



JUN 21 2024

DEPARTMENT ORDER)

**SUBJECT: Revised Criteria and Guidelines for
Road Conversion from Local to
National Roads and Vice Versa**

NO. **112**)
Series of 2024)
on 7/4/2024

In order to streamline the planning process of the Department, and in accordance with the Executive Order (EO) No. 124, series of 1987, Section 5(i), which mandates the DPWH to classify roads and highways into national, regional, provincial, city, municipal, and barangay roads and highways, based on objective criteria it shall adopt; provide or authorize the conversion of roads and highways from one category to another that focuses on the functionality of a road in relation to the national road network, herewith entail strict compliance with the updated Guidelines for Road Conversion from Local to National Roads or vice versa.

I. FUNCTIONAL CLASSIFICATION CRITERIA

The **Subject Road for Conversion**, otherwise referred to as "**SRC**", must be existing and passable to at least four-wheeled vehicle prior to its evaluation or reclassification based on the following road functional classification criteria:

NATIONAL ROADS:

1. Primary Roads

- 1.1 A contiguous length of significant road sections extending linearly without any breaks or forks that connect major cities (At least around 200,000^[1] population) comprising the main trunk line or the backbone of the National Road System.

2. Secondary Roads

- 2.1 Directly connect cities to national primary roads, except in metropolitan areas^[2];
- 2.2 Directly connect major ports^[2] to national roads;
- 2.3 Directly connect major airports^[2] to national roads;
- 2.4 Directly connect accredited primary tourism enterprises^[2] to national roads;
- 2.5 Directly connect cities^[2] (not included in the category of major cities);
- 2.6 Directly connect provincial capitals^[2];
- 2.7 Directly connect major national government infrastructure^[2] to national roads;
- 2.8 Roads that would connect or fill the gap between adjoining national secondary roads (protruding) to form a continuous national secondary road network;
- 2.9 For islands with at least two population center greater than 25,000^[3] having roads which run either linearly or completely around the island from the intermodal transportation point^[2] of the initial population growth center to the next population growth center.

¹ RA 7160, Section 452; 2020 Census of Population

² Refer to Attachment 1, Definitions of Terms

³ Philippine Road Classification Study (Final Report)

- 2.10 Bypass or Diversion Roads^[1]—with an affirmative definitive study^[2] that is quantified through measurable parameters or threshold (including but not limited to Volume-Capacity Ratio (VCR), roadside friction, travel time, & route delays) as verified by the **Project Preparation Division, Planning Service (PPD, PS)**;

3. Tertiary Roads

- 3.1 Other existing roads under the DPWH which perform local function, and;
3.2 Roads that would connect or fill the gap between adjoining national tertiary roads (protruding) to form a continuous national tertiary road network.

LOCAL ROADS:

1. Provincial Roads

- 1.1 Connect cities and municipalities without traversing national roads;
1.2 Connect national roads to barangays through rural areas, and;
1.3 Connect to major provincial government infrastructure.

2. Municipal and City Roads

- 2.1 Roads within the poblacion;
2.2 Roads that connect to provincial and national roads, and;
2.3 Roads that provide inter-barangay connections to major municipal and city infrastructure without traversing provincial roads.

3. Barangay Roads

- 3.1 Other public roads within the barangay and not covered in the above definitions.

OTHER ROADS:

1. Expressways

- 1.1 Divided arterial highway for through traffic with full or partial control of access and generally with grade separations at intersections.

II. GUIDELINES FOR THE EVALUATION PROCESS

1. Proposal and Initial Evaluation

The **SRC**, either unclassified^[3] or local (provincial, municipal, city, and barangay road) shall be requested or proposed for conversion into a national road or vice-versa, supported by the following documents:

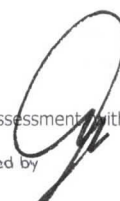
1.1. Form of Request

- 1.1.1 **Memorandum** from the DPWH Regional/District Engineering Office endorsing the request for conversion of local/unclassified road under their jurisdiction

¹ Refer to Attachment 2, Guidelines for Bypass/Diversion Roads

² An affirmative definitive study such as Feasibility Study, Pre-Feasibility Study, Project Concept Paper, Traffic Condition Assessment with clear indication of the function of the SRC (e.g. as bypass/diversion road) recognized, verified and endorsed by the PPD.

³ Any fully operational road sections without former or present road classification that have been funded and solely initiated by the department but are not yet part of the national road network



1.1.2 **Resolution** from the City/Municipal/Provincial Board (for local roads) requesting for conversion of local roads into a national road

1.1.3 **Letter** from the proponent public official (e.g., Senate, House of Representatives, concerned Provincial Governor or City/Municipal Mayor, etc.); and/or

1.2. Supplementary Proposal Documents

1.2.1. **Map** reflecting the location of the road alignment indicating its start and end limits, network connectivity and national importance;

1.2.2. Pertinent **supplemental documents**, such as project profile and other similar documents

The above-mentioned proposal documents both for local and unclassified roads shall be consolidated by the concerned Regional and District Engineering Offices to be submitted to the DPWH Secretary, through the Undersecretary for Planning Service, by the concerned DPWH Regional Director. The SRCs shall be initially evaluated by the Statistics Division, Planning Service (SD, PS) based on the available data, prior to field validation to determine the SRC's road functional classification (Section I).

2. Field Validation and Final Evaluation

The **SRC** shall be subjected for field validation to verify its functionality and its conformity to the DPWH's Standards (6.10-meter carriageway width with at least gravel surfacing and in maintainable condition) to be conducted by the SD, PS, together with the concerned Regional and District Engineering Offices.

For SRCs (Bypasses/Diversion roads) that satisfy the criteria under Section I, Item 2.10, these shall be referred to **PPD, and/or the Development Planning Division (DPD)**, for their official concurrence to further verify the functionality of the SRC (bypass road ^[2]) with the support of a definitive study ^[5] that indicates the function of the SRC (e.g. bypass/diversion road).

3. Submission of Technical Requirements (Certifications and Resolutions)

Subsequent to the field validation, the **SRC** that is verified to be functionally meritorious shall be processed for conversion only upon compliance of the proponent to submit all the required technical documents such as **certifications and resolutions**, that include the following;

3.1 Resolution of Concurrence (Absolute Requirement for proposed local roads only)

3.1.1 **Resolution** from the City/Municipal/Provincial Board indicating that they fully support and concur the transfer of administration of the SRC to the national government as part of the process of conversion of local roads into national roads;

3.2 Proof of acquisition of the required minimum 20-meter road Right-Of-Way (RROW) per EO 254 s.1987 (Absolute Requirement), to wit;



3.2.1 **Certification** signed by the Regional Director, attested by the Chief of the Right-of-Way and Legal Division (ROWALD), confirming the complete acquisition of the 20-meter RROW (*Refer to Attachment 3.1 for the draft format of Certification*)

3.2.2 **Certification** from the Regional Director/District Engineer indicating that the RROW Acquisition of the SRC (*Applicable for unclassified roads only*) has been funded by the Department through General Appropriations Act (GAA) or any other government fund source (*Refer to Attachment 3.2 for the draft format of Certification*).

3.3 Supplementary Technical Requirements;

3.3.1 **Certification** from concerned Regional Director/District Engineer that the road is within the DPWH's Standards (*as stated under Section II, Item 2*) [*Refer to Attachment 3.3 for the draft format of Certification*].

3.3.2 A **board resolution** from the Protected Area Management Board (PAMB), DENR stating that the proposed SRC is located within the Multiple Use Zone. (*Applicable for SRCs located in areas covered under the Expanded National Integrated Protected Areas System (ENIPAS) Act*)

No SRC shall be permitted for alignments located within buffer zones, strict nature reserves or strict protection zones without a clearance/board resolution from the PAMB-DENR.

The **Planning and Design Division together with the ROWALD** of the concerned Regional Office shall facilitate the consolidation of the above-mentioned technical requirements for SRCs determined by the SD, PS to be meritorious for conversion, including requests from their own office and the requests from the local government unit that is within their jurisdiction.

Accordingly, all legal documents involving RROW transactions shall be prepared, reviewed, evaluated, and interpreted by the ROWALD of the concerned Regional Office, as mandated under D.O. No. 161, s. 2022, vesting upon the said office the responsibility to perform such function.

A strict implementation of the foregoing shall be observed and only those functionally meritorious road sections requested with complete set of proposal documents that successfully complied with the technical requirements will be nationalized. Further, it is therefore understood that SRC with any lacking or incomplete submission of documents would continue to remain in its current classification as a local road/unclassified road.

This Department Order shall take effect immediately and supersedes Department Order No. 133, s.2018 and other issuances inconsistent thereto.


MANUEL M. BONOAN
Secretary

4.1.5 RCSS/EMF

Department of Public Works and Highways
Office of the Secretary



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GLOSSARY OF TERMS

Acquisition - The act of vesting of title, right or interest to, real property for public use, benefit or purpose, by virtue of the government's power of eminent domain.

Acquisition (Parcellary) Map - The representation of the real property to be acquired by delineation of the perimeter of the parcel, together with a description of the property and a statement of the estate, right or interest in and to such property so acquired.

Backbone – The main part of the road network system that carries the heaviest traffic (particularly through traffic).

Bypass Road – A type of Highway that connects the same route, but goes around a built-up area, village, or town.

City/Municipal Business District (CBD/MBD) – The part of the city/municipality which contains the principal commercial streets and main public buildings. It integrates a great deal of financial, business, culture, and service institutions, and several supporting facilities, such as business office buildings, hotels and apartments. It is the commercial and business center of a city/municipality. In larger cities, it is often synonymous with the city's "financial district". Some of the key characteristics of CBDs include: high concentration of offices, banks, financial institutions, and so on, high density and high-rise buildings, department stores and high-end shops, and multi-story car parks.

Cities - Other forms of government headed by City Mayors higher than municipalities with a minimum population of one hundred fifty thousand (150,000) inhabitants, as certified by the Philippine Statistics Authority (*Source: R.A. 7160 Local Government Code of 1991*)

Deed - A contract specific to acquisition, transfer, or purchase of a land parcel.

Diversion Road - An alternate highway to lessen traffic congestion from the main highway.

Donation - The voluntary conveyance of private property to public ownership and use without compensation to the owner; a deed providing for conveyance of property without compensation in return.

Department of Tourism (DOT) Tourism Enterprises – Refers to facilities, services and attractions involved in tourism, such as, but not limited to: travel and tour services; tourist transport services, whether for land, sea or air transportation; tour guides; adventure sports services involving such sports as mountaineering, spelunking, scuba diving and other sports activities of significant tourism potential; convention organizers; accommodation establishments, including, but not limited to, hotels, resorts, apartelles, tourist inns, motels, pension houses and home stay operators; tourism estate management services, restaurants, shops and department stores, sports and recreational centers, spas, museums and galleries, theme parks, convention centers and zoos. (*Source: R.A. 9593 Tourism Act of 2009*)



DOT – Primary tourism enterprises - Refers to travel and tour services; land, sea and air transport services exclusively for tourist use; accommodation establishments; convention and exhibition organizers; tourism estate management services; and such other enterprises as may be identified by the Secretary, after due consultation with concerned sectors. (*Source: R.A. 9593 Tourism Act of 2009*).

Functionality – The purpose of the road in a strategic and inter-regional sense rather than its use in terms of traffic related to geometric features.

Intermodal Transportation Point – An area within the island where two or more modes of public transportation including highway, mass transit, railroad, aviation or waterway transportation and all other transportation-related industries (with complete facilities and administered by the concerned government agencies) are linked, thus, serving as the main transportation hub where passengers and cargos are transported on a daily basis.

Major Airports – The airports handling international and domestic flights under the classification of *International Airports* and *Principal Airports* as identified by CAAP.

- **Airport Classification System** - The Civil Aviation Authority of the Philippines rationalized the previous airport classification system released by its former denomination, Air Transportation Office (ATO), based on the *Master Plan Study on the Strategy for the improvement of National Airports* conducted by the Japan International Cooperation Agency (JICA). National airports regulated by the CAAP are classified into three: *International Airports*, *Principal Airports*, and *Community Airports*.
- **Civil Aviation Authority of the Philippines (CAAP)** - The CAAP is responsible for implementing policies on civil aviation, such as the Airport Classification System, in order to ensure safe, economical, and efficient air travel. As an independent regulatory body with quasi-judicial and quasi-legislative powers, the CAAP is mandated to set comprehensive, clear and impartial rules and regulations for the Philippine aviation industry.
- **Community Airports** - Are airports that are used primarily for *general aviation* which represents the "private transport" and recreational components of aviation.
- **General Aviation** - General aviation is defined by the International Civil Aviation Organization (ICAO), as all civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire. For ICAO statistical purposes the general aviation activities are classified into instructional flying, business flying, pleasure flying, aerial work and other flying.
- **International Airports** - Are airports with border control facility used for international flights.
- **Principal Airports** - Are airports which serve domestic destinations. This category is further subdivided into two types: **Principal Class I** - are airports capable of serving jet aircraft with a capacity of at least 100 seats; **Principal Class II** - are airports capable of serving propeller aircraft with a capacity of at least 19 seats.

Major City– Are highly urbanized cities with a minimum population of two hundred thousand (200,000) inhabitants, as certified by the Philippine Statistics Authority (*Source: R.A. 7160 Local Government Code of 1991*)



Major National Government Infrastructure - Includes military stations, national prisons, multiple-purpose water resources projects, special economic zones, and state universities, among others, which are managed by the National Government.

- **Military Camps/Stations** – refer to the various installations, bases, facilities, and utilities administered by the Department of National Defense (DND) within the country. These infrastructures are established to support and facilitate military operations, training, and logistical functions, serving as hubs for strategic planning, troop deployment, equipment storage, and other activities essential for the armed forces' operational readiness and effectiveness.
- **National Prisons** – refers to a government establishment where national inmates/prisoners serve their sentence. Philippine prisons are also known as penal colonies or Prison and Penal Farms presently under the control and supervision of the Bureau of Corrections (*Source: Revised IRR of R.A. No. 10575*).
- **Multiple-Purpose Water Resources Projects** – Infrastructures designed primarily for irrigation, and secondarily for hydraulic power development and/or other uses such as flood control, drainage, land reclamation, domestic water supply, roads and highway construction, and reforestation, among others, managed and operated by the National Irrigation Administration (NIA) [*Source: Sec. 2 (c) of PD No. 552, s. 1974*].
- **State Universities and Colleges (SUCs)** – refer to public Higher Education Institutions (HEIs) established by national laws which are financed and maintained by the national government and are governed by their respective independent boards of trustees or regents (*Source: Section 3 (m) of RA No. 10931*).
Note: HEI – refers to an education institution authorized and recognized by the Commission on Higher Education to offer bachelor's degree or graduate courses
- **ECOZONES or Special Economic Zones** – Selected areas with highly developed or which have the potential to be developed into agri-industrial, industrial, tourist, recreational, commercial, banking, investment and financial centers whose metes and bounds are fixed or delimited by Presidential Proclamations (*Source: Republic Act No. 7916, as amended by Republic Act No. 8748*).
- **Expressways** - Divided arterial highway for through traffic with full or partial control of access and generally with grade separations at intersections.
- **Railway Stations** - A place with one or more buildings and platforms where trains stop for people to get on or off (in partial/full operability) as identified by the Department of Transportation (DOTr).

Major Ports – Base Ports and Terminal Ports managed by the Philippine Ports Authority (PPA) or the Cebu Port Authority (CPA) with Roll on/Roll off (Ro-Ro) vessels/ferries that transport, move, or carry cargo as well as passengers.

- **Base Port** – A center or hub of operations and is, in most cases, the busiest terminal in a PMO



- **Cebu Port Authority (CPA)** – Responsible in administering all ports located in Cebu Province, thus effectively separating these ports from the Philippine Ports Authority (PPA) system.
- **Philippine Ports Authority (PPA)** – Institution that facilitates the implementation of an integrated program for the planning, development, financing, operation and maintenance of ports or port districts for the entire country.
- **Port Management Office (PMO)** – The PPA's administrative and operational arm. There are twenty-six (26) PMOs which oversees the Base Ports and TMOs.
- **Roll on/Roll off (Ro-Ro) Vessels** – Specially designed vessels for carrying trailers, cars, and other rolling equipment which is discharged through the bow or stern ramps or both.
- **Terminal Management Office (TMO)** – Refers to an administrative unit overseeing the operation of a terminal in delivering frontline services.
- **Terminal Port** – A port owned and maintained by other government entities, e.g., Local Government Unit (LGU) and Department of Transportation (DOTr). It also refers to port turned over to PPA from the LGU or private entity (PPA-Managed)

Metropolitan Area - Consists of Metro Manila, Cebu and Davao Cities, which include cities or contiguous municipalities and districts meeting the criteria for metropolitan integration. (Note that the Subic Bay Metropolitan Area (SBMA) is not included under this definition)

Provincial Capital - The seat of the provincial government.

Right-of-Way - A general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

Road Classification – The function or purpose of a road.

Road Conversion – The process of changing the organization that is responsible for funding the operation and maintenance, or has ownership of the road.

Title - The legal document conveying title to a property.

Urban Areas – Situated within the boundaries of a city with a population greater than 500,000.



ATTACHMENT 2

**REQUIREMENTS FOR BYPASS/ DIVERSION ROADS TO BE CONSIDERED FOR
CONVERSION**

1. The proposed **Subject Road for Conversion (SRC)** must be **existing, paved** and **passable to at least four-wheeled vehicle** prior to further assessment.
2. The road being bypassed which the SRC is serving as an alternate route **must be a national primary and/or secondary road**.
3. **Traffic Condition Assessment (TCA)** shall be required on SRCs that fall under one of the following categories to validate its current function and other merits.
 - a. SRC deemed viable based on accepted¹ Feasibility Study (FS) Report but with variation(s) in both actual physical and financial, or actual physical components beyond 20%² from the FS (as confirmed by the Development Planning Division, Planning Service (DPD-PS));
 - b. SRC with no Feasibility Study.
4. Should the SRC require a TCA Report (refer to item 3), the Project Preparation Division, Planning Service (PPD-PS) shall prepare the TCA report confirming, through traffic and reconnaissance surveys, compliance of the SRC to the following prior to endorsement of qualification to Statistics Division, Planning Service (SD-PS).

For Bypass Road

- a. Ends of the SRC characterized by light to medium roadside friction as classified in the Road Network and Inventory Update Manual³ (current version or as may be superseded);
- b. Travel time at the SRC less than the existing competing national road⁴;
- c. Total delay⁵ at the SRC less than the existing completing national road;
- d. "Through" traffic of at least 20% of the total traffic along SRC⁶.

For Diversion Road

- e. Ends of the SRC must be connected to the existing national primary and/or secondary road;
 - f. Ends of the SRC characterized by light to medium roadside friction as classified in the Road Network and Inventory Update Manual⁴ (current version or as may be superseded);
 - g. Length of the SRC is 30%⁷ shorter than that of the existing competing national road;
 - h. Travel time at the SRC less than the existing competing national road;
5. For SRC deemed viable based on accepted¹ FS Report but with variation(s) in actual financial component beyond 20%² from the FS (as confirmed by the DPD-PS), the PPD-PS shall conduct an economic re-evaluation to confirm the viability of the SRC under the actual financial component prior to endorsement of qualification to SD-PS.

¹ Reviewed and approved by the Project Preparation Division, Planning Service with memorandum of acceptance issued to the Implementing Unit

² Item A-2.1, Annex A, Department Order No. 100, s.2017, accessible through:

https://www.dpw.gov.ph/DPWH/sites/default/files/issuances/DO_100_s2017.pdf

³ Appendix F-16, Road Network Definition and Inventory Update Manual v.5 (as attached in DO No. 120, s.2019), accessible through:

https://www.dpw.gov.ph/DPWH/sites/default/files/issuances/DO_120_s2019.pdf

⁴ Competing national roads are one or more national roads that form a section to which a SRC is acting as an alternate route

⁵ Total delay refers to total average time the vehicle stopped during the peak hour travel time and delay survey runs

⁶ Based on average diversion rate per FS submitted in 2021

⁷ Based on the average difference in length between the existing national roads and the alignment of the projects submitted for Feasibility Study (FS) under FY2024



6. SRCs with accepted¹ FS Report and with actual physical and financial components within the 20%² acceptable adjustments from the FS (as confirmed by the DPD-PS) shall be endorsed to SD-PS for qualification for conversion.

Notes:

- a. For SRC with FS funded through 2024 GAA or prior, the competing national road(s) may include tertiary road(s), however, still subject to the other qualifications.*
- b. For SRC (Diversion Road) with FS funded through 2024 GAA or prior, the end(s) may connect to tertiary road(s) however, still subject to the other qualifications.*

*****nothing follows*****



ATTACHMENT 3.1

CERTIFICATION

This is to certify that the required **20-meter Road Right-of-Way (RROW)** along the **<Name of Road>** under the jurisdiction of DPWH Regional Office _____ and _____ District Engineering Office (DEO) **has been fully acquired.**

This certificate is issued this <day> of <month> <year> at <address> in support of the subject road's conversion into a national road.

ATTESTED BY:

<NAME OF CHIEF>

Chief, Right-of-Way and Legal Division

<RO>

SIGNED BY:

<NAME OF REGIONAL DIRECTOR>

Regional Director

<RO>



ATTACHMENT 3.2

CERTIFICATION

This is to certify that the acquisition of the 20-meter Road Right-of-Way (RROW) along **<Name of Road>** located at _____ has been funded through the General Appropriations Act (GAA) with a total appropriation of _____ starting from the year ____ to ____ under the <Programs/Projects/Activities>.

This certificate is issued this <day> of <month> <year> at <address> in support of the subject road's conversion into a national road.

SIGNED BY:

<NAME OF DISTRICT ENGINEER/REGIONAL DIRECTOR>

(District Engineer/Regional Director)

<DEO/RO>



ATTACHMENT 3.3

CERTIFICATION

This is to certify that **<Name of Road>**, an (unclassified/local) road, located at _____ is within the Department's Standards for National Roads & Bridges. The project is implemented by the DPWH Regional Office _____ and _____ District Engineering Office (DEO) and has the following road inventory data:

Road Name	:
Road Length	:
Carriageway Width	: (<i>Varies from</i> ____ <i>meters to</i> ____ <i>meters</i>)
Surface Type	:
Directional Flow of Traffic	:
No. of Lanes	: (<i>Varies from</i> ____ <i>lanes to</i> ____ <i>lanes</i>)

This certificate is issued this <day> of <month> <year> at <address> in support of the subject road's conversion into a national road and to attest the authenticity of the above mentioned information.

SIGNED BY:

<NAME OF DISTRICT ENGINEER/REGIONAL DIRECTOR>

(District Engineer/Regional Director)

<DEO/RO>



REFERENCES

Manuals:

- National Economic and Development Authority (NEDA), Philippine Development Plan 2017-2022
- Institutionalization of the New Planning Process: Road Conversion Version 1, 2015
- Institutionalization of the New Planning Process: Road Conversion, 2013
- Road and Bridge Information Application (RBIA) Theories and Procedures, 2004
- Philippine Road Classification Study (Final Report), 1991

Laws, Rules and Regulations, Department Orders, Memorandum Circulars:

- Reorganizing The Ministry of Public Works and Highways, Redefining its Powers and Functions, and for Other Purposes, Executive Order (EO) No. 124, series of 1987, Section 5(i), which mandates the DPWH to classify roads and highways into national, regional, provincial, city, municipal, and barangay roads and highways, based on objective criteria it shall adopt; provide or authorize the conversion of roads and highways from one category to another that focuses on the functionality of a road in relation to the national road network.
- Amending Executive Order Numbered One Hundred Thirteen, Series of Nineteen Hundred Fifty-Five, Executive Order (EO) No. 254, series of 1987, Sec 1, National roads shall have a right-of-way of not less than twenty (20) meters, provided that a right-of-way of at least sixty (60) meters shall be reserved for roads constructed through unpatented public land and at least one hundred twenty (120) meters reserved through naturally forested areas of aesthetic or scientific value
- An Act Providing for a Local Government Code of 1991, Republic Act No. 716
- Department Order No. 161, s.2022, Preparation, Review, Evaluation, and Interpretation of Contracts and Other Legal Documents by various Offices of the Department
- Department Memorandum dated December 12, 2014, Feasibility Studies for City and Town Bypasses
- Department Memorandum dated September 12, 2011, Road Classification/Conversion
- Department Memorandum dated June 10, 2009, Road Functional Criteria

Links:

- Population Data by City: <https://tinyurl.com/RoadConversion-Population>
- List of Ports: <https://tinyurl.com/ListofMajorPorts>
- List of Airports: <https://tinyurl.com/ListofMajorAirports>
- List of Accredited Primary Tourism Enterprises: <https://tinyurl.com/RoadConversion-Tourism>

Note: Information contained in the above-mentioned links are subject to change