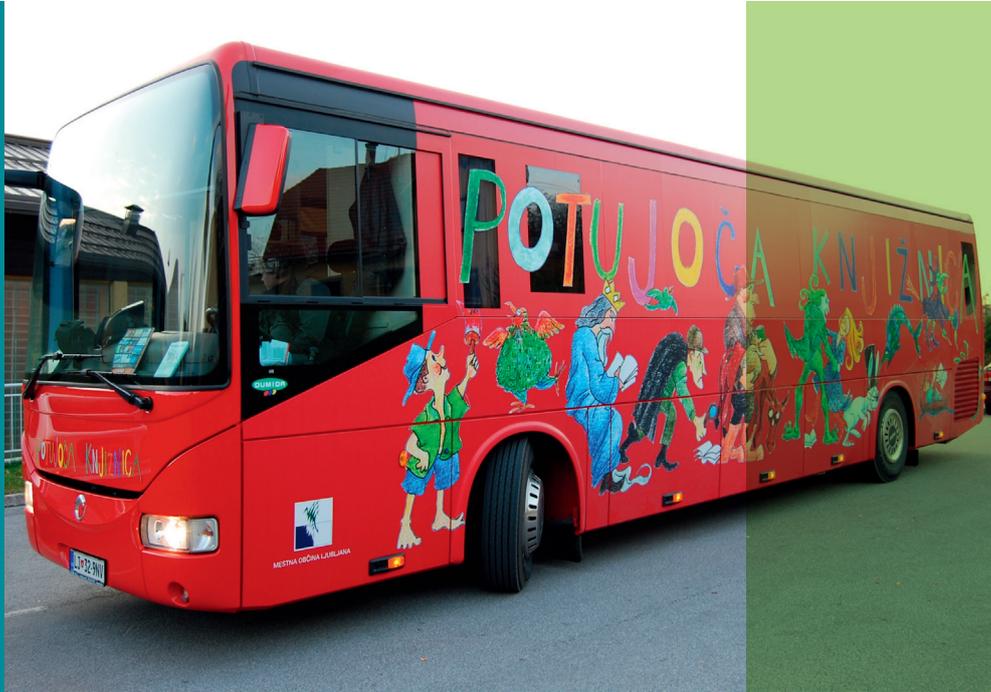# International Federation of Library Associations and Institutions

IFLA Professional Report No. 123

Mobile Library Guidelines

Revision by a working group of the IFLA Public Libraries Section,
Co-ordinated by **Ian Stringer**

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Cover photo:

An eye catching mobile library from Ljubljana, Slovenia. This vehicle looks very friendly and tells exactly what it is. It encourages people to investigate further.

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1.0 Introduction

What is a Mobile Library

The term *Mobile Library* is mainly used by British/Australian librarians. They use it to describe a motorised vehicle carrying library material. Other countries call these variously Bookmobile, Bibliobus, Bucherbus, etc. This document uses the term in its broadest sense. Any library service that does not stay in one place is classed as a *Mobile Library.*

Books are by no means its only payload. The modern mobile library may carry DVD's, CD's, computers, pictures, maps, toys and leaflets as well as books. It will have facilities to download material onto disk and memory device. Motorised vehicles are not the only means of transport. Boats, trains, planes, motorcycles and various animals are used to provide a service. You could not really call the elephant library of Thailand a bibliobus.
See Illustration 1
These guidelines will therefore use the term *Mobile Library*

Mobile library services are essential to the Public Library Service and should be seen as an integral part of it. When planning library services to meet community needs, mobile library services should be considered early in the planning process as a viable and cost effective means to serve residents disadvantaged in terms of access to a static library.

The overall objective of a mobile library service is to promote equity of service provision by enhancing the opportunity of access to library services. A mobile library provides the most flexible of library service, not being restricted to any particular population centre and able to respond to the needs of fluctuating populations.

It is impractical to make specific recommendations in the hope that they are universally acceptable because of differences in government, geography, demography, and economic factors.

These guidelines have been prepared by a team from around the world and are intended to provide a basis for planning the development of a mobile library service but the end result must inevitably reflect local conditions.

All measurements are quoted in Metric with Imperial in brackets. In cases where UK/Australian English differs from US English we have added the US term in brackets.

2.0 Establishing Mobile library Services

2.1   Responsibility

The responsibility for establishing and developing library services may rest with any tier of government, from national to local depending on the country's constitution and legislation with regard to devolution of government functions. As library services are a public good which are provided free or virtually free of charge to users revenue is provided from taxes and rates depending on the tier of government responsible .

2.1.1 National Government
On a national scale, the powers delegated to a national library by the government may include the mandate to provide library services for the benefit of the total population. A totally integrated national public library network with uniformity of provision is then possible. The total or major part would then be from tax revenue, although precepts may be levied on second tier authorities.
Library services can also affected by international government such as the European Union Government.

2.1.2 Second Tier Government,
The establishment and conduct of library services by a second tier of government permits and encourages responsiveness to local conditions. Revenue may be provided from a combination of central government subsidy, second tier government tax revenue precepts from third tier government authorities or rate revenue. Typically this is a State or Province.

2.1.3 Third tier Government
This level of government is nearly always of a local nature with responsibilities and powers to raise finance being determined by a higher tier of government. Being locally based allows maximum accord with the requirements of the local population. Typically it is a City, County or Parish District. The major revenue sources are generally from rate revenue and higher tier government subsidies.

2.1.4 Co-operative agreements
For mutual benefit, two or more authorities may join together in a co-operative arrangement to provide library services. This is particularly relevant in the area of rural mobile library services where library catchment areas frequently overlap administrative boundaries.
Agreements of a formal or informal nature may be set up between authorities. On the simplest level one authority may reimburse another for providing a service to some of its residents or provide a trade of in some other reciprocal form. At a more complex level two or more authorities may establish a committee of representatives from each authority to manage

the joint library service: being funded by precepts levied on the participating authorities.
Examples NBLC in the Netherlands.
Book purchasing Consortia in the UK.

2.1.5 Private libraries
In the absence of an 'official' public library service a few individuals or religious organisations around the world have set up their own service
Example:Jaswant Singh's mobile in Punjab
(see website appendix)

2.2 **Types of library service involving mobile libraries**

2.2.1 **Mobile Library and static service points**
This is the most common type of library service, in which mobile libraries are involved. The service comprises a main library located in the major service centre with supportive branches in secondary service centres or in outer urban areas with a mobile library service operating in the rural and urban fringes. Very isolated individuals and small communities may be served by deposit collections in convenient locations or by a personal postal service.

Owing to flexibility of the mobile library service, variations on this type may exist. In growth areas, a mobile service may be provided to meet current demands until growth is such that a static service point is required. In housing developments with no available site for a static library a mobile can provide a service on a permanent basis. On industrial estates or low density housing developments a mobile service can operate instead of an economically non-viable static service point.

2.2.2 **Mobile Library service only**
In certain situations geographic, economic or political factors may determine that static services are unsuitable to meet the needs of the population and that demands can best be met by providing library services exclusively by means of a mobile library service.

This could be an area with an evenly distributed, dispersed rural population with no major urban centre or identifiable central place or an area containing several small settlements of approximately the same size. A base from which to operate would still be a necessity, with its location being as geographically central either as possible or determined by

extraneous factors such as maintenance facilities or building availability.

Mobile libraries can serve temporary communities engaged in short term projects such as harvesting or dam building where a full static service would not be justified. They are good to serve nomadic populations and areas previously devastated by war or extreme weather

2.2.3   Specialist Mobile Library services

There are Specialist Mobile Library services which fulfil a particular function and may reflect the degree of sophistication of the total library service, the policies of the library service providers and the changing socio-economic conditions.
See illustration 2, 3, 4 and 5

2.2.3.1   Children's

Specialist children's mobiles are used to promote the library service to children, often in the school but also at galas, fêtes, carnivals and shows. They are also used in partnership with museums archives and galleries. They are sometimes scheduled to visit play-schools and nurseries, which are not part of the local authority service.
See illustration 3, 4 and 5

2.2.3.2   Schools

Frequently, library services are under the auspices of an education authority and a mobile library service to schools and pre-school playgroups is regarded as an essential addition to the educational process. When a library service is not directly connected to an educational administration, the general pattern is for mobile library schedules to include school visits, either as part of the normal route or as a specialised service. An example being a dedicated service to rural schools.

In those countries where the trend is towards double income families, greater use is being made of pre-school facilities and specialist mobile library services are being developed to meet the changing needs ,

2.2.3.3   Housebound (Homebound)

Specialist services exist to provide library services to people who are more or less confined to their home, for the very old or for persons with disability. In those countries with an ageing population, greater emphasis will need to be placed on meeting the needs of the less mobile members of the community.
See illustration 6

2.2.3.4   IT vehicle (Cybermobile)

A recent trend is for the specialist vehicle containing pc's internet provision, scanner, photocopier, dvd's cd's, download facilities and listening stations. They often have support staff and trainers on a regular basis
See illustration 2

2.2.3.5 Mobiles for retirement villages

Many mobile libraries visit sheltered homes and retirement complexes. As these rise in number some authorities have found it practical to dedicate a vehicle just for this service. This enables the stock to reflect better the clientèle with a greater proportion of large print, talking books and welfare advice
This can include 'Lobby Stop 'service for Assisted Living and Life Care centres.

2.2.3.6 Mobile homework and training Centres

Many children find the home environment is unsuitable for study purposes and those out of reach of a static library service are being given special vehicles for study support and homework clubs. Professional teaching staff is often supplied

2.2.3.7 Other specialist vehicles

These include
'Info-mobiles' for employment seekers
Homeless aide centres
Service to Aboriginal settlements such as Native American Reservations

2.3 Governing Factors

While the ideal situation in general may be to serve concentrated urban populations through static service points and less dense and dispersed populations by mobiles, a number of governing factors may determine the feasibility of such an arrangement .The cost involved in providing the service is a major governing factor and is often of overriding importance. Physical characteristics of a region may govern the feasibility of mobile services provision as may the availability of technical support.

2.3.1 Service type costs

In considering the provision of public library services, a choice must be made between equity of service and cost. In an ideal situation, all residents should have equal opportunity of access to services but pragmatically this is rarely achieved.

A balance must be struck between what is an acceptable service level to residents and what is an acceptable cost to the funding authority. Inevitably, it is the rural resident who will be most disadvantaged in

library access, for there are fewer people in rural areas than in urban areas and the cost of providing a service is higher per capita.

An equalisation of costs per capita is not a viable alternative for this would lead to an even more disadvantaged rural population. Rural residents however have a high tolerance to low levels of service access and adapt their lifestyle accordingly. The library planner whilst accepting this premise must seek to provide as equal opportunity as possible.

(a) **Mobile versus branch**
Mobile library services are often regarded as the most costly type of service and static services as the preferable traditional library outlet. Consequently, a proliferation of inadequately-sized inflexible branch libraries may be developed whereas a more cost effective, cost efficient mobile library would be more appropriate. However in certain circumstances, such as large catchment area, it may not be possible to operate a mobile library service due to the physical limitations of the operation and branch libraries may be the only alternative.

Due to the widely variant costs worldwide for vehicles, building material, labour, fuel etc., each government authority needs to undertake its own costings on mobile libraries. Both construction and operating costs need to be taken into consideration.
Many vehicles are obtained by either grant funding or gift. The running costs must be taken into consideration before setting up a service in these cases.

Once a monetary value has been arrived at for each type of service a benefit schedule is required so that the cost and benefit of each can be adjudged.

Cost Schedule

Branch
1   Establishment
         Land
         Building
         Car park
         Heating/ air conditioning units
         Aesthetics
         Building fees
         Stock
         Furniture and equipment
         Power system/ cabling
         IT hardware

Water supply and plumbing

2   Recurring
         Staff plus on-cost (insurance welfare etc.)
         Maintenance
         Flooring (carpet etc.)
         Insurance of premises
         Equipment depreciation
         Stock
         Operational expenses e.g. electricity, communications
         Miscellaneous (travel, stationery, printing, promotion)
         Heating fuel
         Cleaning
         Refuse (trash) collection

Mobile

1   Establishment
         Vehicle
         Garage
         Base

2   Recurring
         Licence/tax
         Fuel
         Base costs as per branch

Benefit Schedule Indicators

Mobile v Branch	Stock replenishment vote
	Range of resources
	Depth of service offered
	Ease and speed of interlibrary loan
	Charges for services
	Catchment area
Mobile	Frequency of stops
	Duration of stops
Branch	Time taken for patrons to travel
	Cost of travel
	Convenience of opening hours

(b)   Mobile Library v Postal Service

A postal service is at best only a supplementary service to that provided by either a branch or mobile. In very isolated or highly

inaccessible situations, a postal service is essential and may be the only means of providing a library service. However, its benefits are minimal compared with service delivery from either mobile or branch libraries. Disadvantages include the inability of users to browse, postal delays, cost of freight, loss and damage in transit, and lack of information provision. A cost –benefit schedule should be developed to provide a basis for comparison. The cost schedule would be similar to that of a branch library with less space required because of the absence of public access, but additional costs being included for freight charges including packaging

(c)   Mobile Library Service v On-line service
With the onset of downloadable e-books this could be the future of the mobile library in some areas.

2.3.2 Physical characteristics

Although it may be considered that a mobile library service would best serve the needs of a dispersed population, the physical characteristics of the area may limit its feasibility.

Many rural areas in both developing and developed countries are served by non-metalled roads on which the level of maintenance varies considerably. A mobile library is not tolerant of poor road conditions due to the weight of materials it carries, which places undue stresses on the vehicle. The library fittings within the vehicle are easily subject to damage through movement of the vehicle body.

Consideration must also be given to the length of the vehicle, its turning circle, height of chassis above the ground, engine power and braking system in relation to surface conditions, steepness of hills width of roads and sharpness of corners. Street furniture and traffic calming must also be taken into account. Traffic humps are particularly bad for long vehicles. Low bridges must be taken into account when route planning as must the length available on ferries.

Climate is a governing factor in many cases. In the tropics and sub-tropics the rainy season often makes roads impassable sometimes for several weeks through flooding wash outs and soft ground. Snow and ice may limit the use of libraries.

The area to be served may determine the viability of a mobile library operation. Whilst overnight stops can extend the range of a mobile library's sphere of operations there is a physical and human limit on the service

2.4 Local provision

When considering the introduction of a mobile library service careful planning must be given to its operating schedule so that maximum use is made of the vehicle and optimum value can be gained from the service. Physical and human restraints determine a mobile library's sphere of operations. The number place and duration of stops is dependent upon a number of factors, which must be taken into account. At all times during planning and operation, there is a need to be flexible and to change itineraries as circumstances alter. In planning a mobile library itinerary the following need to be considered:

2.4.1 Area to be served

The distance a mobile library is able to travel in a day and at the same time provide an effective and cost efficient service is dependent on road conditions and the number and duration of stops. A mobile, which stops for half a day in a centre, is not going to cover the same area as one, which stops for a few minutes at several locations. Similarly, a mobile which is used to drop off bulk loans of books can travel further than one which solely serves the public on an individual basis.

The maximum daily distance should not exceed 200 kms. (125 miles) on average nor should an itinerary last more than two weeks without a days break for maintenance. A mobile library unlike most vehicles earns its keep when stopped. So when planning routes, stopping time must be maximised against travel time. Overnight servicing of the vehicle can be considered to make maximum use of vehicle time.
In urban areas or where lengthy stops are warranted, average daily travel may be as little as 20kms (15miles). When overnight stops are used the range of operations can be extended but the needs of the staff must be considered to prevent any deterioration in service quality. Nevertheless, cases do exist where the mobile is continually on the road for three or four days.

Examples of overnight stops are common in Australia, the Upper Murray Regional Library Service in New South Wales /Victoria or Tafe mobile library service near Dubbo NSW being two examples
See illustration 7

2.4.2 Distribution of population

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Population density is a big factor. More people will be served in dense populations, but by its nature, the mobile is ideally suited for dispersed populations. This must be borne in mind when making comparisons of efficiency with branch libraries. Emphasis must be given to the less mobile population such as elderly, those without vehicles or where public transport is poor or non-existent.

The location of service centres, availability of power, hours of operation, road conditions and available staffing should all be taken into consideration.

2.4.3 Frequency and Duration of stops

The number of stops per day will depend on the population distribution and the potential and actual use of the service. A visit to a school will consume considerably greater time than a stop at an individual farm. Conversely a stop to deposit a bulk loan of resources will take far less time than a stop to serve a community. A maximum of twenty stops per day is the advised maximum. When a greater number of stops is envisaged then the service may become over personalised with many of the stops just to serve individual families.

It is difficult to justify such a personalised service on cost grounds and consideration should be given to replacing such stops with lengthier community stops. The hours spent on the road versus service hours is another key consideration. A general guideline is an average of one hours service to one hours driving.

Again circumstances may vary considerably and the ratio may fluctuate significantly around this point. However at more than two hours road service to one service hour the cost effectiveness of the service may require examination

An idealistic and very generalised guide to operations would be a 9-day itinerary covering 50kms (30 miles) per day with 5 stops per day and a road hour to service hour ratio of 1:1, with an output of 50 issues per hours and a staff of one driver to one librarian.

3.0 Finance

There are few differences between raising funds for the establishment or continuation of a mobile library service and gaining finance for static library provision. The major difference is that mobile libraries are very specialised vehicles, which require a high level of craftsmanship. Other differences concern the items in the annual budget, which are specific to mobile library operations.

A static library has far greater first costs but lasts much longer than a vehicle. The mobile is a good short term option.

3.1 Vehicle costs

Mobile library vehicles vary greatly in cost depending on the type of vehicle chosen, the quality of fittings, import duties, local market forces and technical standard. All vehicles should be purpose built to obviate the many problems, which can arise through the incompatibility of the vehicle type and its intended use. Finance may be raise through direct government grant, or by a combination of subsidies, fund raising bank overdraft or loan funding. Immediately a vehicle is purchased, financial planning should be undertaken to provide funds for its future replacement.

Vehicle replacement becomes necessary when the cost of repairs coupled with the inconvenience of the vehicle being off the road and having out dated design features. Exceed the costs and benefits of new vehicle with modern facilities The life of the vehicle may be taken as 10 years on average and the trade-in value at the end of the period as negligible.

A mobile library replacement fund should feature as part of the authority's budget on an annual basis and sufficient funds allocated to account for replacement after 10 years. Annual inflation rates must be taken into account during the budget process.

3.2 Operational budget

The annual budget for mobile library operations may be drawn up in four different ways.
- The library system's budget may consider the mobile services as a separate programme listing each item of expenditure and its estimated cost in the forthcoming year
- The items of expenditure may not be separated out but be included in the appropriate budgetary items for the whole library system as a whole
- Some of the items may be included in the general library budget such as book-stock and staff, whereas others may be submitted as separate items such as vehicle repair and maintenance, fuel costs and external site maintenance.
- Some budgetary items may be included in the library's budget, in any of the three ways listed above, but others form part of the budget of other sections of the authority. This occurs where an authority has a section responsible for all vehicles.

Specific budgetary items which are distinctive to mobile library operations include:

- Vehicle repair and maintenance
- The repair and maintenance of 'halt' sites (including upkeep of concrete pads, power points and bus-stop type signs)
- Telecommunication costs
- satellite dish maintenance and licensing fees for on-line access
- fuel costs
- vehicle insurance
- road tax
- Colour scheme and interior design
- External power costs

3.3   Sponsorship

Various types

- Advertising on vehicle *See illustration 8*
- Sponsoring certain books
- IT equipment
- Bequests from grateful users

3.4   Grants

Different sources exist

- Government
- Lottery
- Private companies with charitable intentions eg Bill Gates Foundation
- Private companies as a condition of certain government regulations e.g. power companies as contribution to cutting emissions etc.
- Charities
- Bequests
- Friends' groups

4.0 Vehicles

4.1 Types

The types of vehicle have been restricted to four:

- van chassis, *See illustrations 9 and 10*
- lorry chassis, *See illustration 11*
- bus/coach chassis, *See illustration 12 and13*
- semi-trailer/articulated type, including the bendy-bus chassis. *See illustration 14 and 15*

A wide range of sizes exists, and the final choice on which vehicle to choose, is determined by cost, local availability, terrain and road conditions, stock capacity, anticipated usage, and IT requirements.

Neither the width nor the interior height should be less than 2000mm (6.5 feet) (A selection of layouts are in the appendix.) Whenever possible a substitute vehicle should be available to provide continuity in the event of a breakdown. This may be of smaller dimensions.

4.1.1 **Van type**

The van type is regarded as the smallest viable mobile library within the parameters of these guidelines. Usually a specialist driver's licence is not required so these small vehicles can take the library service to very isolated communities. Their small size is dictated by
- Terrain - Mountain passes, narrow roads, delicate bridges limited size ferries, limited parking sites.
- Specialist use e.g. children's vans and those for community centres and sheltered homes.
- Fuel economy and staff saving (usually single staffed)

The vehicle's restricted space and its limited stock, place constraints on the services that may be offered, and staff facilities are very limited. It can, however, effectively serve villages of up to about 1500 people, individual properties, small schools, community centres, prisons and sheltered homes.

The lack of space limits any extension activities, although, depending on climate, etc., the use of awnings or other temporary structures may allow for extending the range of possible activities.
It is however particularly useful for trying out the potential library usage in an area, perhaps a new housing development or factory site.

4.1.2 **Lorry (truck) type**

This may be regarded as useful for more general purposes, effective in a wide range of situations. Usually between 8.5 & 11 metres long, (28 & 36 feet,) and gross vehicle weight ranging between 7.5 & 17 tonnes; this allows for a book capacity of 2500-4000 volumes, depending on weight.

The lorry chassis is generally cheaper than a bus or coach and has the advantage of being available in various drive and axle combinations, as appropriate to the terrain over which it may be used. The medium-height chassis available usually make it comparatively easy to make into a mobile library.

Retaining the manufacturers cab gives a tried and true design, and allows the manufacturer's original safety & security features to be retained, but can limit space. A coach-built cab is generally to a lower specification but gives extra space for a front counter.

When looking at weight it is important to note that the gross weight includes the books a full fuel tank and the staff. It is also worth checking that the vehicle proposed is allowed over all bridges on its route..

4.1.3   **Bus/coach type**

This may be also regarded as useful for more general purpose, effective in a wide range of situations. May be slightly longer than the truck at over 10 metres (33 feet) long with a book capacity of 3-4500 volumes. The coach chassis is higher than a truck whilst the bus is usually very low. The bus makes for partial easy access but the pay-off is intrusive wheel arches and often a raised floor at the rear over the axle/drive systems. These are easily disguised as seats on a service bus. The same could be done on the mobile but at the loss of book space.

The coach chassis usually gives a flat surface, and has a walk-through cab giving a large spacious area to work in. The low floor of the bus chassis, highly advantageous in urban environments, may be a liability in rougher terrain.

The larger internal space of the above allows more user and staff comfort and permits basic extension activities to be carried out. Additional space can be created by installing a retractable module in the side of the vehicle to accommodate a counter and storage area.

This type of vehicle is suitable for townships up to about 5,000 population, isolated stops new urban developments housing, industrial and commercial estates and medium sized schools. Its main restraint being the amount of turning space required.

4.1.4   **Semi-trailer type**

The semi trailer or articulated mobile library is often the ideal vehicle for providing in-depth library services to rural and urban fringe residents. The overall length may be in excess of 15 metres (50 feet) with a carrying capacity of 5000 volumes.

The interior dimensions allow a wide range of resources to be effectively displayed and provide maximum comfort for users and staff. Extension activities may be carried out with few problems and the larger space permits the inclusion of enhanced features such as internet pcs electronic white boards.

Townships up to 7500 population and large schools can be effectively served. The large trailer is suited more to community rather than individual

halts. The size and weight of the vehicle preclude its use on rough narrow dirt or twisting roads. (Though they have found to be very good at getting over traffic calming road humps) Low structures and overhanging branches may be a hazard as well as weight restrictions (though multi –axle trailer may have less weight per axle than a rigid)

Tampere, in Finland tried out the articulated bendy-bus chassis (Also known as tandem buses, banana buses, slinky buses, caterpillar buses or accordion buses.) High cost of spares ruled against it and its replacement is a rigid three axle.
See illustrations 2 and 15

4.2   Technical

Due to the large range of options, local availability, differing standards of manufacture, government regulations, legislative requirements and innovations, the technical section here can only act as a rough guide to the final choice.

4.2.1   Engine

Diesel engines are now the accepted standard. Traditional problems such as poor starting from cold can be overcome with various pre-heaters and cold start products. The best method is for the vehicle to be garaged under cover.

Engine accessibility should be taken into account, if maintenance facilities are limited. Availability of spares locally should also be a factor. Often the maintenance will be looked after by the local authority or its agents and they naturally will see better value in a standardised fleet. This is acceptable up to a point but the integrity of the mobile library must not be compromised. For example the workshop may want to see all vehicles on the same chassis but refuse (trash) collection vehicles and snow ploughs need very different chassis to a mobile library.

There must be adequate clearance underneath the engine and transmission and the engine should be sound-proofed, as should any on board generators.

Automatic transmission is highly desirable, although manual transmission is still preferred by many operators, especially in very hilly areas. Cruise control is a desirable option. Power steering is now almost universal.

A turbo charged engine is desirable for maximum horsepower, and also to meet modern emissions regulations. Also with regard to emissions standards, a variety of technologies are available to help meet these standards, including electronic engine management systems.

'Adblue,' etc. are useful for meeting more stringent legislation. However depending on the available maintenance facilities, simplest may often be best!

Engines may be mounted at the front, the near front, the middle or the rear. The latter two are more expensive are there are less choices of engine available and are only likely to be found on bus & coach chassis. The near front engine encroaches more on the interior space than does a forward mounted engine. However choice will generally be decide by cost and availability.

4.2.2   Chassis

The type of chassis chosen will be influenced by local availability and servicing arrangements. Specific legal requirements must be followed in many countries e.g. The European Union decrees that chassis must have type approval as defined by EU directive.

Every chassis has a gross vehicle weight, comprising the weight of the chassis body and load, which must not be exceeded. The weight of books may be ascertained using 1200 (hardbacks) as weighing 1 tonne as a guide.

Based on its wheelbase, which is the distance between the front and rear axles each chassis has its own turning circle. The shorter the wheelbase the smaller the turning circle.

The rear overhang of the body affects the vehicle's balance and steering and must be neither too long nor too short. Too long causes overloading on the rear axle and 'light' steering. Too short causes overloading on the front axle and heavy steering. A longer overhang at front and rear gives more chance of putting the vehicle over a pavement (side walk) with its inherent dangers, but can be vital to get the vehicle around badly parked cars (autos) etc.
See illustration 16

In many countries, the ratio of wheelbase to overall length, and the specific axle loadings caused by overhangs, are subject to legal constraints. The wheelbase should be at least 55% of the vehicle's total length. Each longitudinal piece of chassis should be in one piece and not jointed.

All underside areas below floor level should be coated with corrosion and fire protection.

4.2.3   Brakes

Full air brakes, with anti-freeze unit, where necessary, together with an engine brake should be provided. The engine brake is desirable in hilly terrain. Electric retarders can also be used, (often fitted as standard on Bus & Coach Chassis,) and over hilly terrain and especially long descents, can dramatically reduce brake fade and service brake wear. All trailers should be fully braked.

4.2.4   Mirrors

Rear view mirrors should be fitted. It is also useful to have different magnification mirrors. In Europe, the latest regulations also require wide-angle front and side look-down mirrors. The fitting of mirrors is covered by various local regulations A mirror mounted by the back window (if fitted) is useful to check that no-one is immediately behind the vehicle when reversing.

A reversing camera is a good solution; failing this a second person should be used as a guide when reversing. In many countries it is illegal to reverse without either second person or camera. *see illustration 17*

4.2.5   Heating, air conditioning, ventilation and insulation

Some form of heating is required in most vehicles as few areas have all year round equable climates. The power of the units depends to a large extent on the extremes of temperature that may be experienced and the size of the vehicle's interior. But it is also influenced by the amount of insulation in the vehicle body, the window area, whether tinted glass is used and use of doors.

Finally the number of staff and users and site exposure all must be taken into account. It is better to fit two small heaters than one big one. Smaller heaters get warm faster on the cold winter's day and give the option of taking one off for repair but still being able to maintain the service schedules using the remaining heater.

Insulation of the sides and roof of the vehicle helps to maintain a constant temperature. A minimum of 50mm (2 inches) of insulation material should be used, with anti-drum insulation on the sides of the vehicle. Some modern vehicles use roof and side panels moulded as large sections from a composite sandwich of insulating and load-bearing materials. This system is highly efficient for both insulation and ease of manufacture, but tends to make future body repairs more complicated and expensive since whole panels may need to be replaced.

 Roof mounted dual-purpose heating and air-conditioning units are most satisfactory although their power requirements often necessitate a generator or external power source. 24 volt DC-powered air-conditioning

systems are now available, using the vehicle's auxiliary batteries, and are a very 'green' solution for temperate climates, since they do not need a generator or engine running to work, but they are relatively low power and will be insufficient for hotter climates.

The roof may need to be strengthened to bear the additional load. Rear mounted units may lead to imbalance and a tendency to sway at the rear end. Consideration must be given to the increased height of the vehicle should the units project through the roof. Air flow should be directed through vents placed at intervals in the ceiling to distribute cool air.

Hot air and hot water system space heaters may be installed to run on gas, petrol(gasoline), diesel or kerosene(paraffin). Using the engines fuel (usually diesel) is now almost universal. For water heating, systems are available which use heat exchangers and the engine exhaust to heat the water – the ultimate 'free' heat!

4.2.6 Entrances

Entrances should have hand rails fitted to both sides of the stairwell to facilitate entrance by elderly, young and disabled people.

Whilst mobile libraries would not normally move with users on board, it may be necessary to do so in emergencies. Also depending on the type of suspension fitted and the location, vehicles can move, rock or sway in the wind, due to passing traffic, etc., and for that reason, 'grab' rails may be fitted throughout the vehicle for the safety of users.

Entrance and internal steps should have non-slip treads and be clearly marked in bright colours.

The number of steps and their rise depends on the height of the chassis. This is where three axle and low floor vehicles score heavily as the entrance can be much lower.

The width of steps should be a minimum of 254mm (10 inches) with a maximum rise of 200mm (8 inches)

The lowest step should be no more than 178mm (7 inches), but there must be sufficient ground clearance to take account of road conditions such as camber, grass verges and kerbs (curbs).

A drop down step may be necessary to achieve minimum height and may be manual pull out or power operated. Internal steps should be fixed. A warning signal should alert the driver if the steps are in the lowered position when starting off.

A recessed mat well should be provided at the top of the stairs with a hard wearing mat installed.

Doors, fitted with unbreakable glass should be fitted at the entrance. They should be dust proof and weather proof. They should be easy and safe to operate and lockable from inside and out.

Any outside handles should be recessed and an anti-rattle device fitted.

A double set of doors may be fitted so that the temperature is not unduly affected by the continual opening and closing of the doors. Double doors also provide a barrier against dust and water and added protection in inclement weather. The external and internal doors should, therefore, operate independently.
see illustration 6,19, 21

4.2.6.1   Access for disabled people

Access for disabled people may be affected by a separate mechanical lift fitted to the vehicle or one can be fitted into the steps. Fitting into the steps saves space as no separate entrance exit is required. However at busy halts the entrance and exit of a disabled person stops other people and can make the disabled person feel uncomfortable. The second entrance required for a separate lift can be used as an emergency exit and a swing out section of shelving can be installed in front of the second door. The placing of lifts can affect the balance and therefore handling of the vehicle.
S*ee illustration 6,20 and 22*

4.2.7   Storage

Storage space is at a premium on mobile libraries with the situation being exacerbated when cartons of books are carried for drop off along the route. Full use therefore should be made of all available space.

Where possible, lockable, under-body storage compartments should be fitted. As these will also be filled with generators batteries inverters etc it is desirable to maximise space inside the vehicle.

Internal space may be found above the front window, in corners, over the wheel arches,under seats, and under the lowest shelf.

A small trolley system may be used to carry boxes for delivery en route. This can have a special space in the shelving runs. Interchangeable modular furniture and shelving units can be used to improve flexibility. *see illustration 24*

4.2.8 Power supply

Power supply is a crucial consideration in mobile libraries. There must be a power supply separate from that generated by the engine. This can be batteries, a generator or external source.

With the great advance in batteries, it should be possible to fit units of sufficient power to last out a day's usage. This will be affected if there are sessions of over 5 hours without moving the vehicle.

Any batteries fitted should be in addition to the vehicles own batteries. However they should be able to be charged from the vehicles alternator. The vehicles own batteries should be diode protected so that there is no chance of the vehicle battery draining into the library battery. The vehicle batteries must stand alone to enable the vehicle to start at the end of the day.

There should be on on-board charger to enable both vehicle and library facilities batteries to be re-charged either over night or on-site.

Portable or built in generators are a second alternative power source. They can be noisy on the vehicle or for neighbouring houses. They can also have vibration problems and care must be taken to avoid fumes entering the vehicle or neighbouring premises. Regular maintenance is vital. The power generating capacity should exceed requirements for often the generator loses power as it ages.
See illustration 25

Vehicle voltage is usually 12-24 volts but electrical appliances run at 220-240 volts so an inverter is required to step up the voltage

The most satisfactory power source is from external sources. In some countries electricity authorities provide power outlets attached to poles to which the mobile library can be connected. A heavy duty cable with weather proofed fittings is essential. Local regulations can be very strict on use of external cables and they should never be allowed to trail over a right of way. They are therefore best used in non public areas. This type of connection can also be limiting, as once the power outlet is installed, the mobile library halt cannot be moved from that location; unless a battery system is also fitted.

4.2.9 Electrical

During the planning of a mobile library it is important that a certain amount of future proofing is done. Once the wiring of the vehicle is complete it is a very costly job to rewire the vehicle. Extra sockets should be installed from the outset. Because of the complications caused by wiring

runs there can be considerable saving in using the same design for more than one vehicle.

Because of variations in current supply around the world it is impossible to cover electrical systems in depth. However on all systems there should be an emergency lighting provision at least over the exit and counter area. This should be direct from the vehicle batteries.

Fluorescent lighting with diffusers is the most popular lighting system but newer energy saving systems are being used to direct light into specific places, particularly using low-energy, low-voltage LED technology.

Lighting should be fitted over the shelves rather than down the centre of the vehicle to avoid shadows.
The counter area should always be well lit, but care must be taken where PC's are being used.

All steps and doorways should be well lit.

Individual lights should be provided in the cab and staff area.

Recessed lighting outside the vehicle to highlight it and make it safe to approach should be installed.

The vehicle itself should be provided with adequate reversing lights together with obligatory fog lamps, front and rear.

Light switches should be fitted by the entrance and behind the counter. It is wise to have individual switches rather than one master switch. These should all be well labelled. Emergency lights should be fitted

All halts in the evening should be in well lit safe areas

In designing all these electrical systems it should be borne in mind that 90% of all vehicle fires are caused by electrical faults. Great care must be exercised in ensuring that all electrical circuits are properly protected, by separate fuses or circuit breakers for each individual appliance or circuit on the vehicle.

4.2.10   Body Construction

Traditionally the frame work of mobile libraries has been made of hardwood, but aluminium framing is increasingly being used because of its light weight in relation to strength and ease of working. There is less risk of failure due to ageing. Steel framing is also used.

The exterior cladding can be aluminium, steel sheet or GRP (glass reinforced plastic (fibreglass)). Aluminium and steel sheet should be

between 16 gauge (1.2mm) and 20 gauge(1mm) so that it is neither too thin nor too flexible nor too heavy. Sheets should be flat rather than ribbed for ease of cleaning and for general appearance. Modern decal applied pictures etc. need a perfectly flat surface.

Sheet steel should be zinc-coated to prevent corrosion which is particularly prevalent when steel abuts aluminium. Whilst the sides of vehicles may be steel aluminium or GRP, roofs are commonly of aluminium with the preference for a single seamless leak proof sheet. Joints in aluminium must be fully sealed, preferably with rolled seam or locked seam. Sheets should be screwed rather than nailed into wooden frames to prevent them working free through vibration and stress. Roof corners should be solid to lessen damage from overhanging branches etc. Translucent roofs are preferred in Northern climates to maximise light.

Glass reinforced plastic (GRP) and fibreglass reinforced ply (FRP) are now commonly used in mobile library body construction. GRP is a fibreglass and resin moulded construction, whilst FRP consists of a 3ply sandwich of fibreglass-ply-fibreglass. The materials are corrosion and rust proof, stronger than metal and seamless with panels being moulded in one sheet.

Whilst more expensive to manufacture construction costs are less. It is easily repaired by infilling with fibreglass or cutting and replacing damaged sections. The same is not necessarily true of composite insulated panels – these are extremely light, extremely strong, have a high insulation value and speed up construction of the new body – but once damaged they can lose both their insulating properties and their structural integrity, and may have to be replaced whole.

Sheet steel damage may be repaired by beating and filling or replacing the damaged panel. Aluminium is more difficult as once it is stretched it will not return to its original shape.

Features such as wheel arches, front ends, roof fairings, side deflector skirts and roof panels can all be made of fibre glass as it lends itself to easy shaping and can be relatively easily replaced if damaged.

4.2.11   Windows

Sky lights should be of a non glare type, using tinted or faceted glass. Fibreglass translucent panels are often preferred. All must be dust and water sealed.

Several smaller sky lights may be preferred to allow more flexibility in controlling temperature and also for ease of handling.

Multi-way opening skylights are recommended. If not, then rear opening should be used to lower wind resistance when travelling. It is advised that warning buzzers are fitted to prevent unauthorised access or rain damage.

As many windows as possible are recommended in colder climates, so that supplementary lighting is kept to a minimum. However it may be better to have high level narrow windows all way round upper area of walls where there are no shelves. Another solution is to have very light weight shelving in front of large windows.

See illustrations 15, 18 and 26

All windows should be dust and water sealed and made of high impact glass. They should be encased in rubber rather than metal for ease of replacement. All should be lockable from inside.

Front and front side windows should be as large as possible to aid in vehicle manoeuvrability. Driver and passenger windows should be open-able. Tinted windows are recommended. Sun visors should be fitted capable of being adjusted to cover side windows when appropriate.

Windscreen wipers and washers should be fitted to both front and rear windows.

A small rear window can be fitted to allow sighting behind the vehicle. A reversing camera is a an optional alternative. A rear window(s) provides more light in the rear and gives an air of spaciousness. It can also act as the emergency exit if no other doors are fitted.

4.2.12   Interior finish

The interior décor should be of a light colour to increase the sense of space.

A fitted carpet gives a homely touch to the vehicle but vinyl or polished wood are easier to clean and less prone to dust. Carpet tiles can be a useful way of getting the best of both worlds. Easily removed for cleaning yet giving a warm touch to the vehicle.

Walls and ceilings may be covered with textile material to improve ambience.
See illustrations 27-35

4.2.13   Retractable module

A most beneficial enhancement to mobile libraries is the retractable module. This varies from the system in which a small section of the vehicle

wall is made retractable to where almost the whole length of both sides is extended outwards. The mechanics can be hand operating winding, electric or hydraulic.

Where the module is the length of the vehicle the floor area can be more than doubled. In smaller versions the module contains a self contained section such as the counter or children's section. It is useful that access can still be made inside the vehicle when the module is closed to help staff load in the depot where there may not be space to extend. . Equally the vehicle could give a partial service if there was a breakdown during a days run.
see illustrations 14 and 35

4.2.14   Safety features

Special mudguards and mud deflectors should be fitted on all wheels along with spray suppression equipment.

A long range fuel tank with lockable filler cap should be fitted.

Provision for towing the vehicle should be fitted

Large bumpers (fenders) as local regulations and condition demand, this can also include bull-bars in wilder terrain.
see illustration 36

A first aid kit must be carried and it is desirable that staff have basic first aid training.

Fire extinguishers should be fitted and labelled. These should be able to put out electrical fires. They should be checked on a regular basis.

Seat belts should be fitted and worn in all seats (staff should not sit on the floor, in the vehicle body whilst in motion)

Mobile phones should be fitted or an alternative form of emergency communication, such as radio be provided.

4.2.15   IT provision

On-line access can be made available by a variety of methods
- Via mobile phone
- Via satellite
- Via local wi-fi
- Via hook up land-line

The mobile library should be a mini-branch library so should include
- public access pc's

- staff only pc's
- copying facilities
- printer
- access to on-line reference works
- download provision

see illustration 31, 37-39 and 42

4.2.16   Kitchen facilities

Basic kitchen facilities enable the vehicle to stay away from base longer. These can include microwave oven, sink, refrigerator, hot water and eating area.

4.2.17   Toilet facilities

The need for toilet facilities varies according to area. These should be airline type with retention tank under the vehicles. Facilities for emptying the tank are often available at local coach depot.

4.2.18   Insulation

Good insulation can keep out the cold and the heat and can be a sandwich in the body skin.

4.2.19   Inverter

As most appliances use 220-240volts an inverter is required to allow them to run off the vehicles batteries which are normally 12 or 24 volts

4.2.20   Awning

A pull-out awning is useful for shading the entrance (or keeping the rain off) but is useful if the vehicle is used in a promotion at local events.

4.2.21   Going Green

The use of green or bio-diesel is to be recommended. Solar panels are now being used to supplement the batteries. Modern panels can form a translucent roof to the vehicle. The solar panels can actually pick up from high brightness security lights in the vehicle's garage.
see illustration 42

4.3   Health and Safety
The following safety features are recommended:
- brightly coloured handrails,
- bright step edges

- safety bars on stairs and lifts
- fire extinguishers
- first aid box
- Emergency exit
- Reversing camera
- Double rear mirrors
- Emergency lighting system
- telephone

All emergency equipment should be checked at specified intervals

4.4   Emergency procedures

It is essential to have set procedures on what to do in case of the following:

- fire
- injury to staff
- injury to reader
- when to use first aid kit
- dealing with violent reader
- road traffic accident
- injury to animals

1. The famous elephant library from Thailand. Not only did this service provide books , but by means of a portable satellite and modem gave on line access to remote communities

2. Netti Nysse The second IT bus from Tampere Finland

3. Soria Moria, a Children's library from Norway Exterior

4. Soria Moria, a Children's library from Norway Interior

5. WOW! Words on Wheels. A children's mobile from Birmingham UK

7. Upper Murray Regional Library Service, Tangambalanga, Victoria in Australia. This van travels so far from base c200kms that overnight stops are required.
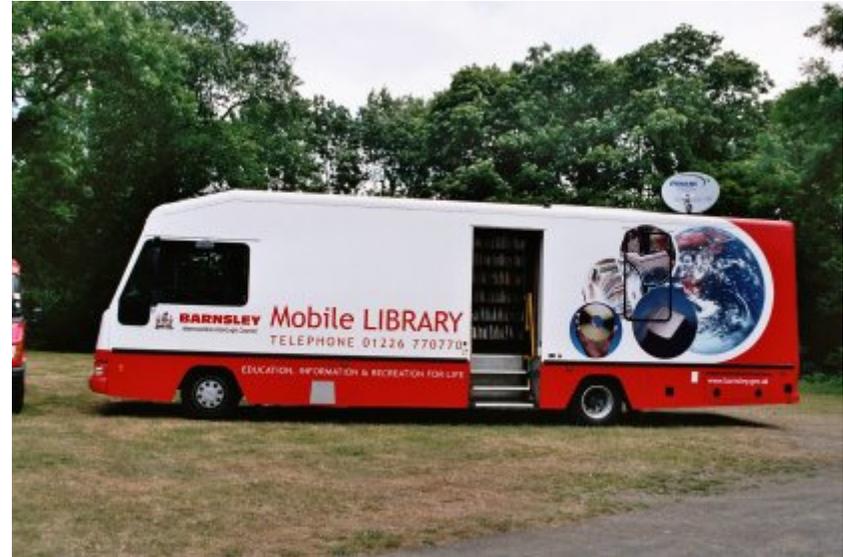

6. 3 axle small mobile library from Bexley UK . This shows low access and a small ramp

8. The mobile library can be a big advertising hoarding either for commercial profit or as with this Leicester (UK) van for the library service

9. Portugal's oldest surviving mobile library (no longer in service)

11. Barnsley, UK showing satellite dish which lowers into the roof to enable access to Low garage.

10. Bathala, Portugal replacement for picture 9. A small vehicle is required to get a service to remote mountain communities

12. Specialist mobile library from Spain showing its design promoting Don Quixote, also big wing mirrors and sliding door

13. Exotic colour scheme from Seoul in South Korea ,for a dual purpose van being both library and museum

15. Netti Nysse mark one. Showing how a bendybus can be used as a mobile library

14. Copenhagen, Denmark trailer showing the pod in extended position

16. Mobile Library from Norway showing long overhang front and rear

17. Barcelona Spain. Showing plug doors and heated dual front wing mirrors

19. In contrast this Australian van from Upper Murray Regional Library Service needs a canopy to keep out the sun. It also shows its pod extended.

18. Suffolk UK. To make the most of available light the entire side is a window.

20. Barcelona Spain showing lift for wheelchair access

21. Safety handrails as seen in Norway

23. Storage racks for CDs and DVDs seen in Norway

22. Access lift on mobile library from North west Regional Library Service in South Africa

24. Small trolley on Middlesbrough UK van. Used for residential home deliveries and to make easy changes of stock when going to different areas of the city

25. Neat stowage on a Barcelona, Spain, vehicle

27. This UK van shows how rotating racks add stock on little floor space

26. Round windows add interest and light to a Staffordshire mobile Library in the UK

28. Long interior of 13 metre vehicle from East Riding of Yorkshire UK showing counter lengthways (see Appendix 1)

29. Leicester UK shows interior rotating racks in front of a window

31. Interior view of Spain's Don Quixote van showing how shelves can be replaced for an exhibition and use of large screen

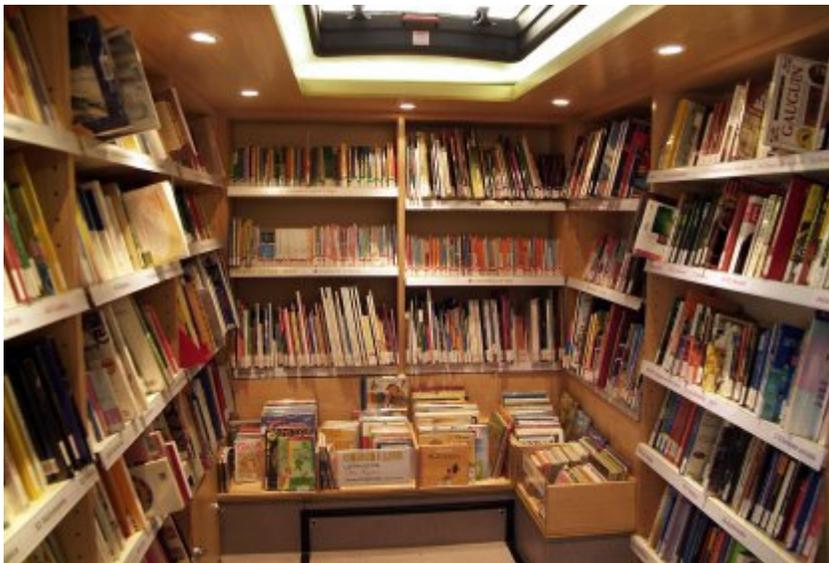30. Barcelona showing clean lines of lightweight aluminium shelving

32. Bega Valley,New South Wales, Australia showing rear counter in a vehicle with separate cab

33. Interior of Spanish mobile showing bright wooden shelves and tables.

35. Interior of Copenhagen mobile library with both pods extended

34. Interior of Spanish van showing 'kinderboxes'

36. Australian mobile from Tafe at Dubbo in New South Wales This shows the rugged build and 'roo' bars for a vehicle that travels across the outback for up to 450 kms at a time

37. Online access to local council information on East Riding UK vehicle

39. PCs for the public in Scotland UK

38. Neat arrangement of public access PCs on Walsall(UK) mobile Library

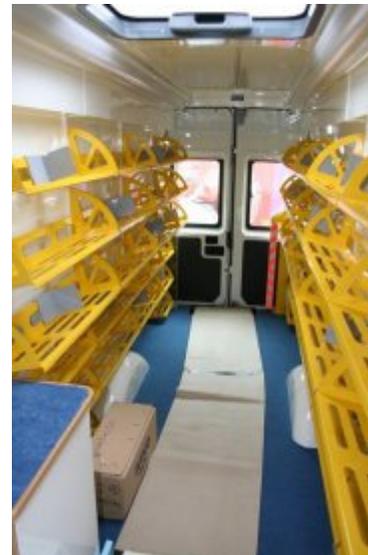40. A New Zealand mobile library with a bold message for the public

41. Upper Murray Library and its satellite dish and canopy

43. Barnsley UK installed pc s next to the counter to enable staff to give help rapidly

42. In the UK solar panels first appeared on this vehicle from the City of Bradford

44. Very lightweight shelves for use on a small home visiting van in the UK

45. Eye-catching colour scheme from Neath Port Talbot Wales UK A good use of Vynil printing

47. Not all mobile libraries are road vehicles, this is a railway carriage from Thailand converted into a library and IT centre in conjunction with the local police force. Its intention is to give street kids some education and try and keep them in a safe environment

46. Vibrant colours in Manukau New Zealand

48. Finally in Stockholm Sweden and elsewhere boats are used in coastal waterways This is Gurli moored in Stockholm harbour.

The most important asset of any mobile library THE STAFF

5.0 **Furniture and equipment**

There is a range of furniture and equipment which should be standard on any mobile library. Smaller vehicles are very restricted in space and priority is generally given to maximizing the number of volumes carried. Staff facilities in particular are often very restricted in these vehicles.

However it is most important that the needs of the staff are not neglected in an effort to maximise service provision. The staff are the most important asset on the mobile library and have to endure long hours in restricted surroundings.

5.1 Standard furniture and equipment

5.1.1 Shelving

Solid wood or metal shelving is the most common type but composite wood is being used more frequently as a cheaper and greener option. Wooden shelving tends to create fewer problems than metal. It doesn't flex as much and stays in place better. It is also quieter. Metal shelving can be cheaper and lighter.
See illustration 22, 23, 28-29, 30, 32-34

Shelving should be adjustable rather than at fixed intervals. This allows for different sized books and also makes the most effective use of space available.

All shelving should be tilted to prevent books falling off whilst the vehicle is in motion. Angled shelves are more satisfactory than other methods such as lips on the front or guard rails

Side shelves should be angled between 10˚and 15˚ to the horizontal. Shelves against the back wall should be even steeper up to 20˚.

The strength of shelving should be about three times that of normal shelving to prevent them splitting under load. The solid timber should be thicker than normal and the shelves shorter with more uprights.

All shelving should be constructed in separate bays with the length of the shelves not more than 760mm (30inches) to provide extra strength.

The configuration of shelving is a matter of personal choice but the aim should be to incorporate as much stock as possible which is easily seen and accessed. While it may be preferable to place books face out this is generally impractical.

It is preferable to have all sizes of books interfiled so as not to break up sequences but this will decrease the number of shelves available because of the grater distance required between them. It is therefore more space effective to have separate shelving for larger volumes.

Paperback fiction may well best shelved separately so that the shelves can be closer together. The use of separate rotating racks can increase stock dramatically at the cost of little space. Paperbacks are ideal for use in these as they are smaller and lighter.

Large print books, CD's, cassettes, DVD's and community material are generally shelved separately. Sensible consideration of users should be taken into consideration. There should be no books on the top shelves for young children and no large print on the bottom row.
See illustration 23

Ideally the bottom row of shelving should go no lower than 300mm (12 inches) This can be usefully used as locker storage space.

Children's books require special attention. Browser boxes allow the books to be displayed face out. Special 'pigeon-hole' shelves can also be used

Where wheel housing protrudes into the interior a little imagination is required to make best use of the remaining space. They can be built round to form a bench, storage box or have a browser box on top. Care must be taken not to protrude into the gangway.

Rotating racks may be inset into walls , in front of windows or on the wheel arches. They can be used for non-book material such as periodicals DVD's CD's video cassettes, posters computer games and toys.

5.1.2   Counter (Desk or Work Station)

Owing to the limited area available and to allow maximum space for stock the design and placement of the counter is critical. A counter running the lengthways can reduce the amount of space available for shelving. However it does put the staff out with the customers, which is often better than behind a counter 'barrier' Now that on-line computers are becoming the norm on mobile libraries the counter can be good place to mount these.

In van and bus type vehicles the front of the vehicle is generally considered the best place for the counter. Best use can then be made of bulk head storage by the staff.

Some mobile libraries have counters at either end of the vehicle designated 'in' and 'out'. With computerised issue systems this has become less

common and a single counter is the norm as it allows more room for shelving.

In a semi-trailer type mobile library the greater amount of space means the siting of the counter is less critical. See appendix for suggested layouts

The height of the counter is dependent on personal preference. There are two alternatives: a low counter at which the staff sit of 710mm (28 inches) or a higher counter at which staff stand of 920mm (28 inches). The high counter needs slightly less space on the staff side and is therefore useful on smaller vans. As smaller vans generally have shorter halt times staff comfort is not so critical.

The width of the counter should be between 500mm (20 inches) and 625mm (25inches). With the decline in use of manual issue the space is less critical.

When staff sit at the counter, a knee well should be provided, and a recess where the staff stand. Equally a small recess and bag rail are useful on the customer side.

The counter should have non slip surface and all corners should be rounded. It should also have lockable drawers and a cupboard. A cash drawer is usually a requirement.

Provision should be made for returned books and for holding reserved and requested books. Shelving behind the counter being the usual system, but dump bins on castors are useful as they can be wheeled out at busy times to give more choice for readers. Returned books are always the most popular

Special provision should be made for the issuing system. If a traditional card system is used, lips on the counter edge or built in recesses in the counter, may be used.

With computerised issue it is best to securely mount the pc on the counter. The keyboard can be on a sliding drawer underneath. The fixings should be padded to minimise vibration and attention paid to anti theft hardware. There should be adequate ventilation around the pc.

Space provision should be made for additional items such as printer modem and satellite box.

A waste paper bin(trash can) should be provided in the vicinity of the counter. This should be a built in fixture.

see illustration 28,30,32,33

5.1.3 Seating

Traditionally public seating has not been installed, as users tend to spend a short time on the mobile library and not use it for prolonged study. So it is not such an important issue in mobiles as in static service points. Seating therefore tends to be minimal and one seat over a wheel-arch is often enough. In larger mobiles where the stops may be of several hours, padded bench seats may be provided, doubling up as storage boxes.

The increasing provision of on-line facilities has meant that more people are staying for a longer period and it is therefore necessary to make sure seating is provided for pc users.

Seating for staff must be carefully considered so that the most comfortable, functional and well designed seats are provided. As mobile library staff may spend several hours travelling, it is essential that they have the maximum comfort.

Coach type fabric covered seats with arm rests and head-rest; fully adjustable should be fitted for driver and passenger. Seat belts should be fitted.

To save space in small vehicles the seats can be made to swing round. This should not compromise the safety of the seat belts and head-rests.

5.1.4   Notice board/Alpha numeric digital displays

The mobile library is an excellent publicity medium for local events, council matters and library services. A notice-board should be fixed in a prominent position. A glass cover enables removable lettering to be used but modern pc printing and lamination enables more attractive posters to be made. This can be in corporate style.

A touch screen notice board can be very useful.

Outside the vehicle window poster space can be included. This is very effective as many mobiles travel through town every day.. Display material should always be up to date and old posters discarded immediately after their date.
See illustration 37

5.1.5   Catalogues

Few mobiles have the space for card catalogues. Most authorities now use on-line systems so no separate catalogue is needed. Where an on-line

system is not available the use of mobile phones has transformed the ability of mobile staff to get up to date catalogue information.

5.1.6 Display area

With modern shelving systems it is possible to remove the shelves in one bay for a short period and make use of the space for attractive displays promoting stock and events. The summer reading scheme is a popular choice.

5.1.7 Children's furniture and equipment.

There are numerous options for more exciting areas for children. Kinder boxes can be supplied in different shapes. Bright colour schemes and plenty of display space, with various soft toys and soft cushions can give a friendly homily feel to the vehicle. Many soft furnishings can be stored to keep them cleaner until the appropriate halt is reached.

5.1.8 Technology

Mobile libraries are now fitted with:– PCs, Laptops, Printers, Scanners etc.. Whilst this uses valuable shelf space it opens up opportunities undreamed of for reference enquiries etc. The mobile library is no longer the poor relation of the library service but is an integral part.
See illustration 31,33,36,39 and 43

To achieve this technology, choices must be made on the communications system used. This affects telecommunications, bandwidth, satellite technology and cellular phones. Local conditions influence the choice. Whilst satellite is the most expensive it may be the only alternative in remote areas. As in all things you get what you pay for. A cheap satellite may connect you only to a satellite that skims the horizon, no good in down-town New York, for example, but probably quite acceptable in flat Saskatchewan.

5.1.9 Inverter power

To enable all the technology to work it is necessary to install an inverter to convert the 12-24volts vehicle battery power into 220-240volts for pc's etc. make sure the unit is powerful enough to cover all requirements especially if an electric kettle and microwave is included in the staff quarters.

5.2 Staff amenities

The size of the vehicle usually determines the range of staff facilities but some or all the following may be included:

- An encased washbasin with outside tanks. There should be a separate header tank for the hot water system. The hot water can be heated from the engine.

- Towels

- A cooking device
  This is usually a small microwave oven. Camping gas stoves are generally considered dangerous because of live flames and fumes. Electric hobs draw too much power.

- A small refrigerator

- A clock

- A storage cupboard and basic crockery and utensils

- A fold away table

- Storage for drivers log books schedules maintenance reports etc

- A wardrobe and mirror

- Toilet facilities

- Radio and on board music system

- Mobile phone (cell phone)

5.3   Enhanced Furniture and equipment

As users expectations increase so the library service must become more sophisticated. What has become standard equipment in static libraries must become standard on mobile libraries. I-pod players, PCs, Laptops, Printers, Scanners are common in branch libraries and provide a needed service and so should be provided on the mobile library.

With larger vehicles the library becomes a community focus. There should be extension activities and a range of equipment to be used in them. These may include television, a screen for *powerpoint* presentations, recording equipment, audio equipment and digital camera/ recorder.

Mobile (cell) phones should be fitted. A public address system can be useful when the vehicle is acting as a mobile advertisement for the library service at shows fêtes etc.

6.0 Staffing

There are many variations and view points regarding the number and type of staffing of mobile libraries. The principle that should be universally applied is that the staff form an integral part of the overall library structure.

All library staff may be involved in mobile library operations, including working on the vehicle as part of a rota. This practice enhances the idea of a unified library service and increases staff awareness of the mobile library service and the needs of rural residents. The variety of work usually leads to increased motivation.

Management should encourage participation but not make it compulsory as an unwilling member of staff is unlikely to provide the commitment and level of service that is required. In many cases the mobile library is run by a dedicated member of staff with varying assistance from other members of the library service. The advantage in this is that continuity of service allows mobile library staff to develop a comprehensive idea of users' needs.

Mobile libraries and their staff need to be given the same status as static service points. Schedules should be arranged so that mobile library staff can have the opportunity to also participate in activities offered to headquarters staff. The driver of the mobile library must be regarded as a full member of the library team not just a chauffeur.

Mobile library staff should have

- Opportunity to participate in regular staff meetings
- Time to attend professional and personal development courses
- Written job descriptions
- Regular evaluations
- Continuing education programmes
- Time for promotional activities
- Equal conditions of service with other staff
- Involvement in the strategic planning of the library service
- Participation in book selection
- Participation in route planning
- Consultation in designing new vehicles

The type of staff operating the vehicle will vary according to local agreements. In this guide three types of staff will be considered professional, paraprofessional and non-professional

6.1 Professional Librarians

Many mobile library services are operated by librarians with accredited professional qualifications and are members of the country's Library

Association. The work involved in providing service from a mobile is the same as that provided in a static library with the exception that there are fewer immediately available resources to draw on.

6.2 Para-professional

The term paraprofessional is used to describe those staff who have undertaken study leading to a formal qualification which makes them eligible to perform more complex tasks in a library but does not qualify them to undertake the duties of a librarian.

6.3 Unqualified staff

In some countries the direct services of a librarian may be unavailable. In this situation non-professional staff operates the service. The lack of professional qualifications is invariably compensated by a great deal of dedication, commitment and personal rapport with the readers.

6.4 Volunteers

As a principal all staff should receive remuneration. Volunteers while well-meaning and enthusiastic do not have the training and knowledge to give a good library service. Volunteers can however be used for example to control crowds at school halts, deliver books to isolated people and to act as local advisers when there is a service interruption.

The library should have a general policy on the use of volunteers in all its services

In an increasing time of litigation the library service must not leave itself open to damage claims. Volunteers, like all regular staff, should:
- Be checked against criminal and sex-offender records
- Dress and act according to the authorities guidelines
- Work according regular staff conditions
- Understand health and safety requirements
- Understand use of equipment and safety clothing
- Not drive the vehicle unless proof of qualification has been given and insurance cover is in place

6.5 Number of staff

The number of staff required to operate a mobile library in average conditions has been accepted as 60 books issued per hour for many years. However the increased use of on-line reference materials means that a formula for enquiries should also be considered.

Some areas demand a separate chauffeur to drive the vehicle even if two staff are not required issue wise. Two staff are to be preferred in more dangerous areas.

The layout of the vehicle can dictate the number of staff, those with separate in and out counters needing at least two staff.

The staffing arrangements can vary. For example the vehicle going a long way from base may use local staff who meet on site. This saves paying staff for travelling as passenger. With two staff it is possible to stagger meal breaks and thus have a continuous service and not close for lunch etc..

Local staff may also be drafted in to serve at busy evening halts or school or factory halts

An often overlooked economy is that where there are two vehicles operating, each with one staff, it may be possible to double the staff on one vehicle and go out for half the time at each halt. Whilst it cuts down the time spent at each halt it keeps the same staff time. This cuts out one vehicle and the money saved may avoid the need to make staff redundant.

6.5.1 One-Person Operation (Single staffing)

The current trend is for single staff operation in which the member of staff both drives and serves the users.

Sufficient time must be allowed for the single staff member to attend to routine procedures such as re-shelving. Itineraries should be carefully planned to allow for extra staff at school halts etc. This can be overcome by concentrating busy halts on the same routes, or using locally based staff.

Single staffed vehicles should always get a second person to help with reversing manoeuvres. Or a reversing camera should be fitted

6.5.2 Two People operation (Double staffing)

Two people operation is usually a driver and a librarian or unqualified member of staff. Both staff usually contribute to the service, but it is the driver's responsibility to complete vehicle checks, log books, fuel returns etc.

6.5.3 Relief staffing (Substitutes)
Provision should always be made for relief staff to work in case of illness, holiday or vacancy. Whether these people come from the rest of the library system or on a casual basis they must have adequate training and instruction in health and safety etc. It is useful for staff wishing to take up a post in the mobile library service to complete some days as a substitute.

Care must be used in the use of substitute drivers. Agencies can be used but can only supply a 'chauffeur and a second library assistant may be required. Dedicated substitute drivers are a better option. These can be retired drivers, other council drivers, retired armed forces drivers fire-fighters etc.

It is most important that the mobile library service is strictly maintained as its customers often have the most difficulty of all users in accessing the library service and the infrequency of visits means that a missed halt denies people a service for a long time.

6.6   Training

It is more important than in most library areas that the mobile library staff are well trained. Often they are out on their own with no immediate supervision. The advent of mobile (cell) phones has helped decrease the sense of isolation.

First aid, health and safety and customer care training are all requirements for the good mobile library staff

The mobile library staff may be the only member of the library service seen by its users, indeed they may be the only representatives of the local authority. As such they need to represent the authority in its best interests and be aware of current ideals. So they should receive necessary training and instruction.

6.6.1   Library Qualifications

It is desirable to have a qualified member of staff involved in the mobile library service but not necessarily on every vehicle. Mobile phones and on-line messaging has lessoned the need for full time professional involvement.

6.6.2   Driving

All drivers should have necessary qualifications for the size of vehicle driven. It is good practice to check annually and keep a record of licences at mobile library headquarters

6.6.3   Library management system(LMS)/Integrated Library System (ILS)

It is now the normal practice for new vehicles to have contact with the library management system, whether on-line or offline with evening uploading. This keeps the mobile library stock as part of the whole library system and allows access to the rest of the library stock. The well supported mobile library now has access to on-line reference sites.

 The LMS can also be used as a security system. Mobile libraries that travel a great distance (up to 450 kms in some cases) can be seen to log in.

Failure to log in can alert headquarters staff of a problem. It can be used for messaging.

7.0   Collections

The stock of a mobile should aim to reflect the community's need for recreation, information, education and culture. Each community is unique and the library's collection should reflect this. It is necessary that collections meet specialist as well as general needs. This may include books in different languages or for materials relating to specific industries or activities of especial interest to the community. It may require material relevant to the age, sex, religion or ethnicity of the community. The range and depth of stock for the mobile library to draw on is a product of the library authorities collection development policy

7.1   Collection Development Policy

A collection development policy (stock policy) cannot exist in isolation but must support the goals and objectives of the library system which in turn should be based up the community's needs. The specific goals and objectives of the mobile library service should form an integral part of the library system's overall mission. The policy should:
- Indicate the needs and priorities of the collection
- Set parameters of what will be collected
- Specify the range and depth of the collection's coverage

A collection development policy should be sufficiently flexible to cater for changing needs and goals. Selection should follow the policy's guidelines but be readily adaptable to respond to the dynamic nature of mobile library service provision.

Specifically, the policy should consider the following areas:

- The library objectives
- The needs of the community
- Short, medium and long term goals
- Library and authority policies on service provision
- Acquisition determinants such as funding, networking and resource sharing
- Responsibility for selection and acquisition, including responsibility for co-ordination
- Formats to be collected
- Categories to be collected
  - Priorities
  - Subjects
  - Genres
  - Depth of coverage
  - Range of coverage from elementary to advanced

- o Exclusions
- o Emphases
- Range and depth of formats in categories collected
- Policy on donated materials
- Withdrawal policy
- Censorship policy
- Policy on payments
- Selection criteria such as quality of production or country of origin
- Limiting factors such a a financial ceiling per item
- Collection development standards

7.2   Resource types (Materials)

Whilst books, in both hard and soft covers continue to be the mainstay of the mobile library, resources in other formats are now in common use. In many cases they provide the only means of satisfying a users needs. Cd's CD-ROM's, DVD's and on-line resources must be considered part of the library resources. The mobile library stands to gain more than most when connected to the internet as it provides the sort of reference provision never before possible. Talking books and DVD's can easily be listened to in different languages and so minority groups will find they are able to access mainstream products in their own language.

Toys may be the only resource the library can provide for children with physical or intellectual disabilities. Resources in other languages should be available for children.

7.3   Resource Quantities (Material quantities)

The amount of stock carried on a mobile library is roughly as follows

- Transit type van   1500
- Up to 7.5 tonnes   2000
- Up t0 20 tonnes   2500-4000
- Semi-trailer   5000
- Semi-trailer with pods 7000

These are for a van fitted with standard shelves. The use of larger shelves face on display, spinners, magazine racks etc. will all vary the amount to be held.

7.3.1   Collection Consideration

The following points may be taken into consideration when deciding the ratio of stock.
- Adult fiction generally provides the highest percentage of the library's issues. The ratio of hard backs to soft backed books is more critical

on a mobile library and the smaller size and less weight of paperbacks may justify using more than in a static library.

- Adult non-fiction covers the widest range of categories. Whilst adult fiction can generally be divided into a small range of genre such as science fiction, crime, romance: non-fiction covers hundreds of categories. It could be argued that therefore the vehicle should hold more non-fiction than fiction as the range is so much wider. In fact it is so wide as to be impossible and therefore the mobile library must rely on good staff and excellent back-up stock to provide a good service.

- The collection should reflect the immediate needs of the community but not exclusively so. The tendency to over emphasis popular subject areas should be avoided. Due to its small size the non-fiction collection on a mobile library can be only a representation of the wide range of material available. Regular changes of stock and a good request system are vital.

- The use of children's books varies greatly according to type of service offered. If schools and pre-school centres are to be visited the percentage of children's books will be higher. It may be possible to put the school halts on set days and load the vehicle appropriately on those days with special additional collections. Equally the amount of picture books or teen reads will vary according to the places served.

- On-line PC's should now be seen as the goal to be aimed at and the provision of these will influence the amount of reference stock, if any, is to be carried.

- Audio materials should be carried. These can be DVD's and CD's. They should include talking books and films plus non-fiction DVDs e.g. house decoration or gardening DVDs. Modern DVDs are available with multi-language options.

- The downloading of books, music and talking books should now be considered when designing new mobile libraries

- The geography and demography of the routes should be analysed and stock supplied accordingly. For instance note should be made of high concentrations of older people, children and other language speakers. Equally visits to old peoples homes hospitals and welfare centres should be take into account when stocking the mobile library

7.3.2　Starting a collection

When starting a new mobile library service or extending routes into new areas, there will be uncertainty over what stock to put on the vehicle. User surveys and feedback from similar areas should be used
The following is a suggestion of good starting ratio per 2000 stock items

Adult fiction	500
Adult non-fiction	400
Children's fiction	200
Children's non-fiction	200
Picture books	200
Teenage	150
Adult literacy/ foreign language	100
Large Print	100
Talking books	50
Audio	100

7.3.3　Stock exchange (materials rotation)

Stock should be changed with base headquarters on a regular basis. Shelves should be refilled every day and worn or damaged books removed. The use of stock on the mobile library needs constant monitoring and rarely used items should be removed. No item should remain on a mobile library if it has not been used for 6 months.
All stock should be changed after a period of two years.

An easy way to change stock where more than one mobile library is used is to change over routes for each vehicle. Some services do this as a regular feature. For example the green van does green routes for two months and then does the red route for two months. Kirklees authority in the UK painted its four vehicles all in house style but in different colours. The readers were then aware that they saw four different vehicles at their weekly halt over the course of a month. This system gave the readers a choice of 4 times the stock they would have seen.

7.4   Donations

Donations can be a worthwhile supplement to the stock of a mobile library. There are however problems
  • Donors may want to specify that the book only stays on the mobile library and can't be exchanged
  • Some areas give more and better books than others. This could lead to unbalanced stock in some areas
  • Donations may only come in certain fields and there is a danger that these are over represented
  • The donor may have a commercial, political or religious reason for donating
  • The content of the donation may be unsuitable for a variety of reasons- it may be politically or religiously insensitive. It may be deemed too violent or it may just be too technical.

Despite all the above, donations can, if used with care gave a greater range of stock for the readers. A written donations policy, agreed with staff and politicians is useful. Donations should never be turned away, but the library must make the proviso that it can do what it likes with the donation. All donations should be sent to headquarters to be properly processed and vetted, not just put on the nearest shelf.

'Thank you' letters and book-plates acknowledging the donor are nice gestures but should not be overdone.

8.0 Service Base

The service base is the place from where the mobile library operates. Preferably, the base would form part of the headquarters or a branch library but it may have a separate building and location. The base should consist of a garage and work area. It should be convenient for access to the areas served.

In many cases the mobile library forms part of an authority's fleet of vehicles and be housed and maintained by a separate department. In this case there may not be a need for a garage but there should still be covered parking area at base

8.1 Garage

An enclosed garage is to be preferred, and it is essential in some climates particularly those with freezing conditions

There should be a minimum of 1.5m (5 feet) space surrounding the vehicle to allow room for inspection and maintenance work.

The possibility of future vehicles being larger must be considered

The height and width of the entrance should allow for easy access. Drive through is preferred to cut down on amount of reversing and its potential hazards.

Vertical rolling or sliding doors take up less space and power operation (with manual backup) saves time and effort.

The floor of the garage should be sealed and well drained. An inspection pit is an advantage.

Exits should be clearly marked and fire fighting equipment provided. All electrical apparatus should be regularly checked and suitably protected with circuit breakers etc. There should be a fire wall between the garage and library space

The garage should be fitted with power, lights, fans, storage space for tools, and maintenance/cleaning materials. Ideally there should be heating and a security system.

Power points should be provided so that they are convenient to the vehicle for battery charging, cleaning and heating.

A loading bay at least 1.5m (5feet) should be constructed to allow direct transfer of stock to the vehicle.

8.2   Work area (Office space)

A defined work area should be provided adjacent to the garage for sorting stock for exchanges etc.

Double doors between the garage and work area should be double hinged with kick plate at bottom and window at head height.

The loading bay and work areas should be on one level or a lift provided. The backup stock should be located in this area. As a rough guide there should be approximately three times the stock in reserve as on the vehicle and on-loan.

Moving or railed shelving can help with space problems. Work tables, desks, PC's and staff amenities should be provided as in any other library work area.

9.0   Promotion

Mobile library services are provided to equalise as far as possible the opportunity of access to library services .The aim should be to reach and attract as many people as possible. In many cases rural residents have

been the last to receive library services and consequently have less tradition in using them. They have less knowledge of how the system works and its range and depth.

A mobile library stocked with books is not sufficient in itself to attract its full potential of members. It does have the advantage of being less intimidating than a static branch. It brings the service to a customer in a small size.

It is vital that the library and its services are promoted continuously so that new members are attracted and current users are made aware of the vast range of services available.

The means of promoting the mobile library are varied limited only by the available funding

9.1 Permanent Publicity

The mobile library's most effective publicity is the vehicle itself continually travelling the area. Therefore the vehicle should be very distinctive and its purpose obvious. The vehicle should have an eye-catching design and the word library should be prominent. It should also include the authority's name and corporate logo so the mobile is seen as part of the larger system.
See illustrations 3,12,13,45 and 46

9.2 On-going publicity

There are many ways to promote the mobile library service. The following list provides examples and ideas
- Production of calendars containing details of service and visiting times.

- Distribution of services and schedules to households community organisations information points post offices banks etc.

- Use of notice boards in shopping centres council offices static

- libraries doctors' and dentists' surgeries.

- Production of a service newsletter

- Use of other organisations' newsletters

- Articles and adverts in local press, radio and TV

- Information on government and local government circulars

- Bookmarks listing services and schedules

- Use of mail centres to distribute fliers

- Letter drops by local post, milk, deliverers and garbage collection service

- Using the mobile library at special events such as fairs, markets, carnivals, show days, historic events, school open days etc.

- Extension hours activities such as story hour book talks poetry events

- Displays in shopping malls community centres

10 The most important asset

Finally whatever shape or size the vehicle where ever in the world it travels the most important asset on a mobile library is the STAFF Good staff are essential to maintain good service.

Appendix 1

Diagrams of some suggested layouts for Mobile Libraries

 The following diagrams are given as guidelines to help when designing the layout of a new mobile library. All drawings assume left hand drive vehicles, unless of a specific right hand drive vehicle. Right hand drive users from UK, Australia etc. should use a mirror image of the plan. These are not scale diagrams but an indication of the different placement of features on the vehicle.

In all vehicles having only one door a second means of escape in case of fire or traffic accident should be installed. This emergency exit can be a window or a second door normally concealed behind shelves. Often it can be as simple as using the existing drivers door with suitable guiding.

1 Two door rear counter
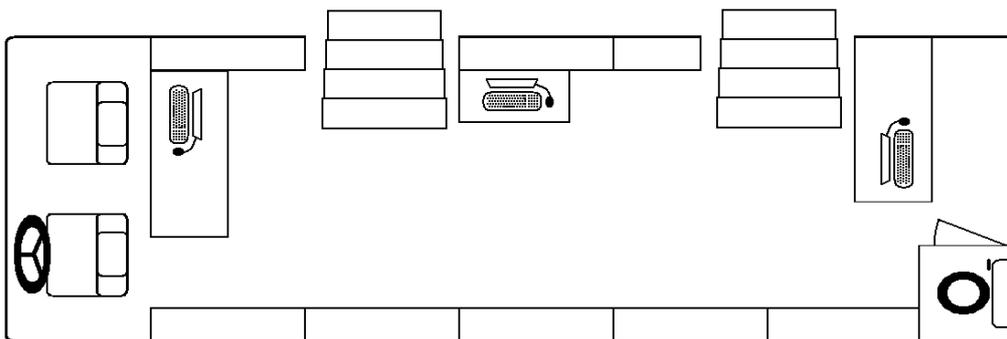
This has two doors, one for entrance and one for exit, with a counter by each door. This is useful on busy routes. It is not as important where computerised issue is used. A toilet/washroom has been shown as an optional extra.

The front counter uses the passenger seat as a seat for the staff. However with modern safety seats and seat belt fittings this may no longer be an option and provision for a second seat will be needed. This will mean re-siting the counter further into the vehicle

2 Two door one counter.

This is useful on where the vehicle serves schools or very busy halts where a more regimented system is required.
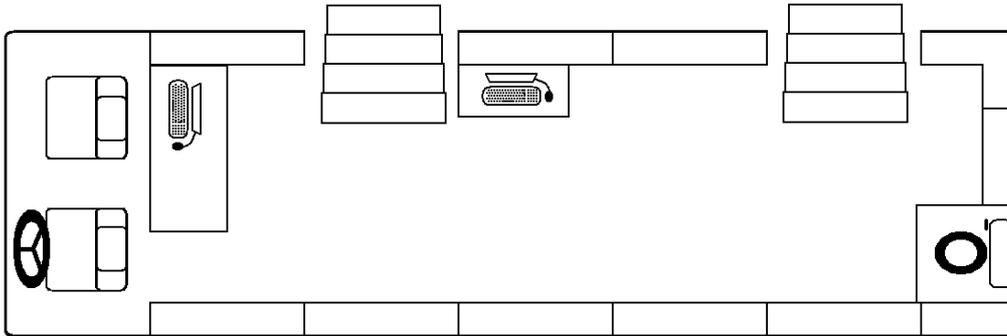
3 A single entrance front counter

A single door maximises shelving area. This is useful where the readers mainly arrive at the start of a halt, and then leave more or less together. Once again an optional site for the toilet is shown. The counter is hinged to allow for access by staff.
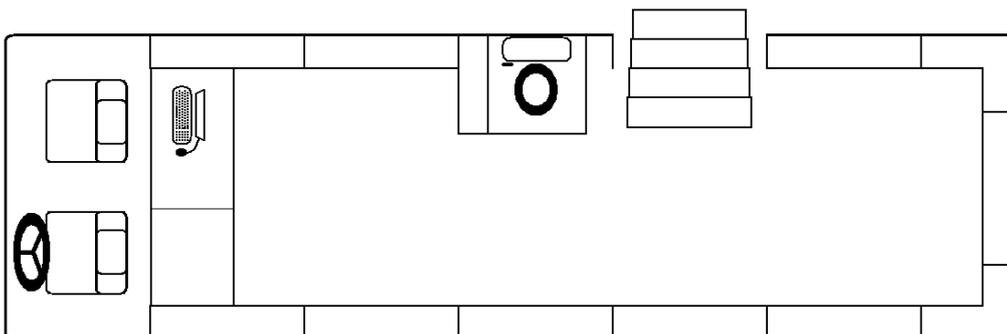
4 Single counter Rear entrance.

The rear entrance can be used for shallower steps or long ramp. It is useful in school and factory yards. But it can be dangerous on main roads.
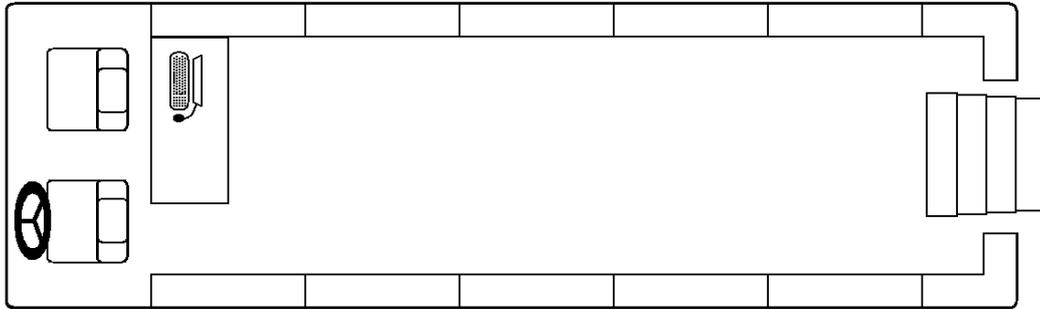
5. Single entrance at rear side counter.

This is an actual example from East Riding of Yorkshire in the UK (hence the right hand drive) A rear entrance and side counter gives a great feeling of spaciousness and the side counter puts the staff in with the customers not behind a barrier. This has proved a very popular layout with users.
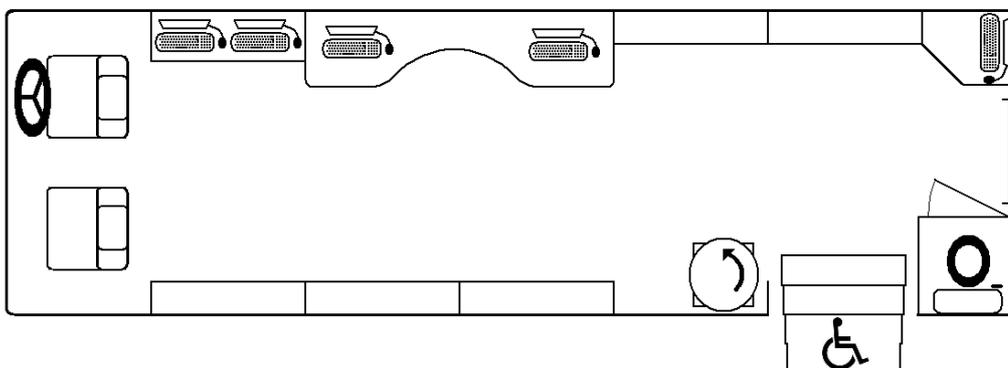
Suggested locations for the washroom/toilet.

The side of the rest-room can have shelving and the door can hold a leaflet rack. If the facility is only for staff use the public need not be aware of it. We are not suggesting you need four toilets! They are the four suggested locations.
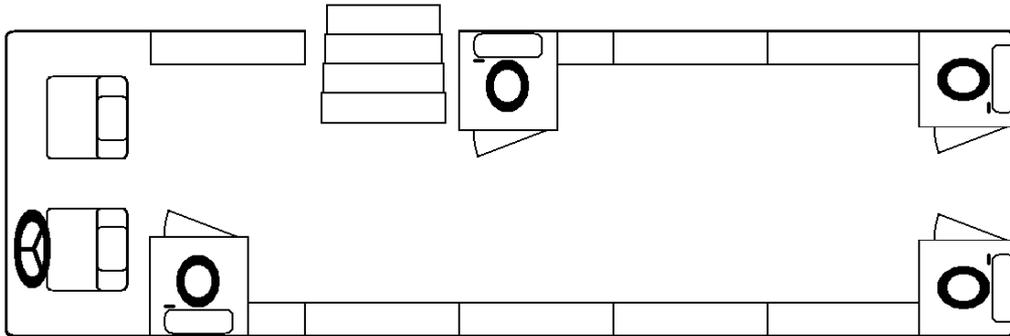
Suggested Locations for spinners to hold paper backs

Spinners can be put in front of windows. They hold the same amount of books as the shelving they replace. They are useful in colder countries to maximise the sunshine getting in the van. This also saves on lighting costs. Useful in more dangerous areas where staff can readily see what is happening outside. Potential users can see inside. Some vehicles use a complete side of windows using metal shelving with minimum back support
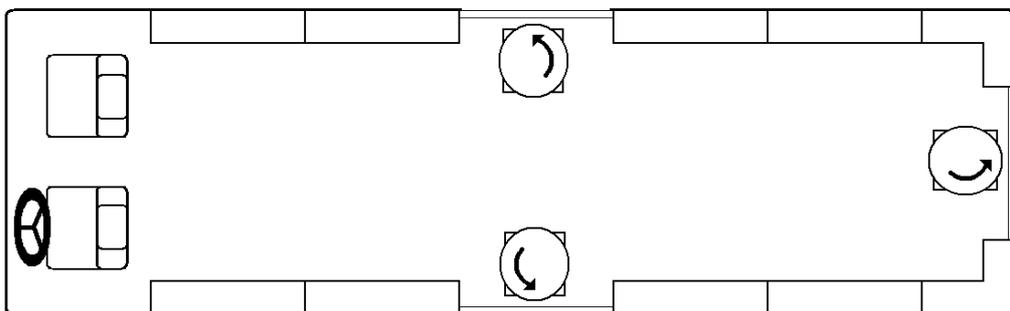
Suggested locations for doors

The doors shown are step lift type. The entrance steps can fold down into a lift to help with wheelchair/pushchair access. Public doors should never be put on the driver's side of the vehicle!
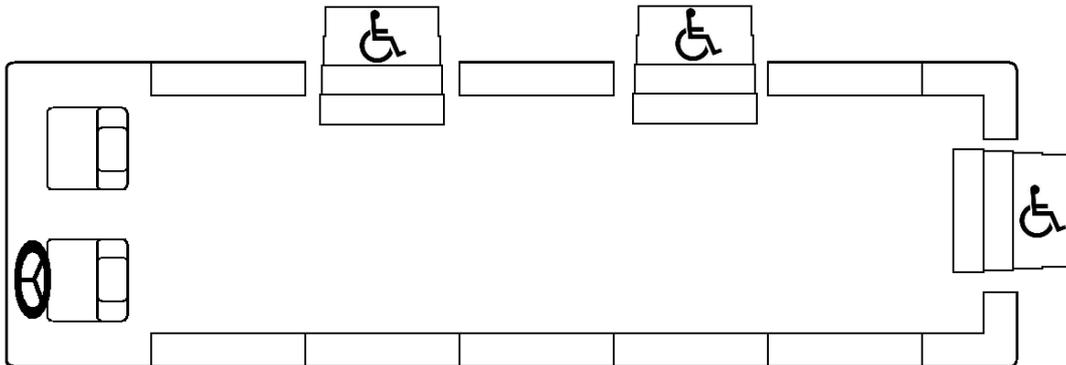
Separate entrance for Wheelchairs

At busy halts a person in a wheelchair can hold up the queue when using a step lift. This can cause embarrassment to the wheelchair user. The answer may be the separate wheelchair entrance. Some possible configurations are shown. The downside is that the wheelchair user may be made to feel 'different' and feel they are an inconvenience to the staff. Also the second entrance uses valuable shelving space.
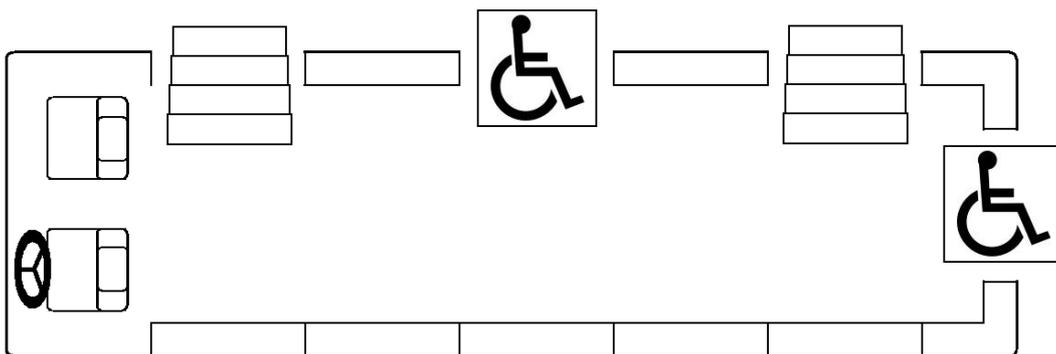
Using extend-able pods

This is dealt with in the section on trailers

Appendix 2

Trailer layouts

As with self propelled vehicles I have used left hand drive as the norm. Users in the UK, Australia, Japan etc. should use a mirror image.

Please note these are diagrammatic and not to scale. The length of a trailer can vary from 13 metres (40 feet) to about 8 metres (25 feet).

All vehicles are shown with an entrance for wheelchairs in the step- well. As with the self-propelled vehicles this can be changed to suit local conditions and available finance. Trailers can be much lower than self-propelled units especially where they have only one axle at the very rear and often a retractable ramp can take the place of a more expensive lift.

Once again the provision of toilet (rest-room) facilities can be inserted in various places (see self-propelled section). Similarly trailers can be made very light and airy buy the imaginative use of windows and roof-lights.

In all vehicles having only one door a second means of escape in case of fire or traffic accident should be installed. This emergency exit can be a window or a second door normally concealed behind shelves.

Trailer 1. Single door mid entrance
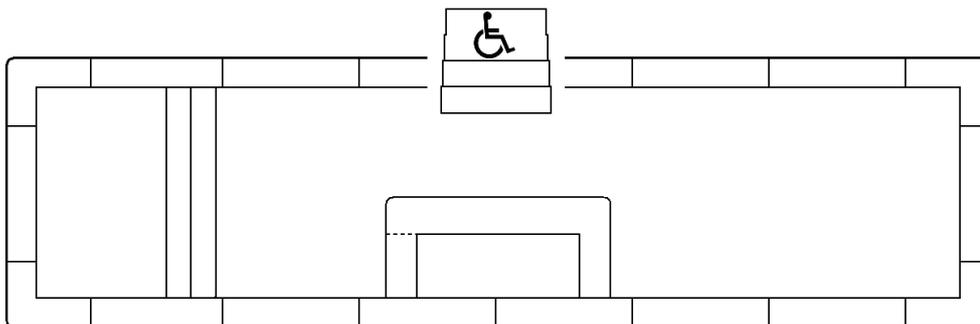
This has a middle entrance and a counter facing the entrance. In colder climates some sort of glass screen will keep the staff warm. This design has the advantage of staff being able to see immediately who is coming in and give appropriate warm welcome.

On the downside, staff in a warm glass cubicle, can appear unfriendly or unapproachable to new users.

The section on the left is a raised part where the floor clears the fifth wheel coupling unit. Traditionally with its lower headroom it is used for the children's section. Children are usually more agile at getting up and down the steps. But provision should be made for the child in a wheelchair. This is usually a removable ramp.

Trailer 2 Two entrances round counter

Two entrances round the counter can be useful at very busy halts. This is important as trailers tend to be larger and less manoeuvrable and so should be used in places where high usage is expected. This means they will stay in one place for longer periods and are usually busier.
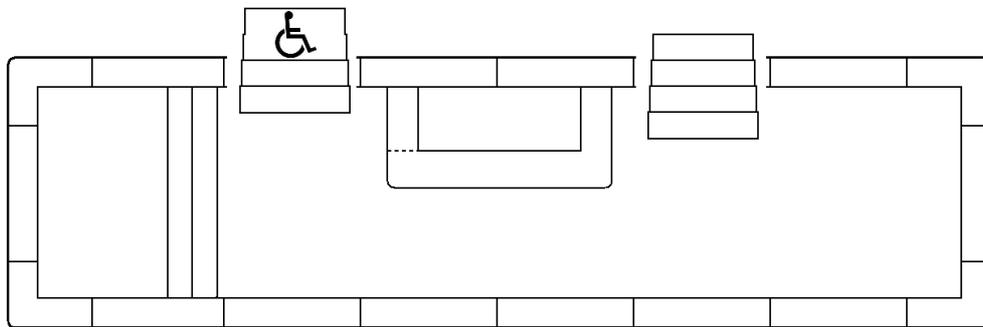
Trailer 3 Single entrance. Counter at the rear.

Once again this gives good viewing of incoming users for the staff and chance to welcome people. It gives a very spacious feel. This design is suitable for insertion of a toilet facility and of spinning book racks.
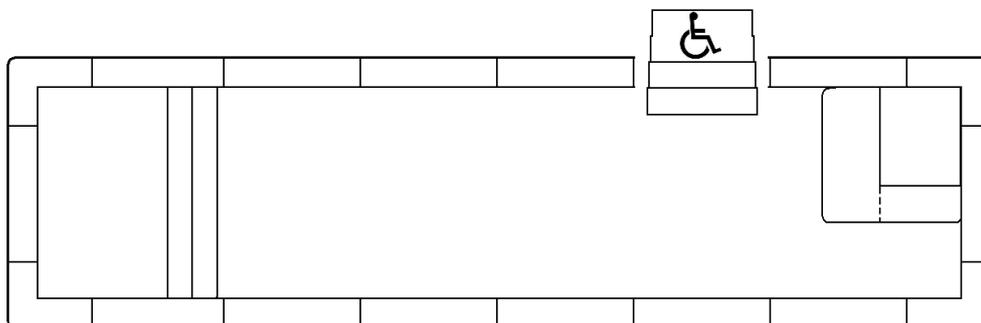
Trailer with pods

Pods can give up to 50% extra space whilst using a normal amount of garage space and room out on the road. Basically a 'pod' is an extending room that is stored within the vehicle when it is travelling. They are usually power operated and include various safety features to stop them falling over or coming out when the vehicle is in motion.

Care must be taken that items are not left on the floor when the pods are to be closed. It can be useful for staff to be able to gain access eg in the garage, without opening the pods, so if the door is in the pod a separate entrance should be provided.

The drawing shows two pods but the use of a single pod is perfectly feasible. It also shows various positions for the doors. This design puts the staff in the pod facing a popular section, such as the cd and dvd section. It can also be used for a children's library, neatly keeping them out of the way of adults.

Very low access can be achieved as the pod can come out over the pavement, or purpose-built train-style platform.
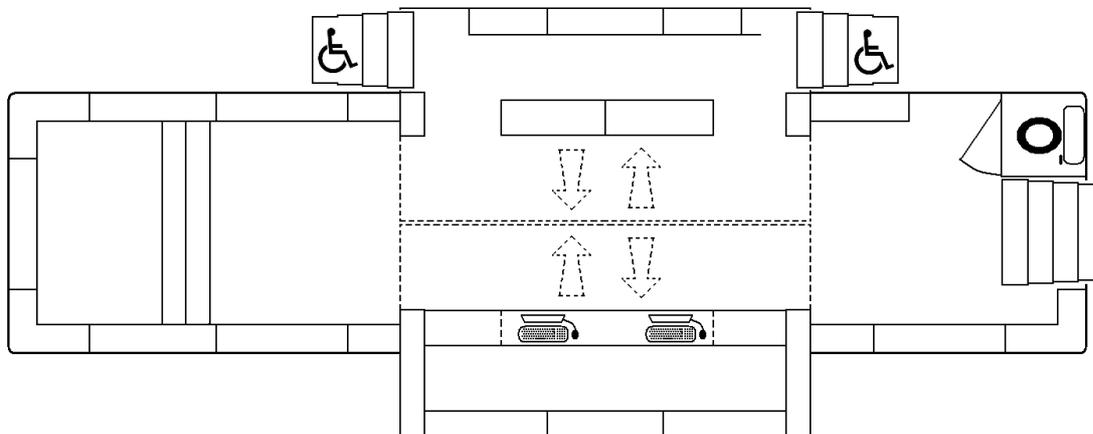
Suggestions for enhancements

Because of its larger size the trailer can have more enhancements. Here is a drawing of a trailer based on one used in the UK. It has a separate staff area which contains toilet, sink, cooking facilities and dining table. With more than one staff on duty it can be kept open over meal breaks, thus maximising usage.
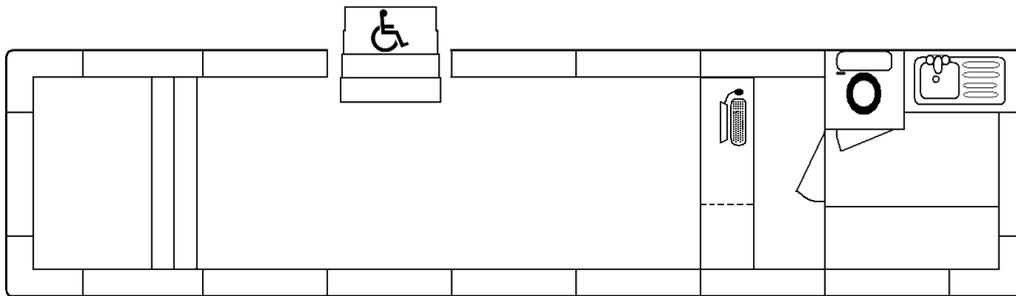
Appendix 3

<div align="center">Useful Websites</div>

Whilst a Google search using the words *'mobile library'* *bookmobile bibliobus* etc. will bring up lots of sites they are in no particular order. Mobile libraries can also be found on *You tube Twitter, Flickr* and *Facebook*

The following are recommended sites and are all good as a starting point.

The IFLA Public Libraries Section web page is the home site for this publication and a section can be found listing useful websites. This will be constantly checked and updated.

Because websites are often short term only a few important sites are included here

IFLA Public Libraries section
http://www.ifla.org/en/public-libraries

Conference proceedings
(Find a conference and scroll down for mobile library papers)
http://archive.ifla.org/IV/confproc.htm

UK Branch and Mobile Libraries Group
http://www.cilip.org.uk/get-involved/special-interest-groups/branch-mobile/Pages/default.aspx

USA bookmobile group of ALA
http://www.ala.org/ala/aboutala/offices/olos/bookmobiles.cfm

http://www.ala.org/ala/aboutala/offices/olos/bookmobiles/servicesbookmobile.cfm

Australian Mobile Library Page
http://www.mobilelibraries.com.au/

Spanish Mobile Library Section
http://www.bibliobuses.com/

Randers in Denmark has an excellent site
http://www.randersbib.dk/default.asp?page_id=79

Two sites on Green mobile libraries
http://www.techsoupforlibraries.org/blog/green-bookmobile
Green mobile in California

http://olos.ala.org/columns/?p=139
UK paper by Ian Stringer for US bookmobile section

The famous camel library has its own site
http://camelbookdrive.wordpress.com/

For an idea of how many mobile libraries there are see

http://www.statemaster.com/graph/edu_pub_lib_num_of_boo-education-public-libraries-number-bookmobiles for the number of US bookmobiles

and

http://www.google.co.uk/images?hl=en&safe=off&q=bibliobus&um=1&ie=UTF-8&source=univ&ei=LFr-S8v1Kqay0gTqwJjnDQ&sa=X&oi=image_result_group&ct=title&resnum=4&ved=0CDsQsAQwAw : an index of French speaking bibliobuses

http://homepages.nyu.edu/~mg128/International.htm : International book buses, includes useful links

Punjab private Library
http://www.nriinternet.com/NRI_EDUCATION/India/Jaswant_Singh/index.htm

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