

Mobility – Health – Land Use Program: Transfer of physical activities into every day's routine.

Short Summary

In Weiz, Austria a Mobility – Health – Land Use Program has been carried out which deals with the transfer of physical activities into every day's routine. The main goal of this program is to reduce short car trips and shift them towards walking and cycling (mainly up to 3 km distance) without additional time consumption. The main argument for the participants is the increasing of their own fitness. This personal benefit is usually not easy to be proven when trying to implement sustainable and environmental friendly travel behaviour in other projects.

Problem description

Lack of movement is one of the most important factors leading to different health problems like heart/circulatory diseases, depressions, overweight and obesity, diabetes type2, hypertonia etc. Surveys in France, Switzerland and Austria show that the number of fatalities based on lack of physical activities due to changed transport behaviour (lack of cycling, walking – to much car use) is eight times higher than that of those dying due to traffic accidents and double the number of those dying because of transport related PM10 impacts. This lack of movement is largely caused by the way of life and, last but not least, by the fact that motorised individual traffic has increased to such a high extent. This behaviour clearly also has impacts on the environment and thus also on the individual, who will be exposed to a higher load of pollutants.

There have already been approaches for reducing the increasing car traffic in the conurbation areas. Nevertheless, these approaches have mostly failed because the environmental issues were emphasised too much. The personal benefits that may be drawn by the individuals from changing their behaviour were not really pointed out. All too often renouncing the use of one's own car was equated with the reduction in comfort and quality of life.

Description of the campaign / measure

The core idea of the program is the "transfer of motion and physical activity into everyday life". Instead of taking the car, the bicycle will be chosen, or everyday journeys will be made by simply going on foot. The programme that has been developed does not only help to improve fitness and health but also to save the environment. In this module, there was a co-operation with the several medical doctors from Weiz as well as with a local fitness manager. Those who are patients of these doctors were invited to take part in the mobility / health programme.

The "Activity Programme" took 12 weeks and had the following objectives and targets.

- The participants should become aware of their mobility habits, learn to understand their effects and identify an active opportunity for change.
- The participants should (re)discover their city and the possibilities for pleasant walking and cycling in their direct surroundings.
- The participants should be motivated to transfer more physical activities into everyday mobility, i.e. to increasingly go on foot or ride the bicycle instead of choosing motorised means of transport and to document this behaviour.

- The participants should learn about and experience and understand the physical and psychological advantages and benefits of regular movement (above all "non-sportive" movement).
- The participants should exchange their experiences, hints and (self)motivation strategies.
- The participants should act as multipliers for their families, friends and their surroundings.

The 12 weeks' programme provides for three evening sessions a group meeting including presentations on mobility/movement and impacts on the behaviour and additional two fitness checks (before – after). As early as at the kick-off meeting, the participants were given the Mobility / Health Diary which had been developed specifically for this kind of program. Participants could note every day to what extent they had achieved their personal activities. This facilitated qualitative and quantitative evaluation. The idea was to transfer more motion into everyday life. 30 minutes of physical activities a day would be optimal. In this context, it does not really matter whether these 30 minutes of motion are performed all at once or are distributed over the day. In order to find out whether the programme had yielded measurable results and in order to be capable of offering personalised consultancy relating to fitness (intensity, optimal pulse frequency, etc.), a classifying walking test was made as early as in the first project week (methodology of the UKK walking test). After 12 weeks, this walking test was repeated in order to measure the changes.



The three meetings had the following contents:

- 1) Explanation of the approach, information on connections concerning mobility / health / land use / environment (incl. the impacts). Hand out of mobility / health diaries and explanation of the use. Hand out of step counters.
- 2) Motivation: - Feedback, hints, tricks, reactions.
- 3) Analysis of mobility diaries, evaluation and finalisation of Project

Who is the driving Force behind it? Who is the beneficiary? Who and how many are involved?

The implementation of the project has been funded by the European Commission through the Interreg 3B Program – Alpine Space and by the City of Weiz, Austria.

The project was designed and carried out by FGM-AMOR (Austrian Mobility Research), by the political responsible for mobility management in Weiz, Mr. Otmar Handler and by the local fitness manager Gudrun Eggenreich. Medical Doctors from Weiz contributed with presentations and co-operated by the procuration of their patients. The biggest benefit was at the participants and the public.

Main slogan / statement

“In Weiz is nix weit” (this Austrian dialect wordplay means something like “there is no distance really long in Weiz”).

Results / Potentials

Average values per person:

- During the duration of the 12 week program each participant covered approximately 170 km on foot.
- Ca 100 km have been carried out by bicycle by each participant in average in the same period.
- About 92 car-km could have been shifted to walking and cycling within the 12 weeks program.
- This means that approximately 1/3 of all non-motorised kilometres are saved car kilometres from the average 270 km per person (=170 km on foot and. 100 km by bike) and among them a shift of 92 km from car to those non-motorised modes). The remaining kilometres where additional distances / trips for improving the fitness.
- All participants improved their fitness values in average about 13,1% within the period of 12 weeks.

All participants confirmed that they will continue with the program on their own in the future. Therefore a extrapolation for the whole year is valid.

This would mean the following:

Persons who participated in this motivation program would walk or bicycle in average approximately 1200 km per year. At the same time they would save in average 400 car kilometres per year.

The impacts of these savings / shifts concern not only the participants but also all the citizens of Weiz regarding a reduction of emissions and noise and an increase of traffic safety.

If it would be possible to convince a bigger number of citizens of Weiz to behave like the pilot group (= transfer more physical exercise into everyday routine by shifting car trips towards walking and cycling without additional time consumption) the advantages for the whole region could be calculated and demonstrated very well also in a quantitative way.

Example for the potential in Weiz: The assumptions are very conservative.

Assumption: It is planned that the program will be carried out 3 times with each 37 participants. After the finalisation each participants could convince another 3 persons to each behave like he / she does. This would lead to the following shift / saving:

37 Persons x 3 repetitions of the program x motivation of 3 followers each x 1200 km on foot / by bike per year = **399.600, - km will be covered by bicycle / on foot per year.**

37 Persons x 3 repetitions of the program x motivation of 3 followers each x 400 shifted car-km per year = **133.200, - saved car-kilometre per year in Weiz.** This equals a saving of approximately 18 tons CO₂ per year.

Opportunities and barriers - Factors of influence and criteria of success and possible barriers

Factors of influence and criteria of success and possible barriers:

- Good co-operation between medical doctors and implementation team
- Public space must be prepared for physical movement (e.g. no above average safety problems caused by cars or availability of walking routes and cycling tracks or speed limit of 30 km/h etc.)
- Action should be carried out in the warmer season – Start in March – end in October.
- Good contacts with media for public awareness

Steps of implementation

- Design of program
- Establishing partnerships and co-operations
- Acquisition of participants
- First meeting and before-fitness test of participants
- Second meeting
- Final meeting (incl. analysis of results, feedback)
- Documentation

Constant and permanent information of the public.

Time of implementation

12 weeks duration is the minimum for a campaign like this because after 12 weeks it is possible to measure differences in the fitness level.

Other examples

A similar project already has been carried out in Graz, AT and Linlithgow UK.

Cost / Benefits

The cost-benefit analysis of the approach has shown that appr. € 100 were invested in each participant. The analysis comprises design and implementation costs as well as the evaluations (including all the personnel costs) and the material costs for the walking tests. However, they did not include the catering costs during the meetings. This is to be compared to a mean value of one day of an employee's absence from work through illness. At an average salary of € 2000,- a month, a sick person costs appr. € 161 a day (incl. incidental wage costs but without treatment costs) This does not include the training and working costs of a person doing the work instead of the sick person. This makes it quite obvious that the costs for the programme would already be more than amortised if only 1 day of absence from work through illness for each participant were reduced by more movement.

