

**Interreg**  
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European Regional Development Fund



EUROPEAN UNION

## **Regional Lessons learned report**

### **Pilot Integration Public Transport - Target Group Transport**

#### **Middelburg - Vlissingen**



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## MANAGEMENT SUMMARY

According to the Regional Mobility Strategy, future transport in Zeeland must be innovative, affordable and are future-proof and offer quality for the traveler. That requires flexibility and adaptability of public transport and Wmo transport (target group transport). Both systems have their challenges when it comes to updating the cost recovery ratio and cost control. It is important not to prioritizing a reduction in the level of facilities, but thinking in other forms of public transport, in order to realize a more suitable offer.

Public transport and Wmo (targetgroup) transport can be seen as communicating vessels. The more accessible public transport is organised, the better it is an alternative to target group transport. Seducing Wmo travelers to public transport appears in practice difficult. The high level of service at an attractive rate at the Wmo taxi versus the cases of insufficient public transport (transfer, walking distances, no suitable route or time) make it in practice difficult to get Wmo travelers to do so.

This is also the case on Walcheren. It's clear that there is a problem between Middelburg and Vlissingen intensive WMO transport system (many taxi rides) and at the same time low use of bus lines 57 and 58, except for a few rush hours.

It is precisely in the combination of target group transport and public transport that there are opportunities for joint further development. It's about solutions that are accessible to the target group, improve accessibility and are better in terms of costs to be carried by the province, municipalities and travelers. Both in the public transport vision of the future 2040 and in the regional mobility strategy, it is expected that more new flexible demand-driven transport concepts will appear. This raises the question, precisely in this area between Vlissingen and Middelburg, if there is sufficient potential for a new transport system that can be tested on a pilot basis.

The aim is to match the transport needs as closely as possible, so that the available resources are used better and travelers receive a more suitable transport offer.

In this exploration we have developed a number of outline scenarios (see chapter 5).

In several stages of elaboration, these have been tested against criteria drawn up in advance and discussed with the municipalities of Middelburg and Vlissingen, the province of Zeeland, Connexxion and Taxi de Vlieger. In addition, there is twice consulted a focus group containing people who work with the target groups almost every day.

This iterative process has led to multiple adjustments and ultimately to a supported preferred variant for a pilot:

The Flextaxi (see chapter 6), with the following features:

- A taxi that travels directly from any busstop to any other busstop in the area;
- Reservations can be made by phone, via web or app;
- In addition to the existing bus stops, additional busstops will be added;
- Flextaxi runs every day of the week from morning to evening;
- The rate (tariff) for the customer has yet to be determined;
- It is a supplement to the unmodified Wmo transport and to line 57 and line 58, where line 58 alone is not more in the evening and on Sundays, moments with very limited transport demand.
- The implementation takes place as much as possible with the existing resources: the current drivers and vehicles that can also be used for Wmo transport and bus stop taxi with the organize, ride acceptance and planning from the Municipal Transport Center Zeeland.

This makes the total transport offer more diverse: on balance, more departure options are offered at more times and in all travel directions. Flextaxi is expected to close the gap better between public transport and Wmo-transport. It can be attractive to public transport users, new users and WMO travelers. For that last one group, the shorter pre-registration time is an advantage and is it an additional alternative that is more intricate than the current ov. Because you can travel directly from the nearest busstop to another busstop

of your choice and because extra stops are being added, there are less frequent transfers and walking distances limited.

Because it is a busstop-busstop system, it can be carried out more efficiently than Wmo transport, where per trip a relatively large amount of time is spent on the collection moment at the door.

Based on benchmarking it is expected that passenger growth will be realised. A total of 15,000 travelers more than now per year. The prognosis shows that the line-bound public transport 34,000 travelers lose to Flextaxi and other transport options, that 7000 Wmo travelers switch to Flextaxi and that Flextaxi itself transports a total of 57,000 passengers per year (see section 6.9.2).

It has been calculated that the pilot situation can be financed on a structural basis with the same government contribution as the current (€ 2.7 million per year) based on the current prices for a ride. This still depends on the choice of the equipment (buses) and the price per timetable hour on lines 57 and 58. In the new public transport concession it will be more affordable to use more compact midibuses here that are cheaper in execution. In the current public transport concession it is rather worthwhile to continue driving with the existing buses (see paragraph 6.9.5).

The prognosis of both the total number of travelers and the total government contribution are subject to an extensive analysis. Nevertheless, we must make the nuance that these forecasts obviously have the necessary uncertainties due to all kinds of dependencies. Think of corona, but also determining factors that still need further shape, including the rate, image, promotion, and dependencies on ICT-technical choices. That is why a sensitivity (scenario) analysis was made, taking into account various scenarios, to provide an indication of the government contribution within realistic bandwidths (see section 6.9.7).

In order to get a complete financial picture, it is also necessary to include the transition costs. To start the pilot, there are still various aspects to take into account. Think of the choice for whether or not other buses on line 57 and 58, with the various options for lease, purchase, takeover scheme, depreciation and/or transfer options for the existing buses. There will also be roster loss among Connexxion drivers (see section 6.12 for an overview).

In addition to friction costs for line-bound public transport, there are various other points of attention that are outside the scope of this exploration. These points require further elaboration in combination with sometimes negotiation and mutual consultation between various stakeholders. It must be clear who will direct the pilot, how this will be financed, and how the project organization will be implemented. In addition, discussed must the various tactical and operational topics: from determining the customer prices to and with the choice of a booking system and app, and which integration this requires, for example, within the existing organizations. In chapter 7 we provide an overview of these components.

Conclusion: there is potential for a Flextaxi pilot in Middelburg and Vlissingen, whereby it is possible to offer more and more diverse transport options for a larger group travelers for the same structural government contribution as in the current situation. However, there are still transition costs that must be taken into account that are not yet fully known. We advise to conduct further research to get an idea of the one-off costs and the organization and further develop the elaboration of product features indicated in Chapter 7.

LINK with the MOVE objectives:

- greening mobility and reducing greenhouse gases in the transport sector.
- increase accessibility, increase mobility options,
- setting up financially sustainable transport systems.
- Increase social integration.

Link with the MOVE objectives

## 1 INTRODUCTION

In Walcheren, as in the rest of Zeeland, the challenge is to find a good balance between public resources and a good transport offer, consisting of public transport and target group transport. By continuing to continuously decline the existing public transport, a negative spiral of declining quality and further declining use threatens, resulting in poorer accessibility. In addition, it is a challenge to continue to offer an affordable Wmo transport system, with growing healthcare costs and an aging population. The Municipality of Middelburg, Vlissingen and the Province of Zeeland therefore want to look together at how transport can be organized not so much less, but above all differently, so that available resources are used better and travelers receive a more suitable transport offer. The question is whether there is sufficient potential for a new transport system, particularly in the area between Vlissingen and Middelburg, that can be tested on a pilot basis. We have developed and elaborated a promising scenario based on the analysis and the pre-defined preconditions. After consultation and consultation with the core group consisting of employees from the municipalities of Middelburg, Vlissingen, the province of Zeeland, the transporters Connexion and Taxi de Vlieger, the GVZ and a focus group with frontliners, a preferred scenario was eventually further adapted and elaborated.

In this report you can read the details of this pilot proposal and the way to get there.

### 1.1. Cause

The contours of Zeeland's public mobility are outlined in the Regional Mobility Strategy (2021). Future transport must be innovative, affordable and future-proof and must offer passengers quality. That requires making choices. The future public transport system will be more focused on the thicker passenger flows, long travel relationships and faster connections. This also means that in a number of places the bus no longer drives through, but along the village. At the same time, fine-grained transport is still required, which can be designed on a demand-driven basis because of the lower volumes.

The pandemic with the associated decline in travellers, highlighted the need for greater flexibility. A transition plan from the province and Connexion does not focus on reducing the level of facilities, but on thinking in terms of other forms of public transport, with the aim of matching the transport needs as closely as possible. This is an additional reason to also look for smart combinations with other transport systems such as WMO transport.

The affordability and future-proofing of target group transport (WMO travellers) also require attention due to increasing costs due to the double aging of the population and increasing care needs. The space created by making fewer journeys with low occupancy in public transport can be used for further expansion of flexible and high density (intricate) transport systems, for example in collaboration with Wmo transport. The idea behind this is that both systems, OV and Social Support Act, can be more efficient and effective together than functioning as two separate systems.

The collective transport systems (OV and Social Support Act) can be seen as communicating barrels. The more accessible public transport is organised, the more people can use it and participate in society as normally as possible. Only accessible and high-quality public transport with short walking distances is a strong alternative to target-group transport. The national Contourennota Toekomstbeeld OV 2040 states that the aim is to achieve fully accessible public transport in 2040 in accordance with the UN Convention on the Rights of Persons with Disabilities. The focus on thick lines, sometimes resulting in longer walking and cycling distances, must therefore be accompanied by a fine-grained and flexible transport solution for the groups that can't handle these distances.

The Regional Mobility Strategy also describes how a system of flex taxis in combination with target group transport will contribute to this in the long term:



This system must guarantee that every resident has a pick-up location (busstop) within 2.5 kilometers with suitable mobility options. For most residents, this will be closer to home, as such pick-up points can be found in villages and residential areas at a distance of up to 500 meters. Outside built-up areas, 2.5 kilometers is guaranteed as the maximum distance to a pick-up point.

Regional Mobility Strategy 2021 (section 1.3, page 5)

On Walcheren, travel distances for young people are in a number of cases doable with an (electric) bicycle, but often too far for the elderly. In order to eliminate mobility poverty, especially for the less mobile people, intricate and flexible systems should be considered. The regional lines (57 and 58) between Vlissingen and Middelburg are struggling with low occupancy in an area where many Wmo rides are made. This combination of factors makes this specific area even more interesting as a pilot area to experience how both systems can complement each other better.

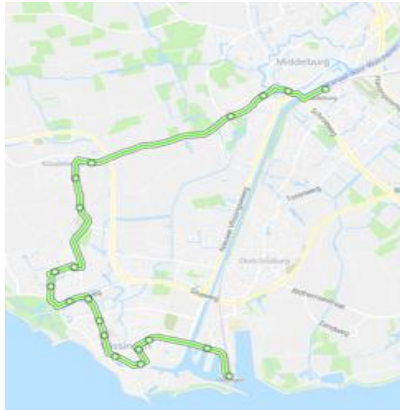
This report zooms in further on this case. We are also investigating the potential for an alternative transport solution. We used data analysis, desk research, interviews and a selected group of frontliners in a focus group. In chapter 6 we further developed this idea into a concrete pilot proposal.

## 2. CURRENT SITUATION PUBLIC TRANSPORT

This section describes the situation as it applied during the 2021 timetable year.

Three bus lines run between Vlissingen and Middelburg, lines 56, 57 and 58. In addition, there are a number of school trips that are not included in this analysis.

### 1.1. Lijn 56



Line 56 runs from Vlissingen station via Scheldeplein, the hospital, Koudekerke, Middelburg Southwest and the center of Middelburg to Middelburg station and vice versa.

Line 56 runs on Monday to Saturday during the day with a frequency of 2 x per hour, in the early morning, in the evening and on Sunday during the day, the line runs 1 x per hour.

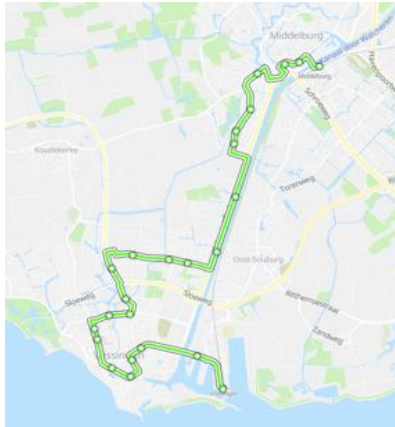
### 1.2. Lijn 57



Line 57 runs from Scheldeplein in Vlissingen via Oude Veerhavenweg and Oost-Souburg to Middelburg station.

Line 57 runs on Monday to Saturday during the day with a frequency of 1 x per hour. The line does not run on Sundays or in the evenings.

## Lijn 58



Line 58 runs from the Sporthal stop in Vlissingen via Scheldeplein, the hospital, West-Souburg, the west side of the Canal through Walcheren and Middelburg Southwest and the center to Middelburg station.

Line 58 runs on Monday to Saturday during the day with a frequency of 2 x per hour, in the early morning, in the evening and on Sunday during the day, the line runs 1 x per hour.

NB: from timetable year 2022, this line will run 1 x per hour from/to station Vlissingen to provide a connection to the intercity to/from the direction of Roosendaal.

## 2.4. Other forms of public transport

### 2.4.1. bus stop

In recent years, the call bus formula stop taxi (halte taxi) has been used at more and more locations in Zeeland. This form of public transport on demand provides connections where a bus line often used to run. The bus stop can be called, runs according to a fixed route and customers need a transport pass to travel with it. With these characteristics, the service cannot be characterized as very flexible. The bus stop is controlled by the Municipal Transport Center (GVZ), which also houses Wmo transport. And the transport is carried out by Taxi de Vlieger. The function of a bus stop on Walcheren (with about 70 trips per month) is less important than in most other Zeeland regions. As an indication: In the month of May 2019 there were, for example, 72 trips per month. In the Oosterschelde this is 474 per month and in Zeeuws-Vlaanderen 1600. On Walcheren this mainly concerns evening and weekend transport.

The general opinion is that a bus stop needs to be modernized: it could be more user-friendly in terms of booking, planning and reserving.

### 2.4.2. local bus

There are a total of eighteen local buses in Zeeland. Local neighborhood bus associations are responsible for these small buses, which are operated by volunteers. The local buses only run on working days. A neighborhood bus association is also active on Walcheren with several lines:

- Between Westkapelle and Veere
- Between Veere and Middelburg
- Between Middelburg and Vlissingen-East

- Within Middelburg-Noord (formerly Servicebus)

Some time ago, a Service bus drove in Middelburg. He did a tour of suburbs where there was no transport and a number of hotspots for the less mobile target groups (no hurries) such as important medical destinations and the market on Thursday. Connexxion took care of the implementation with professional drivers. Because the low usage was no longer in proportion to the costs, according to the evaluation report, the choice was later made to continue the line as a neighborhood bus (line 569), operated by volunteers. Previously, a 19-seater transporter bus was used, and now with an 8-seater bus that is not accessible for wheelchair users. During the corona period, Taxi de Vlieger has temporarily taken over this transport. The drivers help with getting out.

The neighborhood bus associations operate within the public transport concession on the basis of collaboration with Connexxion and the province.

## 2.5. Other modalities

There are three train stations within a distance of 6 kilometers in the Middelburg-Vlissingen region. In addition to the three bus lines, there is a train connection with stations in Vlissingen, Oost-Souburg and Middelburg. The three stations are served twice an hour.

In addition (since mid-December 2021) there is an intercity service that does not stop at Vlissingen-Souburg on Monday to Friday 1x per hour. This extra intercity runs until about 20:00.

In addition to competition from the train, the bus also faces competition from the car and the (electric) bicycle and the increasing use of shared bicycles (public transport bicycles).

## 2.6. Competitive position of the bus compared to car, train and (electric) bicycle

It has been determined how much time it takes to travel from origin to destination for ten random trips between Middelburg and Vlissingen.

The results are as follows:

- 10 to 15 minutes by car
- 20 to 30 minutes by bike
- 12 to 20 minutes by e-bike
- 20 to 40 \*) resp. 60 minutes \*\*) by train
- By bus 30 to 50 \*) resp. 65 minutes \*\*)

\*) with a bicycle as a means of transport before and after; \*\*) ditto with bus and walking

Although the bus has certain convenience features compared to cycling and walking (with a seat and shelter from rain and wind), the difference in travel time is a weakness in many relations. In particular, the competitive position of lines 57 and 58 in relation to train/bicycle/walking is weak and this position appears to be deteriorating rather than improving. Some causes are:

- The distances within this area (Middelburg-South and Vlissingen Central-North) are generally easy to walk or cycle for normal healthy people: the cycling infrastructure is generally of good quality and the cycling range is increasing with the rapid rise of the e-bike.

- The residents of the area of lines 57 and 58 all have access to a train station within walking or cycling distance. There are no fewer than three train stations within 6 kilometers (Vlissingen, Vlissingen Souburg and Middelburg).
- The combination of bicycle and train is growing, which is reflected in, among other things, the growth and success of public transport bicycles and the explosive growth in sales of electric bicycles over the past five years.



Service area of lines 57 and 58 in Middelburg



Service area lines 57 and 58 in Vlissingen

### 3. TRANSPORTATION ANALYSIS

An extensive analysis has been carried out for the above three bus lines. The analysis aimed to investigate to what extent there is residual capacity to take WMO travelers with them, to what extent the destinations of WMO travelers are near bus stops and to what extent it is possible to drive with smaller vehicles that better match with the transport demand.

#### 3.1. Number of travelers per day and per month

For the investigated bus lines on Walcheren, it was examined how many passengers there are per journey and how many passengers are on the bus, on average, between two stops (November 2019).

Partly due to the fact that only one month has been highlighted, the analysis is not exhaustive; it does give an idea to the choices that can be made and it provides insight into the lines, day types and periods that may be suitable for integration with WMO.

lijn	omschrijving van	via	naar	# instappers per rit				gem bezetting p deeltraject			
				mavr	za	zofd	mnd	mavr	za	zofd	mnd
52	Domburg	Oostkapelle - Grijskerke	Middelburg, Station	7	5	4	7	5	3	3	
53	Domburg	Westkapelle - Koudekerke	Middelburg, Station	10	6	5		5	3	2	
56	Middelburg, Station	Koudekerke	Vlissingen, Station/Ferry	26	11	8		8	4	3	
57	Middelburg, Station	Zuid - Oost Souburg	Vlissingen, Scheldeplein	10	5	--		5	2	--	
58	Middelburg, Station	Stromenwijk - West Souburg	Vlissingen, Sporthal	12	8	9		5	4	3	
258	Middelburg, Station	Stromenwijk - Koudekerke	Vlissingen, Scheldeplein	2	--	--	2	1	--	--	--
569	Middelburg, Station	Klarenbeek - Griffioen	Middelburg, Station	4	6	--	4	1	2	--	--
581	Vlissingen-Oost, Scheldepoort	Nieuw en St.Joosland	Middelburg, Station	1	--	--	1	0	--	--	--
584	Veere, Nieuw-Sandenburgh		Middelburg, Station	2	--	--	2	1	--	--	--
totaal											

Line 56 is the busiest line. This is mainly because this is the only line that connects to the train and the ferry in Vlissingen. Lines 57 and 58 have an average occupancy of less than 5 occupants.

#### 3.2. Number of occupants per trip

Appendix B shows the occupants per journey for the three lines. The blue line represents the mean, the blue shaded area represents the boundary between the 15th and 85th percentiles. It can be seen that the number of occupants per trip is lower than 10 people, especially in the evenings and at weekends.

#### 3.3. Number of boarding and alighting passengers per stop

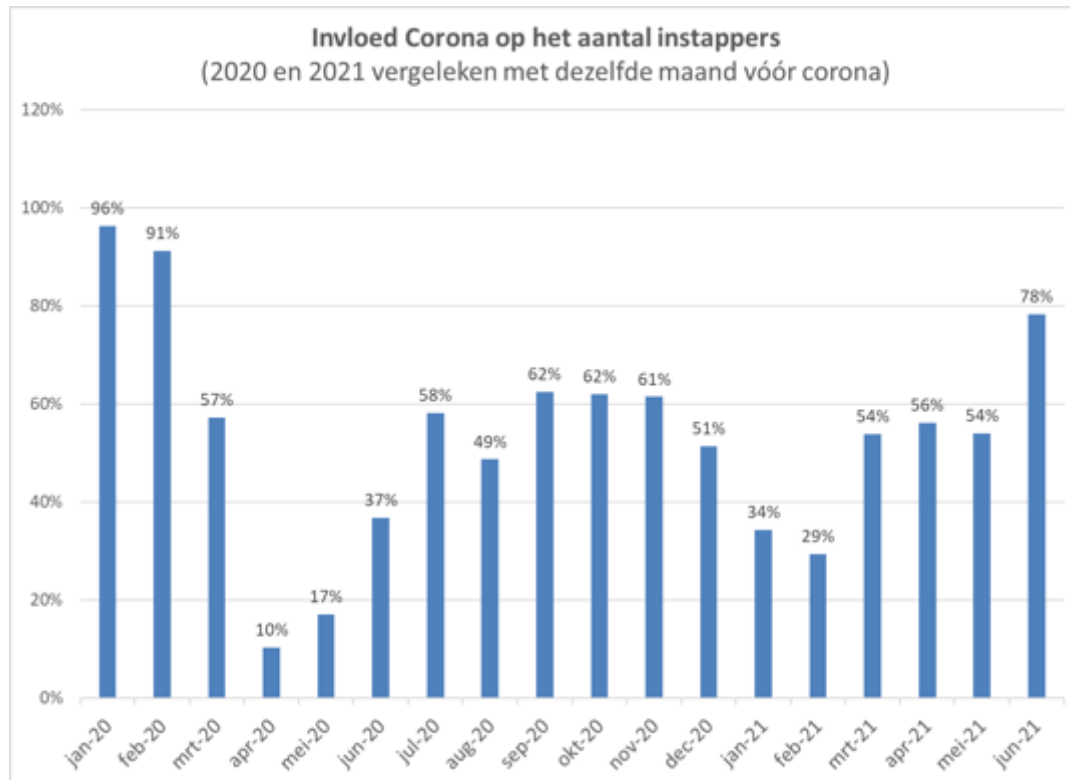
In appendix C, the boarding and disembarking passengers are shown for all stops in and near Middelburg and Vlissingen. It is important to note that the switchers are included in the numbers, whereby a switch counts as one exit and one entry. For privacy reasons, switchers cannot be distilled from the overviews.

There are five busy stops: in Middelburg the station and the stop Koestraat and in Vlissingen: the station/ferry port and the stops Scheldeplein and Prins Hendrikweg. We assume that these stops fulfill an important function not only for the immediate neighbourhood, but also as a transfer stop.

The other stops are used much less. Apart from the five stops mentioned, there are actually no stops that 'stand out'.

#### 3.4. Effect of corona on the volume of transport

For the entire Zeeland concession, the numbers of entry and exit passengers per month were compared during corona with the same month in the period before corona (2019). The figure below shows the effect. It can be concluded that there are of course substantially fewer travelers during corona, but that there is no clear difference. The volume of transport during corona varied between 10% and 78% of the volume of transport before corona.



The reason lies in the fact that the measures during corona could differ from month to month. The number of trips strongly depends on whether or not the facility that one wants to visit is open. It makes a difference whether shops, schools, theaters, sports facilities are open or not and whether working from home is mandatory or not.

In October/beginning of November 2021, the size -at a national level- was, just like in June 2021, again between 75% and 85% of before corona. Currently (in the month of December) the size has fallen sharply again due to the (evening) lockdown.

Due to the large fluctuations, it has been decided not to conduct an extensive analysis for the period during corona. Instead, based on an educated guess, we use a sensitivity (scenario) analysis to indicate the corona effect of higher and lower passenger numbers in public transport and in the Flextaxi on costs and revenues and the required government contribution.

### 3.5. Trends

Public transport use is expected to further decline in the longer term in the region as a result of a number of demographic trends such as aging and population decline. The following important trends are also mentioned in the new Zeeland mix of mobility:

- the use of public bus transport is expected to decrease;

- the number of young people of secondary school age is decreasing;
- the use of the e-bike is increasing;
- and the elderly continue to drive for longer.

These developments are putting pressure on the affordability of the public transport system, which means that the current bus network is increasingly unable to meet the needs of the traveler.

### 3.6. Hurries and no hurries

It is important to be able to empathize with what drives the different target groups. Based on travel motives, we distinguish two clearly different groups: hurries and no hurries. The first group, the hurries, are travelers who mainly want to be transported quickly and efficiently. Think of commuting, school and business travelers. The second group, the no hurries, are travelers who mainly need convenience, comfort and proximity, with sufficient time for boarding, finding a place, etcetera. Think of the elderly, people with disabilities (WMO travellers). Both groups sometimes have conflicting interests. The hurrie is willing to walk or cycle a little further, in combination with a direct and fast bus line. The no hurrie benefits more from shorter walking distances and a more intricate/high density system. Although public transport is an offer for everyone, it can also be an offer that is not really attractive to anyone; not fast enough for the hurrie and not fine enough for the no hurrie.

### 3.7. Conclusion

The occupation of the public transport lines between Middelburg and Vlissingen is low. On the basis of actual use, a frequency reduction of lines 57 and 58 could be justified, but then there is a risk of a negative spiral: impoverishment of a public transport product results in even fewer users. And for the reasons mentioned above, there are no reasons to realize more growth on both lines.

The lines could also be run with a smaller vehicle during the week. Line 57 now 'only' runs every hour, no longer runs in the evening after 6 p.m. and does not run on Sundays. Line 58 runs every half hour, and runs in the evenings until 10 p.m. also throughout the weekend. Line 56 between Middelburg station and the ferry in Vlissingen via Koudekerke does have a fairly 'steady' occupation during the day. This line also runs all weekend until 10 PM. In the evenings, however, the occupation is also very low in line 56 throughout the week.

It can be concluded that the bus is mainly used by those without an alternative (car or bicycle), a limited group of students and by the 'no hurries'. The car and the bicycle appear to be faster in many travel relationships (see section 2.5). The combination of bicycle and train is also a formidable competitor to the bus. A chain journey with this combination is on average 10 minutes faster than a journey by bus between the two places. Only for journeys without a transfer and with stops within walking distance can the bus be competitive with the train and bicycle. In addition, part of the 'no hurries' is eligible for the use of Wmo-taxi, a comfortable facility that facilitates door-to-door travel. For people with an indication, the choice for the bus is now often less than the higher service level of the Wmo taxi.



## 4. CURRENT SITUATION WMO TRANSPORT

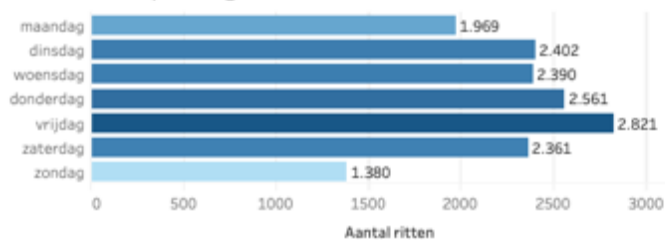
Wmo-transport is a door-to-door transport system for adults who are unable to get from A to B in any other way for a longer period of time and structurally. It is formally intended for rides with a social recreational character so that people can continue to participate in social life and society. In practice, it is widely used for hospital or doctor visits and shopping. From 2015, Wmo transport on Walcheren has been managed by the Municipal Transport Center (GVZ). On behalf of several municipalities, the GVZ is responsible for the day-to-day management and planning of several forms of target group transport, including Wmo transport. The rides are provided by Taxi de Vlieger.

### 4.1. Current question on Walcheren

Wmo transport on Walcheren differs somewhat compared to other parts of Zeeland. Relatively many trips are made with relatively many customers in a compact area (based on trip data from the precorona situation. The month of November 2019 is taken as the benchmark.

Each month, specifically in the Middelburg-Vlissingen region, there are approximately 16,000 journeys, with Tuesday, Thursday and Friday being traditionally the most popular days.

Aantal ritten per dag

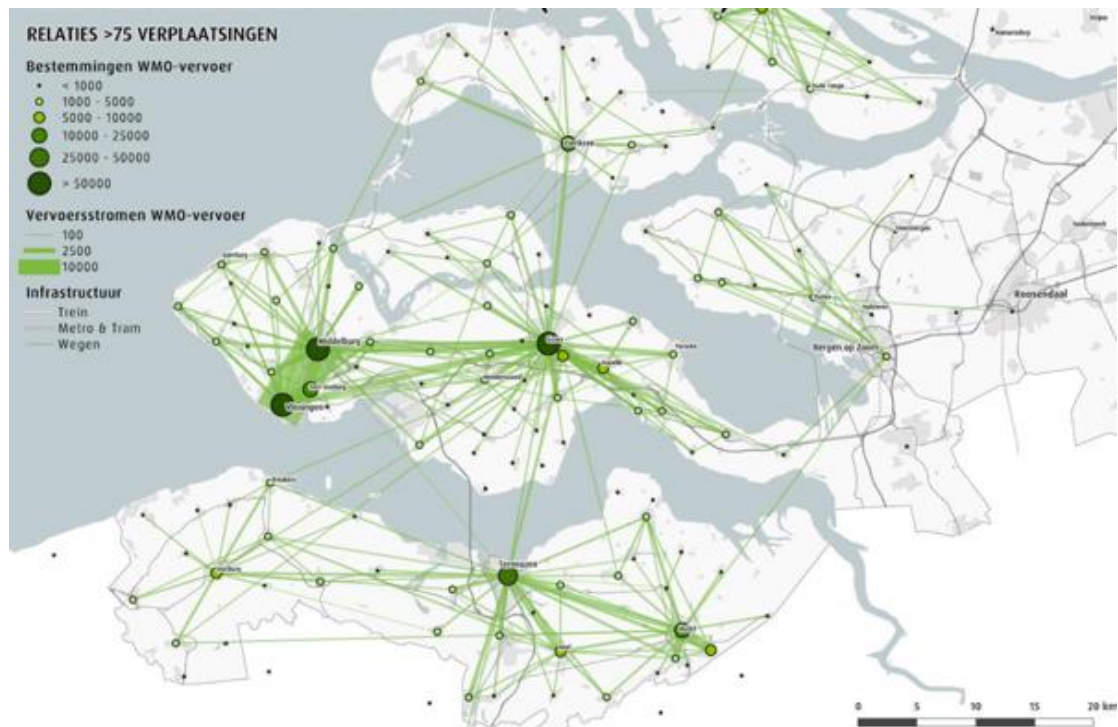


The distribution of the journeys over the day itself, as is usual with Wmo transport, shows a normal distribution with the busiest hours in the afternoon and afternoon (between 13.00 and 14.00 and around 16.00). Shown by the blue line in the figure below. In the afternoon, the rides remain the same until about 5 pm. Only around noon it is a bit quieter, which coincides nicely with the driver's break.



The figure also immediately shows how the distribution of Wmo transport over the day differs from the distribution of public transport and bus stop transport in Zeeland. When the morning rush for public transport has come to an end, Wmo transport really starts.

Most Wmo taxi rides in the province of Zeeland are made in the area between Middelburg and Vlissingen, which is also the operating area of lines 57 and 58. These are local journeys with often short distances: more than half of the journeys are shorter than 5 kilometers with a travel time of ten minutes or less.



This high concentration of short Wmo journeys within Vlissingen and Middelburg and between these municipalities themselves can be explained by, among other things, the concentration of inhabitants, the concentration of facilities and also the legacy of a somewhat generous indication policy in the past. Bus transport has now become more accessible in terms of vehicles and bus stops.

The municipalities have now also become stricter when it comes to access to the system, passes are less easily issued. There is now more emphasis on what transport needs there are and whether there is really a need for a transport pass. And although the own contribution has also been increased somewhat, transport remains relatively cheap for the customer (€ 1.34 start-up, 32 cents/km) for a relatively high service quality (door-door travel). An indication issued is, once given, difficult to reverse. In general, the physical condition of this group deteriorates rather than improves.

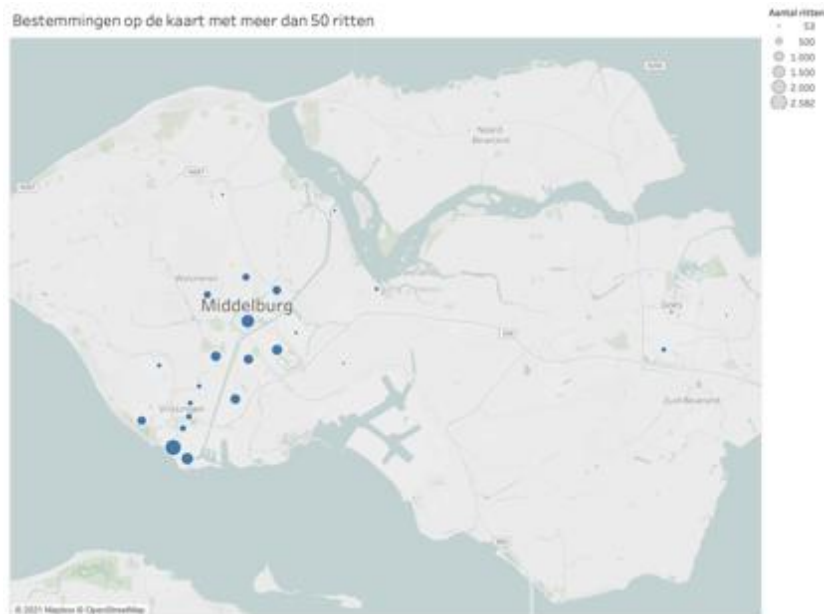
There is also a relatively large amount of individual transport and special indications on Walcheren, for example:

- o Sit in the front
- o Vehicle type specific (No Bus or No Tesla)
- o Room-room transport
- o Not allowed to combine with other travelers

Special indications increase costs and generally have a negative impact on the efficiency of transport, because this limits the chance of combining with other modes of transport. For more information about the indications, the number of trips per hour and their distribution over the day, we refer to the appendix in chapter 11.

#### 4.1.1. Travel motives

On the basis of the road trip data, we conclude that the Wmo trips are clustered around a few top destinations in and on the outskirts of Middelburg and Vlissingen. Transport is concentrated around both city centers and a number of care homes and guest houses, with TerReede in Vlissingen as the most popular location. The necessary hospital and doctor visits are made from the care homes. Both cities are largely self-sufficient: 80% of the journeys remain within the municipal boundaries.



#### Aantal ritten per topbestemming

Vertrek Pos.	Omschrijving	
4382C	BJ Ter Reede Vlissingen	972
4382E	ZH ADRZ Vlissingen	783
4381R	AH Centrum Vlissingen	470
4331R	BJ Gasthuis Middelburg	332
	Woning Sheeren-Loo	105
4331L	Centrum Middelburg	264
	Medisch Centrum Middelburg	129
4462R	ZH ADRZ Goes	339
4387P	Zwembad Vlissingen	262
4337E	BJ Hof Mondriaan Middelburg	140
	BJ Buitenrust Middelburg	118
4384A	AC Sheeren-Loo	247
4383N	AH XL Vlissingen	215
4331A	BJ Willebrord Middelburg	187
4334B	BJ Hof Seijs Middelburg	186
4335P	BJ Getij Middelburg	166
4381E	BJ Scheldehof Vlissingen	146
4351R	BJ Sandenburg Veere	128
4337R	DB Sheeren-Loo	122
4334G	BJ Eben Haezer Middelburg	100
4371R	Intratuin Koudekerke	100
4353A	Fysio Driehoek Serooskerke	99
4331J	Wooncafe Middelburg	50
4337P	Medisch Centrum Sheeren-Loo	49

Precorona, the Wmo taxi on Walcheren was also regularly used for unnecessary journeys. In the other Zeeland regions, there is usually a limited Wmo travel budget that is provided, so that people there generally travel more selectively. The average distances are also greater in most other regions of Zeeland. There, Wmo transport is used more for necessary trips to hospitals and medical treatment. For recreational destinations, family or acquaintances travel there more often than on Walcheren. In particular, the number of recreational rides has fallen due to corona, as a logical consequence of the closure of the catering industry and other recreational destinations.

The actual effect of the rate increase is still difficult to analyse because of the disruption of use due to corona.

For more detailed Wmo transport analysis, we refer to the appendix, chapter 11.

## 4.2. Costs and trends

The costs of a Wmo ride differ per area and time. The average cost of all journeys in Zeeland is approximately €16 per journey. For comparison: In the Middelburg-Vlissingen region, this cost price is lower at over €12 per trip (2019). The clustering of journeys and the relatively shorter distances lead to relatively more journeys per hour per driver, so that the cost price is lower than the provincial average.

Transport is a substantial cost item for the municipalities. In addition, the increasing aging population and the increasing need for care are a problem because of the municipal budgets. Without adjustments to the transport system, including organization and access, Wmo transport risks becoming unaffordable in the longer term with the current forecasts. This increases the need to look at increasing efficiency. Since the transport contract offers a great deal of scope for efficient implementation, cost savings appear to have to be found in particular in both further limiting the access to WMO and encouraging more selective use. It is therefore worth if WMO-indicated persons could also be tempted with alternative forms of transport. For this reason, investments have been made in recent years in more accessible public transport (vehicles and busstops).

An attractive public transport system can decrease WMO taxi use, an inadequate public transport system can increase use. From the municipal side, there is a demand for a more suitable public transport product that meets the needs of WMO-travellers, but above all also offers good facilities for the growing group of seniors who may make use of the social assistance provision at a later stage.

In addition to limiting relatively expensive WMO journeys, it is an idea to make even better use of the WMO journeys that are driven by making more combinations (in the vehicle and consecutively), for example by asking more often whether people are prepared to work at different times. to travel, as is now regularly forced by a shortage of drivers. One possibility is also to move public transport passengers where and when this can be combined.

Another option is to give customers on Walcheren a travel budget, as is used in other Zeeland municipalities. By giving customers a maximum number of kilometers, more selective travel behavior is stimulated.

## 4.3. Efficiency in execution

The current contract features and the organization of Wmo transport are characterized by flexibility and efficiency. Partly because the Municipal Transport Center (GVZ) can provide drivers on an hourly basis calls and, for example, services can stop half an hour earlier, residual capacity, empty and downtime at the edges of the driver services is reduced to a minimum. Mutations can also be passed on relatively easily the night before. The contract therefore contains sufficient flexibility to be able to work efficiently. The plant scales up capacity as demand increases. For example, there are usually 2 extra services on Tuesdays and Thursdays because demand is generally higher on those days. But just as simply, less capacity is used on less busy parts of the day. Drivers drive about 3 trips per hour. Because the journeys are relatively short,

the pick-up and drop-off time at the front door is relatively long in relation to the driving time. The transport contract is designed with a so-called open-end arrangement with a transport obligation, whereby each additional journey request must be carried out within the rules of the system.

The fact that the GVZ plans and manages multiple forms of transport contributes to the efficient scheduling of drivers. This is because services can be built up using different modes of transport. In the morning, for example, a driver drives youth care transport (morning rush hour) and subsequent social assistance transport, with demand increasing precisely in the afternoon. The driver breaks and shifts are staggered, so that spread out shifts are created.

Recently there was a shortage of drivers. As a result, GVZ tried to let customers drive at different times than their first preference, so that combinations can be made and the driver hours can be used even more efficiently. This often turned out to be possible. For example, people who want to go shopping are willing to change their departure time. But it may also be acceptable for people with a medical appointment to leave earlier. Although now mainly prompted by a lack of capacity, this shows that more can be directed towards bundling. There is no longer a shortage of drivers in this region.

#### 4.4. Enticing WMO travellers to use public transport

Because there is still marginal gain to be made in terms of efficiency in the organization of transport, it is opportune to look for optimization in other areas. In addition to a stricter access policy, one can entice WMO travellers to make more frequent use of public transport. This could be done with an attractive and affordable offer, travel coaches or more deployment of public transport ambassadors and related measures. In practice, however, it is only slightly possible to convince this group. Line 57 and 58 are also not always a useful alternative for people with reduced mobility, or for whom cycling is not an option. This group (Wmo-indicated people and/or especially seniors without an indication) generally has a diffuse and irregular travel pattern that is difficult to combine into one large stream. It usually concerns short local journeys at varying times within the municipality or even within the district, with the aim of visiting friends, acquaintances or family, shopping, visiting the market or, for example, a doctor's visit. It is a major challenge to respond well to this with a fixed timetable without people having to transfer several times or having to deal with long walking distances. This would argue in favor of adding more stops to a bus line. However, the greater the number of stops, the more the bus swings and the slower and less attractive the connection becomes. The Knowledge Institute for Mobility Policy (KiM) concludes that the vast majority of people opt for a faster travel time in combination with a longer walking distance instead of the other way around. Only 6 percent of the population has difficulty with longer walking distances. This group is increasing in size due to the aging population.

It was concluded in the focus group and from the transport analysis that lines 57 and 58 may in some cases be a good alternative for this group, but sometimes not, due to, among other things:

- Long walking distances to the stop in combination with busy or unsafe traffic situations;
- Having to switch from one bus to another;
- Failure to drive at the desired times;
- Not driving past the desired busstops (for example, a number of senior housing complexes are not visited);
- Not driving past all destinations that are important for this group;
- And above all for people with an indication, it usually does not pay off to take these bus lines, because of the difference in service level with the Wmo door taxi, which they can rely on.

## 4.5. Conclusion

For the traveler, Wmo transport is cheap and the service quality is high, with many special indications and sometimes even assistance with unpacking the groceries. The number of trips on Walcheren is relatively high. A change is visible. Municipalities are stricter on access, the rate has increased and Wmo transport passes are less easily issued.

The regional cooperation shows that target group transport as a system is already relatively well organised. Planning can always be improved, but because the current agreements already offer a lot of flexibility, we can no longer expect miracles in terms of efficiency profits. However, transport remains relatively expensive per passenger, so continuing to look for optimizations is desirable. When introducing a flex product that leads to more transport movements, the risk of rising costs must be mitigated due to the current contract agreements containing an open-end arrangement.

Even with a stricter access policy, the question is whether the current Social Support Act system will remain affordable in the future. Another possibility is to entice people with an indication to use public transport more often. However, the high level of service and an attractive rate for the Wmo taxi versus the in many cases inadequate public transport (transfer, walking distances, no suitable route or time) make it difficult in practice to get Wmo employees to do so.

## 5. THE PROCESS TOWARDS A PREFERRED VARIANT

### 5.1. Introduction

We have found that in this specific part of Walcheren there is an intensive WMO transport system (many taxi rides) and at the same time a declining use of bus lines 57 and 58. If public transport withdraws further and walking distances increase, this can put extra pressure on the WMO transport provision, because a larger part of the people then no longer have transport options.

It is precisely in the combination of target group transport and public transport that there are opportunities for joint further development. This concerns solutions that are accessible to the target group, which enhance accessibility and which are more cost-effective for the province, municipalities and travelers. Both in the 2040 public transport vision for the future and in the regional mobility strategy, it is expected that more new flexible demand-driven transport concepts will appear.

Based on the foregoing analysis and the predefined preconditions we have developed a number of outline scenarios. In several stages of elaboration, these have been tested against criteria drawn up in advance and discussed with the core group and a focus group, which are explained below.

This iterative process has led to several adjustments and ultimately to a supported preferred variant, which is further elaborated in the next chapter. In this chapter we first briefly summarize the process.

#### 5.1.1. Process project group

Various projectgroup meetings were held in the period from August 2021 to January 2022. The project group consisted of the commissioning authorities of the Municipality of Middelburg (tractor), Vlissingen and the Province of Zeeland, as well as Connexxion and Taxi De Vlieger. The project group's task was to contribute ideas and provide direction by establishing the assessment criteria. In addition, several consultations have taken place with the municipal transport center.

#### 5.1.2. focus group

Due to time and budgetary reasons, an extensive customer survey was not feasible. That is why we opted for a focus group with frontliners: people who are in daily contact with customers. After all, they have a good idea of the needs of travelers in daily practice. Were present:

- a neighborhood bus coordinator;
- a neighborhood bus driver;
- a Wmo taxi driver from Taxi de Vlieger;
- a Connexxion bus driver;
- a policy officer Wmo from the municipality of Middelburg;
- a policy officer for the social domain of Vlissingen;
- a Wmo consultant from the municipality of Middelburg;
- a member of the Middelburg Social Domain Advisory Council;
- a member of the Advisory Council Wmo Vlissingen;
- and a call center employee and coordinator of the GVZ.

Twice in the exploration process, the focus group was interviewed in the library of Middelburg. Examples were tested, dilemmas discussed and practical experiences gathered. The target group of no hurries has always been central to this.

In the first meeting in September, ideas were brainstormed with a broad scope. The second meeting looked more closely together at the most likely variants. The focus here was on the way in which specific product features were implemented. A summary of the recommendations and points for attention of the focus group can be found in Appendix 12.

## 5.2. Variant analysis

Based on the analysis of the bus network, the analysis of the social welfare system and the feedback from the focus group, a number of characteristics of the area and needs of the potential target group emerged. Based on this, we outline a number of possible concept variants that fit in with this.

### 1.1.1. Variant 1: Current situation

The first variant is the reference variant. Everything (public transport and WMO transport) will remain the same. This variant gives us the opportunity to test the other variants against the current situation in order to map out the potential improvement.

### 1.1.2. Variant 2: 'Service bus' instead of line 58

The region is already familiar with the service bus concept in Middelburg Noord. Instead of a large public transport bus (line 58), a smaller bus is used that runs a fixed circle. Line 57 remains intact. The Servicebus mainly serves retirement homes and public facilities such as shopping centers, medical centers and stations. In addition, the Service bus runs in many places where the large bus does not come. The small-scale character, a long driving time (no rush) and permanent drivers who may offer extra support, are in line with the needs of the target group.

- Fixed route according to a lap
- Minimum half hour frequency
- Larger service area (along all important points for the target group) and therefore short walking distances.
- Low floor entry
- Optional deviate from the route
- The system has the potential to tempt WMO-travellers as well.

There appeared to be a lot of support from the focus group for such a concept. In particular, the small scale, shorter walking distances and not having to make reservations are mentioned as advantages.

Similar concepts are active in several regions and comparable medium-sized cities, including Ede, Delfzijl, Dordrecht, De Wolden, Assen, Veendam, Hoogezand-Sappemeer.

See also evaluation service bus Middelburg

### 5.2.3. Variant 3: 'Flextaxi instead of line 57/58'

Following the Texelhopper, several flexible transport systems have been launched. The common denominator of this concept is stop-stop transport with a greater surface coverage due to more boarding



places than a fixed bus line. WMO travellers can make the choice to travel door-door or stop-to-stop. The Flextaxi replaces lines 57 and 58 and is financed with the costs that are saved.

- More boarding places in the district, which shortens walking distances.
- More direct travel relationships possible (without transfer)
- More departure times
- Also hall of senior center, etc
- Only journeys from Halte to Halte or public transport interchange
- Attractive rate (eg public transport rate)
- Reservations by telephone and a simple booking site and/or app with possible real-time updates via SMS or notifications.
- Due to the high stop density, this system meets a diffuse transport demand that is difficult to capture in a timetable.
- From a technical point of view, such a system can be easily integrated and implemented by a taxi operator or central station
- Public transport-oriented, but can also be attractive for social workers with social assistance benefits, for example with tariff incentives.
- Disadvantage: If popular, the system can become quite expensive.

Examples are Texelhopper, U-flex, Syntusflex, Delfthopper, Opstapper in Friesland, Bravoflex and also the Spijkhopper in Spijkenisse, recently launched by EBS.

#### 5.2.4. Variant 4: 'Flextaxi' (with a different interpretation of line 57/58)

'Flextaxi' is a variant of the 'Flextaxi instead of line 57/58'. With the Flextaxi variant, the combination with scheduled public transport is maintained. Flextaxi is also available all week, but differs from the 'Flextaxi instead of line 57/58' in that the timetable of 57 and 58 remains largely in place, but in a reduced form. In the evenings and weekends, when the buses have a very low occupancy, they are completely replaced by the Flextaxi. .

- Line 57 will continue to run according to the current timetable (1 x per hour only during the day on weekdays and on Saturdays). Line 57 is operated by a 20-person bus.
- Line 58 will continue to run twice an hour on weekdays and on Saturdays, but now no longer runs at all in the evenings and on Sundays. Line 58, like 57, is now run with a 20-person bus.
- The Flextaxi is available as an additional transport system on all days of the week from morning to evening. This wide availability is relatively easy to offer, since we only drive when there is demand.
- Wmo travellers get more choice: they can choose per journey whether they use the Flextaxi (stop-stop) or the Wmo system (door-door);
- See other product features variant 3.



Example Electric 20-person bus, currently used in Goes. This type of vehicle could be used on lines 57 and 58

### 5.3. Assumptions for comparability

For the comparability of the variants, we have considered a number of characteristics to be constant.

- The rate (tariff) has been kept constant and must be later discussed;
- The scope of the area is the service area around lines 57 and 58. The exact area still needs to be defined in more detail;
- Current demand (wmo and line 57/58) has been taken as a reference, including assumptions for the impact of corona on demand;
- Professional drivers:

### 5.4. Multi criteria analysis

In order to arrive at a choice, the variants were tested against a number of predefined criteria. After that, the preferred variant was further elaborated.

The four main goals of the Zeeland Mix of Mobility are defined as:

- Innovative;
- Affordable;
- Future-proof;
- Quality for the traveller.

These starting points have been further developed into criteria against which the variants are tested.

#### Criteria Definition

Financial feasibility: Global estimate based on the deployment of personnel/equipment (key figures) + costs for the operator/municipality/province and for the user

Expected use: Estimated partly based on assumptions and reference projects/ studies

Organizational and technical feasibility : To what does the solution require more or less effort / investment to be operational (including infrastructure, ICT, etc.)

Social & administrative feasibility: Are amendments to contracts necessary (where is it possible with WMO frameworks). How might it be received in society and media?

Fitting in the future vision: The system must fit in the future vision of Zeeland, resp. Regional Mobility Strategy

User-friendliness: To what extent does the solution meet the needs of the target group? (see, among other things, focus group results)

Future-proof and innovative: To what extent is the solution scalable, future-proof and flexible in relation to new developments (eg MaaS and new concession, etc.). The system must be innovative in order to justify a pilot.

#### 5.4.2. Qualitative assessment/end Balance

Criteria	Current situation (reference)	Servicebus & line 57 with small vehicle	Flextaxi instead line 57/58	Flextaxi curtailed existing offer
Financial feasibility	0	+	+	+
Expected use	0	+	--	++
Organizational and technical feasibility	0	0	-	-/+
Fitting in the future vision	0	--	+	++
Social & administrative feasibility	0	0	-	++
Usability	0	+	+	++
Future-proof and innovative	0	+	0	++
<b>end result</b>				Preferred variant

#### 5.4.3. Advice for Flextaxi

Based on the broad analysis, we recommend further developing the Flextaxi variant.

- On balance (wmo and public transport) it generates the most users;
- The structural costs fit within the current budget, see also the financial section (6.9). However, additional transition costs must be taken into account (section @@;
- The combination between fixed and flexible transport makes the risk of too much flex use manageable. This creates a pilot situation in which the cooperation between permanent and flex can be further shaped;
- It is innovative and fits in well with the picture of the future that is being sketched in Zeeland;
- More choice is created (more appropriate to everyone's needs) and more departure options are offered. The system is more attractive for no hurries and therefore also for social workers, while people who prefer a fixed line service are still served. As a result, the total offer better meets the needs.

The advantage of this mix of fixed lines and flexible transport is that travelers have a choice.

- People who don't like to make reservations usually have the option of taking the public bus to get to school or work.
- People for whom the walking distances are too long, who want a guaranteed seat, and who want to avoid a transfer as part of a short local trip, can call on the Flextaxi at any time during the week.
- The switch to the Flextaxi is relatively small for Wmo-indicated people. A price incentive or light control from the center will be needed to lead some of the WMO travellers to the Flextaxi.

With the Flextaxi, the costs of the system remain more manageable compared to variant 3: Flextaxi as a replacement for the fixed-line services. This is because lines 57 and 58 are a transport alternative at times when there may still be a substantial demand for transport. The chance that a large group of people will use the Flextaxi at the same time is therefore limited. The Flextaxi is mainly an alternative at times when the demand for transport is decimated (in the evenings and on Sundays). These are the moments that it is better to use on-demand transport than a fixed timetable with low-crowded lines. At the same time, the Flextaxi system remains comprehensible because it can be called up 'always' (at all times of the week and all day) and it is a more attractive alternative for people with reduced mobility.

## 6. FLEXTAXI (WORK TITLE)

In this chapter we will discuss the preferred variant: Flextaxi. This is a working title.

The preferred Flextaxi variant consists of the following components:

- Line 56 remains unchanged;
- Line 57 remains unchanged in terms of timetable, but is operated with a vehicle with 20 seats;
- Line 58 no longer runs in the evenings and on Sundays and is also operated with a vehicle with 20 seats;
- In addition, the Flextaxi runs in the evening and during the day on all days of the week;
- The bus lines and Flextaxi are open to Social Support workers.

### 6.1. Features of Flextaxi

The Flextaxi concept is characterized by:

- The system has an open character and is therefore accessible to everyone. A separate pass, as is usual with the bus stop, is not necessary. However, at least an email address or telephone number will be required to make a reservation. The data of Wmo travellers is already known to the central. They therefore do not need to create a separate account.
- Travelers are transported from stop to stop. (As a result, social assistance workers are given the choice of door-door or stop-stop for each journey and can be tempted to stop-stop with incentives);
- There will be extra stops near origins and destinations that are relevant for no hurries;
- The transport is on demand and not route-bound;
- Reservations are possible via an app and by telephone;
- The implementing organization is as close as possible to the existing organization and processes:
  - o The Municipal Transport Center (GVZ) takes care of the intake (call centre), planning and customer service;
  - o The journeys are carried out by the current operator of Wmo transport and Flextaxi (Taxi de Vlieger);
- The system is available all week long;
- Travelers are picked up and dropped off at the agreed time and stop. The agreed time can deviate from the pre-desired time by a maximum of 15 minutes. It must be checked whether a smaller margin is feasible, in order to avoid unnecessary waiting at the stop. This is especially relevant for people who cannot receive real-time updates via SMS or app
- Rides can always be combined. Wmo travelers who make a door-to-door journey can in principle sit in the same vehicle as (WMO or public transport) travelers who make a stop-to-stop trip;
- Because bus-stop transport is offered, the rate is lower than the current Wmo rate;
- Travelers will be notified by SMS, by telephone or via the app at what time the taxi will arrive at the stop and which vehicle is being driven;

- Payment is made at least by PIN, credit card and with the Wmo transport pass. Investing in OV chip card equipment on all taxi vehicles is not financially realistic and also not sensible in view of the coming replacement of the current OV chip card system. It should be investigated how a connection can be made with the new OVpay (account-based ticketing) and travel on account (such as Mybility in the Oosterschelde region).

## 6.2. Positioning: between public transport service and Wmo

Flexitaxi is a concept that has characteristics of public transport (such as a busstop-busstop) and characteristics of Wmo transport (travel on demand and not route-bound). Existing resources (vehicles and drivers) are used as much as possible.

Experience shows that once people have a Wmo indication, they do not easily opt for alternative forms of transport, while this is sometimes possible for part of their journeys, such as by public transport or possibly with volunteer transport (such as: meeting bus, Thover or automatic).

### 6.2.1. Seducing WMO travellers

The basic principle is that the new Flexitaxi is a better alternative for some of the current Wmo-indicated people, because of the following advantages:

- Being able to travel from any stop to any other stop (within the pilot area) allows more direct journeys without transfer;
- Extra stops at locations relevant to this target group increase the reach in the area and lead to shorter walking distances;
- The pre-registration time provided is considerably shorter (20 to 30 minutes), which makes more spontaneous travel possible compared to Wmo transport, where 1.5 hours of pre-registration time applies;
- It makes sense to make a Flexitaxi cheaper for a Wmo member than a Wmo ride;
- When Flexitaxi can also be booked with an app, the interaction with the traveler receives a qualitative impulse: with more status updates, a customer has real-time insight into his or her pick-up time;
- Wmo pass holders do not need to create an account. If they wish, they can immediately book a Flexitaxi, based on the Wmo cardholder data already known to the GVZ.

The Zeeland Mix of Mobility report (June 2021) sets out an analysis of which Wmo journeys can be replaced by regular public transport, taking into account the number of transfers and the walking distance. This was done by passing Wmo rides in Zeeland through the 9292 public transport planner. It turned out that with a maximum walking distance (sum of distance from home to departure stop and from arrival stop to destination) of 400 meters this is a maximum of 3 percent of the WMO journeys, at 600 meters 15 percent and at 800 meters 28 percent. It is assumed here that no more than one transfer is acceptable for Wmo employees.

However, we can assume that a switch is already a significant barrier for people who are used to a door-to-door journey. In addition, a 600 or 800 meter walk is a nice walk even for non-indicated people. People generally don't walk that far to a bus stop, 200 to 400 meters is common. For train stations, people are willing to walk further, up to about a kilometer.

Goudappel/Appm's analysis focuses on the characteristics of regular public transport. By adding more Flexitaxi stops at locations relevant to Wmo travellers, we can assume that walking distances for this target group will be reduced compared to current public transport. In addition, the number of transfers will be reduced, because many more direct journeys between all random stops in the area will be possible. Flexitaxi is therefore more attractive and more accessible than regular public transport and it is therefore realistic to expect that more than 3% Wmo journeys (as in the analysis by Goudappel/Appm) can in principle be replaced.

In addition to the physical aspects mentioned, mental thresholds also play a role. In general, the target group is not immediately enthusiastic about changes and does not quickly switch to a new product, especially if they can also continue to use their door-door service. The GVZ's call center employees, among others, can play an advisory role and actively try to entice people. When Flextaxi is a real alternative to the originally requested Wmo ride. The GVZ will integrate Flextaxi's rules of play in its planning tool and will train call center employees to point out the benefits of the Flextaxi to customers. If someone has never tried it before, the call center employee can explain how it works and, for example, offer a first free trial. The GVZ is therefore an important link in communication and the first acquaintance with the product. After all, employees already get Wmo'ers on the phone and can estimate whether the specific customer is reasonably able to replace the specific Wmo ride with a Flextaxi ride. In our prognosis, we assume that 5% of the current Wmo rides can be replaced by Flextaxi rides.

### 6.2.2. More choice for public transport travelers (and non-Wmo people)

Public transport travelers will in turn receive an upgrade from the current offer with more departure options and more local direct travel relationships (See next paragraph).

o During the day they can continue to use lines 57 (1x per hour) and 58 (2x per hour), which continue to run with the same frequency, although with a somewhat smaller vehicle;

o In addition, they get many extra direct travel relationships with the new Flextaxi, which leads to fewer transfers;

o They can continue to travel longer every evening because the Flextaxi is still running;

o On Sundays and public holidays, nothing is running at all. Instead, Flextaxi will be available all day long.

The extra offer is expected to attract more travelers. Due to the absolute number of extra departure options and due to a more diverse offer (fine and coarse-mesh transport), there is more freedom of choice, which means that a larger group of people (both hurries and no hurries) find a suitable solution for their travel needs.

### 6.3. Window times and frequency

The schedule below shows during which period the Flextaxi will run and when lines 57 and 58 will run.

Flextaxi is available every day until 23:00. In the morning, the first vehicles start driving during the week at 6:00 AM, on Saturday at 7:00 AM and on Sunday at 8:00 AM.

Beschikbaarheid per uurblok																							
maandag t/m vrijdag												zaterdag											
uurblok	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	7	8	9	10	11	12
Huidige situatie																							
lijn 57	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
lijn 58	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flextaxi (hele week); lijn 57 en 58 rijden niet in de avonden en niet op zondag																							
lijn 57 - 20-p. bus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
lijn 58 - 20-p. bus	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flextaxi																							

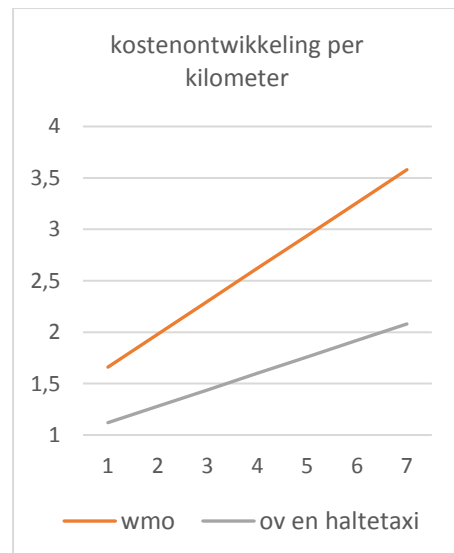
The window times on the east side of the Canal through Walcheren in particular have been extended considerably by offering Flextaxi, but there are also extra departure options on the west side. Flextaxi applies that there are at least 4 departure options per hour. It may happen that travelers are picked up earlier or later or that they have to take a detour in order to be able to combine journeys. This is prompted by the need to keep the system affordable.

Of course, travelers who have an appointment at a certain time (eg in the hospital or the theatre) or who have to catch a connection on a train or ferry can indicate this. They receive an arrival time guarantee, as is usual in Wmo transport.

## 6.4. Pricing

The rate for Flextaxi has not yet been determined.

It is clear that this must be seen in relation to the current rates of the WMO-transport (€1.34 + €0.32 per km) and public transport (€0.96 + €0.16 per km).



Graphic: Cost development per kilometer

The cost development per kilometer traveled of these two systems, as it were, sketches a bandwidth for the discussion about the Flextaxi tariff.

In a flex system, the customer rate is especially important as a button to keep a grip on costs. The rate determines the attractiveness and thus the number of journeys.

The following points of view were exchanged in the core team and focus group:

- o Flextaxi should be cheaper than Wmo transport for Wmo travellers in all circumstances in order to have a price incentive;

- o Because this concerns a limited pilot area with comparable short journeys, it should be considered to apply a fixed rate (fixed), for example 2 euros per journey for public transport passengers and 1 euro per journey for WMO-people. There is no risk on long journeys. The advantage of a fixed rate is that it works strongly in communication; people always know where they stand. The disadvantage is that it is not entirely in line with the public transport system;

- o Public transport users would be able to travel at a public transport rate when public transport is not running. It should be noted that, according to the current plan, Flextaxi is used to a limited extent as a replacement and mainly as an extra service;

- o Connexion has explicitly stated that Flextaxi's rate should be above line-bound public transport during the periods when lines 57 and 58 are operational at the same time as Flextaxi. The carrier argues that Flextaxi should be prevented as much as possible from cannibalizing current public transport use;

- o Consideration should be given to whether or not to use reduction for

Fellow travelers



Escorts

Children

WMO-people

o In addition, decisions must be made about offering free trial rides. In general, people don't just try something new and a first free ride can be the first push they need.

o and/or validating existing subscriptions and propositions.

It may be considered to use a survey to gauge the willingness to pay within the intended target group.

## 6.5. The directing role of the GVZ

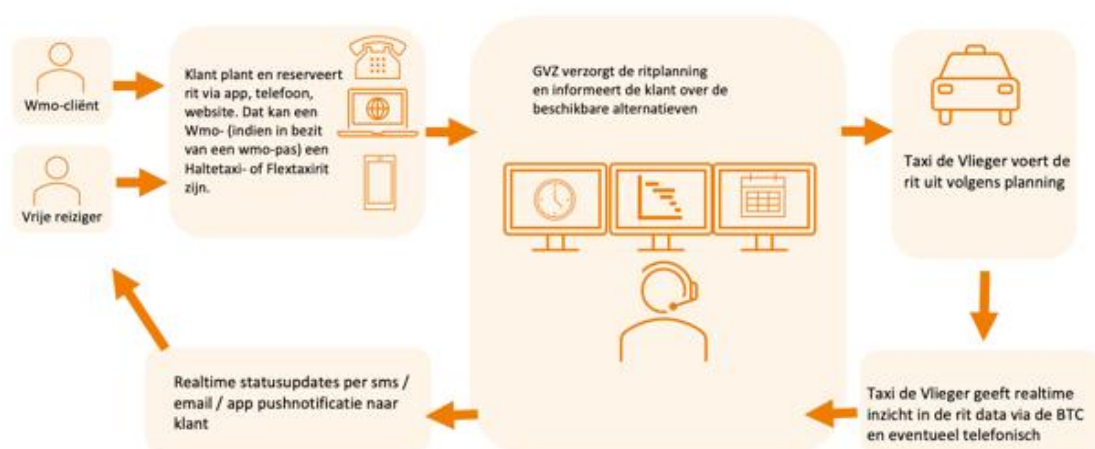
The Municipal Transport Center has an important coordinating role in the coordination of small-scale, on-demand transport in Zeeland. It makes sense to also include Flextaxi's ride acceptance and planning here.

### Combined implementation is already practice

In recent years, the Municipal Transport Center has gradually grown into a control center for the whole of Zeeland. The center now organizes several forms of transport for the municipalities, such as school transport, Wmo transport, but also public transport on demand (bus stop), which is financed by the province.

In the journey planning, made by the GVZ, it is possible that journeys of different product formulas (for example Social Support Act and bus stop taxi) are combined by the same vehicle and driver, as long as the rules of each product formula are respected. The GVZ planner takes all these different rules into account. A public transport passenger can therefore be transported at the same time as a Wmo passenger in the same vehicle. It is also possible that the same driver transports them consecutively: first a Wmo passenger, then another Flextaxi passenger and then another Wmo passenger. In the current operation, the taxi driver is therefore already instructed to drop one passenger at the front door and the other at a stop.

Flextaxi has an open character for travelers. So everyone can use it. In contrast to the current bus stop in Zeeland, there is no need for a separate transport pass. However, at least an email address and/or telephone number must be known that can be provided when booking the first ride. After that, the customer is given the non-binding option to convert this into an account to make booking easier the next time and to take advantage of other options, such as being able to call up a personal ride history.



## 6.6. Required configuration

A number of things still need to be concretised. Considered must the choice between convenience for the traveler and feasibility for the operator.

You can think of:

- Travelers can make a reservation up to [# minutes] before departure;
- Travelers can choose a departure and/or arrival window of [#minutes]
- Travelers who call more than [# hours] in advance receive a discount on the rate;
- An accompanying person may [may or may not] come along for free;
- The level of the rate with a distinction between [entry rate] and [kilometer rate].

### Pre-registration time as an important item of Flextaxi

It was already mentioned in the previous section: The pre-registration time for Wmo transport is now 1.5 hours. Both Taxi de Vlieger and GVZ have expressed the expectation that it should be possible to carry out the Flextaxi Plus bus stops with a considerably shorter pre-registration time of 30 minutes, possibly even 20 minutes. This is a big plus compared to door-door transport. It requires further coordination with the GVZ and possibly some simulations to determine the exact and realistic pre-registration time and departure windows.

## 6.7. Phone, app and web application

The focus group clearly showed that the primary target group no hurries has no need for an app. During the meeting people became enthusiastic about a booking module / web application from EBS (Spijkhopper), because of its simplicity and ease of use. More advanced applications are available on the market.

We recommend offering Flextaxi via telephone, web and app. That way, the customer has the choice. Where an app raises the threshold for some groups, it can actually lower the threshold for hurries, because of the ease of booking/payment and being continuously informed of the ride status. In the long term, access to transport will be done more often with apps. The pilot is a good environment to gain experience with this in Zeeland, without losing sight of the less digitally skilled groups.

### 6.7.1. Towards Mobility-as-a-Service

A separate app is a first step. More and more transport providers are also making their service available via other travel platforms, in addition to their own app. In recent years, the integration process of a multimodal transport offer has been accelerated by the emergence of Mobility-as-a-Service (MaaS), in which apps, in addition to presenting multiple transport options in a chain journey, also facilitate booking and payment.

An interesting development that builds on this is, for example, the Goan initiative in Twente, one of the 7 national MaaS pilots. The Goan app provides access to WMO transport, volunteer transport, shared mobility and public transport. In this way, people with an indication also see which alternatives they have at what price and travel time.

In addition, it contributes to the findability of Flextaxi when it is included in common travel planners. We will discuss this in more detail in Chapter 7.

## 6.8. Operating area and (additional) stops

The scope of the pilot area is broadly defined. The neighborhoods in Middelburg and Vlissingen that are now served by lines 57 and 58 are the Flextaxi's primary operating area, with the most important no-hurries locations on the edges of the area. The exact limits are yet to be determined. Because the service area of lines 58 and 57 already covers almost all of Vlissingen and all of South Middelburg, it is worth considering designating all of Middelburg and Vlissingen as a Flextaxi area. That makes the boundaries of the area clear for everyone. When a boundary is drawn at Middelburg South, uncertainties may arise because one ride within Middelburg is then allowed and the other is not allowed.

Travelers are allowed to travel from any stop to any stop in the area. The Flextaxi serves the existing bus stops and a number of additional stops to be determined near important origins and destinations of no hurries where there is no bus stop nearby. A number of criteria will have to be drawn up for suggesting additional stops. Below we give some suggestions.

### 6.8.1. Preconditions for additional stops

To organize data management and stop management in an orderly manner, a number of preconditions are required. You can think of:

1. Distance to other stops: An additional stop can be proposed if no other stop is located within 500 meters.
2. Service area with some scale: The additional stop must be located at a location with demonstrable potential (i.e. not only interesting for one or a few individuals)
3. Maintain existing bus stop: If, due to the disappearance of a line, an existing bus stop is closed, it may be considered to maintain it for Flextaxi.

### 6.8.2. Busstop layout

In contrast to regular public transport, the use of Flextaxi is not characterized by large volumes and many travelers. Costly investments in stop infrastructure and stop furniture therefore do not easily outweigh the sometimes possible incidental use of such a specific Flextaxi stop. A stop sign on a lamppost can be sufficient. Certainly in a pilot phase it is an advantage if a stop can be moved again if necessary. For example, look at existing locations such as residential care centers, GP practices, physiotherapy practices, shopping center, pharmacy, community center, etcetera. The coordinates and the name of the stop must be correctly passed on to the Central Stop File (CHB) of the NDOV, so that the stops can also be made visible in travel planners. It is also advisable to make smart use of existing facilities as much as possible. The following aspects should be taken into account:

- o It is safe to get in and out at the location;
- o The location is socially safe;
- o There is already a seat (an advantage);
- o There is already a roof and/or shelter against rain and wind (an advantage);
- o There is sufficient lighting (an advantage).

In a number of cases, additional stops can be placed, for example, in front of the main entrance of a larger senior institution. Customers could then, for example, wait for the taxi in a sheltered and comfortable place in the central hall.

## 6.9. Financial analysis

The first financial analysis is based on an average cost of public transport and social assistance and the Flextaxi based on comparable areas elsewhere in the country. In addition, we take into account a corona effect.

We assume integral structural costs for the longer term. In addition, transition costs must be taken into account. The incidental one-off costs are mentioned separately, if known. The actually requested government contribution can of course deviate from this as a result of further calculation and of choices to be determined regarding the refinement of the product features and rules and due to financial agreements between carriers and clients in the concession and transport contracts.

When designing the preferred scenario, the aim was that the future operation of the Flextaxi, including lines 57 and 58, should not be more expensive than the reference variant: the current operation of bus lines 57 and 58 without Flextaxi.

### 6.9.1. Assumptions and principles

The following assumptions and principles were used for the analysis:

- Due to the arrival of the Flextaxi and lowering the number of journeys on the fixed lines, 20% of the passengers on line 58 and 10% of the passengers on line 57 will no longer travel on these lines, because there is no public transport at times when they want to travel because they prefer a different mode of transport (for example, bicycle, walk, train, car, ride with someone, or use the Flextaxi because it offers a more direct route, for example);
- With the arrival of the Flextaxi, 5% of Wmo travelers in the Middelburg-Vlissingen region will transfer to the Flextaxi. (see also section 6.2.1).
- In addition to the 'overcoming' passengers from public transport and Wmo transport, the Flextaxi will also serve a latent demand for transport (new passengers). This latent demand consists of residents and visitors within the transport area who currently have no public transport alternative when they want to travel or who discover that they can make direct journeys with Flextaxi that now require a transfer. We expect latent demand to reach 16,000 travelers. In total, the Flextaxi will transport 57,000 passengers per year. That corresponds to 8 passengers per hour.
- In daily operation there are no separate vehicles that are used exclusively for Flextaxi. In the Zeeland management model, the GVZ controls a fleet of vehicles with drivers every day. Sometimes a driver is assigned a door-door ride (Wmo) and the other time a stop-stop ride (Flextaxi). The current operator and the GVZ are optimistic about the opportunities they see to make the necessary Flextaxi rides with combine the current work package. . This is because it is estimated that the short bus stops are relatively easy to achieve in between. In our calculation, however, we assume that four additional vehicles must be continuously available during the Flextaxi's operational hours. We assume that in this way there is sufficient coverage in the area to guarantee a short pre-registration time of approximately 30 minutes.

### 6.9.2. Traveler numbers

The forecast numbers of travelers per year are as follows:

	Current	Preferred Scenario
Line 57	44.000	40.000
Line 58	150.000	120.000
Flextaxi	0	57.000
Wmo	143.000	136.000
Totaal	338.000	353.000

Current: passenger numbers and revenue based on November 2019; numbers corrected by -15% for public transport and -10% for Wmo timetable based on 2021.

- Preferred scenario: lines 57 and 58 only run on Monday to Saturday during the day, not in the evening and not on Sundays; both lines are preferably driven by vehicles with midi buses (= vehicles with 20 seats); It is also conceivable that no new midibuses will be purchased within the current (expiring) concession and that the existing 12-metre buses will be used until the end of the current concession. Flextaxi is offered throughout the week.

The current Wmo transport is designed as an open final scheme: even though it is expected that some of the journeys can be driven away within the current operation, many extra passengers can provide a financial risk. This risk must be mitigated by making agreements in advance about this, how this can be controlled and/or, for example, by applying a ceiling during the pilot.

### 6.9.3. Traveler revenue

The table below shows the passenger revenues. Flextaxi is based on a rate of 2 euros per journey. For the financial analysis it is not necessary to know the amount of the passenger revenues. The cost price for the carrier and/or the government contribution for public transport, WMO transport and Flextaxi are sufficient to determine how much money the pilot will cost.

	Current	Preferred scenario
OV (Lijn 57+58)	€ 430.000	€ 352.000
Flextaxi	N/A	€ 114.000
Wmo	€ 420.000	€ 400.000
Totaal	€ 850.000	€ 866.000

based on November 2019, adjusted by -15% for public transport and -10% for Wmo transport as a result of corona.

### 6.9.4. Operating costs

For fixed public transport (line 57/58) the operating costs have been determined on the basis of average cost prices for comparable areas. In principle, costs can be saved by using midi buses (vehicles with 20 seats) instead of the current 12-metre buses with approximately 40 seats, provided that these vehicles can be depreciated over a normal period and the existing vehicles can be sold elsewhere. The smaller vehicles are cheaper to purchase, lease and/or depreciate. They are more manoeuvrable, they are cheaper to maintain and they use less fuel. In addition, the capacity is more in line with the transport demand.

The government contribution for the Flextaxi is derived from the contribution that is currently being made for Wmo transport (see next paragraph).

	Current (*)	Preferred scenario
OV (Lijn 57 + 58)	1,4 million	0,9 million (**)
Flextaxi	n/a	0,6 million
WMO	2,1 million	2,0 million
Totaal	3,6 million	3,6 million (**)

(\*) based on November 2019, adjusted by -15% for public transport and -10% for Wmo transport as a result of corona.

### 6.9.5. Government contribution in the pilot period based on current financial agreements with the carriers

The (required) operating contribution for the Flextaxi is rounded off at € 500.000,- per year. The government contribution to public transport will decrease as a result of the reduction in the number of journeys on line 58 by approximately €150,000 per year. For the WMO transport, the government contribution decreases by approximately € 100,000 per year. On balance, the Flextaxi will therefore cost an extra €250,000 per year during the pilot.

#### midi buses

In the new public transport concession there will be a new situation in which somewhat more compact midi buses can be used on lines 57 and 58. These are cheaper to purchase, maintain and operate, so that the government contribution per timetable hour driven will be lower than in the current situation where driven with more expensive 12-metre buses. Because the current concession period will only run for 2 years, it is financially unattractive to purchase new midi buses due to the short depreciation period. Unless a good takeover arrangement is agreed for this. Because this scenario is still further exploration requires two scenarios:

1. A scenario within the current concession rules and with the use of the current 12-metre buses;
2. and a scenario in the new concession with the use of midi buses.

We have calculated that in the final situation the preferred scenario in terms of government contribution is just as expensive as the current situation without Flextaxi.

Government contribution per year in million euros	Current Situation	Flextaxi in current concession period	Flextaxi in new concession period
Line 57,58 with 12 m buses	1,0	0,8	n/a
Line 57,58 with midi buses	n/a	n/a	0,6
WMO	1,7	1,6	1,6
Flextaxi	n/a	0,5	0,5
Total government contribution	2,7	2,9	2,7

The public transport concession includes a DRU allowance (contribution per timetable hour). However, the DRU contribution in the current concession is lower than what Connexxion needs for this. In the present

proposal, we have assumed key figures that are currently customary in the market and which are currently not customary in the concession.

#### 6.9.6. Government contribution per passenger

The operating contribution for each entry-level passenger is known to the WMO transport. This is approximately €12 per passenger. This includes call center costs and costs for driving the ride minus the customer contribution. For the Flextaxi this will be approximately €8.50 per passenger and for public transport it will be around 3 to 5 euros per passenger.

Government contribution per passenger	€
public transport required (based on current timetable and current passenger number)	5,1
public transport required (based on preferred scenario and midi buses)	3,4
public transport required (based on preferred scenario and 12 m buses)	4,8
WMO	12,1
Flextaxi	8,5

#### Busstop-busstop more efficient than door-door

Wmo transport in this area consists of very short journeys. As a result, the pick-up time takes up a relatively large share of the total time a journey takes, sometimes the pick-up and drop-off (with cash payment at the WMO transport) together takes even longer than the net driving time itself. Especially picking up people at the front door takes more time due to parking, ringing the bell, and because customers are not always ready: they still have to visit the toilet, find their bag, keys and transport pass, put on a coat, open the door. of the house has yet to be locked. That is a big difference with the busstop-busstop rides, where the discipline and responsibility of being ready on time lies with the customer, people board immediately and it is not possible to pay in cash. The Flextaxi also does not have to go all the way into the residential area, but arrives at stops at strategic locations and through roads that are generally easier and faster to reach and leave. Taken together, many precious minutes can be saved with this.

Taxi de Vlieger and the GVZ have therefore expressed the expectation that the bus-stop journeys will be faster and easier to combine with the existing Wmo taxi work, which means that the contribution per journey can be lower compared to the Wmo taxi. For the Flextaxi we assume that it is € 8.50 per passenger.

#### 6.9.7. Sensitivity (scenario) analysis due to the effects of Corona.

The pandemic has shown that the predictability of people's travel behavior is not an exact science. It is difficult to accurately predict the actual effects of corona (including potential virus variants). A sensitivity (scenario) analysis was performed for the preferred scenario. By testing Flextaxi against unfavorable and favorable scenarios, a realistic but broad bandwidth is created to provide an indication of the minimum and maximum government contribution.

	<b>Possible development (hypothetical)</b>	<b>Government contribution in million euros</b>
Scenario 1	The use of Flextaxi is disappointing and both social welfare and public transport have to deal with a slight decrease due to Coron	2,7
Scenario 2	A low use of Flextaxi and a significant contraction due to, for example, a new Corona variant (-60% ov and -40% wmo)	2,3
Scenario 3	Expected use of Flextaxi and a significant contraction due to, for example, a  new Corona variant (-60% ov and -40% wmo)	2,6
Scenario 4	Expected use of Flextaxi and a slight decrease as a result of corona	2,9
Scenario 5	Expected use of Flextaxi and 10% growth in public transport	3,2
Scenario 6	Twice as much use of Flextaxi than expected and a significant contraction of public transport use	2,9
Scenario 7	Twice as much use of Flextaxi than expected and 10% growth in the public transport use and 40% decrease in WMO	3,6
Reference	Current situation without Flextaxi with corona effect: -15% public transport and -10% WMO.	2,7

## 6.10. Pilot Period

Because Flextaxi is a new proposition that fits in with the Regional Mobility Strategy, we consider it advisable to give further development a chance. For that reason, we recommend allocating at least 2 years for a pilot. The first year can then be used for further fine grinding, making small adjustments and properly placing the product. The product can prove itself in the second year. A new form of mobility offers the opportunity to better match transport to the wishes of the traveler. Innovation is also accompanied by a certain degree of "uncertainty". Something that is new by definition creates a barrier for the majority of people. In addition, late adopters are generally overrepresented in the target group (no hurries) targeted in this case. In order to give such a new product a chance, some degree of market maturity is needed to serve a structural passenger demand with a sufficient level of quality.



## 6.11. Points of attention transition

The current public transport operator in Walcheren (Connexxion/Transdev) has indicated that additional costs will have to be spent for the pilot and/or that the business case does not include matters that the operator does want to/must take into account.

You can think of:

- Purchase (or lease) midibuses (new vehicles with 20 seats) for a possibly limited period, or make agreements regarding a takeover guarantee, so that the midibuses can continue to run in the next concession period, even if another carrier becomes a concessionaire
- Sale, cancellation of the lease contract, or transfer of the current vehicles to another concession; in the worst case: keeping the current vehicles for occasional rush hour journeys where the new vehicles have too little capacity.
- If Connexxion sees no opportunities within the financial possibilities to purchase new midibuses, there will be higher variable costs than in a situation in which midibuses are deployed on lines 57 and 58.
- The realization of charging equipment for electric vehicles and the operational consequences of the use of electric vehicles compared to diesel buses.
- Loss of schedule due to drivers having to change vehicles during their shift.
- Making use of the (more/) less work scheme as a result of the reduction in the number of timetable hours.

The points described may be the subject of discussion between Connexxion and the Province of Zeeland.

Transition costs may also arise for the future operator of the Flextaxi and the coordinating taxi company GVZ, such as the costs described below.

It is estimated that 2 to 4 extra taxi vehicles are always needed, depending on the time of day.

In the current contract, the deployment of any additional capacity falls under the entrepreneurial risk of the executing party. For this reason, only the government contribution has been calculated and any additional capacity deployment has not been separately included in this financial analysis.

## 7. CONSIDERATIONS FOR IMPLEMENTATION

When there is administrative support for a definitive go, the pilot proposal will be converted into a project. And then of course a project organization is needed. For this it is important to know:

- who will be the client (province, or municipalities or jointly),
- how the financing is arranged;
- who will be the lead partner behind the project;
- how stakeholders are involved;
- and which pilot period is desired (start and end).

Once the frameworks have been established, the implementation can be further elaborated. In this chapter we elaborate on the main points that require attention within the implementation, which can serve as the basis for an implementation plan to be drawn up.

### Four to five months

No separate total plan has been worked out. Because this is still highly dependent on choices still to be made. We estimate that a period of 4 to 5 months implementation time should be taken into account, depending on the ambition level of the choices that still have to be made.

### 7.1. Team and responsibilities

In terms of project team, we consider the following composition of roles necessary, each with his/her own area of attention and expertise:

#### Role Responsibilities

Project leader: As initiator the first point of contact for the client(s) and guardian of the critical milestones in the planning and the project budget;

Manager Taxi operation" arranging the operational processes, including the vehicles, drivers;

Coordinator directing" GVZ employee responsible for arranging and training the call center, the configuration of the rules and stop coordinates in the planning software, drawing up the data management and monitoring plan and, among other things, checking on privacy rules;

ICT employee: Depending on the choices to be made, this person is responsible for new ICT developments such as the app, findability within travel planners such as 9292, link with the GVZ software and other Flectaxi-related ICT issues, including arranging payment flows. and testing all applications.

Employee Commerce and Communication: responsible for drawing up and executing a media plan, introduction campaign and a marketing plan. Also responsible for rates and promotions.

#### 7.1.1. Discuss

The GVZ sees a logical role for itself in taking on the management of the system. Because many work streams converge at the GVZ, it would be logical to let the implementation team work from the central office as much as possible.

### Project consultation

After a kick-off meeting in which acquaintances are made and the planning is discussed, a consultation structure will be set up. Each workflow will have its own dynamics and planning, but weekly feedback will take place for each workflow in a progress meeting with a core team in which at least the project leader and client(s) are represented.

### Consultation stakeholders

For a successful introduction and to avoid surprises, it is necessary to properly involve a number of stakeholders. Which organizations these are will have to be coordinated together, but think of:

- Connexxion and Taxi de Vlieger (insofar as they themselves are not yet part of the implementation team;
- The OPOV;
- Advisory Councils Social Support Act and Social Domain (Middelburg and Vlissingen);
- Disability and/or senior citizens' councils;
- Neighborhood associations
- Important settings for the primary audience (no hurries)
- Road authorities;
- Municipal councilors.

## 7.2. Implementation budget

In chapter 6 we discussed the expected structural costs per year. A budget will also have to be made available for the implementation itself. The following should in any case be taken into account for the project budget:

- The hours of the project organization
- ICT/app/notifications development costs (is it connected to existing technology or opts for new development)
- Development costs of the payment flows (definite choices still have to be made in this regard)
- Set up control center (including training call agents and configuration of the game rules)
- Purchase or lease additional vehicles (4)
- Training/Instruction drivers
- Drafting and executing media and promotion plan
- Additional stops and stop signs (design, production, installation, configuration in systems and communication)
- Risk hedging based on a risk analysis yet to be drawn up

It is currently not possible to provide an estimate for this, because this is highly dependent on choices that still have to be made and further agreements that have to be made between the carriers, the principals (province and municipalities) and, for example, the options offered by the municipal authorities. transport center.

### 7.3. Actions

In this section we give an indication of the most important work flows.

#### 7.3.1. Control Center (GVZ)

The rules of Flextaxi are broadly defined. Final choices still need to be made in a number of areas, such as the rate, the window times, the punctuality margins, the maximum waiting time at the stop and the pre-registration time. Once established they can be tuned:

- The rules of the game (business rules) are simulated and, if necessary, proposals are made for adjustment in the project team;
- All agreements with the operator about vehicle management, quality, training, IT and punctuality are recorded in an SLA, which is drawn up by the client;
- The business rules (including stop names and coordinates) are configured in the planning software;
- Agreements are made about data management and monitoring. A database and monitoring environment will be set up for this;
- Central staff is trained by means of work instructions (possibly via e-learning)
- Organization of administrative processes
- Set up test workstation call center
- Set-up of test workplace management
- The processes are tested in a test environment and live environment

#### 7.3.2. Vehicles and drivers

The operational taxi manager is responsible for the timely and adequate functioning of the drivers and vehicles:

- New vehicles must be purchased or leased on time (according to the current calculation, this concerns 4 vehicles);
- Drivers all receive work instructions;
- Test drives are driven and the first experiences are fed back by the drivers;
- Measures to comply with the SLA with the GVZ must be implemented in the organization.

### 7.3.3. Infrastructure / busstop management

It must be determined where the busstop management will be invested. Normally this is up to the road authorities and it would make sense to leave it there. This requires close consultation with Connexxion and municipalities.

- Communication takes the initiative for a design of the physical visibility at the stops. For example, with a separate stop sign at additional stops and a recognizable sticker at existing stops in the pilot area. (Possibly with consultation of stakeholders such as OPOV and advisory councils);
- A bus stop scan must be carried out to determine the definitive bus stop list;
- A protocol for additional stops (see chapter 6) and the method of stop management is coordinated with the busstop manager;
- Busstop names and coordinates are supplied to the GVZ and Connexxion according to NDOV specifications and are submitted to the Central Stop File of the NDOV.

### 7.3.4. ICT-related tasks

To reserve

Flextaxi customers will soon be able to book via:

- Telephone
- Web application
- App

Reservations by phone are existing practice. For this, a telephone number must be reserved that is included in the communication.

An online web application and a customer app are not yet common in the current GVZ organization. We recommend conducting a market survey into the possibilities that are available and that are in line with future developments and ambitions within the GVZ, and then decide whether to develop in-house or purchase existing applications.

There are various white label applications on the market for comparable transport products. It is therefore worthwhile to set an objective benchmark for this in order to make a well-considered choice.

One of the options is to explore partnership with Connexxion. Since Connexxion is a stakeholder in the project and is actively responding in other regions in the Netherlands with online ordering modules and customer apps for Flextaxi-like developments, it could be interesting to look for a strategic partnership. Connexxion's IT architecture can be linked to Taxys, a software package used by GVZ. The Connexxion app supports planning, booking, payment and informing the ride via status updates. Talks between GVZ and Connexxion are ongoing at Goerre Overflakkee.

# In 7 stappen altijd en overal van A naar B

Door het slim koppelen van bestaande systemen en inzet van partners in heel Nederland.



Existing proposition of Transdev/Connexxion: OV-op-Maat

## Flextaxi findability in travel planners

In order to make Flextaxi findable in travel planners and/or Maas providers, a number of preconditions must be made. Depending on the level of ambition, it must be decided whether this will already be achieved at the start of the pilot or, for example, during the first half of the year. This can be seen as a stand alone project. Preconditions include:

- Connecting to TOMP-API specifications (national standard);
- A separate form with specifications (NeTEX) and business rules of the system must be submitted for 9292 (Separate route with 9292).
- Busstops must be supplied in the Central Stop File specifications (interface Stops NDOV);

## Test period

Separate workflows will have to be planned for the above components, which are still dependent on choices that still have to be made. Experience has shown that it is important to reserve a lot of time in the implementation (we recommend at least 12 weeks before going live) to be able to test the IT processes end-to-end.

## The communication/marketer employee is responsible for:

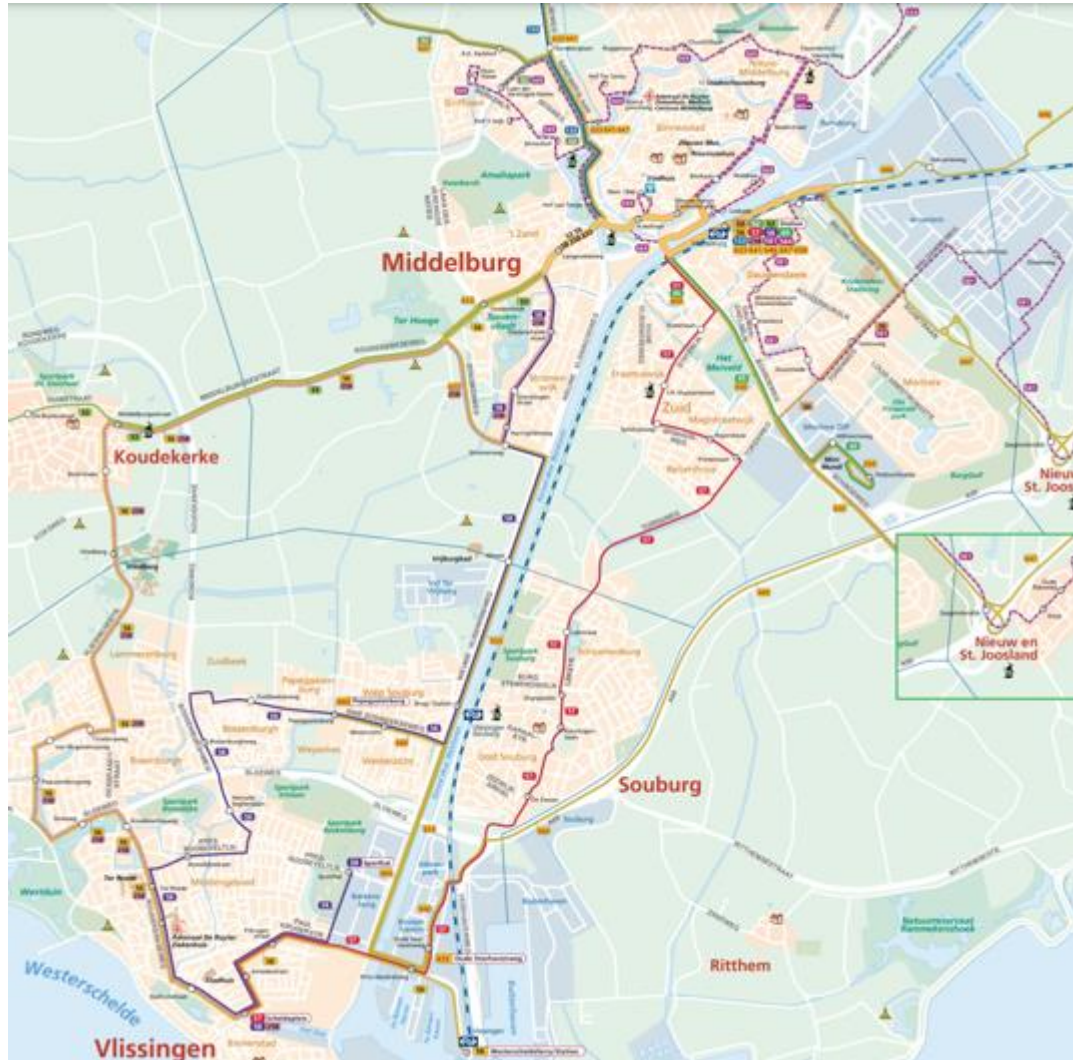
- The communication and marketing strategy: The focus group argues in favor of looking for the no hurries mainly physically and taking them as much as possible by hand. This could be done on the basis of on-site meetings.
- Completion of the Marketing mix based on a marketing plan
- Positioning / naming for Flextaxi Plus
- Corporate identity/logo design in coordination with a design/communication agency
- Organizing an introduction campaign
- Organizing web content and Q&A

- Drawing up a media plan and spokesperson line
- Coordination with communication staff of stakeholders such as municipalities and transporters

## APPENDIX 1:

### LINE NETWORK MAP

The most recent line network map - published by Connexxion on the website - of the area around Middelburg and Vlissingen (version April 2020).



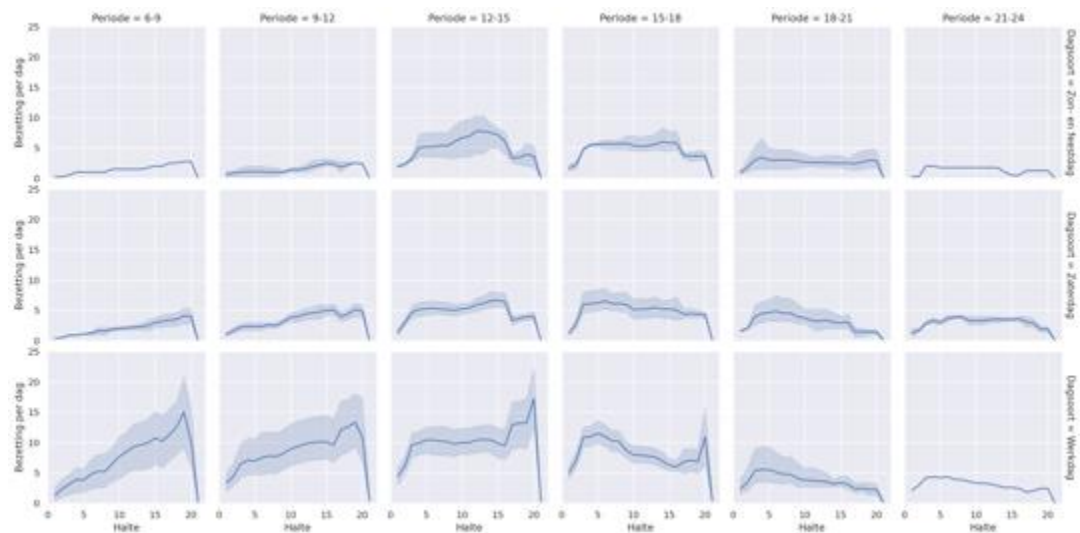
Note: line 258 is shown on this map, but this line has since been discontinued. As a result of corona, a number of other changes have also been made that have not yet been processed on the card and that also have no/limited influence on (travellers who use) lines 56, 57 and 58.



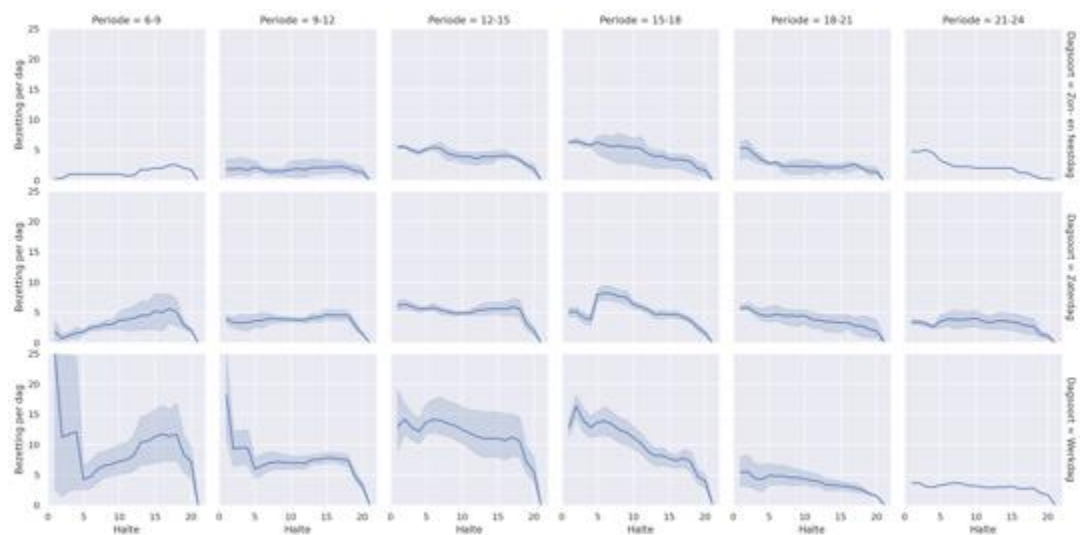
## APPENDIX 2: NUMBER OF SEATS PER RIDE

The figures below show the number of occupants per trip for three types of day (Monday to Friday, Saturday and Sunday) for lines 56, 57 and 58 for a representative month before corona (November 2019). For each day type, 6 periods are shown (6-9, 9-12, etc. up to and including 21-24 hours). The occupancy over the journey is shown per figure.

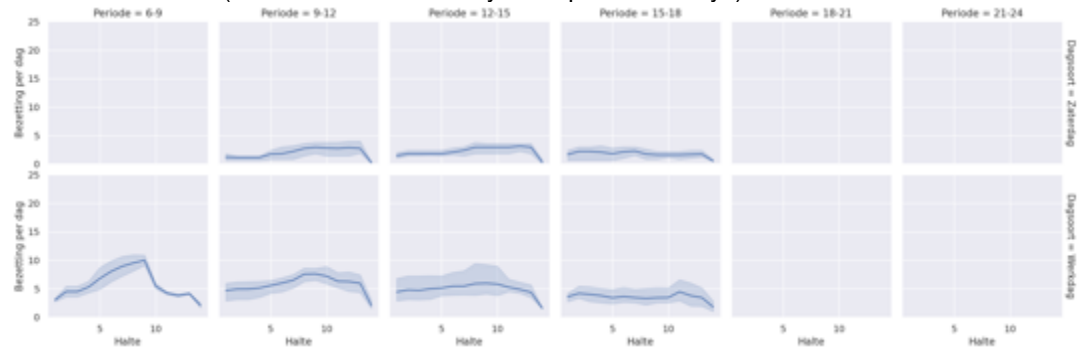
### Line 56 direction 1



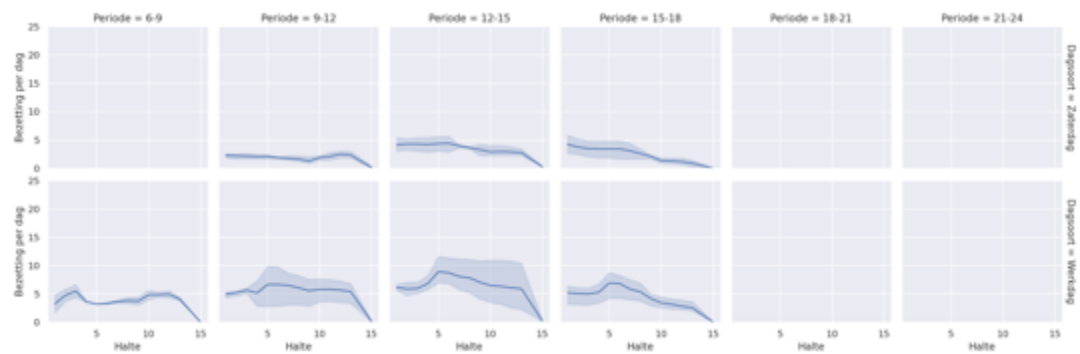
### Line 56 direction 2



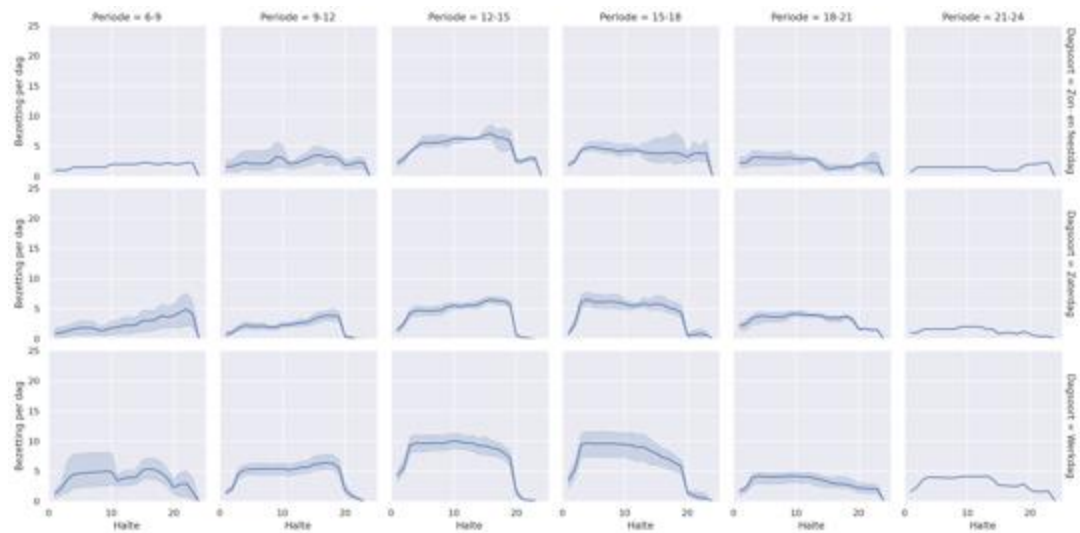
Line 57 direction 1 (does not run on Sundays and public holidays)



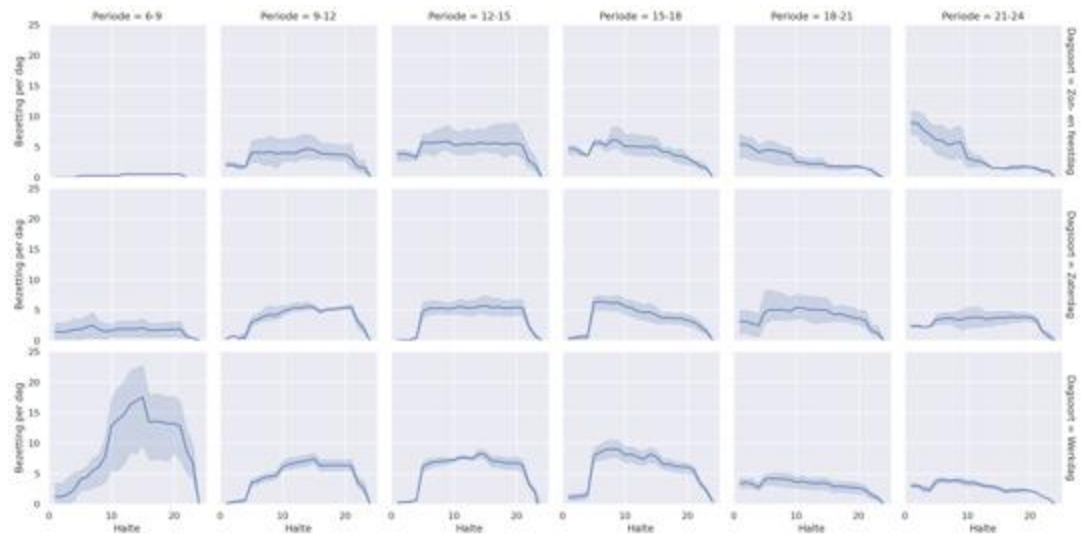
Line 57 direction 2 (does not run on Sundays and public holidays)



Line 58 direction 1



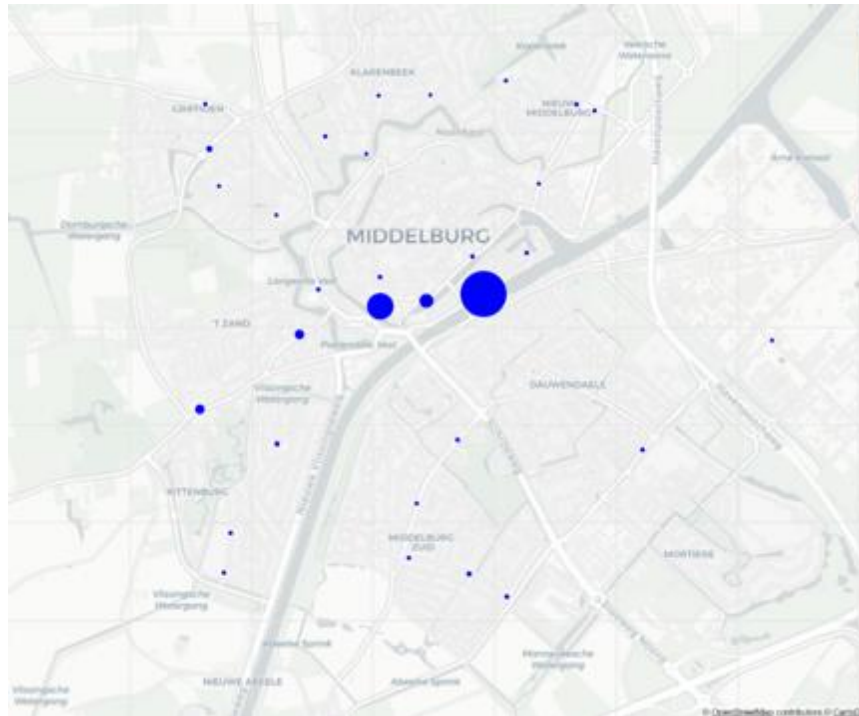
## Line 58 direction 2

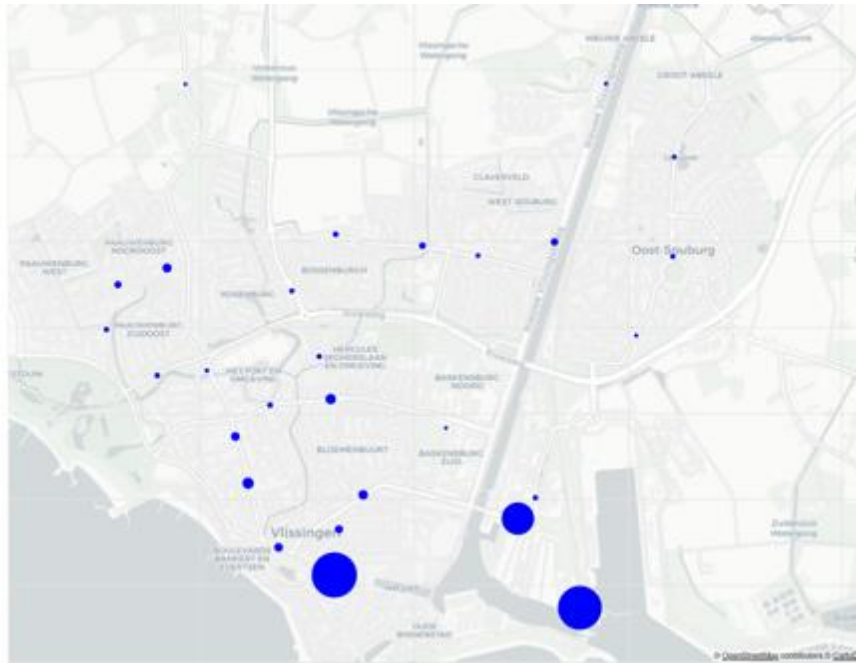


### APPENDIX 3: NUMBER OF BOARDS AND DEPARTURES PER STOP

Period: Monday to Friday; Nov 2019; including switchers (\*)

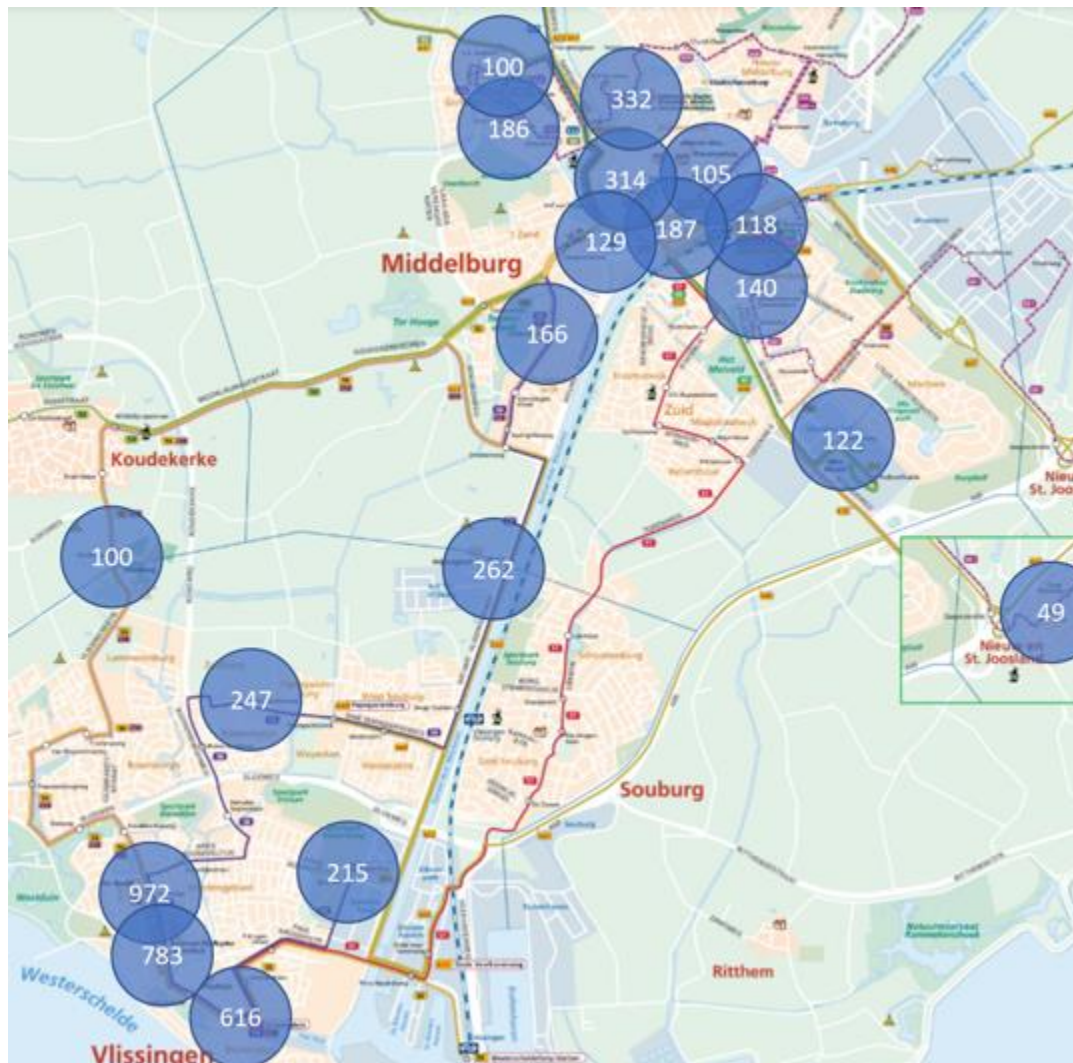
(\*) a transfer is counted as one exit and one entry Middelburg





## APPENDIX 4: WMO ANALYSIS

### Main Wmo origins and destinations



Origins and destinations outside Vlissingen and Middelburg:

- 339 Goes
- 128 Veere
- 99 Serooskerke

## APPENDIX 5: POINTS TO CHECK FOCUS GROUP

Twice a half day was set to meet with the focus group.

The focus group had the following composition:

- a neighborhood bus coordinator;
- a neighborhood bus driver;
- a Wmo taxi driver from Taxi de Vlieger;
- a Connexxion bus driver;
- a policy officer Wmo from the municipality of Middelburg;
- a policy officer for the social domain of Vlissingen;
- a Wmo consultant from the municipality of Middelburg;
- a member of the Middelburg Social Domain Advisory Council;
- a member of the Advisory Council Wmo Vlissingen;
- and a call center employee and coordinator of the GVZ.

### Results first meeting September 2021

- The current buses do not pass by a few locations that are important for this group (eg some old people's homes);
- Bus stops are often too far away;
- Not only the distance to the stops, but also the road to them is important. Think of:
  - o The accessibility of the route (e.g. walker friendliness)
  - o Road safety (busy intersections and crossings)
  - o Social insecurity (dark tunnels, etc.)
- Line 57 no longer runs in the evenings. People also want to be able to travel (back) in the evening;
- Communication risks: sending alone is not always effective with this group. Although it can be nice to have an offline folder or article in the newspaper, this does not reach the group sufficiently. People find change difficult and the threshold for a new system is high.
- Communication opportunities:
  - o Stimulating word-of-mouth is important;

- o Create ambassadors among users, so that they persuade not yet users to travel with them;
- o The interactive exchange of information on location: By going to people, giving explanations and being able to answer questions directly;
- Small-scale transport is appreciated by this target group. This is experienced as more personal and less time pressure is felt;
- The Servicebus of the past is labeled as very positive:
- o This concept was easily accessible;
- o The stops were close to relevant locations for the target group;
- o There was a large social aspect to it: a 'knows us' neighborhood feeling;
- o The rollator was easy to carry;
- The belief is that if you want to get people out of the Wmo taxi, a financial incentive is also needed;
- Not all Social Support workers are eligible to use the current public transport;
- The no hurries should have choice;

#### Frequency:

- The disadvantage of a service bus is that the frequency will probably be a maximum of 2 times per hour. The number of departures from a demand-driven system is higher;
- On the one hand, it is indicated that the time factor plays a smaller role for the no hurries. On the other hand, it is of course a factor that partly determines the service level and thus the attractiveness of the system;
- If you want to get people, then the frequency is important. Lines 57 and 58 now run every 30 minutes. That is really considered the minimum. The local buses now run every hour (Veere - Westkapelle every 2 hours).

#### Current Flextaxi:

- The current Flextaxi and/or butterfly-like concept with mandatory reservations but with fixed times is not enthusiastically received, because of the threshold of reservation and the need for one and the complexity: how do you ensure that people understand this well? The system is not very familiar to the focus group.
- When extra stops are added, it is a point of attention to ensure sufficient shelter and seating;
- A new system should focus on combining as much as possible. Individual transport is only necessary in very special situations. People generally also find it pleasant to travel with others;
- A new service should not be used too luxuriously: such as driving to the front door instead of the stop or lifting heavy bags, then people will count on it. The WMO drivers often offer the extra service, but it cannot become a guarantee.

Variant: flex system from door to some hubs (train stations and city centers)

- This system doesn't seem very suitable. The scale of the area is actually too small for such a system.



- From some important bus stops (such as Koestraat) the walking distance to the center is already large, let alone from the station.
- The frequency of the trains is also too low to be part of the system.
- The system is too complicated; the motto 'everyone should be able to participate' does not apply in this way.
- The exchange can play a role to a certain extent for travelers who find the system difficult.
- For the longer distance, for example to Bergen op Zoom, such a shape could help. In fact, Valys is already intended for that: The connection to the public transport station is also supervised there.

#### Rate:

- If it concerns small distances and the distances remain comparable in a defined area, a fixed rate (fixed price) can be considered.
  - o Advantage: it creates clarity, people know exactly the tariff and it is easy to communicate;
  - o Disadvantage: a separate rate makes it a separate system and not a logical part of public transport;
- Consider making the system free for WMO travelers. Disadvantage: then the use can resort to a great deal;

#### To reserve:

- Reservations form a barrier to spontaneous travel;
- Using an app requires skill that Wmo people often do not have. Calling is a barrier, but an app is even more so. The power station could play a role in this;
- People must be able to be taken by the hand, especially the first experience is important;
- When smaller vehicles are driven, there is a greater risk that on an incidental basis no more seats are available due to fluctuations in demand. The advantage of making a reservation is that you know for sure that you can come along and that a seat is guaranteed;
- When a reservation has to be made, it is important to make this as accessible as possible with good guidance, for which a role seems to be reserved for the exchange

#### Role Central:

- The participants in the focus group agree that the operator must be able to contribute ideas. The new concept is a form of public transport and privacy is treated differently there than with social assistance transport. The operator at the exchange could ask about the reason for someone's travel, but the traveler can never be obliged to answer.

#### Driver support:

- The average bus driver is not seen as very helpful by the no hurries. They sometimes drive away before people are seated. For WMO travelers, this is a living fear.
- Local bus drivers help with getting in and out if necessary. However, the travelers cannot count on that, because the drivers are volunteers. When it is stipulated that neighborhood bus drivers must be able to help, some drivers may not feel like it.

## Results second meeting November 2021

During this meeting, the various promising variants were presented.

The variants:

1. Service bus; cancel line 58, line 57 continues to run
2. Flextaxi: stop-stop instead of 57/58
3. Flextaxi Plus: stop-stop, in addition 57/58 during the day during the week
4. Open Wmo taxi door-door to public transport passengers

### **Service bus:**

- The service bus largely meets the needs of the no hurries target group;
- Many elderly people are lonely, traveling together is also a social moment;
- The concept is not innovative, but it does not have to be revolutionary for the target group either. The target group often sees innovation as a barrier;
- Although this does not appear to be the preferred variant, the focus group advises not to let go of this **variant**.

### **Flex as a replacement for line 57/58**

- If you use flex for everything (variant 2), it is difficult during rush hour; you don't have capacity at a taxi center to absorb that. There is a risk that a lot of valuable capacity will then have to be added (if that is possible at all)

### **Flex plus (variant 3)**

- After booking a ride at the Spijkhopper (live on the big screen), the group is enthusiastic about such a concept; this is considered promising for a substantial part of the no hurries group.
- Making a reservation, especially the first time, requires guidance;
- The Central can play a guiding role in this: by pointing out Wmo travelers to the possibilities of the system, when a door-to-door journey also seems possible with a stop-stop;
- This variant can compete with WMO transport with a cheaper rate and shorter pre-registration time; In particular, the short pre-registration time seems to be an advantage for WMO customers on Walcheren, because this group generally tends to book as short as possible in advance;

**Pre-registration time:**

- Seen from the center, 20 minutes of pre-registration time is still feasible in the pilot area. A short pre-registration time could be a good incentive to opt for this system instead of a WMO taxi. There the pre-registration time is one and a half hours.
- With this system the spontaneity disappears a bit, which is a disadvantage. With a regular public transport bus you can simply assume the departure time;
- With such a flex system, the number of departure options is higher than a fixed public transport line, which is again an advantage.

**Rate and payment:**

- Keep an eye on the “poor people”, for them the WMO rate increase was already a big shock;
- It is suggested to use the public transport rate, because it replaces public transport. For example, it is an option to use € 1 extra for the Flextaxi during the day, because people can also use 57 and 58, and to offer the Flextaxi for a public transport rate in the evening. This is unclear to the traveler and also no incentive to let Wmo employees use this system.
- You want to get rid of cash as much as possible, it is expensive and unsafe and also does not fit in with the innovation.
- A lot (70%) of people still pay with cash in WMO transport.
- Consensus is there not to offer cash as a payment option from the start with the introduction of a new system. You are introducing something new. Be innovative with the payment system;
- Driving on account can be a solution for some of the no hurries;
- There is an interesting cashless prepaid payment system in the Oosterschelde region (works with Mybility). People travel prepaid, and receive an automatic alert when the prepaid is almost empty. It is difficult to get those people into that system in the first place. It is important to keep the system accessible. But it already exists and you can join it.
- Public transport chip card is not feasible now due to the way of working with TLS, but may be in the future;
- OV chip will gradually become less important in the future, now that OVpay is being introduced everywhere;
- Payment by pin card is feasible for almost all travelers;

**Promotion and communication:**

How do you ensure that people get to know this product?

- Free rides, for example you put a small bus at Ter Reede and provide information. In this way, potential users from the Social Support Act become familiar with the system;
- Organize meetings, where you can also look up cooperation with organizations such as WVO and Zorgstroom. There, many people also receive guidance at home, which can also help introduce the system;

- People can be tempted with the shorter pre-registration time than in the Social Support Act;
- The exchange also introduces the new concept over the phone with customers;
- Many elderly people watch Omroep Zeeland;
- Introducing buddies is a good idea, at large locations put someone in the hall who knows the system and can help people.