

## IMPROVED PRIORITIZATION CRITERIA FOR ROAD INFRASTRUCTURE PROJECTS

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### *Rezumat*

Scopul principal al acestui raport este de a propune o metodologie de evaluare a proiectelor finanțate din buget stat pe baza unui model de selecție riguroasă, inclusiv criterii clare și eficiente de prioritizare. Acest raport susține în primul rând că prioritizarea proiectelor și selecția trebuie să fie optimizate în patru dimensiuni: absorbție, impact, legitimitate și capacitate. În al doilea rând, oferă un diagnostic al Programului Național de Dezvoltare Locală (PNDL), gestionat de Ministerul Dezvoltării Regionale și Administrației Publice (MRDPA), ca fiind cea mai importantă sursă de finanțare din bugetul de stat pentru proiecte de infrastructură locală. Proiectarea și implementarea actuală prin PNDL lasă loc pentru îmbunătățiri, așa cum se reflectă și din lipsa de direcție strategică în alocarea de fonduri și creșterea continuă a numărului de proiecte care au început fără un calendar fezabil pentru finalizarea lor. Mai mult, acest raport face recomandări pentru îmbunătățirea procedurilor de evaluare și selecție a proiectelor de dezvoltare a infrastructurii locale cu un accent special pe criterii de prioritizare și sursele de finanțare viabile pentru fiecare tip de investiție. Scopul practic este de a spori eficiența și eficacitatea investițiilor propuse, prin maximizarea impactului în cadrul resurselor financiare disponibile în mod inerent limitate. Un accent complementar este pe oportunitățile de armonizare și o mai bună coordonare a investițiilor din diferite surse de finanțare, în contextul unei disponibilități de aproximativ 40 de miliarde de euro în România, de la UE, pentru perioada 2014-2020.

**Cuvinte cheie:** prioritizare, proiecte de infrastructură, PNDL, managementul investițiilor publice, criterii de selecție a proiectelor, coordonarea investițiilor, fonduri structurale EU

### *Abstract*

This report's main aim is to propose a methodology for assessing state-budget-funded projects based on a rigorous selection model, including clear and effective prioritization criteria. This report first argues that project prioritization and selection should be optimized against four dimensions: absorption, impact, legitimacy, and capacity. Second, it provides a

diagnostic of the National Program for Local Development (PNDL), managed by the Ministry of Regional Development and Public Administration (MRDPA), as the most significant source of state-budget funding for local infrastructure projects. The PNDL's current design and implementation leaves room for improvement, as reflected by the lack of strategic direction in allocating funds and the continued rise in the number of projects that get started without a feasible timeline for their completion. Further, this report makes recommendations for improvement of project evaluation and selection procedures for local infrastructure development projects, with a special focus on prioritization criteria and viable funding sources for each type of investment. The practical purpose is to enhance the efficiency and effectiveness of proposed investments, maximizing impact in the context of inherently limited available financial resources. A complementary focus is on opportunities for harmonizing and better coordinating investments across various sources of funding, in the context of nearly EUR 40 billion available to Romania from the EU for the 2014-2020 programming period.

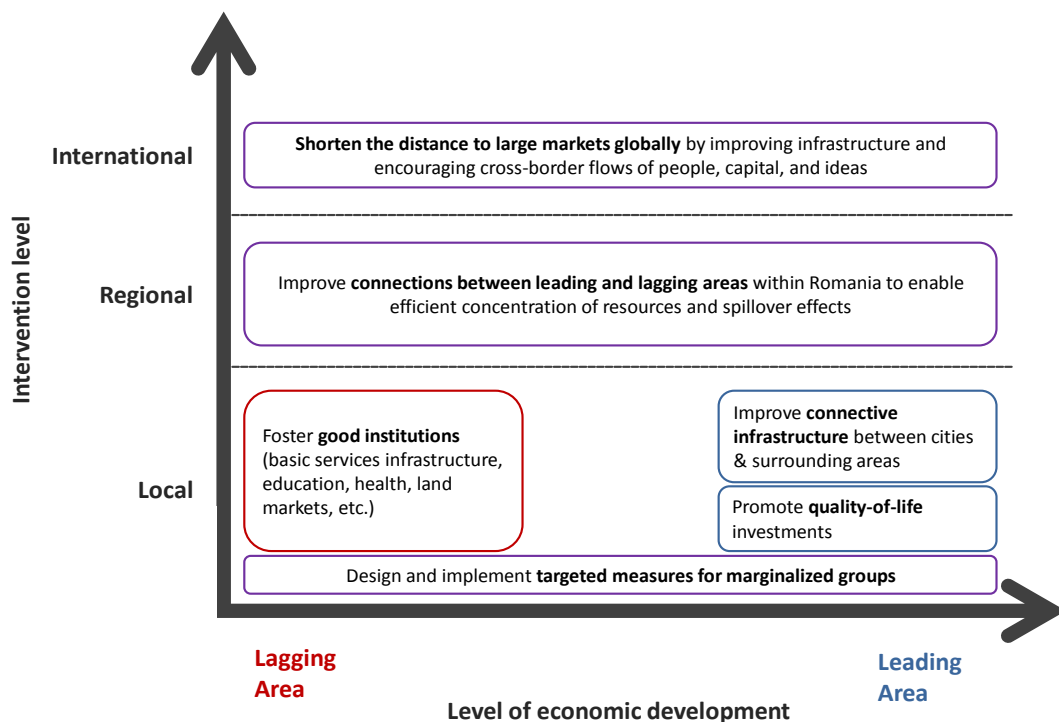
**Keywords:** prioritization, infrastructure projects, PNDL, public investment management, project selection criteria, coordination of investments, EU structural funds

## **1. INTRODUCTION**

Nearly twenty-five years after its democratic revolution, Romania continues to face important development challenges – from transport to education, health, environment, labor, agriculture, public administration, etc. This is not surprising for a country that went through a long and complex transition from communism and a centrally planned economy. For one, there is still no highway connection from Constanța, Romania's eastern port on the Black Sea, to the Western border, which about 70% of exports cross. Public utilities infrastructure is still deficient, as some areas of the country, particularly in the East and South, have fewer than half of the housing units connected to running water and sewage. Now Romania also faces the risk of EU infringement procedures and potential financial penalties, particularly in the water and sanitation sector, where it needs to hit clear targets and allocate significant funds over the coming years. The examples of persistent needs abound but, against this backdrop, recent progress particularly in large urban centers – with Bucharest surpassing cities like Madrid, Berlin, Rome, Lisbon, and Athens in terms of GDP per capita (PPP) – suggests that Romania has a high growth potential, provided that people have access to the right opportunities.

As argued in the World Bank's 2013 Competitive Cities report, the key to unlocking Romania's growth potential involves a range of interventions, targeted to the specific needs of leading and lagging areas. The first priority is improved connectivity and accessibility for people to take advantage of

opportunities in Romania and abroad. Second, the government should nurture functioning institutions to ensure basic living standards for its citizens – essentially, the same start in life for all (i.e., drinking water, sewage, electricity, heating, good schooling, effective land and housing markets, affordable healthcare, etc.). Last but not least, targeted efforts for marginalized communities are required to address the specific factors that limit their mobility. By the same token, there are major negative consequences of the current situation, marked by slow progress and persistent needs: every day, people across Romania miss out on critical opportunities for personal and professional growth due to the lack of proper access to connective infrastructure and basic services. This further undermines the country’s potential to boost individual productivity and achieve sustainable and inclusive economic growth, slowing down progress toward achieving convergence with the EU. While knowing the right priorities is vital, a sine-qua-non condition for Romania’s successful development is having access to sufficient financial resources for supporting critical investments.



**Figure 1.** Investment priorities differ across leading and lagging areas in Romania, *Source: Competitive Cities (World Bank, 2013)*

Over the years, key stakeholders have channeled human and financial resources toward addressing key gaps in local infrastructure development to enable higher economic productivity and growth. At the local level, after 1990, county and city/town/commune-level authorities have been granted increasingly more authority over the provision of basic infrastructure services and the ownership of related assets. While more aware of local needs than the central government, few of these players (i.e., only some of the largest cities) have been able to generate sufficient own resources, enter PPP arrangements, attract private investment, or convince financial institutions to lend them the funds to fully finance the heavy costs involved in the upgrade, rehabilitation, and/or expansion of roads, water supply, and/or wastewater systems. In this context, the development of local infrastructure has depended on two main types of financing: internal (mainly the central government) and external (international partners, including the EU, the World Bank, the European Bank for Reconstruction and Development, etc.).

Internally, since the 1990s, the central government has launched numerous legislative acts and investment programs with 100% state-budget financing. These include: Government Decision (GD) 577/1997 for local and county roads, water supply, and wastewater systems; GD 530/2010 for “the rehabilitation and upgrade of 10,000 kilometers of County and Local Roads”; Government Ordinance (GO) 7/2006 for sport infrastructure in rural areas, etc. Not all such programs appear to have been properly designed and implemented, as they have lacked clear strategic prioritization and coordination, adequate funding, and effective monitoring and evaluation (M&E) mechanisms. The MRDPA – previously, the Ministry of Regional Development and Tourism (MRDT) – has spearheaded many such initiatives, attempting to improve the coordination of various interventions through common strategic planning and implementation. Beyond good intentions, however, Romania has not been able to significantly expand infrastructure development programs from its own sources because of limited availability of investment budgets, constrained opportunities to contract loans, and strict targets with respect to maintaining low annual deficits.

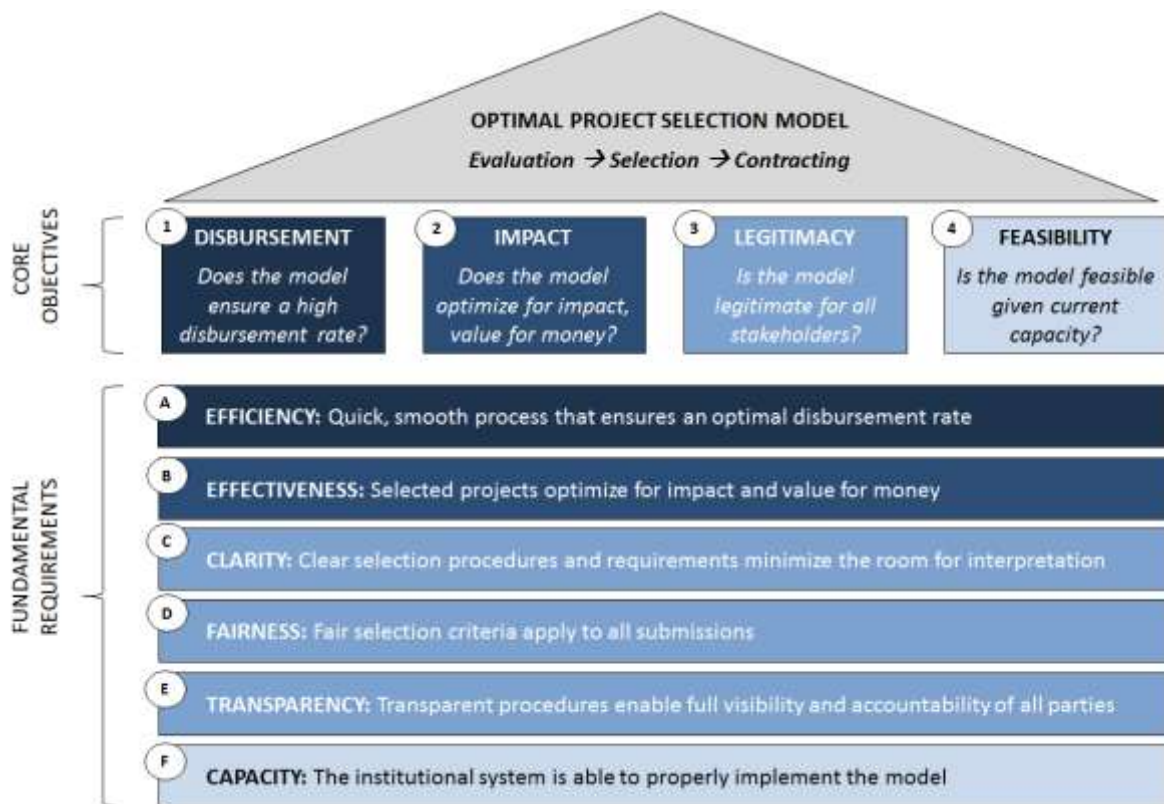
In this context, funds from external partners have played a critical role and will continue to do so for the foreseeable future. The largest source of financing comes from the European Union (EU), which allocated a further EUR 40 billion for the 2014-2020 programming period. A substantial part dedicated to local infrastructure development (particularly through the Regional Operational Programme, Large Infrastructure Operational Programme, and the National Program for Rural Development – PNDR). But past experience suggest

that Romania faces significant constraints that have limited its capacity to absorb such funds, for a variety of reasons: incomplete alignment with EU legislation and best practices, particularly in the area of public procurement; lack of resources for co-financing and running costs of EU-funded projects; public authorities' weak capacity to prepare, implement, monitor, and evaluate complex interventions; heavy bureaucracy and excessive audits, etc. Even it was able to fully absorb substantial EU structural funds and take advantage of other forms of international assistance, Romania would still face critical infrastructure needs far exceeding available funding.

## **2. OPTIMAL PROJECT SELECTION**

First and foremost, what are the main objectives and requirements of an optimal project selection model? At a basic level, a model for selecting investments should maximize value for money (i.e., most impact for least cost). In reality, however, the picture is more complex. The framework presented below is based on the World Bank's 2014 report on "Identification of Project Selection Models for the Regional Operational Programme 2014-2020." Still, the same principles apply to any investment program, regardless of the source of financing (state budget or EU funds).

An optimal project selection model has four core objectives (disbursement, impact, legitimacy, and feasibility) and six corresponding requirements (efficiency, effectiveness, clarity, fairness, transparency, and capacity). The following sections assess each of them, though it is important to recognize that they are all ultimately interrelated. An investment program may also have to make deliberate trade-offs between them: for example, it could be highly efficient and spend the funds rapidly, but focus solely on low-impact interventions; or it may be able to select only the proposals with the highest expected impact through a complex mechanism, but may lack transparency (and, hence, legitimacy) or may exceed the management system's capacity with numerous procedures, leading to delays and even blockages. In short, all four goals are important, though not all may be achievable at the same time.



**Figure 2.** Key objectives and requirements of a sound project selection model

## 2.1 Disbursement (efficiency)

First, an optimal selection model needs to ensure that the budget allocated for a particular program is spent efficiently – i.e., “disbursed” – in a given time horizon. For EU-funded interventions in Romania, this is usually 9-10 years. In the case of the PNDL or of many state funded activities, the money is allocated annually, per Romania’s current practice of single-year budgets. Disbursement is a concern particularly in the case of highly cumbersome procedures in the pre-application/application phases, which would therefore slow down the entire process and leave insufficient time for the project’s implementation and to receive reimbursements of eligible expenses.

## 2.2 Impact (effectiveness)

Equally important, given the inherently limited nature of the funding available, an optimal selection model should distinguish between more and less impactful interventions, prioritizing the former for higher effectiveness. This is easier said than done, as there is no single definition of a project’s impact.

Several types are worth considering: financial/economic impact (as measured by a cost-benefit analysis, net present value or internal rate of return calculations, etc.); social impact (i.e., impact on poor and/or marginalized communities); and environmental impact (e.g., changes in greenhouse gas emissions, reduction in non-recyclable waste, etc.). Additionally, a project may generate direct impact (the immediate result of completing the intervention, e.g., faster travel times on a newly modernized road); indirect impact (a positive or negative effect on a related sector, such as the development of a residential neighborhood close to a rehabilitated road); and induced impact a positive or negative effect on a non-related sector (e.g., a new road sparks economic activity in a region, generating more jobs and higher disposable income for residents, who consume more and thus further contribute to growing the local economy). (Later in the report we discuss the opportunity of using composite indexes for measuring impact – in particular, the Territorial Development Index and the Local Human Development Index.)

### **2.3 Legitimacy (clarity, fairness, and transparency)**

In addition to absorption and impact, an optimal project selection model should be legitimate for all stakeholders involved – particularly for applicants and beneficiaries – through clear, fair, and transparent rules and procedures. Clear application requirements and selection/prioritization criteria help set the right expectations and reduce room for interpretation. Fairness depends on applying the same standards to similar proposals and only deciding based on the formal criteria that are noted in the funding facility's regulations. Along the same lines, the full application, evaluation, and selection mechanism should be described in transparent terms. This will boost applicants' confidence in the proceedings and also strengthen the accountability of technical evaluators and other stakeholders who may intervene during the project cycle.

### **2.4 Capacity (feasibility)**

Finally, a project selection model may optimize for absorption, impact, and legitimacy, but it will be of little practical use if it does not also account for feasibility given the system's capacity constraints. In general, the more complex a framework is the more resources (staff numbers, staff knowledge, time, and money) it requires to run smoothly and flawlessly. Of course, there are hard constraints (e.g., a fixed budget dedicated to the program's management each

year) and softer ones (e.g., internal staff may be limited, but additional external evaluators may be hired if there are sufficient financial resources available).

In addition to the four core dimensions described above, project selection models should take into account the size and sector of proposed interventions. Put differently, the exact formulas for optimizing for absorption, impact, legitimacy, and capacity differ across small and large investments, as do the prioritization criteria for selecting roads vs. water/wastewater systems vs. schools vs. hospitals, etc. There is no ideal one-type-fits-all selection model that can be applied without proper consideration of project size and sector.

While these principles aim to ensure optimal allocation of public resources and the maximization of value for money in public spending, they do not formally cover small projects. Indeed, the question remains: what should be done to select and prioritize small projects for which adopting the full project cycle and evaluation procedures, as defined by GEO 88/2013, would be excessive? In a few words, the answer is the following: the applicable procedures should be proportional to the cost and complexity of each project.

The PNDL, as the main state-budget-funded program managed by the MRDPA finances primarily small and lower-middle-sized investments. Following the methodology used in the “Project Selection Models” report and using the Ministry of Finance’s definition for large projects, PNDL projects were sub-divided in the following categories: large projects (more than RON 100 million); upper-middle-sized projects (RON 30 – 100 million); small/lower-middle-sized projects (RON 1.5 – 30 million); and very small projects (less than RON 1.5 million). Very small projects (less than RON 1.5 million) constitute 2.5% of the PNDL portfolio, while small/lower-middle sized projects represent the bulk of projects, with an average value of around RON 6 million (~EUR 1.4 million). Both very small and lower-middle sized projects fall under the category of “small projects” according to the GEO 88/2013, i.e., they are under the threshold of RON 30 million.



**Table 1. Structure of the PNDL 2014 project portfolio by size\***

	Number of projects	Average value of project (in RON)	Total value of projects (in RON)	% of total contracted projects
<b>Small Projects (&lt;1.5 mln RON)</b>	494	875,000	0.43 bln	2.5%
<b>Medium-Sized Projects (1.5 - 100 mln RON)</b>	2,533	6,460,000	16.4 bln	94%
<i>Lower-middle-sized projects (1.5 – 30 mln RON)</i>	2,501	6,000,000	15 bln	86%
<i>Upper-middle-sized projects (30 – 100 mln RON)</i>	32	44,000,000	1.4bln	8%
<b>Large Projects (&gt;100 mln RON)</b>	4	133,000,000	0.53 bln	3.5%
<b>TOTAL</b>	<b>3.031</b>	<b>5,700,000</b>	<b>17.4 bln</b>	<b>100%</b>

*Data Source: PNDL Database of Projects (MRDPA, 2014).*

\*Note: Only those projects were considered for which a project value was available. The total number of projects under consideration by PNDL now is 3,952.

This suggests that PNDL proposals should be evaluated and prioritized against simpler, more straightforward selection criteria compared to the framework proposed by GEO 88/2013, which in any case is not applicable for investments under RON 30 million. Criteria for the PNDL should take project impact into account, without attempting highly precise estimates of direct/indirect/induced effects or requiring elaborate cost-benefit analyses. For efficiency purposes, there should be a selection process able to go through a large number of small-sized projects (as opposed to large projects for which the important factor is to thoroughly assess each individually or in comparison to other large projects, as part of a strategic decision-making process).

### **3. PROPOSED PRIORITIZATION CRITERIA FOR ENHANCED SELECTION OF PNDL PROJECTS**

This section proposes prioritization criteria for the main types of investments financed by the PNDL in the road infrastructure field: county roads and communal roads. For each sector, the prioritization is envisaged to be done in two steps:

- A prioritization to determine the optimal allocation of funds across counties, based on actual county needs for that respective sector;

- A prioritization at the local and at the project level to determine which locality would benefit most from a particular type of investment, respectively which individual project would have the most significant impact.

### **3.1. How to allocate funds for county roads across counties**

The allocation of funds across counties can be done using the following prioritization criteria:

**Table 2. Prioritization criteria for county roads at the county level**

Proposed Indicator	Measure	Year	Weight	Relevance
Investments Needs	RON	2011	30%	The way funds are allocated should be done mostly based on where the need is greatest. In this case, the greatest need was calculated by identifying the counties with the largest network of dirt or gravel county roads made – i.e., county roads requiring modernization. The investment needs for modernization work were evaluated using cost standards developed by the MRDPA.
Population	Number	2011	20%	The total population of the county is another important prioritization criteria, as the rehabilitation of a county road network should take into consideration how many people will benefit from this investment.
Local Human Development Index	Value	2011	15%	The LHDI was designed by Prof. Dumitru Sandu and indicates for each county the respective level of development. The methodology for the elaboration of the LHDI is discussed in detail in your full report. The less developed a county is, the more attention it should be given as it will likely have fewer resources for the development of critical infrastructure.
Financial Sustainability Index	Value	2014-2022	15%	The FSI was developed by Victor Giosan and Graham Glenday and it measures the prudent capital expenditure margin for a local authority. The FSI represents, in a simplified form, 30% of non-earmarked revenues over an implementation timeline (in this case 2014-2022, which corresponds to the next EU programming period, including two years for finishing up investments started through 2020). The

Proposed Indicator	Measure	Year	Weight	Relevance
				FSI is also meant as a counter-weight to the LHDI, as it shows the capacity of public authorities to cover operations and maintenance costs for completed infrastructure projects. Usually, the poorer public authorities have a weaker capacity to cover such costs.
Number of Motor Vehicles	Number	2011	20%	This is thought as a counterweight to population numbers, as there may be counties with a high population, but with a low motorization rate, and counties with a smaller population but a higher motorization rate.

An allocation based on investment needs was also considered, but the differences between different counties were too high. For example, in Covasna the budget allocation for county road rehabilitation was 1.8 million Euro, while for Hunedoara it was 28.6 million Euro. The prioritization criteria used above smooth the results, and they factor in other criteria, such as poverty level, for determining needs at the county level. It was decided to have no budget allocation for Ilfov County given that the investment needs are relatively small.

### 3.2. How to prioritize county roads projects within a county

The criteria used to evaluate and select different projects have to be calibrated to the system that will actually use those criteria. In the case of the PNDL, the system has a reduced capacity – it currently lacks a pool of external evaluators that could take on such a task and has only limited internal staff. As such, elaborated criteria, similar to those used by the Regional Operational Programme, are hard to implement.

The choice was thus taken to propose a more normative approach and determine the priority county road development projects for each county – i.e. the county road links that PNDL funds should go to first. The prioritization criteria are included in the table below.

**Table 3. Prioritization criteria for county road projects**

STEP 1 – Prioritization of all county roads within a county		
Prioritization Criteria	Weight	Relevance
<b>Connection to opportunities</b> <ul style="list-style-type: none"> <li>• Connection to a growth pole (10 points)</li> <li>• Connection to a county residence (7</li> </ul>	30%	While the network of county roads is relatively large in every county, some road links are more important than others. Of particular importance are those county

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<p><b>points)</b></p> <ul style="list-style-type: none"> <li>• Connection to a city with more than 10,000 people (<b>4 points</b>)</li> <li>• Connection to a city with less than 10,000 people (<b>1 point</b>)</li> </ul>		roads that improve accessibility to centers of opportunity – i.e., larger localities that provide jobs, education, healthcare, culture, administrative services and act as engines for the local/ county/ regional/ national economy.
<p><b>Connection to major trunk infrastructure</b></p> <ul style="list-style-type: none"> <li>• Connection to a highways proposed in the Transport Masterplan (<b>10 points</b>)</li> <li>• Connection to an express road proposed in the Transport Masterplan (<b>7 points</b>)</li> <li>• Connection to a national road (<b>4 points</b>)</li> </ul>	20%	Connection to major trunk infrastructure enables overall accessibility to people living along the respective county road.
<p><b>Traffic on the County Road</b></p> <ul style="list-style-type: none"> <li>• More than 3,500 vehicles per day (<b>10 points</b>)</li> <li>• 2,000-3,500 vehicles per day (<b>7 points</b>)</li> <li>• 500-2,000 vehicles per day (<b>4 points</b>)</li> <li>• Less than 500 vehicles per day (<b>1 point</b>)</li> </ul>	30%	The more travelled a county road is the more attention it should garner when it comes to rehabilitation/modernization works.
<p><b>Number of people per km serviced by county road</b></p> <ul style="list-style-type: none"> <li>• More than 450 people/km (<b>10 points</b>)</li> <li>• 300-450 people/km (<b>7 points</b>)</li> <li>• 150-300 people/km (<b>4 points</b>)</li> <li>• Less than 150 people/km (<b>1 point</b>)</li> </ul>	20%	It is not enough to ease access to opportunities, it is important to do so for as many people as possible. County roads that connect a larger population to a center of opportunity should receive a higher score.
<b>STEP 2 – Identification of projects that could be financed from EU funds*</b>		
<b>Sub-step 2.1</b>		<b>Reasoning</b>

Identify the county roads that connect to the TEN-T network.	County roads that connect to the TEN-T network may be eligible for funding under the Regional Operational Programme 2014-2020, and applicants should first apply to the ROP, before attempting to apply for PNDL funding. If, the ROP application is not accepted for funding, applicants should provide an explanation of why it was not accepted.
<i>*Note: This step may be subject to change, based on the final Applicant's Guide developed for the Regional Operational Programme 2014-2020.</i>	
<b>STEP 3 – Identify the road links that should receive PNDL funding</b>	
<b>Sub-step 3.1</b>	<b>Reasoning</b>
Using the priority list prepared under Step 1, and subtracting the county roads that may be eligible for EU funding, determine the length of the county road links defined as “bad”, which could be financed from the county road allocation for the respective county. Funding will be given to the county roads that have received the highest score under Step 1, and which have a road link defined as “bad”. If the PNDL funding available to a county for county road projects will suffice to modernize all road links defined as “bad”, Sub-step 3.2 will be undertaken. County councils have provided information on the state of the roads (i.e. “good”, “medium”, “bad”). According to GD 363/2010, the standard cost for the modernization of 1 km of county road is €332,832.	Available funds should be allocated with priority to the road links that have been identified by the county councils as being “bad”. It is the county councils that best know which road links are in most need. The prioritization methodology described under Step 1 ensures that a unified methodology is used nationally for allocating PNDL funds for “bad” county road links.
<b>Sub-step 3.2</b>	<b>Reasoning</b>
If available funding for a particular county suffices to cover the modernization of all “bad” county road links, the remaining funding can be used for the rehabilitation of “medium” county road links as follows: <ul style="list-style-type: none"> <li>• Priority will be given to the county roads with the highest estimated score under Step 1, with the exception of the roads that may be eligible for EU funding.</li> <li>• Funding will be allocated with priority to dirt or gravel roads defined as “medium”.</li> <li>• If funds will remain after this allocation, remaining funds will be allocated to “medium” county road links that have the following coverage type:</li> </ul>	If “bad” county road links can be covered with allocated PNDL funds, the rest of available funds should go to second priority road links identified by county councils as being in a “medium” state.

<p>cement concrete; paved with setts; or, bituminous asphalt.</p> <ul style="list-style-type: none"> <li>Should funding be available even after this allocation, the remaining funds will be allocated to “medium” county road links that have been modernized already (i.e. they have an asphalt concrete coverage).</li> </ul> <p>County councils have provided information on the state of the roads (i.e. “good”, “medium”, “bad”) and on the surface coverage of county roads. According to GD 363/2010, the standard cost for the rehabilitation of 1 km of county road is €273,855.</p>	
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Individual maps are created for each individual county, with a list of priority projects. The lists is elaborated using data on the state of the county roads, as reported by the county councils through October 2014.

### 3.3. How to allocate funds for communal roads across counties

The allocation of funds at the county level can be done using the following prioritization criteria:

**Table 4. Prioritization criteria for communal roads at the county level**

Prioritization Criteria	Measure	Year	Weight	Relevance
Investments Needs	Euro	2011	40%	The way funds are allocated should take into account where the need is greatest. In this case, the greatest need was calculated by identifying the counties with the largest network of communal roads made of gravel and stone – i.e., communal roads requiring modernization. The investment needs for modernization work were evaluated using cost standards developed by the MRDPA.
Rural Population	Number	2011	30%	Communal roads primarily service people in rural areas and the larger the rural population of a county, the more attention should paid to rehabilitation/ modernization of communal roads there.
Local Human	Value	2011	15%	The LHDI was designed by Prof. Dumitru Sandu and indicates for each county the

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Prioritization Criteria	Measure	Year	Weight	Relevance
Development Index				respective level of development. The methodology for the elaboration of the LHDI is discussed in detail in our report. The less developed a county is, the more attention it should be given as it will likely have fewer resources for the development of critical infrastructure.
Financial Sustainability Index	Value	2014-2022	15%	The FSI was developed by Victor Giosan and Graham Glenday and it measures the prudent capital expenditure margin for a local authority. The FSI represents, in a simplified form, 30% of non-earmarked revenues over an implementation timeline (in this case 2014-2022, which corresponds to the next EU programming period, including two years for finishing up investments started through 2020). The FSI is also meant as a counter-weight to the LHDI, as it shows the capacity of public authorities to cover operations and maintenance costs for completed infrastructure projects. Usually, the poorer public authorities have a weaker capacity to cover such costs.

An allocation based on investment needs was also considered, but the differences between different counties were too high. For example, in Ilfov the budget allocation for communal road rehabilitation was 0.1 million Euro, while for Argeş it was 37.9 million Euro. The prioritization criteria used above smooth the results, and they factor in other criteria, such as poverty level, for determining needs at the county level. Nonetheless, it was decided to have no budget allocation for Ilfov, as the investment need for Ilfov is around 3 million Euro – a relatively small sum, which can be covered from the local budget.

### **3.4. How to prioritize communal roads projects within a county**

The prioritization of investments in communal roads cannot realistically be done on a road-by-road basis, as was proposed for county roads, because of the sheer number of roads that need to be considered. The coordination can



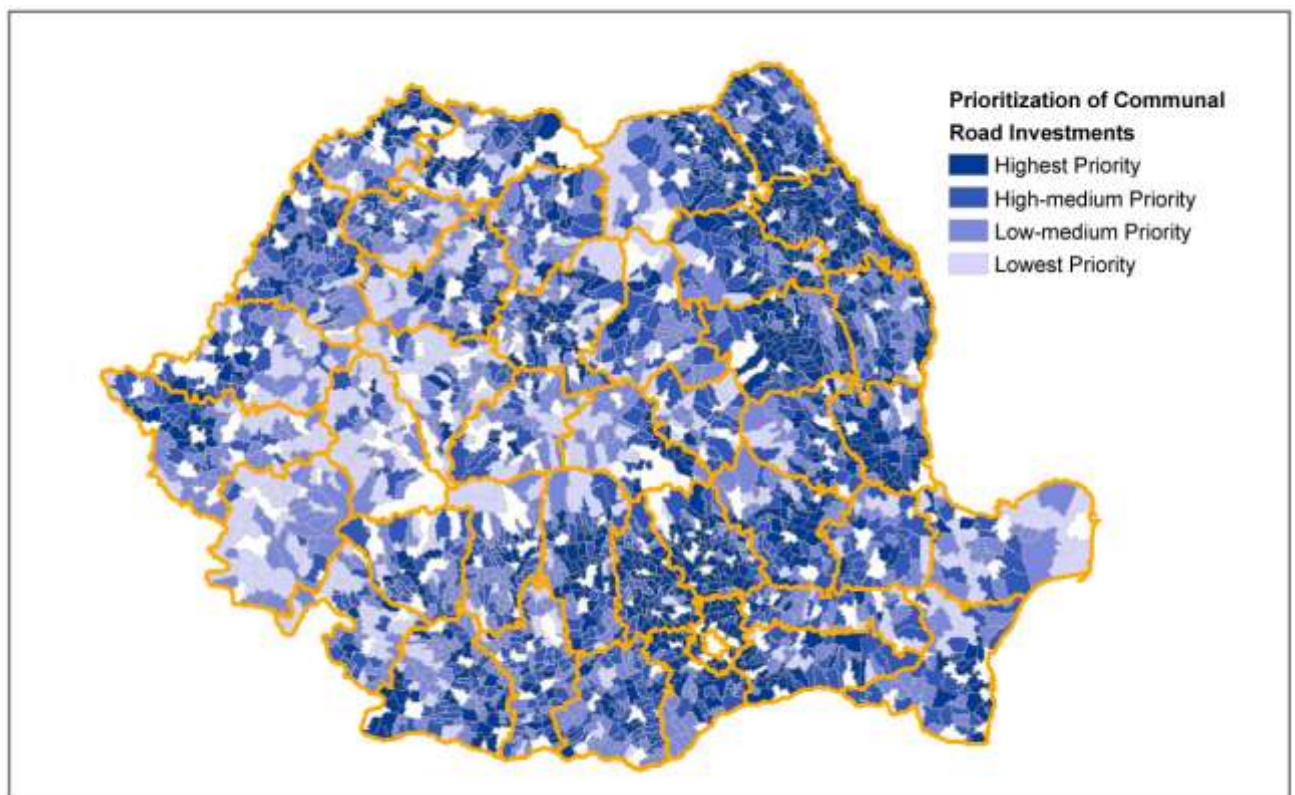
however be done at the locality level and the following prioritization criteria can be used in this sense.

**Table 5. Prioritization criteria for communal road projects, by territorial administrative units (TAUs)**

STEP 1 - Eligibility		
Sub-step		Reasoning
Finance communal road projects only in communes with more than 1,000 people.		PNDL funds should target initially larger communes, where a minimum of economies of scale can be achieved.
STEP 2 – Identifying the TAUs that should receive priority funding for communal roads		
Prioritization Criteria	Weight	Relevance
Population of locality	40%	The larger the population of a particular locality, the bigger the need for investments in communal roads.
Population density	30%	The denser a locality is, the more impactful a communal road development project is likely to be – i.e., a larger population can be serviced by fewer kilometers of road.
Local Human Development Index	15%	LHDI at the locality level should be taken into consideration to give more attention to poorer localities, which have a tougher time financing investments from their own budget.
Financial Sustainability Index	15%	The FSI at the locality level will provide a counterweight to the LHDI, ensuring that priority is given to localities face development needs but that can also actually cover operation and maintenance costs once the development is finalized.
STEP 2 – Identifying the TAUs that could receive PNDR 2014-2020 funding*		
Sub-step		Reasoning
Propose for PNDR 2014-2020 funding the TAUs that have an FSI larger than 4 million Euro. Focus only on communal road projects of less than 5 kilometers.		The communes that have a larger FSI, have a larger budget capacity, and a higher administrative capacity required for writing a PNDR application. Moreover, smaller infrastructure projects require lower operation and maintenance costs, and they allow more communes to benefit from investments in their communal roads.
According to GD 363/2010, the standard cost for the modernization of 1 km of communal road is €193,506.		
*Note: This step may be subject to change, based on the final Applicant’s Guide developed for the PNDR 2014-2020.		



The map below indicates the communes with the highest need for investment in communal roads, as determined using the prioritization criteria above. The allocation of localities to priority criteria was done using the Natural Breaks Jenks method. A county-by-county discussion of priorities for communal roads, as well as the way PNDL projects (either contracted or with a standing commitment) fit within those priorities will be done as part of our future work.



**Figure 3.** Prioritization of investments in communal roads by locality

#### 4. CONCLUSIONS

This report aims to provide a methodology for assessing state-budget-funded projects – submitted for financing to the MRDPA – based on a set of clear and effective prioritization criteria. As noted earlier, the scope is broader than a simple proposal of new criteria, which cannot be treated in isolation from the other steps of an investment.

As such, this work aims to improve the entire cycle involved in the MRDPA's project portfolio assessment and strengthen the preparation and prioritization of investments for the 2014-2020 programming period. To this end, this final report includes: (i) a theoretical framework for project

prioritization and selection, optimized against four dimensions (absorption, impact, legitimacy, and capacity); (ii) a diagnostic of the National Program for Local Development (PNDL), managed by the MRDPA, as the most significant source of state-budget funding for local infrastructure projects; (iii) an overview of how EU-financed infrastructure programs select and prioritize projects, including monitoring and performance indicators; and (iv) recommendations for improvement of project evaluation and selection procedures for local infrastructure development projects, with a special focus on prioritization criteria and viable funding sources for each type of investment.

The purpose is to enhance the efficiency and effectiveness of proposed investments, maximizing impact in the context of inherently limited available financial resources. As reflected throughout the broader engagement (i.e., the four activities mentioned above), a key focus is on opportunities for harmonizing and better coordinating investments across various sources of funding, in the context of nearly EUR 40 billion available to Romania from the EU for the 2014-2020 programming period.

## **REFERENCES**

- [1]. World Bank: „*Improved Prioritization Criteria for PNDL Projects*”, under the Agreement for Harmonizing EU and State Funded Investments Program, December 2014.