement of the municipal units as well as the local communities. This is consistent with the legal requirement which provides for bottom-up participatory planning in Vietnam. The costing of selected sub-projects will be subject to prevailing government cost norms. To ensure transparency and accountability, the sub-projects to be funded under the Program will be screened by the CPC using the screening (pass/fail) and prioritization criteria summarized in Table 10, and which are detailed in the POM.

Table 9: Menu of Urban Infrastructure Supported by the Program

Type of Infrastructure	Description
Roads	Roads and minor bridges (<25m length) under management, operation and maintenance of the city
Bridges	Bridges (>25m length) under management, operation and maintenance of the city
Drainage	Urban drainage and environmental amenities: including regulation lake and channel rehabilitation that is demonstrably linked to flood control and erosion protection

[22] Vietnam Urbanisation Review: Technical Assistance Report. World Bank November 2011.

Type of Infrastructure	Description
Low Income Areas	Improvement of tertiary infrastructure including streets, water supply, drainage and lighting.
Resettlement Areas	Provision of public infrastructure in areas where housing/land will be allocated to households resettled due to city infrastructure projects (potentially including but not limited to the Program sub-projects), excluding infrastructure for commercial purposes
Social Infrastructure	Including construction and rehabilitation of schools and markets, excluding clinic and health centers (due to special requirements)

Table 10: Sub-project Screening and Prioritization Criteria

Mandatory Pass-Fail Criteria	Prioritization Criteria
Sub-projects must: • Conform to the menu of eligible investment sub-project types (as shown in Table A1.3, above); • Fall within the functional expenditure mandate of the CPC, as assigned in law and clarified through executive decisions at central and provincial level; • Be included in the approved plans of the CPC, such as City Construction Master Plan and 5-year Social-Economic Development Plan; • Include a credible financing plan that will result in completion within the period of the Program; • Demonstrably contribute to the improvement of the living standards of urban populations and address their immediate needs, especially the urban poor; • Demonstrate that capacity is available for operational and maintenance, and that support instruments are in place to ensure this in future; • Be self-contained; if there are any complementary investments required (e.g., link roads for bridges) from other sources of funds, financing for those investments must be fully secured and presented; • Minimize land acquisition and resettlement to the largest extent possible, but where this is necessary include fair compensation and mitigation measures; • Not result in any long-lasting or severe negative environmental impacts; and • Do not involve the procurement of: (1) works, estimated to cost US$ 50 million equivalent or more per contract; (2) goods, estimated to cost US$ 30 million equivalent or more per contract; (3) non-consulting services, estimated to cost US$ 20million equivalent or more per contract; or (4) consultants' services, estimated to cost US$ 15 million equivalent or more per contract.	**Sub-projects to be prioritized are those that:** • Provide positive economic impacts, including a significant impact on poverty reduction and local economic development; • Facilitate access to markets and economic development opportunities for poor households in peri-urban areas (i.e., strengthens the city's role as a regional hub); • Support sustainable city development and brings positive environmental impacts; • Benefit a high proportion of poor and low-income households and promotes gender equality; and • Minimize negative social impacts on the community (e.g., sub-project requiring no or few households to be resettled). • .

172. The MOC has reviewed the list of sub-projects proposed by the cities and appropriate changes have been made to ensure conformance with the pass-fail and prioritization criteria. Compliance with the criteria will be verified at the feasibility study stage of each sub-project. The application of these criteria, together with the economic analysis reported below, are adequate to ensure that the Program investments are used efficiently to address infrastructure deficiency that constrain the expansion and development of the cities.

Assessment of the Proposed Sub-Projects

173. The city administrations have prepared provisional lists of sub-projects to be financed by the Program. These lists have been determined by the CPCs in consultation with provinces, by identifying the highest priority investments from the city master plans and detailed five-year plans (2011-16). These lists have been reviewed by the MOC and confirmed as complying with the eligibility and prioritization criteria.

174. There are a total of 88 sub-projects identified for the seven cities with a total investment cost (including counterpart funding) of US$ 280 million. The size of individual sub-projects ranges from US$ 317,000 to US$19.5 million, with an average size of US$ 3.2 million. Eighteen sub-projects have values less than US$1 million, 66 are in the range US$US 1 million to US$ 10 million and 4 are above US$ 10 million.

175. Sub-project preparation costs including feasibility study and design will be financed by a Project Preparation Technical Assistance Facility (PPTAF). Therefore feasibility study and design costs are not eligible Program expenditures. It is expected that at least the detailed design of infrastructure to be constructed during the first two years of the Program, 2015-2016, will be completed by the start of the Program itself.

176. The total estimated cost of sub-projects in the lists prepared by the cities is approximately equal to the total allocations to the cities for the full six years of the Program. However the lists are not final and some sub-projects may be added or deleted according to need and funding availability during the implementation period. Cities will review and update the sub-project lists as part of the annual Program planning exercise. Table 11 summarizes the proposed sub-project outputs by type while an expanded matrix is presented in Annex 1.

Table 11: Summary of Proposed Sub-Projects

Type	Sub-projects	Estimated Cost (US$ million)	Average Cost (US$ million)	% Cost
Roads	40	124.00	3.10	44.29
Bridges	5	46.00	9.20	16.43
Drainage	12	41.50	3.46	14.82
LIA	18	23.00	1.28	8.21
Resettlement Areas	6	28.00	4.67	10.00
Social Infrastructure	5	6.50	1.30	2.32
Other	2	11.00	5.50	3.93
TOTAL	**88**	**280.00**	**3.18**	**100.00**

Road Sub-Projects

177. There are 40 proposed road sub-projects with a preliminary estimated total cost of US$124 million, representing 44.3 percent of all proposed investments under the Program and an average cost of US$3.1 million. In addition, several other sub-project types can include residential roads or paths.

The proposed roads vary from 7m to 24m in total width (carriageway width 5m to 15m). These roads are the main spinal roads providing access to urban areas. In most cases the proposed sub-project will either: (a) upgrade an existing minor road or track, or (b) repair, resurface or provide adequate drainage for an existing sealed road. Only in a minority of cases will the proposed sub-project build a new road.

178. Proposed technical details of the roads follow MOC design specifications for the appropriate road class. None of the sub-projects appear to present any unusual technical complexity and all are considered to be Class II or III works under the Government's technical classification. Therefore, construction of the carriageways and pavements should not present any major difficulty in design or construction. Proper attention to design of side drainage and cross drainage will be needed to prevent flooding and to avoid damage to the road. Drainage design should take into account increased capacity needed due to the future effects of climate change where relevant.

179. In some cases, there are existing buildings, temporary structures, boundary fences and other obstacles within the proposed road reserve area and these will require clearing with suitable resettlement arrangements. In some cases there will also be a need to relocate utilities such as electricity transmission lines. One road in Thai Nguyen runs parallel to a railway and should be provided with a safety fence to separate vehicles and pedestrians from rail traffic. While the road will not encroach upon the railway reserve, it will be prudent to communicate with the railway authority to ensure that no problems arise.

Bridge Sub-Projects

180. There are 5 proposed major bridge sub-projects with a total estimated cost US$ 46 million, representing 16.43 percent of total investment costs and an average cost of US$9.2 million. The proposed bridges vary between 7m and 19.5m in width and carry mainly strategic urban roads. Three of the bridges are entirely new river crossings; one replaces an existing road bridge that is too narrow and in poor repair (verified by site visit); one replaces an existing steel and timber bridge and one replaces a suspension footbridge in extremely poor condition.

181. All the bridges will use simply supported span type construction and so can use standard specifications and design details. Technical complexity could arise from foundation requirements and from the river hydraulics. It will be important to ensure that adequate ground investigations are carried out to ensure that foundation designs are appropriate. Design procedures should include a check that the bridge opening is sufficient for maximum (100 year) flood conditions and that appropriate measures are adopted to prevent scour and/or damaging erosion of the river banks adjacent to the bridge site. None of the bridges are considered "special" under the Government's technical classification of works: 1 is Class I (in Hoa Binh), 2 are Class II (in Thai Nguyen and Dien Bien Phu) and 2 are Class III (in Bac Kan and Thai Nguyen).

182. Future effects of climate change should be taken into account in hydraulic analysis. Some bridges will require clearing of buildings and other structures on the bridge approaches and suitable resettlement procedures should be followed. Resettlement arrangements will be made by the city, in coordination with relevant authorities.

Drainage and Environmental Improvement Sub-Projects

183. There are 12 sub-projects in this category with a total cost of US$41.5 million and an average cost of US$3.46 million. The sub-projects consist of provision or improvement of stormwater drainage channels (three schemes); construction of masonry embankments to natural streams (four schemes) and improvements that include excavation, embankment improvements and construction of perimeter roads or tracks to natural lakes which have a drainage function (four schemes).

184. One scheme, in Thai Nguyen (cost US$ 4.8 million), will carry waste water as well as storm water and discharge into a wastewater treatment plant recently constructed with finance from the Government of Finland. This scheme complements drainage works in other priority areas of the city that are also financed by Finland.

185. The drainage works should not pose any major complexities in design or construction. There will inevitably be considerable disruption to traffic and also to buried utilities during the construction period. It is common, particularly with combined storm drainage and sewerage systems, that it is not financially feasible and/or not economic to construct the system with adequate capacity to prevent any flooding from occurring during the heaviest storms. Experienced design consultants should be engaged to ensure that the system is designed so that any flooding that does occur will dissipate quickly and without causing physical damage, and to ensure that flooding does not result in discharge of foul water to the surface. The temptation to "stretch" the available finance to cover a larger area by using a specification below this minimum, should be avoided. Drains carrying untreated waste water should discharge into a treatment plant.

186. The lake and watercourse improvement schemes have a dual function of creating public amenity space within the urban areas in addition to the drainage function. These sub-projects should not present any major technical problems, although embankment constructions always entail some risk of local collapses occurring – this can most effectively be prevented by careful attention to conditions encountered during construction and a willingness and ability to revise the design to take account of conditions. There will be disruption to existing users of the watercourses and the possibility of temporary loss of water quality downstream due to wash-out from construction works. The ESSA provides guidance on environmental protection measures to be taken in connection with these schemes.

187. According to the Government's technical classification framework, all proposed sewers are under the Class III.

Low Income Areas Sub-Projects

188. There are 18 sub-projects with a total estimated cost of US$23 million proposed for upgrading of "low income areas" at and an average cost of US$1.28 million Characteristically, these are residential areas with poor provision of infrastructure, perhaps reflecting a history of informal or piecemeal development, and in which a high proportion, though not all households, are in the low-income group. The proposed activities comprise provision of residential roads, water supply, drainage and street lighting to these areas. According to the Government's technical classification, all of these works are considered Class III.

189. The low income areas sub-projects appear technically unproblematic, although it will be necessary to pay adequate attention to the proper design of drainage and – as with all sub-projects – to the quality of construction. In many of these areas, upgrading will require widening and re-alignment of streets and this will result in the need to clear or relocate some structures, with appropriate resettlement procedures.

Buildings (Social Infrastructure) Sub-Projects

190. Four cities have included construction of public facilities such as kindergartens, schools, cultural centers and one market renovation scheme in their sub-project lists. The total estimated cost of these sub-projects is US$6.6 million and their average cost is US$1.3 million. Thai Nguyen proposes to construct a large kindergarten (300 – 400 pupils) to serve the central area of the city. Dien Bien Phu proposes a number of smaller local facilities including one kindergarten, one elementary school and four community cultural centers. According to the Government's classification framework, all buildings such as schools, kindergartens, markets with 1-4 stories are considered Class III.

191. It is expected that these facilities will be constructed using standard designs and as they will consist of relatively light buildings, there should be no major technical difficulties beyond ensuring quality of construction. Engagement of relevant sectoral agencies (for example, education) will be needed to ensure that the needs of the end-users are met. The cities should also verify that personnel and operating costs for operating the facilities will be available upon completion.

Resettlement Area Sub-Projects

192. Six cities propose to finance preparation of resettlement areas – i.e., areas in which households relocated due to infrastructure developments elsewhere – including, but not limited to, developments funded by the Program – can be allocated housing land. The estimated cost of these sub-projects is US$ 28 million and their average cost is US$4.67 million. The funds will be used to prepare the areas and provide basic public infrastructure – roads, water supply, drainage and lighting. Therefore, from a technical point of view, the sub-projects will be similar to the Low Income Area sub-projects discussed above. According to the Government's technical classification, all of these works are considered Class III.

193. Development of the resettlement areas may require some re-location within the site of households already living in the area.

Other Sub-Project Types

194. The provisional sub-project lists include two sub-projects that do not fit into any of the general categories listed above: they are sub-projects in Thai Nguyen and YenBai or re-routing of overhead electric supply cables through underground cable ducts in main city streets (length 8.8km; estimated cost of sub-projects US$ 11 million). According to the Government's technical classification, this type of sub-project is considered Class III.

Ensuring Technical Quality: Summary

195. The city administrations of the Northern Mountains cities, usually working under the oversight of the provincial administrations, have a significant track record in delivering substantial investments in urban infrastructure including roads, bridges, water supplies, wastewater treatment plans and other facilities of similar size and complexity to the sub-projects proposed under the Program. There is adequate capacity in the local (mainly Hanoi-based) engineering consultancy sector for feasibility study and design of these investments and in the contracting sector for construction. However, it is clear from observation of existing and recently built infrastructure that flaws in design and poor quality of construction can occur in some cases. Technical failures could arise from inadequate technical studies and design, particularly for the larger and more complex sub-projects; from use of standard designs that are not appropriate to the local circumstances and from poor contract management and construction supervision practices. Technical failures are likely to be associated with weaknesses in institutional relationships and procedures as much as with lack of technical capacity in the narrow sense.

F. Description and Assessment of Program Expenditure Framework

Program Budget Structure and Classifications

196. Program expenditures are estimated to total US$300 million. US$280 million will constitute the performance-transfer system and finance infrastructure investments specified in the investment menu. This includes US$50 million in counterpart contributions from the participating cities. US$20 million will support MOC activities and results directly linked to the execution of the Program.

197. The performance-based transfers, along with contributions from the participating cities, will fund the construction of local infrastructure, social and environmental related studies, compensation costs, sub-project management, and operation costs associated with management of the infrastructure investments. At the national level, expenditures will include Program administration, capacity development activities implemented by MOC (primarily through specialized consultants), and verification audits undertaken by the State Audit of Vietnam (SAV).

198. The Cities have prepared sub-project lists indicating the cost of each sub-project broken down by construction, preparation and supervision, resettlement compensation and other costs; together with indicated time required for preparation and for construction and projected start dates. Table 12 shows projected expenditures by year based on the sub-project plans prepared by the cities.

Table 12: Projected Program Expenditures by Type and Year (US$ millions, projected)

	2015	2016	2017	2018	2019	2020	Total
*Estimated expenditures by cities including IDA and counterpart funds**							
Thai Nguyen City	13.50	31.00	19.50	8.00	6.00	1.00	79.00
Cao Bang City	8.50	3.50	12.00	5.00	3.00	0.50	32.50
Bac Kan City	6.00	8.50	5.50	5.00	3.00	0.50	28.50
Dien Bien Phu City	4.00	10.00	10.00	5.50	2.50	0.50	32.50
Yen Bai City	5.50	2.50	14.50	9.00	2.50	0.50	34.50
Tuyen Quang City	4.00	3.00	12.00	15.00	6.00	0.50	40.50
Hoa Binh City	3.00	1.50	10.50	8.00	8.50	1.00	32.50
Sub-Total for cities	***44.50***	***60.00***	***84.00***	***55.50***	***31.50***	***4.50***	***280.00***
Estimated national level Ministry of Construction Expenditures by Type							
National Policy Development	1.00	1.00	1.00	1.00	1.00	2.00	7.00
MOC Staffing and Capacity Development	2.00	2.00	2.00	2.00	1.00	1.00	10.00
Annual Audits (SAV)	0.50	0.50	0.50	0.50	0.50	0.50	3.00
Subtotal for MOC	***3.50***	***3.50***	***3.50***	***3.50***	***2.50***	***3.50***	***20.00***
Total for Program	**48.00**	**63.50**	**87.50**	**59.00**	**34.00**	**8.00**	**300.00**

* Expenditures by cities include recurrent expenditures associated with sub-project management. Vietnamese public sector accounting practices require these costs to be included in sub-project cost estimates and budget provisions.

Program Financial Sustainability and Predictability

Framework for Assessing Program Financial Sustainability and Predictability

199. The participating cities, with the exception of Thái Nguyên, rely on transfers from central State budget revenues to fund a large part of their recurrent spending (typically around 50 percent) and have almost no ability to mobilize capital funds at the city level. The draft sub-project lists imply that substantial amounts of counterpart financing will be required in some cities. About 83 percent of the sub-project financing needs will be met through advances and performance-based disbursements from the Program. Taken together with the relatively large size of some individual sub-projects, this creates a risk that cash flow difficulties could impede implementation of the Program.

200. The following sections focus first on assessing and identifying appropriate measures to mitigate the risk of delays in implementation of the Program due to inadequate availability of capital funds to complete Program activities, and second on assessing the financial impact of the Program on the recurrent budgets of the city administrations.

201. The existing framework for capital investment planning at the city level is weak, with annual capital budget allocations not known until December in the previous budget year. This is particularly a problem for larger sub-projects requiring multi-year implementation periods. During field investigations for this Technical Assessment, several examples were encountered of ongoing capital investment projects which have experienced serious delays due to non-availability of finance in annual budgets subsequent to inception of the project. In one case, contracts were awarded in 2010 but have not yet been implemented because of lack of funds. There also appears to be a troubling practice of pre-financing of works by contractors, who work in expectation of payment when funds become available under a future budget. Shortfalls of cash, as compared to the approved budget, could also occur but discussions with the city and provincial administrations did not reveal this as a serious problem.

202. DLI 2 "Local urban infrastructure investments delivered as per each Participating City's approved Annual City Plan" accounts for 67 percent of the total disbursements to the cities under DLIs 1, 2 and 3, and is therefore a critical consideration in projecting cash flow. Achievements could fall short of targets for this DLI if any of the following occur:

a) Inadequate cash-flow leads to delays in inception or completion of construction works;

b) Delays in procurement or construction for non-financial reasons; or

c) Failure to fully comply with procedural or technical criteria for verification of a "completed sub-project".

203. In order to assess the risk of these events occurring and having a serious impact on Program implementation, annual financing needs have been calculated based on the target implementation dates included in the sub-project lists prepared by each city. These financing needs must be met from: (a) advances; (b) disbursements linked to the DLIs, and (c) capital funds available to the cities from own-source revenues or transfers from general State budget revenues. A projection of advances and disbursements of the performance-based transfers leads to identification of potential financing shortfalls overall and at the city level. These shortfalls can be reduced or eliminated by adjustments to the implementation plans. The residual risk of funding shortfalls is assessed below, and measures to mitigate this risk are identified.

Program Cash Flow Needs and Performance-based transfer Financing

204. Table 13 shows the total value of sub-projects proposed by the cities compared with the projected allocation of transfer funds for each city.

Table 13: Comparison of Program Projected Expenditures and Allocations (USD)

City	Total	Transfer Allocation	Counterpart Funds
Thai Nguyen City	79,000,000.00	61,010,032	17,989,968
Cao Bang City	32,500,000.00	28,606,993	3,893,007
Bac Kan City	28,500,000.00	22,501,114	5,998,886
Dien Bien Phu City	32,500,000.00	26,655,201	5,844,799
Yen Bai City	34,500,000.00	29,450,204	5,049,796
Tuyen Quang City	40,500,000.00	31,988,126	8,511,874
Hoa Binh City	32,500,000.00	29,788,331	2,711,670
National Expenditures	20,000,000	20,000,000	
Total	**300,000,000**	**250,000,000**	**50,000,000**

205. Each city will be entitled to receive a fixed maximum amount of disbursements each year, subject to achieving the DLI targets. These allocations have been adjusted to assist the cities to meet their annual cash flow needs, up to the maximum amount allocated for each city. The first verification of results will be conducted in early 2016, so the first disbursements will be in mid-2016. Because the most significant DLI indicator (i.e., the one linked to the largest amount of financing) is based on completing infrastructure sub-projects in accordance with the Enhanced Annual City Plan, there can be no certainty that these targets will be consistently achieved and so actual disbursements could lag behind the schedule. Cities will be entitled to receive an advance of up to 25 percent their total allocation, beginning in 2015. Table 14 shows the projected advances and disbursements to each City on this basis and assuming that the DLI targets are achieved.

Table 14: Performance Based Transfer Finance by City and Year (US$ millions, projected)

	2015	2016	2017	2018	2019	2020	2021	Total
Thai Nguyen City	15.25	4.51	11.93	6.65	10.71	9.37	2.59	61.01
Cao Bang City	7.15	3.14	6.19	2.62	4.12	4.43	0.95	28.61
Bac Kan City	5.63	2.64	5.69	2.09	1.46	4.29	0.69	22.50
Dien Bien City	6.66	2.60	3.13	5.18	4.60	2.52	1.95	26.65
Yen Bai City	7.36	3.32	3.98	3.56	6.26	3.38	1.59	29.46
Tuyen Quang City	8.00	2.69	3.58	2.42	5.79	8.59	0.92	31.99
Hoa Binh City	7.45	3.50	2.53	1.81	3.04	9.72	1.74	29.79
Total	**57.50**	**22.40**	**37.04**	**24.33**	**35.99**	**42.30**	**10.43**	**230.00**

Note: transfers in 2015 are advances; transfers in following years are performance based transfer disbursements

206. Table 15 estimates the need for counterpart financing (i.e., financing mobilized from sources other than advances and disbursements of transfer funds) for each city in each year. These figures were calculated by subtracting the estimated advances and disbursements (Table 14) from the estimated needs (Table 12).

Table 15: Projected Counterpart Financing Needs By Year (US$ millions, projected)

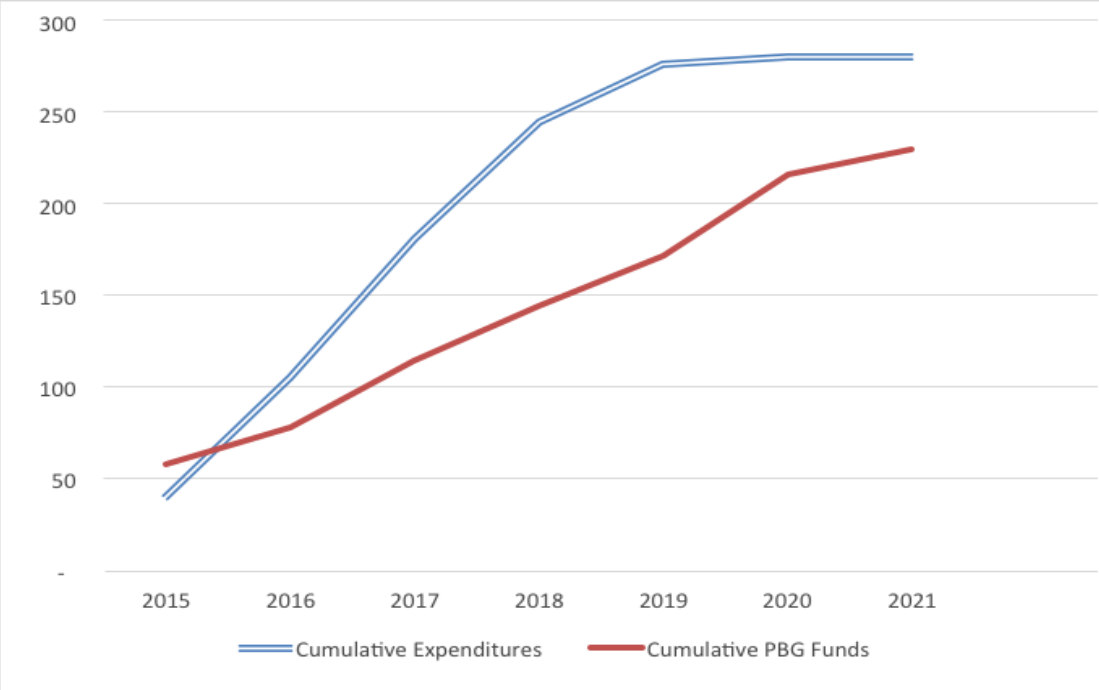
	2015	2016	2017	2018	2019	2020	2021	Total
Thai Nguyen City	(1.92)	26.95	7.67	1.34	(4.80)	(8.59)	(2.59)	18.06
Cao Bang City	1.49	0.19	5.63	2.66	(0.85)	(4.43)	(0.95)	3.83

Bac Kan City	0.62	5.84	(0.39)	3.00	1.77	(4.29)	(0.69)	5.96
Dien Bien City	(2.53)	7.55	6.57	0.25	(2.39)	(1.97)	(1.95)	5.85
Yen Bai City	(1.98)	(0.78)	10.38	5.29	(3.75)	(2.79)	(1.59)	4.80
Tuyen Quang City	(3.81)	0.14	8.50	12.37	0.16	(8.59)	(0.92)	8.19
Hoa Binh City	(4.50)	(2.01)	8.17	6.02	5.45	(9.72)	(1.74)	1.67
Total	**(12.63)**	**37.88**	**46.54**	**30.94**	**(4.42)**	**(40.38)**	**(10.43)**	**48.36**

207. Table 15 shows the difference between the estimated disbursements and the estimated total financing needs of each City in each year. The estimated counterpart financing needs vary markedly from year to year. Thai Nguyen is projected to need US$28.3 million of counterpart funds in 2016 and US$10.9 million in 2017 (though these amounts will be offset somewhat by a surplus of US$5.5 million from 2015). The highest need for a single year is projected to be over US$10 million in Yen Bai, Tuyen Quang and Hoa Binh and between US$ 5 million and US$ 10 million for the other cities. These estimates are not out of scale with the annual capital budgets of the cities (see Section C, Fiscal Framework, above) but careful budget planning will be needed to avoid cash flow shortages.

208. The year with the highest counterpart financing need will vary between cities but all occur between 2016 and 2018. It is projected that in 2020 and 2021 disbursements will exceed expenditures. One consequence is that the cumulative maximum amount of financing that the Cities will need to mobilize will occur in the middle years of the Program. This is illustrated in Figure 5 below. The largest cumulative "deficit" or gap between cumulative expenditures and cumulative receipts of transfer funds (advances and disbursements) will occur in 2019**.**

Figure 5: Cumulative Expenditures and Receipts of Performance-based transfer (PBG) Funds (US$ millions, estimated) For All Cities



Potential Measures to Minimize Cash Flow Risk

209. All cities should carefully review their implementation plans including the timing and sequencing of sub-projects, based on a thorough understanding of the financial implications under the

performance-based transfer system. If necessary, MOC should engage an expert consultant to assist the cities with this task.

210. Based on the revised implementation plans, cities should prepare projections of their cash flow needs through the Program period. They should also prepare detailed multi-year procurement plans that can be used for monitoring progress and identifying promptly where difficulties may occur.

211. Based on these projections, cities should take appropriate steps to ensure that non-transfer financing will be available when needed. This could be achieved through mobilization of resources at the city level (for example, Thai Nguyen raises funds for capital investments through land lease sales) or through discussion with the PPC. The possibility of cities raising loans (short term "bridging" finance) from central government or from banks to cover Program financing shortfalls should also be investigated.

212. Financing shortfalls could be alleviated by reducing the advances paid to contractors. It seems that contractors are routinely paid advances of up to 30 percent of the contract value (20 percent was assumed in the calculations described above). This is more than is needed to cover the contractor's mobilization costs and contrasts with the alternative practice of pre-financing of contracts by contractors.

213. Cities should ensure that adequate financing is available before proceeding with procurement. In case of financing shortfalls, it will be preferable to delay the start of a sub-project rather than to experience cash flow difficulties during implementation.

214. A high quality of design work and construction supervision will be conducive to reducing risk from cash flow shortages by ensuring that all relevant technical factors are taken into consideration in the design and that construction is implemented to a high standard. Conversely, one of the biggest financial risks undertaken by the cities under the performance-based transfer system is that the verification process determines a completed sub-project to be sub-standard and thus ineligible to be counted against the "completed sub-projects" DLI.

215. The initial plans prepared by the cities indicate a number of large sub-projects, mostly bridge constructions, to be completed in the final year of the Program, 2020. Disbursement of DLI-2 funds linked to these sub-projects will fall in 2021. However, delays caused for example by unforeseen conditions or events encountered during construction – as can occur in any construction project – would have the effect that construction would not be completed within the Program period and thus the allocation linked to the sub-project would not be disbursed. With this consideration, it will be prudent for Cities to plan to complete major sub-projects by 2019 at the latest, allowing a margin of error for unforeseen delays.

216. An effective Program MIS will be invaluable in assisting MOC to avoid cash flow difficulties by adjusting the allocation of available advance amounts and transfer disbursements, through the annual budgets of the cities, in response to cash needs. An effective MIS will also allow MOC to identify where delays or bottlenecks may occur and to provide necessary assistance to the cities to resolve difficulties in a timely manner.

Operation and Maintenance Funding

217. With the exception of Thai Nguyen, the cities' own-source revenues are insufficient to meet their recurrent expenditures and they are reliant on transfers from the province. The annual budget plan includes funding for maintenance of infrastructure. Maintenance of urban roads is generally regarded as a priority. However budgets are limited and some roads in the urban areas, observed during the field visits, appear to show evidence of lack of adequate maintenance.

218. Reliance on transfers for funding makes it more difficult for cities to plan essential maintenance activities efficiently. In general, delayed or inadequate maintenance of roads and other infrastructure will lead to higher repair costs later.

219. The Program will result in an increase in the amount of infrastructure under management of the city and, thus, ultimately will increase the level of maintenance expenditures required. Maintenance costs of new infrastructure should remain low for several years and therefore this increased maintenance burden will not be felt immediately. In the longer term, the increased maintenance burden should be more than offset by increased own-source revenues resulting from urban economic growth, stimulated by the Program investments.

220. Failure to effectively manage assets will limit the impact of the Program over the long term. While this is beyond the Program implementation period, it is no less important. However, the Program will have limited leverage on City decision-making by this point. The focus of risk mitigation is therefore appropriately placed on ensuring that CPCs establish a sound framework for asset management, and are demonstrably keeping newly created assets in full service within the Program period. These are the focal areas for the sub-indicators in DLI 3, relating to serviceability of assets and the financing of maintenance activities respectively. In addition, DLI 3.1 requires cities to undertake Asset Condition Assessments and develop asset management plans in the first two years of Program implementation, prior to the subsequent inspection of asset serviceability from 2017.

221. Capacity support will be required to assist cities to strengthen their asset management programs, and this should be provided for in the annual Capacity Development Plan.

Adherence of Program Budgeted Expenditure and Execution to Government Priorities

222. The Government of Vietnam is facing huge demands for urban infrastructure investment and considers it a high priority to meet these demands in order to facilitate urbanization and continue sustainable growth and development of the economy. Therefore, the Government has strongly requested Bank support for investments in the seven Northern Mountains cities through the NUDP.

223. The investments have been identified through the city master plans which have been extensively reviewed and approved at Prime Ministerial level in the case of Thai Nguyen and at provincial level for the other cities. The investments have also been selected from amongst master plan projects for inclusion in the current five-year implementation plans. The criteria for sub-project selection and prioritization determined by the Ministry of Construction in agreement with the Bank ensure selection of the highest value sub-projects and appropriate sequencing and connectivity of separate sub-projects.

224. The CPC are almost entirely reliant on transfers from national and provincial level to finance infrastructure investments. City annual investment plans and budgets are subject to approval from the provincial level, thus providing a further assurance that planned investments adhere to Government spending priorities.

225. Most capital provision in the city annual budget is earmarked for specific investments and is used for the intended purpose – the assessment did not encounter evidence of finance provided for one purpose being diverted to another, which would entail deviation from Government-determined priorities were it to occur. There is some evidence of the State Treasury temporarily using funds earmarked for one purpose to cover expenditures for a different purpose, in order to ease cash flow shortages.

Efficiency of Program Expenditures

Overview

226. In this section the efficiency of proposed Program expenditures is assessed in terms of overall cost-effectiveness (appropriateness of costs of infrastructure outputs) and of proposed spending on non-construction items, mainly compensation costs.

227. Because of the low volume of similar works previously undertaken by the cities, it is necessary to rely mainly on the initial estimated costs and cost breakdowns provided by the cities in the sub-project lists. Three approaches are taken to assessing the appropriateness of these costs: comparison with the published cost norms of the Ministry of Construction for these output types; the size of variations in unit costs between sub-projects of similar type proposed for the Program; and comparison with similar outputs supported by other Bank projects in Vietnam.

228. The potential impacts of the cost norm system on cost effectiveness are discussed in the light of previous Bank experience with this system. Finally, the extent to which the use of competitive procurement can be relied upon to ensure cost-effectiveness is discussed.

Sub-Project Estimated Unit Costs

229. Table 16 shows calculated unit costs for each sub-project type based on the estimates and breakdowns provided by the cities, for those sub-projects for which unit quantities were provided. Because of the very variable nature of the outputs included in the LIA, resettlement and environment and drainage sub-project types, the costs have been calculated by unit area.

Table 16: Summary of Unit Costs by Sub-Project Type

Type	Sub-Projects	Unit	Quantity	Costs Per Unit	
				Total	Construction
Road	40	m^2 paved surface	464,935	$102	$166
Bridge	5	m^2 bridge deck	21,724	$2,253	$2,999
LIA	18	ha	1,313	$8,106	$15,095
Resettlement Areas	6	ha	35	$286,031	$510,446
Buildings	5	m^2 floor area	2,710	$448	$613
Drainage and Environment	12	km^2 served	2,553	$3,812	$5,238
Other	2	km underground tunnel			

Note: table shows only sub-projects for which adequate size and cost data are available.

230. These average figures appear reasonable for the road, bridge and buildings. The level of expenditure on the LIA, for providing basic infrastructure to high density residential areas, is quite modest.

231. The investment in developing the resettlement areas is quite high – about US$0.5 million in total, but this would probably represent only about 10 percent of the cost of constructing housing on the sites, which appears reasonable. However the sub-project data submitted by the cities show notably limited information about the resettlement areas (number of households to be accommodated etc.) and the value for money of these investments should be re-examined carefully at the feasibility study stage.

232. The average figures conceal significant differences in unit costs between very similar sub-projects. For example, estimated construction costs of major bridges vary between US$1,165 and US$3,063 per square meter. Similar variations are found for other sub-project types. Some variation is expected according to the local situation (some of the bridge sub-projects include approach roads, for example) but the size of the variations still appears larger than would be expected given that the estimates are supposedly based on MOC unit cost norms. This gives rise to the concern that final costs may vary significantly from these estimates.

Use of MOC Cost Norms

233. The Ministry of Construction publishes output-based unit cost norms for estimating the costs of different types of construction, as well as detailed input-based norms based on quantities of different types of construction work for use in estimating costs based on final designs. Initial cost estimates are derived from the output-based norms while final cost estimates, following detailed design, are based on input costs.

234. The use of cost norms should provide a reliable basis of comparison with estimated and actual sub-project costs and should in principle assist in ensuring that construction costs are not excessive. However, there is some concern regarding the accuracy of the cost norms in use. There is also the risk that a cost estimate based on cost norms can become a "floor price" even where the efficient cost based on market prices of construction labor, materials and equipment might be less. The Technical Assessment for the Rural Water Supplies PforR Program in Vietnam commented on this point: "The use of published construction cost norms provides bidders with clear guidance on the maximum bid that will be deemed compliant. Although this puts a cap on costs, when combined with a process that underutilizes fully open and competitive bidding (by overusing shopping as a procurement method) it also tends to put a floor on them. The IDA-funded, on-going, Red River Delta RWSS Project provides evidence that the cost norms and procurement practices may be a source of inefficiency."

235. There is a concern that cost norms applied to recruitment of consultants are much lower than market rates. This will make it difficult to recruit consultants with sufficient capacity and may lead to consultants failing to carry out all necessary design or construction supervision procedures in an effort to economize on time.

Competitiveness of Procurement

236. Because of the larger size of the sub-projects, use of shopping as a procurement method will be less of an issue in the RBNUDP-NM than in the RWSS PforR Program referred to above. Only around 15 out of 88 works procurement packages are likely to fall below the existing threshold for competitive tendering, and it is expected that under the new Procurement Law the threshold will be lowered so that virtually all works contracts will be competitively tendered (see Fiduciary Systems Assessment). However, the tender evaluation procedures in use by the cities have the effect of eliminating the majority of tenders submitted on non-price grounds: either because of errors in tender preparation which may be quite minor in some cases, or because of low scores on a technical assessment which is subjective and liable to produce significantly variable results between individual assessors. In most cases only one or two tenders reach the price comparison stage. In effect, there is limited incentive for a tenderer to submit a competitive price.

237. For this reason, the procurement process as currently applied cannot be fully relied upon to secure the most efficient price for construction works. Improvements to the procurement procedures, outlined in the Program Action Plan, should have the effect of improving the competitiveness of procurement.

Comments on Breakdown of Cost Estimates

238. The cities have provided cost estimates for the sub-projects broken down into construction costs, costs of preparation and construction supervision, compensation costs and other costs. Table 17 summarizes the proportion of each cost category by sub-project type.

Table 17: Percentage of Total Costs By Type

	Construction (%)	Supervision (%)	Compensation (%)	Other (%)
Road	65	5	17	13
Bridge	61	4	21	14
LIA	71	7	7	15
Resettlement Area	59	5	20	16
Buildings	77	4	8	12
Environmental	70	6	10	14
Other	77	2	0	21

239. It is understood that cities have not included sub-project preparation costs in the cost estimates as these costs will be funded by the PPTAF. On this basis, the costs estimated for supervision seem reasonable. Excessively tight budget limits for consultant services for supervision could lead to implementation delays or could have deleterious effects on the quality of completed works.

240. As expected, compensation costs are a significant component of the costs of road and bridge sub-projects. Some compensation costs will inevitably occur in LIA schemes as infrastructure improvements require rationalization of informal settlement patterns. It is rather more surprising that

compensation costs should be significant for community buildings which would normally be constructed on existing sites.

241. The estimated costs for the "resettlement areas" - essentially, preparing vacant land with infrastructure so that families displaced by infrastructure schemes elsewhere can be allocated house plots there – include a 20 percent element of compensation cost, presumably for resettling households that are already present in these zones. This seems remarkably high and this point should be re-examined.

Conclusion

242. The sub-project costs available at this stage are initial estimates based on output unit cost norms. There appear to be some inconsistencies in the application of these norms. The initial estimates are not sufficiently reliable to be used as a basis for calculating the value of works completed (DLI-2) and the final, input-based detailed cost estimate should be used for that purpose. These latter cost estimates will be used for annual budgeting purposes by CPCs in any event. Disbursements to cities will still be required to fall within the agreed annual and total envelopes for this DLI. Any cost over-runs relative to budget figures will be borne by CPCs, who may also retain any savings. These savings, if any, are unlikely to be significant given the application of final cost norms and small project sizes, but will provide an incentive for cost-efficiency in sub-project implementation in a manner that is consistent with a results-based approach.

243. There is a risk that the final costs of sub-projects will vary considerably from these initial estimates. This could cause difficulties both for overall financing of the Program and (even if the overall effect of cost variations is neutral) for the cities' cash flow planning.

244. Cities should review the cost estimates based on the outline preliminary design proposals which are already available in most cases. MOC should oversee this process and if necessary should provide additional support to the cities in order to arrive at appropriate and consistent cost estimates for the schemes.

245. Competitive tendering procedures should be improved to ensure that there is genuine price competition so that final construction costs accurately reflect market prices.

G. Results Framework, Monitoring and Evaluation

Table 18: Results Framework

Results-Based National Urban Development Program in the Northern Mountains Region: Results Framework													
Indicator	**Core**	**DLI**	**Unit of Measure**	**Base-line**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**Freq-uency**	**Method**	**Respo-nsibility for Data Collecti-on**
Program Development Objective: ***to strengthen the capacity of participating Northern Mountains cities to plan, implement, and sustain urban infrastructure***													
PDO Level Results Indicators													
Enhanced Annual City Plans approved and disclosed to the public	☐	☒	# of Participating Cities	-	7	7	7	7	7	7	Annual	MIS & Verification Audit	MOC/ SAV
Asset management plan adopted and local urban infrastructure sub-projects in full service after completion	☐	☒	Yes/No	n/a	An asset condition assessment in each Participating City completed	An asset management plan for each Participating City is completed	Minimum of 80% of local urban infrastructure sub-projects completed are free from physical damage and fully provide the functions	Minimum of 80% of local urban infrastructure sub-projects completed are free from physical damage and fully provide the functions	Minimum of 80% of local urban infrastructure sub-projects completed are free from physical damage and fully provide the functions	Minimum of 80% of local urban infrastructure sub-projects completed are free from physical damage and fully provide the functions for which they were designed	Annual after 2017	Verification Audit	SAV

							for which they were designed	for which they were designed	for which they were designed				
Implementation Strategy for National Urban Development Program adopted with annual milestones	☐	☒	Yes/No	n/a	Policy Note on urban infrastructure investment needs approved	NUDP implementation framework approved	NUDP expenditure framework approved	NUDP management capacity in place	NUDP national rollout strategy with selection of phase 2 cities	NUDP implementation in phase 2 cities commenced	Annual, as specified	Competent Authority	MOC
Total number of people benefiting from Program (disaggregated by gender)	☒	☐	#	0	0	19,000	131,000	191,000	230,800	757,000	Annual	MOC	CPC
Intermediate Results Indicators													
Result 1: Institutional Strengthening At City Level													
Professionally-staffed management units in place within each Participating City People's Committee	☐	☒	# of Participating Cities	-	7	7	7	7	7	7	Annual	MIS / Verification Audit	MOC / SAV
Result 2: Infrastructure Delivered													
People benefiting from city	☒	☐	#	0	0	8,700	68,600	118,800	142,800	650,000	Annual	MOC	CPC

primary/ secondary infrastructure services													
People benefiting from improved tertiary/ social infrastructure services (disaggregated by gender)	☒	☐	#	0	0	10,300	62,400	72,200	88,000	107,000	Annual	MOC	CPC
Ethnic Minority beneficiaries (disaggregated by gender)	☒	☐	%	0	0	40	28	22	23	14	Annual	MOC	CPC
New and upgraded roads completed	☐	☐	meters	0	1,500	35,800	5,200	30,200	26,200	3,000	Annual	Enhanced Annual City Plan	MOC/ CPC
Resettlement areas completed	☐	☐	hectares	0	32	13	141	10	8	32	Annual	Enhanced Annual City Plan	MOC/ CPC
LIAs upgraded	☐	☐	hectares	0	23	53	116	118	23	0	Annual	Enhanced Annual City Plan	MOC/ CPC
Result 3: Sustainability of Infrastructure													
Increase in annual own-sources	☐	☒	# of Participating Cities		7	7	7	7	7	7	Annual	Financial statement/ verificatio	MOC/ SAV

revenue by at least 12% over previous year												n report	
Result 4: National Policy, Support and Oversight													
Capacity support to cities provided in accordance with Annual Capacity Development Plan	☐	☒	%	-	100	100	100	100	100	100	Annual	MIS / Verification Audit	MOC / SAV
Completed Program Report	☐	☒	Yes/No		Yes	Yes	Yes	Yes	Yes	Yes	Annual	Verification report	SAV

Figure 6: Results Chain for Results Area 1 – Institutional Strengthening

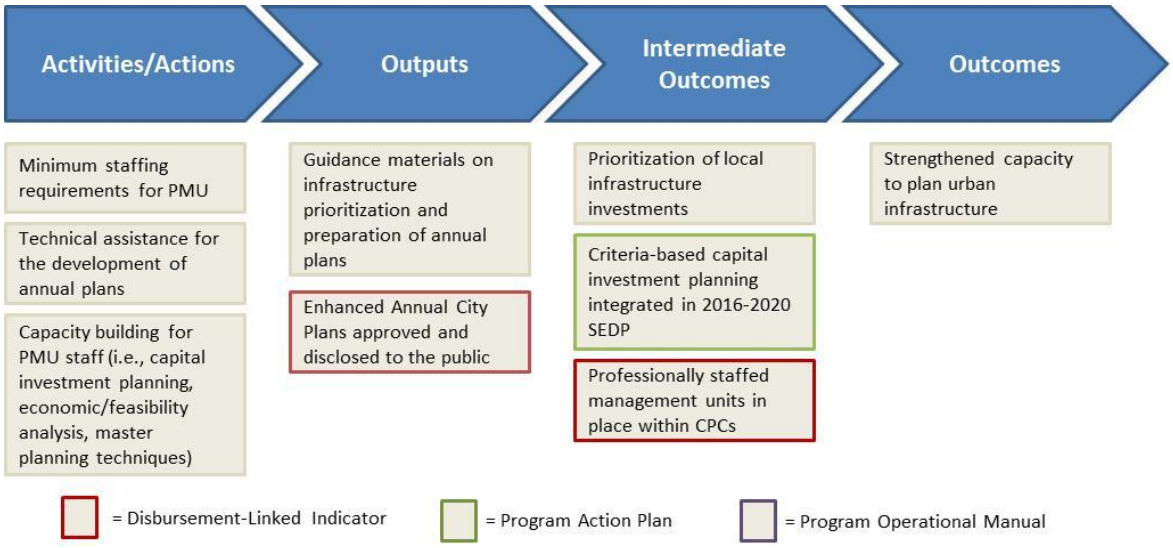


Figure 7: Results Chain for Results Area 2 – Delivery of Infrastructure

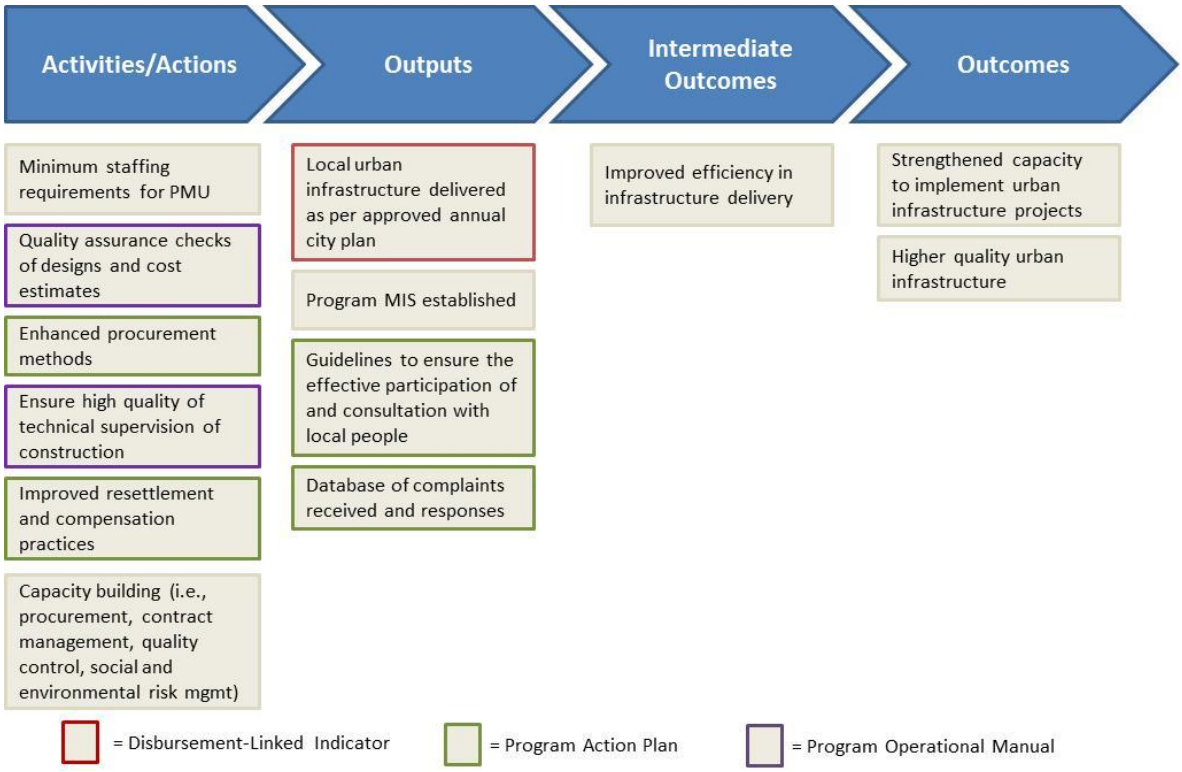


Figure 8: Results Chain for Results Area 3 – Sustainability of Infrastructure

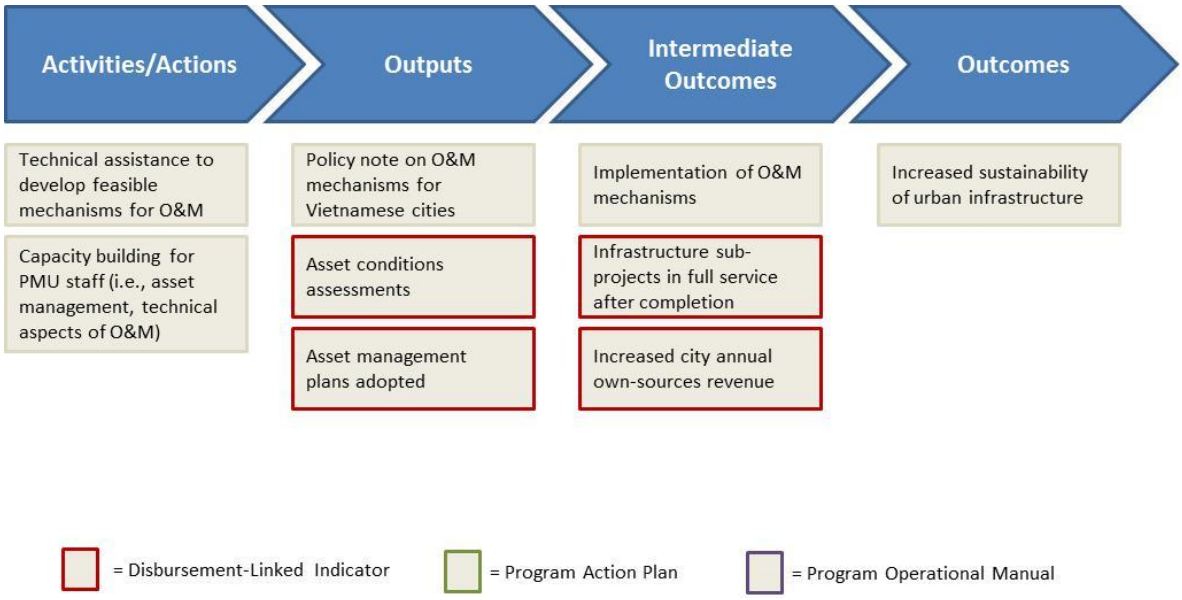
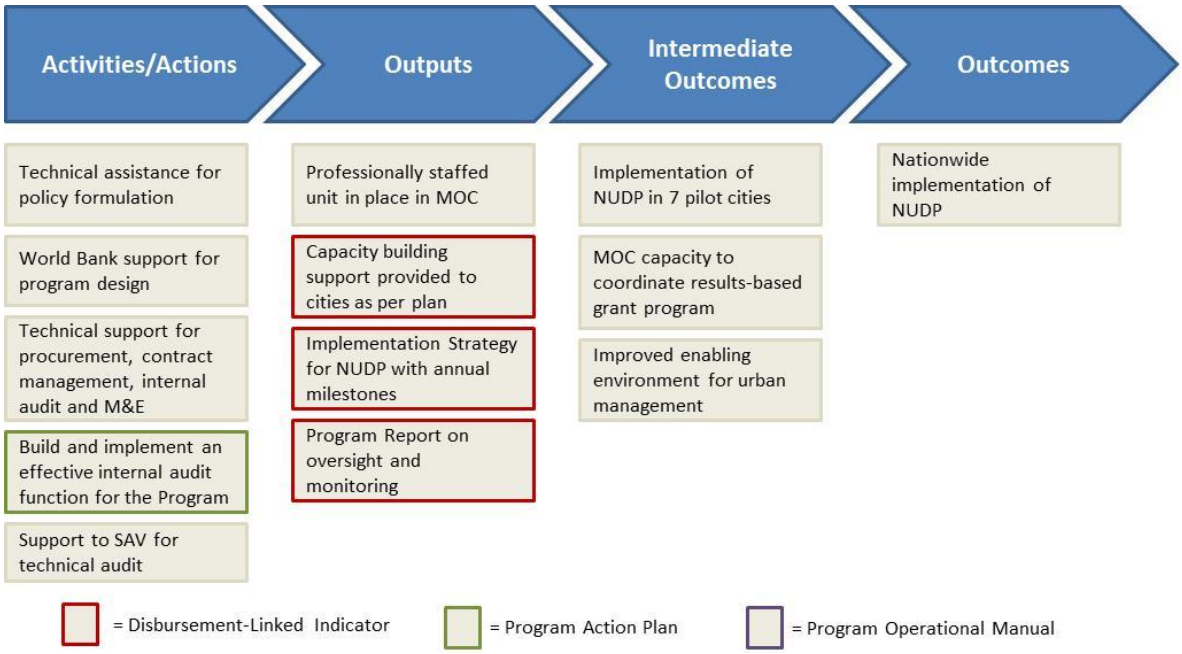


Figure 9: Results Chain for Results Area 4 – National Policy, Support, and Oversight



Program Requirements for Monitoring and Evaluation

246. The key Program results will be monitored through annual verification audits (technical and financial audits including verification of all DLIs by city). These verification audits will be conducted by independent external auditors contracted by the State Audit of Vietnam (SAV). Detailed definitions of the criteria relating to fulfilment of each DLI are developed and included in the PAD and the POM.

247. In order to enhance transparency and to facilitate implementation and management of the Program a management information system (MIS) should be put in place. This need not be highly

sophisticated – as there are only seven cities implementing sub-projects; either a system based on proprietary software or a system of standardized information regularly entered in spreadsheet format and compiled at national level should be sufficient. This will allow the cities to track progress against annual plans and will allow the MOC to monitor overall progress, to assess capacity developed and to identify management or capacity development interventions that may be needed in a timely manner.

248. The MIS should also be used for tracking results indicators, particularly those that are not DLIs.

249. At a minimum, the MIS should track progress in the following areas:

a) Annual City Investment Plans and implementation;

b) Technical and impact data per sub-project;

c) Procurement planning and implementation;

d) Staffing and capacity development of key units of the city administrations;

e) Records of public consultations; and

f) Records of complaints received and responses.

250. Operation of a basic Program MIS will require specialized M&E staff located in the city PMUs and adequately trained to carry out their functions.

Existing M&E Capacity of the Cities

251. The city PMUs do not currently have specialized M&E staff. There does not appear to be a systematic procedure for electronic tracking of plans, budgets or sub-projects implemented, or for compiling information on sub-projects of the NUDP at national level in MOC. Present M&E practices rely mainly on narrative reports.

252. At present there is only limited capacity to assess the impacts of completed infrastructure investments and to use the insights gained to improve future planning.

Strengthening M&E Capacity

253. Efforts to strengthen M&E capacity under the Program should focus on the following areas:

a) Better tracking of achievements against annual investment plans and procurement plans, based on a simple MIS;

b) Tracking of key transparency indicators including public consultations and complaints procedures; and

c) Establishing a specialist M&E capacity within the CPC, either in the PMUs or in another appropriate unit.

254. It is recommended that the CPC should carry out, with suitable technical support, an evaluation exercise as part of preparation for the Program mid-term review. A major focus of this evaluation will be a simple impact assessment of the completed infrastructure sub-projects and lessons learned for future planning and sub-project preparation.

H. Program Economic Evaluation

Rationale for Public Provision and/or Financing

255. The infrastructure outputs of the Program are public goods that are unlikely to be attractive investments for private investors. The types of infrastructure: mainly urban roads and bridges, improved infrastructure in low income residential areas, and drainage and environmental improvements are not suitable for a user fee-based financing model. The sub-project selection criteria specifically exclude investments providing a direct commercial benefit to a private interest that would as such be suitable for private financing. The economic benefits of the investments will stimulate private investment in the productive economy as well as facilitating an orderly increase in the urban population and these effects will lead to increased revenues for the city administrations.

Economic Impact of the Program

256. The tangible economic benefits of the Program are expected to arise mainly from investments in roads and bridges, resulting in reduced journey times and vehicle operating costs within the urban areas of the participating cities, reduced accidents, as well as reduced congestion and improved access from the urban areas to the highway network. Improvements in surface water drainage will also reduce traffic congestion caused by surface runoff or river flooding.

257. Investments in improved drainage, environmental improvements, local infrastructure in low income residential areas and social infrastructure will result in intangible economic benefits through improved living conditions for urban residents.

258. The integrated package of investments in economic and social infrastructure will stimulate private investment by reducing costs of doing business in the cities, improving transport links, developing access to land for industrial and commercial investment and increased attractiveness of the urban environment.

259. Urban economic growth stimulated by the Program investments will create employment opportunities for poor and low-income citizens of the participating cities and also of the surrounding rural areas. The participating cities serve as hubs for transport, trade in inputs and services for the rural economy and concentration points for rural produce as well as representing a significant end user market. Development of the cities will improve access to services for both urban and rural residents. Therefore, the Program investments are expected to foster sustainable and inclusive economic growth. Through the focus on low income area improvements and community services, poor and low income urban residents will receive a high proportion of these benefits. Therefore the Program is expected to have a direct, though unquantified, impact on poverty.

World Bank Value Added

260. The Bank's urban program in Vietnam has been successful but piecemeal. The mostly "retail" approach is no longer sustainable as current engagement spans about 30 cities. It has also been effective at focusing on infrastructure expansion but less so on institutional development and urban management.

261. The Government is facing huge demands for urban infrastructure investment, with particularly acute needs from cities in the Northern Mountain region. The government's ability to meet these demands is constrained not only by the availability of finance but also by limitations in the capacity of the city administrations to effectively plan and implement investments. The Bank's engagement will assist the Government to introduce a results-based implementation framework to strengthen arrangements for infrastructure planning, appraisal, implementation and monitoring alongside effective urban management and supervision systems. Key dimensions of this approach are:

(a) rewarding performance through a results-based financing approach that provides an incentive to encourage cities to strengthen their own planning and implementation capabilities; (b) clarifying roles and responsibilities for infrastructure delivery; and (c) providing a simple and replicable implementation framework.

Results of Economic Evaluation

262. The Program sub-projects involve seven cities and a considerable variety of infrastructure types. Even within the main types the economic benefits will vary, for instance, according to the type, purpose, and existing situation of each road or bridge investment. A cost-benefit analysis was conducted for 78 of the proposed sub-projects related to Low Income Area upgrading, environment sanitation and drainage improvements, road rehabilitation/upgrading and bridge construction in the seven cities, accounting for about 85 percent both in terms of the number of sub-projects and project cost. The activities not evaluated include undergrounding power-telecommunication lines, kindergartens, and resettlement areas. The results of this analysis should be considered as supplementing the qualitative description of economic benefits presented above.

263. The analysis is based on the incremental benefits and costs of the sub-projects to society as a whole for the Low Income Area upgrading and environment sanitation and drainage sub-projects, and on the comparison of sub-project costs and benefits in "with" and "without" cases for road and bridge sub-projects using the Net Present Value (NPV) and the Internal Rate of Return (IRR) indicators to justify the economic viability for a period up to 2039, allowing for a 3-5 year construction period starting in 2015 and a benefit period of about 20 years. The robustness of economic feasibilities of sub-project components was tested through sensitivity analyses that reflect the inherent uncertainties in all cost and benefit estimate inputs to the analysis.

264. The majority of investments (about 64 percent) are in roads and bridges which are the types for which economic benefits are most readily quantified. The RED[23] and HDM4[24] models have been used to estimate internal rates of return for these sub-projects. Quantified benefits include (a) vehicle operation cost (VOC) savings; (b) VOT (time value) savings; and (c) accident cost savings. In addition to these quantified conventional benefits, most sub-projects will also improve drainage and landscape, as well as result in land price appreciation. These have not been included in the evaluation.

265. VOC units were computed using the World Bank's HDM4-VOC model. Figures on vehicle operation and characteristics are based on recent projects such as MCDP and SCDP.

[23] Roads Economic Decision-making, developed by World Bank.
[24] Highway Development and Management, originally developed by Transport Research Laboratory, UK

Table 19: Typical Vehicle Operating Costs

Road Terrain & Type	Rough-ness (IRI)	Bicycle ($/veh-km)	Motor-bike ($/veh-km)	Car Medium ($/veh-km)	Bus Mini ($/veh-km)	Bus Medium ($/veh-km)	Truck Light ($/veh-km)	Truck Medium ($/veh-km)	Truck Heavy ($/veh-km)
Terrain: A	2	0.01	0.06	0.38	0.44	0.50	0.26	0.39	0.87
Flat	3	0.01	0.06	0.39	0.44	0.50	0.27	0.39	0.88
Road: X	4	0.01	0.06	0.39	0.46	0.51	0.27	0.40	0.91
Paved	8	0.01	0.06	0.44	0.54	0.60	0.30	0.44	1.00
	12	0.01	0.05	0.50	0.63	0.70	0.32	0.47	1.13
Terrain: A	6	0.01	0.05	0.45	0.51	0.56	0.28	0.41	0.94
Flat	10	0.01	0.06	0.51	0.62	0.69	0.33	0.48	1.12
Road: Y	14	0.01	0.06	0.59	0.72	0.80	0.37	0.55	1.31
Gravel	18	0.03	0.07	0.68	0.83	0.91	0.42	0.62	1.51
	22	0.17	0.07	0.76	0.93	1.00	0.47	0.69	1.71
Terrain: A	10	0.01	0.06	0.58	0.67	0.72	0.34	0.49	1.19
Flat	12	0.01	0.06	0.61	0.71	0.78	0.36	0.53	1.27
Road: Z	18	0.03	0.07	0.70	0.85	0.93	0.43	0.63	1.53
Earth	22	0.17	0.08	0.77	0.94	1.01	0.48	0.69	1.72
	24	0.17	0.08	0.81	0.98	1.05	0.50	0.72	1.81
Terrain: B	2	0.01	0.05	0.39	0.44	0.49	0.26	0.38	0.86
Rolling	3	0.01	0.05	0.39	0.45	0.50	0.26	0.39	0.87
Road: X	4	0.01	0.06	0.40	0.46	0.51	0.27	0.40	0.90
Paved	8	0.01	0.06	0.44	0.54	0.60	0.30	0.44	1.01
	12	0.01	0.05	0.50	0.63	0.70	0.32	0.48	1.14
Terrain: B	6	0.01	0.05	0.45	0.51	0.56	0.28	0.41	0.95
Rolling	10	0.01	0.06	0.52	0.62	0.69	0.33	0.48	1.12
Road: Y	14	0.01	0.06	0.59	0.73	0.80	0.37	0.55	1.31
Gravel	18	0.03	0.07	0.68	0.83	0.91	0.42	0.62	1.52
	22	0.17	0.07	0.76	0.93	1.00	0.47	0.69	1.72
Terrain: B	10	0.01	0.06	0.58	0.67	0.72	0.34	0.49	1.19
Rolling	12	0.01	0.06	0.61	0.72	0.78	0.36	0.53	1.27
Road: Z	18	0.03	0.07	0.70	0.85	0.93	0.43	0.63	1.53
Earth	22	0.17	0.08	0.78	0.94	1.01	0.48	0.69	1.72
	24	0.17	0.08	0.82	0.98	1.06	0.50	0.72	1.82
Terrain: C	2	0.01	0.05	0.41	0.45	0.50	0.26	0.39	0.86
Mountain	3	0.01	0.05	0.41	0.45	0.50	0.26	0.39	0.87
Road: X	4	0.01	0.05	0.42	0.47	0.51	0.27	0.40	0.90
Paved	8	0.01	0.05	0.46	0.55	0.61	0.30	0.45	1.03
	12	0.01	0.05	0.52	0.65	0.72	0.33	0.49	1.17
Terrain: C	6	0.01	0.05	0.47	0.52	0.57	0.28	0.42	0.97
Mountain	10	0.01	0.06	0.53	0.63	0.70	0.33	0.49	1.15
Road: Y	14	0.01	0.06	0.60	0.73	0.81	0.38	0.56	1.33
Gravel	18	0.03	0.07	0.69	0.84	0.92	0.43	0.63	1.53
	22	0.17	0.07	0.77	0.94	1.01	0.48	0.69	1.73
Terrain: C	10	0.01	0.06	0.59	0.68	0.73	0.34	0.51	1.21
Mountain	12	0.01	0.06	0.62	0.72	0.79	0.37	0.54	1.30
Road: Z	18	0.03	0.07	0.71	0.86	0.94	0.43	0.64	1.55
Earth	22	0.17	0.08	0.78	0.94	1.02	0.48	0.70	1.73
	24	0.17	0.08	0.83	0.99	1.06	0.51	0.73	1.83

266. VOT are updated from the MCDP taking into account difference in per capita income levels of various road user categories in seven Program cities in 2013.

Table 20: Vehicle Occupancy and Average Value of Time

	Bicycle	Motorcycle	Car	Bus	Truck
Income/month ($)	70	95	380	90	220
Hours Worked per Month	190	190	190	190	190
Passenger Time/hour:					
Work Time	0.37	0.5	2.0	0.5	1.2
Non-work Time	0.15	0.20	0.80	0.19	0.46
Percentage Work Time	10	10	60	10	80
Average Pass. Time Cost ($/hr)	0.17	0.23	1.52	0.21	1.01
Passenger Occupancy	1	1.3	1.9	22.7	1.8
Total Pass. Time Cost ($/hr)	0.17	0.30	2.89	4.77	1.82

267. Reductions in truck travel times are also a measurable benefit of transport projects. Reduction of travel time can be translated into reduced working capital, fleet investment, disruption to production or spoilage or damage of perishable goods. However, these savings were not accounted for in the analysis.

268. Accident costs are based on the values provided in the 2012 Implementation Completion and Results Report for the World Bank Vietnam Road Safety Project.

Table 21: Accident Costs

Accident	Cost (USD)
With Fatality	14,865
With Injury	2,615
Damage Only	260

269. In regard to travel forecasting, the RED model evaluates benefits accruing to: (a) normal traffic; (b) generated traffic; (c) induced traffic; and (d) diverted traffic in dry and wet seasons depending on the nature of the proposed sub-projects (i.e., new construction, rehabilitation, maintenance, etc.). The base traffic in 2013 was derived from the benefited population, typical composition of modes, and average trip factor[25] in northern cities in Vietnam.

[25] Trip rates and modal shares are taken from the JICA comprehensive surveys for master plans and other local studies on urban transport development in Vietnam.

Table 22: Typical Traffic Composition and Growth Rate

Mode	Base year Composition (%)	Traffic Growth Rate (%)		
		2015 - 2020	2021 – 2030	2031 - 2039
Bicycle	10-12	2-2.5	1.5-2	1-1.5
Motorcycle	60-65	8-9	3.5-4	2-3
Car Medium	8-10	20-30	10-15	8-10
Bus Mini	3-4	20-30	10-15	8-10
Bus Medium	1	15-20	10-15	8-10
Truck Light	1	6-8	5-6	4-5
Truck Medium	5-6	6-8	5-6	3-4
Truck Heavy	1-2	6-8	5-6	3-4
Weighted Average	100	7	4	3

270. For the Low Income Area upgrading and environment sanitation and drainage improvement sub-projects, the MCDP, DPIIP and SCDP models were employed. Works in these categories are expected to reduce travel time and improve road safety for low income urban citizens; to improve public health with the benefits of reduced health expenditures and increased productivity and to reduce costs of damage and other economic loss due to flooding. There will be savings in drainage maintenance costs. Secondary benefits will include an increase in land prices and increased employment (in the construction works) for lower income citizens. The benefits quantified in the analysis include: (a) reduced expenditures on health and increased productive working time; (b) savings from reduced cost due to flooding; and (c) appreciation in land and property values.

271. The analyses use the unit benefits, which were updated from the recent World Bank MCDP to 2013 prices in the seven Program cities and set out in Table 23. Beneficiaries taken into the analysis are based on the population projections of the identified catchment areas and are subject to the facility capacity.

Table 23: Unit Benefits

Benefit	Unit	Value
1. Health benefit	US$/p/yr	10.04
2. Productive time saving	US$/p/yr	6.34
3. Flood reduction	US$/p/yr	16.78
4. Land appreciation	USD/m2	5-12.5

272. The below table provides the summarized results of the economic analysis by proposed sub-project and city. Overall, the conclusion is that the Program is economically viable as the IRR of the all appraised subprojects in seven cities is 22 percent. Given that all of the sub-projects are at the pre-feasibility study phase, the sensitivity analysis accounted for decreases and increases in the benefits and costs of 20 percent. In the worst case scenario, the overall IRR of all sub-projects in seven cities remains satisfactory, with the exception of the road sub-projects in Cao Bang City and the Low Income Area sub-projects in Hoa Binh City which have IRRs that fall below 12 percent.

Table 24: Summary of Economic Analysis of Sub-Projects

City/Sector	Base case		20% increase in costs		20% decrease in benefits		Combined case	
	NPV (US$ mln)	IRR (%)	NPV (US$ mln)	IRR (%)	NPV (US$ mln)	IRR (%)	NPV (US$ mln)	IRR (%)
1. Bac Can City	**9.90**	**21**	**7.41**	**18**	**5.43**	**17**	**2.95**	**14**
Environment Sanitation Improvement	4.18	45	3.99	39	3.15	38	2.95	33
Road and Bridge Development	5.72	18	3.43	15	2.28	14	(0.01)	12
2. Cao Bang City	**5.46**	**17**	**2.42**	**14**	**1.27**	**13**	**(1.77)**	**11**
LIA Upgrade	2.69	35	1.91	25	1.37	23	0.59	16
Environment Sanitation Improvement	0.67	14	(0.28)	11	(0.42)	11	(1.38)	9
Road and Bridge Development	0.31	13	(0.99)	10	0.00	0	0.00	0
3. Dien Bien Phu City	**17.46**	**26**	**14.34**	**21**	**10.84**	**21**	**7.73**	**17**
LIA Upgrade	2.06	33	1.26	21	0.84	19	0.04	12
Environment Sanitation Improvement	5.75	20	4.22	17	3.07	17	1.53	14
Road and Bridge Development	9.64	34	8.86	30	6.93	29	6.15	25
4. Hoa Binh City	**41.53**	**26**	**36.25**	**23**	**27.94**	**22**	**22.65**	**19**
LIA Upgrade	0.44	15	(0.46)	10	(0.55)	9	(1.45)	5
Road and Bridge Development	41.09	27	36.71	24	28.49	23	24.10	21
5. Thai Nguyen City	**11.41**	**17**	**6.69**	**15**	**4.29**	**14**	**(0.43)**	**12**
LIA Upgrade	0.94	27	0.72	21	0.53	20	0.31	16
Road and Bridge Development	10.47	17	5.97	14	3.76	14	(0.74)	12
6. Tuyen Quang City	**16.28**	**25**	**13.68**	**22**	**10.42**	**21**	**7.83**	**18**
LIA Upgrade	5.73	40	5.17	33	4.03	31	3.47	26
Environment Sanitation Improvement	3.20	22	2.51	19	1.87	18	1.18	15
Road and Bridge Development	7.35	22	5.99	19	4.53	19	3.17	16
7. Yen Bai City	**9.11**	**23**	**6.62**	**18**	**4.79**	**18**	**2.27**	**14**
LIA Upgrade	1.37	35	1.00	25	0.73	24	0.35	16
Environment Sanitation Improvement	0.95	34	0.85	29	0.66	28	0.57	24
Road and Bridge Development	6.79	20	4.77	17	3.40	16	1.35	13
8. All 7 Cities	**111.15**	**22**	**87.41**	**19**	**65.00**	**18**	**41.23**	**15**
LIA Upgrade	13.24	30	9.60	22	6.96	21	3.32	15
Environment Sanitation Improvement	14.76	21	11.29	18	8.33	17	4.86	15
Road and Bridge Development	83.16	22	66.52	19	49.71	18	33.04	16

273. Direct compensation costs are already included in the costs of the other sub-project types. The resettlement area sub-projects are essentially investments in new infrastructure to improve urban zoning and provide residents with better access to infrastructure and services and a higher quality of life, in many cases, as compared to the locations from which the residents are resettled. Therefore these sub-projects can be considered as having similar benefits to the low income area sub-projects,

over and above the component of the cost which is properly considered as a cost of the infrastructure investment necessitating the resettlement.

274. The benefits of the social and environmental sub-projects cannot be quantified. However the cost control mechanisms in place for the Program including use of MOC cost norms and competitive procurement procedures, properly applied, should give confidence of the acceptability of these investments on a least-cost basis.

275. Therefore the conclusion of the economic analysis is that the proper application of sub-project selection and prioritization criteria should ensure a positive net present value. Social infrastructure investments will deliver intangible benefits and selection of these sub-projects is taken as an indication that the implicit value of these investments is equivalent to that of the other sub-projects. Program cost-control arrangements are expected to deliver essential economic and social infrastructure investments on a least-cost basis. The assessment confirmed that the Program will reduce poverty and foster inclusive growth by (a) stimulating private sector investment resulting in employment opportunities for residents of the Northern Mountains region as a whole; and (b) by directly improving the quality of life and environment of citizens of low income areas of the cities.

I. Technical Risk Rating

276. The main risks identified through the technical assessment are (a) financing risk, including shortfalls of counterpart funding, cash-flow problems and inadequate financing of operation and maintenance; (b) planning risk, including the selection of sub-economic investments; (c) inadequate capacity leading to delays in implementation; (d) technical failure due to inadequate feasibility studies and design; and (e) technical failure due to poor quality of construction.

277. The final net amount of counterpart financing needed for the Program seems within the capacity of the cities given the size of their regular capital budgets. However these budgets are unpredictable in the existing framework and this leads to delays in implementation of investments. There will be quite large variations in the amount of financing needed by each city each year. Because the performance-based transfer system releases funds for results achieved, the gap between cumulative expenditures and cumulative disbursements in mid-Program will be larger than the final net amount. The risk of cash flow difficulties can be mitigated by careful planning, by strengthening own-source revenue collection and by improving predictability of the cities' capital budget allocations. Cities face difficulties in adequately funding operation and maintenance at present but the net effect of the Program is expected to improve this situation. The overall risk of financing problems impacting on Program implementation is assessed as Moderate.

278. The existing framework for investment planning is not adequate to ensure that available funding is allocated to the highest value investments from amongst those available in each period. The Program will support capacity development to improve planning procedures but in the short term will address the problem by use of a set of pass-fail criteria for eligibility of investments. There is a moderate risk that some sub-economic investments will be financed by the Program but, given proper application of the eligibility criteria, the risk that the Program investments overall will be sub-economic is assessed as Low.

279. The Program will represent approximately doubling of the total capital spending of the cities during the implementation period. There is a basic existing capacity for implementation of infrastructure sub-projects, but this capacity is not sufficient to ensure efficient implementation of the Program. The risk of delays will be mitigated by strengthening the human resources and improving the procedures of the PMUs. The risk of significant overall delays in implementation of the Program is assessed as Moderate.

280. The sub-projects, although of significant individual size, are not technically complex and there is adequate technical capacity, in the city PMUs assisted by expert consultants and in the provincial technical departments with oversight responsibilities, to ensure adequate quality of sub-project preparation and technical design. This work will be financed by the PPTAF. The risk of failures due to poor design is assessed as Low but this risk could increase if the quality of design consultants is insufficient, either because of weak selection procedures or under-funding of these activities in line with MOC cost norms.

281. Technical failure due to poor construction quality is considered a more significant risk than poor design and should be mitigated by ensuring a high standard of construction supervision. If the recommendations of this Assessment for strengthening contract administration and construction supervision are implemented (i.e., improved contract administration procedures, improved supervision procedures, improved selection of supervision consultants and stronger accountability of supervision consultants for quality of work) the risk of poor construction quality having a significant impact on overall Program results is assessed as Low.

J. Summary of Recommended Actions

282. Table 25 summarizes the main technical issues and recommended actions in the RBNUDP-NM Program.

Table 25: Summary of Technical Issues and Recommended Actions

Issue	Action	Details	Implementation
Master plans and investment plans are not effectively disclosed to affected citizens	Improve disclosure procedures. Disclosure of annual plans and budgets	Ensure citizens potentially affected by sub-projects are informed in a timely manner	DLI: annual city plans disclosed to the public
Ensuring Quality of Sub-Project Preparation	Ensure key technical tasks contracted to best available consultants	Improve consultant selection procedures Ensure consultant fees reflect market rates	PAP: increased use of competitive tendering. Capacity development for improved procurement practice
	Quality assurance checks of designs and cost estimates	Decree 15/2013 assigns this task to PPC	POM describes requirements of sub-decree 15/2013.

Ensuring quality of construction	Improve contract administration procedures Ensure high quality of technical supervision of construction	Review rules for provision of advances to contractors; consider partially or wholly replacing these with mobilization payments; Introduce stage-by-stage retention with retention amounts held in a ring-fenced account; Allow release of retention on completion, in exchange for adequate security to be retained until completion of the "liquidation" process; Ensure adequate cash-flow planning and that contracts cannot be signed until availability of funds to make payments is assured; Ensure proper enforcement of contract conditions including liquidated damages where applicable; Ensure that serious breaches of contract and/or contractor malfeasance automatically result in placing the contractor on Government and WB disbarment lists; All contracts of value above US$250,000 should be supervised by properly qualified independent consultants. Supervision consultants should be selected by a process ensuring that the best qualified candidate is selected and should be remunerated in a manner that does not create perverse incentives (supervision consultants should not lose financially by ordering necessary delays in the works, for example); Ensure clear and systematic record-keeping by supervision consultants including all significant communications to the contractor and reports to the PMU on quality and quantity of works completed; and Any construction defects or deviations from design and specification identified during technical audit and not found to have been specifically notified in writing by the supervision consultant to the PMU, to be automatically taken into account in evaluation of the consultant's qualifications for future supervision contracts. Serious cases should result in disbarment of the consultant from further work under the Program	POM describes improved contract administration procedures

Strengthening of MOC and PMU capacity	Apart from existing MOC specialists who carry out the policy development function, minimum staffing requirement for MOC to implement the Program oversights, and capacity support for participating cities.	Qualified specialist with appropriate qualification in charge of capacity development; Qualified and experienced engineers to be responsible for technical review and support city PMUs in preparing of sub-project documents. Qualified specialists in an appropriate discipline who will be responsible to coordinate all related social and environmental issues (including gender and ethnic minority); Qualified and experienced procurement specialists to review and support the PMUs in procurement issues; Qualified and experience financial management specialists to review and support the city PMUs in financial management and in charge of internal audit function; and One specialist in monitoring and evaluation, who should have an appropriate qualification in charge of Program oversight, monitoring and evaluation.	DLI: Professionally staffed management units in place within MOC and CPCs
	Minimum staffing requirements for PMUs	Two design qualified engineers with at least 5 years' experience, led by one staff member with 10 years' experience, to be responsible for control and technical review of the sub-project preparation process'; One staff with University's degree in an appropriate discipline who will be responsible to coordinate and review environmental impact assessments and who will also coordinate social (including gender) and resettlement issues; At least two qualified and experienced procurement staff led by one staff member with 5 years' experience led by one staff member with 10 years' experience. All procurement staff must have certificate of competence in procurement; One qualified engineer with at least 7 years' experience who will be responsible for control and review of contract supervision activities; One specialist in monitoring and evaluation, who should have an appropriate qualification and strong IT skills; and Two general administrative assistants.	

Large workload in recruiting and managing technical consultants	Consider packaging different consultant tasks for a single sub-project OR Consider packaging similar tasks for a number of different sub-projects	Recruit consulting firm rather than individuals	POM describes procedures
Potential cash flow shortages during implementation	Careful cash flow planning Advance identification of necessary finance	Review implementation plans and develop multi-year procurement plans. If necessary MOC should engage an expert consultant to assist the cities with this task; Cities prepare detailed cash flow projections; Take appropriate steps to ensure that financing will be available when needed. This could be by: (a) mobilization of finance at city level, (b) discussion with PPC, (c) central government transfers, or (d) loan financing; Financing shortfalls could be alleviated by reducing the advances paid to contractors; Cities should ensure that adequate financing is available before proceeding with procurement; and Ensure high quality of design and construction to avoid risk of completed sub-projects being deemed ineligible to be counted against the "completed sub-projects" DLI	Program preparation tasks
Limited capacity for monitoring and evaluation	Recruit specialist M&E staff either at PMU or CPC level		DLI: Professionally staffed management units in place within CPCs
	Establish a simple Program MIS	Can be spreadsheet-based. At a minimum the MIS should track: Annual City Investment Plans and implementation; Technical and impact data per sub-project; Procurement planning and implementation; Staffing and capacity development of key units of the city administrations; Records of public consultations; and Records of complaints received and responses	PAP: database of complaints received and responses Design MIS during Program preparation

	Later in the Program, develop skills for assessing the economic and social impacts of completed infrastructure investments	Cities carry out impact assessment of completed sub-projects as input to the MTR	POM describes procedures.
Limited sustainability of sub-projects due to poor O&M practices and shortage of resources	Capacity building and technical assistance on O&M practices and revenue management	Support to cities to review and adjust O&M practices and procedures to ensure that sub-projects remain in operation Support to cities to review and enhance own source revenue management practices	Capacity Development Plans developed for cities to program specific support needs, linked to compliance with DLI 3.1 (O&M) and DLI 3.2 (Revenue enhancement)
Size of capital expenditure program reduces significantly after Program implementation due to lack of resources for capital investment	Technical assistance to cities to review alternative sources of capital finance and undertake associated transactions	Support cities to identify, develop and negotiate alternative forms of capital finance to sustain investment programs after the termination of the RBNUDP-NM, including land-based financing options such as bulk infrastructure fees and tax increment financing.	Capacity Development Plans developed for cities to program specific support needs, linked to compliance with DLI 3.2 (Revenue enhancement)
Lack of National urban expenditure framework for NUDP implementation	Analysis and modelling of urban investment needs and resources. Development of time bound and sequenced national implementation strategy and plan	Undertake modelling and evaluation of national urban infrastructure investment needs and resources to identify gaps, constraints and opportunities as part of the implementation strategy for NUDP Develop a clear plan for the rollout of NUDP in other regions	Technical assistance linked to compliance with DLI 4.1

Annex 1
List of Proposed Sub-Projects

Start (CY)	Sub-project	Scope of work	Estimated Cost (US$)
I	**THAI NGUYEN SUB-PROJECTS**		
2015	Viet Bac road (phase 1)	Road upgrading. Construct asphalt concrete road, related infrastructure, landscape, lighting system with length L = 3.5km.	18,312,400
2015	Low Income Area Upgrading for Cluster 5, Hoang Van Thu ward	Urban upgrading. Upgrading roads/ lanes with L=495m, surface=5.5m, drainage system, water supply system, lighting system and landscape.	771,500
2015	Xuong Rong Regulation Reservoir	Upgrading Xuong Rong regulation reservoir: construct embankment, sidewalk road, lighting system, dredging, drainage/ sewerage system, and penstock if needed.	1,429,000
2015	Kindergarten of Dong Quang	Community facility. New construction. 2-floor building with 24 class rooms and functional rooms, auxiliary works such as ground, fence, garage, kitchen and purchase of education equipment, etc.	1,049,300
2016	Viet Bac road (phase 2)	Road upgrading. Construct asphalt concrete road, related infrastructure, landscape, lighting system with length L = 3km.	13,609,100
2016	Ben Tuong Bridge	New bridge construction. Bridge over Cau river, reinforced concrete beam with L=241m, Surface =15m, with 4 carriage lanes; safety lane and sidewalk, road that connects the two sides, L=593m.	19,528,900
2016	Tan Long Bridge	Bridge upgrading, reinforced concrete beam, L=72m, Surface =19.5m, including 4 carriage lanes, safety lane and sidewalk.	1,966,200
2016	Installation of underground cables in selected main streets	Installation of underground cables in some main streets (Hoang Ngan road, Minh Cau road, Hoang Van Thu road and Doi Can road): Power system, water supply system and some main telecommunication wiring system.	9,688,300
2016	Low Income Area Upgrading for Living Area Cot Co, Trung Vuong ward	Urban upgrading. Upgrading roads/ lanes with L= 263m, surface=5.5m, drainage system, water supply system, lighting system and landscape.	409,900
2016	Low Income Area Upgrading for Residential area of 19/8 street, Trung Vuong ward	Urban upgrading. Upgrading roads/ lanes with L=400m, Surface=3.5m, drainage and lighting system, water supply system, and landscape.	316,800
2016	Resettlement area Viet Bac	Construction of resettlement area. Complete the resettlement site with area of 5ha including all necessary infrastructure.	8,091,000
2016	Waste water drainage channel improvement in residential area	Wastewater. L=6.2km, reinforced concrete sewers/ culverts, dredging channel, embanking two sides, etc.	3,900,000

	Subtotal (12)		***79,072,400***
II	**CAO BANG SUB-PROJECTS**		
2015	Phay Khat - Na Ngan Road	Road upgrading. Upgrading Phay Khat - Na Ngan Street with the length of 5,500m. Covering some degraded part by asphalt, investing in footpath with drainage channel having concrete cover slab each side, planting trees.	4,062,600
2015	Road No. 203	Road upgrading. Upgrading road no. 203 with the length of 8,000m. Covering some degraded part by asphalt, investing in footpath with drainage channel having concrete cover slab each side, and planting trees.	5,909,300
2015	Low Income Area Upgrading for LIA 4	Urban upgrading. Building new infrastructure for LIA 4 of 52.8ha. Upgrading internal roads, constructing sewerage ditch channel covered with concrete cover slab, investing in water supply pipe along the roads, lighting system, environmental sanitation	1,990,400
2017	Le Loi Street	Road upgrading. Upgrading Le Loi Street with the length of 4,000m. Covering some degraded part by asphalt, investing in footpath with drainage channel having concrete cover slab each side, planting trees.	3,087,200
2017	Low Income Area Upgrading for LIA 1	Urban upgrading. Building new infrastructure for LIA 1 of 22.5ha. Upgrading internal roads, investing in drainage channel with concrete cover slab, water supply pipe along the roads, lighting system, environmental sanitation	903,800
2017	Low Income Area Upgrading for LIA 2	Urban upgrading. Building new infrastructure for LIA 2 of 28.4ha. Upgrading internal roads, investing in drainage channel with concrete cover slab, water supply pipe along the roads, lighting system, environmental sanitation	1,140,800
2017	Low Income Area Upgrading for LIA 3	Urban upgrading. Building new infrastructure for LIA 3 of 14.6ha. Upgrading internal roads, investing in drainage channel with concrete cover slab, water supply pipe along the roads, lighting system, environmental sanitation.	586,500
2017	Low Income Area Upgrading for LIA 5	Upgrading and building new infrastructure for LIA 5 of 50.8ha. Upgrading internal roads, investing in drainage channel with concrete cover slab, water supply pipe along the roads, lighting system, environmental sanitation.	2,040,600
2017	Resettlement area	Resettlement. Constructing new 5-ha-resettlement area, investing in transport, water supply, drainage, social infrastructure.	4,262,800
2017	Embankment of Bang River	Constructing new embankment (2 sides), from Hoang Nga Bridge to the end of Tan Giang Ward; Height 6m; Length 3400m; Building hand-rail, sidewalk at two sides.	8,497,100
	Subtotal (10)		***32,481,100***
III	**BAC KAN SUB-PROJECTS**		
2015	Nguyen Van To Road	Road upgrading. Road classification: Urban road, Grade III, Length: 2,7 km	2,258,100
2015	Road from1B cluster to Tong Neng	Road upgrading. Road classification: Mountainous road, Grade V, Length: 4,5 km	5,665,300
2015	Na May - Na Nang Road	New road construction. Road classification: Mountainous road, Grade VI, Length: 1,7 km	2,016,800

2015	Kon Tum Road	Road upgrading. Upgrading Kon Tum Road towards Ngam Road. Road classification: Urban road, Length: 0,25 km	538,700
2015	Resettlement area	Resettlement. Construction new. Total area (ha): 8. Building the infrastructure for water supply, drainage, road, lighting system, divided into lots for resettlement allocation for the project affected households.	1,942,500
2015	Drainage Improvement for Doi Ky road	Drainage improvement for Doi Ky road. Length of constructed roads and sidewalks: 0,9 Km. Improving the existing drainage system on the current sidewalks	350,700
2015	Drainage Improvement for Duc Xuan ward	Drainage improvement for Groups 2 and 3 of Duc Xuan. Length of constructed roads and sidewalks: 2x0,8 Km. Improving the existing drainage ditches to protect the living environment for the households in low income areas	651,600
2017	Tay Minh Khai Road	New road construction. Road classification: Urban road, Grade IV, Length: 4,5 km	6,101,300
2017	Road from Group 11B of Duc Xuan ward to Group 11 of Phung Chi Kien ward	Road upgrading. Urban road, Length: 1,5 km,	1,949,400
2017	Nam Cat Bridge	New bridge construction. Urban road, Length: 100 m of bridge and 700 m of access road	3,206,800
2018	Na Cuom - Na May Road	New road construction. Road classification: Urban road, Length: 2,1 km	3,288,800
2018	Embankment of Pa Danh stream	Construction new. Length of constructed embankment: 2x1,2 Km	524,900
	Subtotal (12)		***28,494,900***
IV	**DIEN BIEN PHU SUB-PROJECT**		
2015	Bridge to Thanh Minh communes	New bridge construction. RC bridge with w = 15m, L=8m crossing Nam Rom River and leading to the centre of Thanh Minh commune	3,483,600
2015	Low Income Area Upgrading for LIA 1	Urban upgrading. 32 ha. Transport road: rehabilitate all existing internals roads; Sewerage system: total length of 2200m; Water supply system: Total length of drainage pipeline is 2,640 km; Lighting system: Arranged along residential roads and the related primary and secondary roads which are not invested. Total length is 2200 m	1,341,700
2015	C13 stream improvement	Stream Improvement. Length of the stream is 3,500m. Dredging stream bed, constructing slope or straight-wall embankment, constructing 2m management road.	3,562,500
2016	Road from A1 bridge to C4 bridge	Upgrading and new construction. L=1,930m, W= 10.5m, related sewerage system, lighting system, landscape.	3,988,300
2016	LIA 2	Urban upgrading. 3.2 ha/ Transport road: It is expected to rehabilitate to be 6cm thick asphalt concrete paved road. Sewerage system: connected to the urban primary and secondary drainage network; Water supply system; Lighting system	692,700

2016	Low Income Area Upgrading for LIA 4	Urban upgrading. 23 ha. Transport road; Sewerage system: connected to the urban primary and secondary drainage network; to the impossible places, drain to the nearest stream; Water supply system; Lighting system	2,352,400
2016	Low Income Area Upgrading for LIA 5	Urban upgrading. 14 ha. Transport road; Sewerage system; Water supply system; Lighting system	2,230,200
2016	Him Lam Resettlement area	Resettlement. Constructing 5 ha resettlement area. Complete technical and social infrastructure including: ground levelling, water supply and drainage, transportation, lighting system, landscape, schools, health-care centers, pre-schools, etc. on entire land for resettlement area	5,294,300
2016	Regulation reservoir	The regulation lake behind provincial hospital. Lake upgrading, dredging bed, constructing embankment, surrounding road, landscape. Total area improved is 4 ha.	4,542,500
2016	Hong Luu stream improvement	Dredging bed, constructing embankment of 3000m	3,752,100
2016	Social infrastructure for LIA	Community facilities. Construction of 1 pre-school; construction of 1 primary school; construction of 4 cultural community houses; construction of 4 health-care centers	941,400
	Subtotal (11)		***32,181,700***
V	**YEN BAI SUB-PROJECTS**		
2015	Low Income Area Upgrading for Hong Ha ward	Urban upgrading. Upgrading infrastructure of LIAs of Hong Ha ward; Upgrading existing footpaths into concrete roads, completing drainages, building a small bridge and constructing power system; Providing waste collection system.	1,247,000
2015	Van Tien road (Km4 to Van Phu bridge)	Road upgrading. Upgrading Van Tien road: Length L=3900 m	1,972,300
2015	Hoang Van Thu road	Road upgrading. Upgrading and extending Hoang Van Thu road: Length L=1,281m; Drainage: stone drainage w/concrete lids, length L=2,500m, Construct living water system along the road, Constructing water drainage and living water supply system for residential area of group	1,597,775
2015	Upgrading Roads of Dong Tam ward	Road upgrading. Total length of routes 4,650m. Structure of pavement: asphalt concrete; Crushed stone or cement concrete. Renovation, upgrading and concreting of vertical and horizontal drainages. Installation public street lighting of some streets	3,096,400
2017	Low Income Area Upgrading for Yen Thinh ward	Urban upgrading. Upgrading existing footpaths into concrete roads; Drainage on one side of road w/concrete lids, public lighting system. Providing waste collection system.	870,100
2017	Low Income Area Upgrading for Nguyen Phuc ward	Urban upgrading. Upgrading existing path ways to concrete roads; drainage on one side of road w/concrete lids, public lighting system, living water and power supply system. Providing waste collection system.	678,900

2017	Upgrading roads and bridges in Yen Ninh ward	Total length of roads 1.585 m Structure of pavement: hot asphalt concrete; Crushed stone or cement concrete. Renovation and completion of vertical and horizontal drainages: Constructing 01 slab bridge with the length L = 12m.	1,079,200
2017	Bao Luong road	Length L=2100m; Drainage: stone drainage w/concrete lids, length L=4.200m; Constructing public street lighting system along the road.	1,608,400
2017	Dien Bien road - Yen Ninh road	Upgrading and widening the existing road into urban road: Structure: asphalt concrete; L=2,390m; Completing vertical and horizontal drainage system, open trapezoidal drain; Constructing water and electricity supply system for households in the area	2,222,000
2017	Upgrading Roads and bridges in Yen Thinh ward	Total length of routes 5.850m. Structure of pavement: hot asphalt concrete; Crushed stone or cement concrete. Renovation and completion of vertical and horizontal drainages: Constructing 02 slap bridges with the length L = 9m and 10.8m.	3,259,800
2017	Upgrading Roads in Nguyen Thai Hoc ward and Nguyen Phuc ward	Total length of roads 5.340m. Structure of pavement: Hot asphalt concrete; Crushed stone or cement concrete. Renovation and upgrading of vertical and horizontal drainages.	2,808,500
2017	Upgrading Roads in Nam Cuong ward	Upgrading internal roads with total length of roads 1.981m. Structure of pavement: asphalt concrete; asphalt crushed stone. Renovation and upgrading of vertical and horizontal drainages.	1,345,700
2017	Upgrading Roads and bridge in Hop Minh ward	Upgrading the internal roads with the length of routes 1.000m. Structure of pavement: cement concrete. Renovation and upgrading of vertical and horizontal drainages: Constructing 01 slap bridge with the length L = 12m. reinforced concrete structure.	746,700
2017	Embankment of Central lake system at Km5 and Hoa Binh lake	Renovating and upgrading embankment, repairing footpaths of central lake system at Km 5: Construction and completion of Hoa Binh Lake embankment.+ L= 150m; Structure: Stone reinforced concrete foundation.+ Foot-paths: Concrete 3m, L=1200m+ Drainage and public lighting system. + Lake dredging.	3,550,600
2017	Public street lighting systems at some main streets	Installation public street lighting systems at some main streets with the total length of 16km.	1,082,000
2017	Kindergarten upgrading for selected kindergartens in Yen Bai city	Renovating, upgrading and extending some kindergartens in Yen Bai city, constructing new class rooms and supplement works.	1,553,600
2017	Resettlement Area	Constructing resettlement area which is synchronous on infrastructure and public works for relocated households. The total area of project is 40.000 m2.	2,861,300
2018	Embankment of Ngoi Yen stream	Constructing concrete embankment of Ngoi Yen stream, Length L=800m; Structure: embankment are reinforced concrete and stone to embankment tops. Constructing bridges and drainage system of the embankment.	2,650,000
	Subtotal (18)		***34,230,300***

VI	TUYEN QUANG SUB-PROJECT		
2015	Le Duan road	Renovation and upgrading the length of 1.265m, coating upgrading, drainage system, pavements construction.	1,690,900
2015	Road Section 1 to Vien Chau	Road Section 1. Upgrading Nation highway 2 to Vien Chau - 1700m, width of 13.5m.	2,542,500
2015	Low Income Area Upgrading for LIA 2	LIA 2: the parks of clusters 34, 20, 21, 22 and 26 under Minh Xuan ward. Upgrading infrastructure, Total Area 22.5ha.	970,700
2015	Kindergarten of Hung Thanh	Construction, Total Area: 4.178,6 m2 .	673,600
2015	Kindergarten of An Tuong	Construction, Total Area: 7328.3 m2.	2,061,800
2017	Road from cluster 16, 17 going to Chu Van An road.	Upgrading total length: 1200m, enlarging road according to urban traffic standards in order to achieving connecting line from Le Hong Phong to Chu Van An road	1,292,200
2017	Low Income Area Upgrading for LIA 1	LIA 1: the clusters such as 2,3,4, 14,15 (old cluster), 16, 17, 18,19, 25, 26, 27, 28 under Tan Ha ward. Upgrading infrastructure, Total Area 86.8ha.	3,126,800
2017	Road from Dum village to Cam temple, Trang Đa commune.	Road at Dum village from Thien Son mines, cluster 18, Nong Tien to Cam temple, Trang Đa commune. Renovation and upgrade local total length : 11,506m	4,895,900
2017	Road from city center to Lo 7 river.	Road from city center to Lo 7 river. Improve infrastructure Total length 400m, cross section 17,5m; Improve infrastructure of An Tuong ward, Trung Viet lake area in order of Administration center surrounding living conditions, economics, utilities development	569,500
2017	Trung Viet Reservoir Improvement	Reservoir upgrading: Apply stone, concrete embankment, curb, walkway within 2000m, plants.	7,768,600
2017	Low Income Area Upgrading for LIA 3	LIA 3: the residential areas of Mau temple, cluster 13, cluster 6 under Y La ward. Upgrading infrastructure, Total Area 31.2ha.	1,460,800
2018	Road from Phan Thiet to the 17/8, Phan Thiet ward.	Construction, from Phan Thiet ward to road 17/8: Total length 900m.	1,237,500
2018	Road from National route 37 to the extended Le Loi road.	Renovate and upgrade, from nation highway 37-residential group 18, Hung Thanh ward portion, across Ngoc Kim re-settlement area to Le Loi road extension. Total length 2000m.	2,149,500
2018	Resettlement Area Tan Ha	Construction of infrastructure, deal with re-settlement demand of entire Tan Ha, Minh Xuan ward area. Develop, unify infrastructure of them and improving economics, living conditions, Total Area: 8.46ha.	5,190,300
2018	Ton Duc Thang road.	Renovation and upgrading (from Man market T-junction, across Water plant, to nearby Le Dai Hanh road) total length : 1427m	1,777,400
2018	Road Section 2 to Vien Chau	Road Section 2. Upgrading Nation highway 2 to Vien Chau - 1400m, width of 13.5m.	2,748,500

	Subtotal (16)		***40,156,500***
VII	**HOA BINH SUB-PROJECT**		
2015	Ly Thuong Kiet road	Upgrading the Ly Thuong Kiet road with length of 900m in Cham Mat residential area.	1,582,900
2015	Vo Thi Sau road	Upgrading the Vo Thi Sau road with length of 500m in Cham Mat residential area.	1,021,500
2015	Ba Trieu road	Upgrading the Ba Trieu road with length of 700m in Cham Mat residential area.	1,309,600
2015	Le Thanh Tong Road	The total length of road is 1,485m, divided into 3 proposed sections.	2,629,200
2017	Hoang Hoa Tham Road	Upgrading the Hoang Hoa Tham road with length of 900m in Cham Mat residential area.	1,825,300
2017	Luong The Vinh Road	Upgrading the Luong The Vinh road with length of 500m in Cham Mat residential area.	922,400
2017	Hoa Binh road	Upgrading the Hoa Binh road with length of 1.930m.	3,505,600
2017	Approach heads to Hoa Binh bridge No 3	Construction of approach heads of Hoa Binh bridge No 3, with the total length of 500m, one point linked to Thinh Lang street, the other point linked to National Road No.6, footpath of both sides, sewers water pipe, and other facilities	1,847,800
2017	Hoa Binh Bridge No 3	Construction of Hoa Binh bridge No 3 across Da River (length L=420 m), one end of the bridge at Thinh Lang Ward, the other end at Trung Minh commune.	17,858,600
	Subtotal (9)		***32,502,900***
	TOTAL (88)		**279,119,800**