# **GREENWAY IN ITALY: EXAMPLES OF PROJECTS AND IMPLEMENTATION**

Pasquale Dal Sasso, Maria Antonella Ottolino

## 1. Introduction

The huge territorial resources available, featuring environmental and landscape traits, and the sensitivity towards their preservation and conservation, led to the origin and development of the "greenways" concept in the United States [Ahern 1995; Fabos 1995; Turner 2001].

Evolutions and research activities on the meaning and definition of greenways have allowed solutions to be experimented with regards to the interrelation and arrangement of "networked" systems of "green spaces" and infrastructural systems or natural linear elements, to tackle issues encountered in the planning of "wide" areas and "open territories", also involving territories belonging to more than one State [Fabos 2004; Fabos and Ryan 2004].

Expanding the idea of greenways to include land planning also meets the current need to combine social and economic requirements with the amount of human and natural resources available and present in the territory, in a way to draw the most benefits without neglecting the possibility of valorisation and growth of the special features and characteristics of the same territories.

The application of the concept of greenway to the territory and its interaction with the systems of "green spaces" also allows us to tackle issues relating to the control of urban growth, thus suggesting solutions that balance social needs with the needs pertaining to urban and extra-urban territories [Taylor 1995; Yokohari 2006].

In Europe, greenways tend to make use of pre-existing infrastructural systems serving as routes for slow traffic or as an educational tool to learn about and protect the cultural, historical and landscape heritage [European Greenways Association 1999].

A constant and unchanged characteristic in the definitions of greenway lies in any case in the presence of pre-existing linear pathways on the territory [European Greenways Association 1999].

For these reasons, which relate to the different meanings that can be assumed and assigned, the greenways created and implemented these days often feature a structure, each differentiated from the others, depending on their characteristics and on the functions they serve [Mennella 2006].

Various differentiated greenways have been designed and created also in Italy.

The differences often derive from the use of greenways in territorial planning; indeed, the definition of greenway envisages a connection and relation among different values, entities, disciplines and subjects, thus covering and interlinking different themes ranging from those of a social, cultural and historical nature, to economic and territorial aspects.

Among the functions that may be served by greenways, there are also those connected with safeguarding the environment by structuring a series of intertwined lines with an ecological, functional and infrastructural connotation, involving large areas or regions.

As the strong "elements" of "open territories", greenways may cover small portions of protected areas as well as entire municipal plains of provincial and regional territories. They may even extend to European networks, thus creating evident physical and symbolic "marks" that enliven and characterise the territory as if fuelled by a desire to become independent entities, able to create... a functional network with the opportunity of connecting several entities (the natural and cultural resources of the landscape) of varying significance, at local, regional, national and European level, and pursuing multiple objectives by exploiting territorial characteristics and adjusting to the morphology of the places ... [Rizzo 2004]

This paper performs an analysis of interventions aimed at the creation of a greenway in Italy in order to ensure its consistency with the definitions of accredited organizations and associations.

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The paper is to be attributed to the authors in equal measure.



Fig. 1 - Example of a greenway in New England, Grafton Notch Landscape, (picture from A.T. Journeys, 32 July-August 2007).

### 2. Materials and methods

The specific dedicated bibliography was consulted to draw up this paper. Plans and projects were also examined, containing specific estimates of greenways, or in any case of alternative pathways (bike paths, green roads, etc.), and several sites were regularly inspected.

According to the method adopted, the official definitions of greenway were compared with the greenways and greenway "networks" examined across the country. For the purposes of comparison the characteristics and aims attributed to specific implementations and projects were summarised. The data referring to each examined intervention was summarised in a table in order to be able to make immediate comparisons and considerations.

The characteristics of the synthetic formulation of greenways on the table may become a reference by institutions and associations for cataloguing or for verification of contents and intervention procedures.

To analyse the state of the art, a summarising table was used, reporting the main characteristics of each intervention (defined as greenway or with similar wording, or those where the word greenway appears in the project or as part of the objectives pursued), with regards to the year of creation, the promoting body, the potential linear development (according to the project) as opposed to the actual development, the plans and the operating procedure for their creation, the procedures undertaken by the promoting bodies to access the funds, the type (urban, extra urban, naturalistic, or functional, recreational, educational, etc.) and finally the main features of the intervention, its objectives and the purposes pursued (table of interventions).

### 3. Results and discussion

The analysis and comparison of the data in the table of interventions reveal that the early greenways were set up between the end of the 20<sup>th</sup> century and the early 21<sup>st</sup> century, in line with an increasing interest in environmental issues and the concept of sustainability.

Of the 41 interventions, 24 have been implemented, while 9 are in their start-up phase and 8 constitute forecasts in the form of plans and specific projects.

An initial consideration that could be made, having examined the interventions, is that almost all of them derived from preliminary technical – scientific and social in-depth studies and, sometimes, from suitable feasibility studies, thus confirming the importance/ need of providing technical-scientific support for the proposal of interventions.

Nr	Region	Inclusion in Plans and	Type and dimensions	References
	Name	projects	Objectives	•
	Year		Creation	-
	Proposing body		Characteristics	1
1	Trentino Alto Adige	Proposed by "Associazione Italiana	Unused railway 50.5 Km	www.greenwaysitalia.it
	Greenway unused railway Ora-Predazzo	Greenway" and CO.MO.DO	Tourist valorisation	
	2003		Partial 25 Km;	
	Company for tourism in the Val di Fiemme		Urban – extra urban	
2	Piemonte	Plan for Cycling Itineraries of the	Along the banks of the Po	Municipality of Turin Map of cycle routes
	Greenway along the banks of Po river	Municipality of Turin	Functional valorisation for free time	
	2004		Total 16-18 Km	
	Municipality of Turin		Urban-suburban-extra-urban	
3	Friuli Venezia Giulia - Veneto	Project- Gal Venezia Orientale with	Old route, trunk road and towpath 15 Km	Pilot project "Gira Livenza"
	The greenway on the river Livenza and "Gira Livenza"	Leader plus community funding	Naturalistic routes, hydraulic works, wharfs and landings, cycle routes	
	2007		Total 15 km	
	Municipalities of Torre di Mosto and Caorle, Provinces of Venezia, Treviso and Pordenone		Suburban-extra-urban	
4	Friuli Venezia Giulia	Projects financed by INTERREG III	Greenway and water ways 400 Km	Project INTERREG III Italia-Austria
	Pordenone Greenway	Italy-Austria	The way of naturalistic, food and wine tourism	
	2000		Total 400 Km	
	Regional board and Coldiretti		Extra-urban-suburban	
5	Friuli Venezia Giulia	Proposed by "Associazione Italiana	Unused railway	www.greenwaysitalia.it
	Greenway unused railway of Val Rosandra (Trieste-Erpelle);	Greenway" and State public railways	Greenway, cycle routes	
	2010		about 17 Km	
	Municipality of Trieste		Urban, suburban	
6	Veneto (Treviso)	Environmental Plan (2000); "Varianti di Settore" (2004);	Unused railway (Treviso-Ostiglia 10 km with the recovery of the steam train) and river towpath (Sile) 100 Km	http://www.tg0.it
	Greenway of Sile "Gira Sile"	Projects Gal Venezia Orientale	Equip and make accessible the naturalistic route in a park area, educational uses	
	2000-2004		Itinerary of about 100 Km	
	Province of Treviso, Ente Parco Naturale Regionale del Sile		Extra-urban, naturalistic route	
7	Veneto	Greenways association Italian;	Unpaved route along the unused railway Rocchette-Asiago	Italian Greenways Association-
	Greenway unused railway Rocchette-Asiago	Confederation Sustainable Mobility	Greenway	www.greenwaysitalia.it
	2009	(Co.Mo.Do);Federation parks; Italian tourist railways	About 27 Km	
	Associazione Artigiani di Asiago		Urban, suburban, -extra-urban	]
8	Veneto (Dolomiti)	Proposed by "Associazione Italiana	Unused railway 65 Km	Italian Greenways Association-
	Greenway of the former railway Calalzo di Cadore -Cortina- Dobbiaco;	Greenway" and State public railways	Tourist and naturalistic valorisation, cycle route	www.greenwaysitalia.it
	2003		about 65 Km	
	Proposed by "Associazione Italiana Greenways"		Extra-urban	1

Nr	Region	Inclusion in Plans and	Type and dimensions	References
	Name	projects	Objectives	
	Year		Creation	
	Proposing body		Characteristics	
9	Italy-Switzerland	Programma Interreg IIIA, Progetto	Unused railway 52 Km	http://www.interreg-italia svizzera.it;
	Greenway of the railway Valmorea tract Mendrisio (Svizzera) e Malnate (Italia)	Regionale Misura: 2.3-Integration and improvement of infrastructure and transport systems	Tourist and naturalistic valorisation, steam train restoration; cycle route	
	2001-2002		52 Km	
	Work Group constituted by Councillor's Office of the Lombardy Region Transportation, Province (Varese,Como), Helvetica Club of S.Gottardo and Association railway Valmorea		Extra-urban	
10	Liguria	Proposed by Region and Province	unused railway	Società ligure Area 24
	Greenway between San Lorenzo e Santo Stefano	and "area 24" private company	Development (environmental tourism ) of unused areas, cycle routes	
	2008		24 Km	
	Regione Liguria		Urban-suburban	
11	Liguria	Project Poseidon (INTERREG III C)	Greenway	Masterplan della valle Scrivia
	Greenway tra monti e mare Poseidon in valle Scrivia	Masterplan-Valle Scrivia Partner europei (Amsterdam, la London	Neighbourhood management- urban and social recovery of disadvantaged areas	
	2004-2006	Haringey, North Kent)		
	Medway-, Stockholm, Vienna and Province of Genoa Municipalities of the Scrivia valley		Urban-suburban-extra urban	
12	Liguria	Competition of ideas for the	Greenway	Masterplan valley del Polcevora
	Greenway della valle del Polcevora	recovery of the ex- area of the steelworks- Master plan editing	Stitch together a degraded urban fabric, ecological networks at a local level	-
	1999-2007	······		
	Municipality of Genoa; soc. Cornigliano		Urban-suburban-extra-urban	
13	Liguria	Proposal of Municipalities for a	Unused railway, coastal route, mountain route	cycle network Savona
	Greenway dell'arco ligure, Via dei Pellegrini, Via Pedemontana, Via del Mare, Via dei Monti	provincial network of cycle paths	Cycle route, cycle link between the province of Savona and the national and European cycle net	
	2010			
	Province of Savona		Urban-suburban-extra urban	
14	Lombardia	Proposed by "Associazione Italiana	Unused railway 40 Km	www.greenwaysitalia.it
	Greenway dell'ex ferrovia del Brembana	Greenway"	Naturalistic valorisation of the route, cycle route	
	2007		Partial 24 Km	
	Municipality of Bergamo		Urban-Extra urban	
15	Lombardia	Regional Landscape Territorial Plan	Martesana canal	Associazione Italiana Greenways; Ambiente e
	Greenway del Naviglio della Martesana		Functional recovery for free time; cycle route	Territorio June 2007 nr. 3
	1999		35 Km	
	Lombardy regional board		Urban- suburban- extra-urban	

Nr	Region	Inclusion in Plans and	Type and dimensions	References
	Name	projects	Objectives	-
	Year		Creation	_
	Proposing body		Characteristics	
16	Lombardia	Regional Landscape Territorial Plan	Great Canal 50 Km	Associazione Italiana Greenway Ambiente Territorio June 2007 nr. 3
	Greenway del Naviglio Grande		Functional recovery for free time; cycle route	Ternono June 2007 nr. 5
	1999		about 20 Km	_
	Lombardy regional board – Municipality of Milan		Urban- suburban- extra-urban	
17	Lombardia	Agenda Locale 21 - Pavia -	Greenway 20 Km	http://agenda21.comune.pv.it
	Greenway della Battaglia	Programme for Sustainable Development	Functional itinerary for free time, environmental education and study of historic buildings	
	2000		Partial 20 - Total 40 Km	_
	Municipality of Pavia Councillor's Office for the Environment and Sustainable Development		Urbana-extra urban, Green path between Certosa and the city of Pavia	
18	Lombardia	Sponsored by the Fondazione del	Green route 120 Km	http://agenda21.comune.pv.it
	Greenway Milano-Pavia –Varzi	Monte Lombardia	Sustainable Tourism educational-recreational; naturalistic and agricultural resource development	
	2004		Itinerary of 120 Km	
	Lombardy regional board		Urban-extra-urban-suburban	
19	Lombardia	The company Pedemontana	Greenway "area" 90 Km	http://www.alternativaverde.it;
	Greenway della Pedemontana	Lombarda, Politecnico di Milano (DIAP) - Environmental Impact	Compensation works for highway project	
	2008	Assessment	Itinerary of 90 Km	
	Provinces of Bergamo and Varese, Soc. Pedemontana spa		Urban-suburban-extra-urban	
20	Lombardia	Proposed by the Provinces of	Greenway 320 Km	Protocol of understanding among the provinces
	Greenway percorsi tra Brescia-Milano-Lecco	Brescia-Milano and Lecco	Cycle routes Extension of the Martesana greenway	
	2008		In project	
	Provinces of Brescia; Milano; Lecco		Urban-suburban-extra-urban	
21	Lombardia	Plan cycle network of valleys	Unused railway 32 Km	Associazione Italiana Greenway
	Greenway della ex ferrovia Val Seriana		Functional valorisation for free time; cycle route	www.greenwaysitalia.it
	2003		Partial 13 Km	
	Municipality of Bergamo		Urban - extra-urban	
22	Lombardia	Single document of Objective	Greenway 10 Km	Associazione italiana Greenways
	Greenway del lago di Como	Planning 2 (Strengthening and	Tourist revaluing of the lake of Como	
	2002-2007	equipment for sustainable	Total 10 km	
	Fondazione Banca Lombardia	development)	Urban - suburban	
23	Lombardia	Local Development Integrated Plan	Cycle routes	http://www.valleolona.org
	Greenway Medio Olona	(PISL)	Associate environmental protection with industrial economic development.	
	2003-2004			1
	Municipalities of Fagnano Olona at all.	7	Urban-suburban-extra urban	1

Nr	Region	Inclusion in Plans and	Type and dimensions	References
	Name	projects	Objectives	
	Year		Creation	
	Proposing body		Characteristics	
24	Lombardia	VAS del PTCP-Provincia di Lodi -	Greenway along the canal Muzza	www.greenwaysitalia.it
	greenway del canale della Muzza	Piano di indirizzo forestale-	Greenway, cycle route	
	2009	Rapporto Ambientale, Progetto Rever Med (Rete verde europea,	72 Km	
	Province of Lodi	finanziato dall'Unione Europea).	Suburban, -extra-urban	
25	Lombardia	Progetto Integrato d'Area between	Route along the canal Adda	www.greenwaysitalia.it
	Greenway del Parco Adda Nord	Parco Adda Nord and Province of	Greenway, cycle route	www.parcoaddanord.it
	2003	Milan	30 Km	
	Region Lombardy and Adda Nord River		Suburban,-extra-urban	
26	Emilia Romagna	Province Modena.Programma di	Unused railway 21 Km	www.greenwaysitalia.it
	Greenway dell'ex ferrovia Modena-Vignola	valorizzazione e promozione del	path for the development and study of historic buildings cycle route	
	2004	territorio (P.V.P.T.)	Total 21 Km	
	Municipality of Modena		Urban- suburban- extra-urban	
27	Emilia Romagna	Piano di Coordinamento Provinciale	Unused railway	Associazione Italiana Greenway; Provincia di
	Pista ciclabile-Modena–Villafranca-Mirandola	-"Rete per la Sicurezza" Provincia di Modena	Cycle route, reuse of the buildings of the railway station, connection between	Modena
		Modena	urban centers and neighboroughs, safe mobility	_
	2005		40 Km	_
	Regione Emilia Romagna, Provincia di Modena		Urban-extra-urban	
28	Toscana	Project to reduce the hydraulic risk	Alzaia del Vingone 13 Km	Press Office of the Consorzio Bonifica delle
	Greenway del Vingone	of Vingone stream and create a green path for leisure	Project to decrease the hydraulic risk of the river Vingone and to become a urban riverside greenway –recreational for slow mobility	colline del Chianti
	2006		13 Km projected	
	Province of Florence and the Municipalities of Scandicci		Urban-suburban-extra-urban	
29	Umbria	1990 Soc. Spolentina - Restoration	Unused railway; 51 Km	XII intern. meeting "Desire, freedom and need
	Tracciato della ferrovia dismessa Norcia-Spoleto	and valorisation project of the	Valorise the former railway track	in creating a cultural landscape mosaic" -
	2000	railway line for tourist purposes. A project to restore the buildings in the	Partial – circa 12.5 Km	Cividale del Friuli (Ud), 25,26 October 2007 - University of Perugia
	Società Spolentina	Municipalities crossed by the railway	Urban-extra urban	
30	Lazio	Lazio Regional Law n. 40/99	Unused railway Roma-Fiuggi-Paliano, (22 Km)	www.greenwaysitalia.it
	Pista ciclabile dell'ex ferrovia Fiuggi-Paliano		Cycle route	
	2003		22 Km	
	Regione Lazio		Extra-urban/naturalistic	<u>]                                    </u>
31	Abruzzo	Initiative of the Regione Abruzzo	Unused railway 46 Km	Proposed laws by the Region for the formation
	Greenway Vasto-San Salvo		Revaluing the coast strip, cycle routes	of a natural reserve along the coast of Teatina.
	2005		In project 46 Km	Protocol of understanding for the acquisition of the areas
	Abruzzo regional and provincial boards, Municipalities		Suburban- Extra-urban	

Nr	Region	Inclusion in Plans and	Type and dimensions	References
	Name	projects	Objectives	
	Year		Creation	
	Proposing body		Characteristics	
32	Campania	Project Feasibility Executive Project	Greenway 15 Km	Text taken from "The Green Way Torchiara -
	La verda via di Torchiara	created between the public and private sectors	Protect the historical and natural heritage, tourist revaluation to increase the economic and social growth	Greenway: a gentle path through history and nature". Fondazione Megalia
	2004	(Province of Salerno, the	15 Km	
	Province of Salerno, the Municipalities of Torchiara; Fondazione Megalia	Municipalities of Torchiara:Fondazione Megalia	Suburban- extra-urban	
33	Campania-Basilicata	Initiative proposed by Università	Unused railway 76 Km	www.ferroviedimenticate.it
	Greenway Lagonegro-Sicignano	Popolare della Terza Età (Polla) and	To avoid the depopulation and cultural and social loss of villages situated inland	
	2008	Club Alpino Italiano (Salerno);	In project 76 Km	
	Associazione ferrovia dimenticata- Università popolare della Terza Età- Club Alpino Italiano		Suburban-extra-urban	
34	Basilicata	Guidelines for the promotion of the	Unused railway 42 Km	Iniziativa Comunitaria Equal II fase
	Greenway Potenza-Laurenzana	tourist areas crossed by a number of former railway lines in Basilicata,	Avoid the depopulation and cultural and social loss of villages situated inland, through tourist promotional initiatives; cycle routes	Progetto "Le Vie del Treno" www.leviedeltreno.it
	2007	Calabria, Sardinia	In project 42 Km	
	European Social fund of the European Union, Ministry of employment and social welfare, Equal community initiative		Urban, suburban, -extra-urban	
35	Puglia	Integrated Programme for urban and	Routes/cycle route	www.Regione Puglia.it
	Greenway Manfredonia	environmental redevelopment	Urban and environmental redevelopment of peripheral areas	
	2008	of peripheral areas	In project	
	Municipality of Manfredonia-Foggia Province		Urban-suburban	
36	Puglia	Protocol of understanding between	Service lines of the Apulian aqueduct 244 Km subdivided in 5 itineraries	www.cicloamici.it/vie_verdi_in_puglia.htm
	Le vie "verdi" di Puglia	Regional Councillors office for Transport of the Regione Puglia and	Cycle routes to valorisation of historical centres of cultural interest and typical products	
	2008	Acquedotto pugliese-Progetto CYRONMED (Cycle Route	In project	
	Puglia regional board - Regional Councillors office for Transport - Sustainable Mobility Service and cycling (FIAB)	Network of the Mediterranean financed with Interreg III B Archimed funds	suburban, extra-urban	
37	Sicilia	Regional Plan for Transports; Feasibility study proposed by	Unused mining railway, Circuit of the Erei Nebrodi, Dittaino - Leonforte - Nicosia; Circuit of the mines; Circuit of the lake; (42 Km)	Conference of 20 October 2003 "Valorising unused railway lines through the creation of a
	Greenway degli Erei	Associazione italiana Greenways	Tourist valorisation, an incentive to local micro economies, cycle routes	system of Greenways", Italian State Railway -
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ļ ,	2003		Partial–9 Km	ISFORT
			Partial–9 Km Extra urban - agricultural naturalist routes through the hills	ISFORI
38	2003	Redevelopment and revaluation of		Conference of 20 October 2003 "Valorising
38	2003 Sicily regional board - Province of Enna - Association Greenway	internal protected areas, an incentive to local micro economies, cycle	Extra urban - agricultural naturalist routes through the hills	Conference of 20 October 2003 "Valorising unused railway lines through the creation of a system of Greenways", Italian State Railway –
38	2003 Sicily regional board - Province of Enna - Association Greenway Sicilia	internal protected areas, an incentive	Extra urban - agricultural naturalist routes through the hills About 42 Km Integrated Plan of Sustainable Development of the Valleys of Anapo del	Conference of 20 October 2003 "Valorising unused railway lines through the creation of a

Number         Number         Distriction         Distriction           3         Finite         Constrained         Constrained         Constrained           3         Selina         Constrained         Constrained         Constrained           3         Selina         Distriction         Constrained         Constrained           3         Selina         Distriction         Constrained         Constrained           3         Selina         Distriction         Constrained         Constrained           2005         Exponsibility regional bearunent for Transport and communication         Distriction         Constrained rainway function for a system of Greenways, fulaina State Rainway- is transport and communication         Distriction         Constrained rainway function for a system of Greenways, fulaina State Rainway- is transport and communication           40         Sielina         Distriction         Distriction         Distriction           1         Unused rainway Faderon Burgio         Constrained rainway about 265 Km         Internation (a system of Greenways, fulaina State Rainway- is transport and constrained rainway faderon Burgio           1         Unused rainway Paderon Burgio         Distriction (a system of Greenways and COMODO         Develop tonism for the enjoyment of the terniony; cycle routes         Paderon (a system of Greenways and COMODO           1 <t< th=""><th>ŗ.</th><th>Region</th><th>Inclusion in Plans and</th><th>Type and dimensions</th><th>References</th></t<>	ŗ.	Region	Inclusion in Plans and	Type and dimensions	References
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TABLE 1 - Greenway interventions created in Italy: Analysis of the current status

The region boasting the highest number of implemented interventions is the Lombardy region with 12 greenways, followed by Sicily with 5 interventions, mainly connected to the Rever Med project, a European project with the aim of creating a huge Green Network along the tracks of unused railways, for the entire western Mediterranean area, connecting and involving Portugal, Spain, France and Italy.

Liguria, with 4 greenway proposals of inter-municipal and European worth, constitutes a novelty in the group of the sector initiatives, since it involves unused industrial and port areas.

There are eight interventions that are currently only proposals, 2 for Puglia, 2 for Sicily and one each for Abruzzo, Campania, Basilicata and Tuscany, while there are 23 implemented interventions that involve 12 regions. Worth noting for the originality is the proposal by the Puglia region to use the infrastructural network of the Apulian aqueduct as a greenway.

Concerning relations with territoriality, it emerges that the implementations that are most in line with the official definitions of greenway - ... " Greenways are systems or networks of connected lands that are protected, managed or developed to provide ecological, recreational and historical/cultural benefits" [Associazione Italiana Greenway], "From the mobility point of view, greenways are a system of routes, dedicated to a non-motorised traffic, connecting people with landscape resources (natural, historical, cultural, etc.) and the "centres of life", both in the urban areas and in the countryside" ... [Associazione Italiana Greenway] - are those of inter-provincial worth, where objectives also of a social - economic nature are pursued, mainly connected with the need to fight the phenomenon of disappearing small inland villages and control the unbalanced urban expansion in a metropolitan area.

Almost all of the proposals and interventions examined may be considered to be in line with the various definitions mentioned above, since they include, in general, many functions. For example, the greenways of the canals in Milan and those along the banks of the river Po in Turin, focus on the leisure function, though without neglecting the other aspects linked to education-knowledge, for the valorisation of the suburban and extra-urban territory.

Notable examples are the two greenways of Battaglia, in Pavia, and Milano-Pavia-Varzi. The latter, seen as an extension of the former, significantly recovers the historical traffic routes heading for the sea and restores river areas that today are still mostly occupied and cultivated without permission.

The Battaglia greenway in Pavia certainly is the most consistent with the historic and official definitions on the meaning of the term greenway. This consistency is shown, with respect to the interventions examined, by the fact that the pathway used was proposed as a route of historic-cultural and landscape worth, connecting together the most qualifying elements, for an organic use of the territory it belongs to. A route that introduces, and guides us through, the "discovery" of the landscape, the historical and monumental places and the cultural wealth of the territory of Pavia [Rizzo 2004; Valentini 2005].

In terms of pre-existing linear elements to be used as greenways, we found that unused railway lines very often provide a greater and immediate feasibility and usability, though conditioned with respect to the resources present along the route, which, however, generally have quite an important landscape value, as is the case for Spoleto-Norcia, Dobbiaco-Cortina, the Val Brembana, the former railway Ora-Predazzo, the former railway Modena-Vignola, the greenway of Val Seriana, the track of the former railway Mendrisio in Switzerland and Malnate in Italy.

The creations that are the least consistent with the definition of greenway concern those cases where the primary objective is exclusively connected with slow mobility (cycle lanes), since they are excessively single minded.

In any case, having ascertained that the main purposes to be pursued by a greenway are connected with slow or alternative mobility, and with the valorisation of the endogenous resources, without neglecting the ecological aspects, where present, all of the Italian initiatives examined, defined as greenways, may be considered as such, according to the most accredited definition in Europe and Italy.

Not a minor issue, which emerged from the analysis of the Italian initiatives, is related to the difficulties, by associations and organizations, to combine their skills and specificity to achieve common interests. In fact, often collaboration is difficult between organizations with different motivations, breaking large-scale initiatives, sometimes even for simple matters of administrative boundaries.

This has affected the creations, breaking them despite their validity and functionality.

Furthermore, from examining the individual cases, it is clear how sometimes, in order to assign specific functions to greenways, designed for multiple functions, the will of individual cycling or environmentalist associations prevails over others, thus limiting the potential functions of the route.

For the interventions implemented in Sicily, instead, where decommissioned rail tracks serving old mines have been used, a right level of consistency was reached between the objectives to be followed and the way to create them, through the strong shared will of bodies and associations and the coordination among Municipalities, Provinces and Regions in setting the methods and procedures to implement the intentions.

In addition, it must be pointed out that the creation of greenways is not always easy due to problems connected with making the route safe for users, the availability of the entire railway line or of the linear element referred to, or due to the non accessibility to the surrounding areas.

With reference to the financed interventions [Agenda 21 Locale; Progetti Interreg; Gal; etc.], it emerged that those like the greenways of Pavia, Sicily and Pordenone, are among the most consistent with the accredited definitions of a greenway.



Fig. 2 - Greenway through a bridge and a canal along the Acquedotto Pugliese. (picture from "vie verdi" greenways in Puglia).

Some creations (the cases of Genoa proposed in the master plans) attribute the creation of greenways to the possibility of finding a solution to issues concerning the urban and social recovery of disadvantaged areas or marginal and dismissed areas (former industrial zones), while respecting neighbouring areas of environmental worth (neighbourhood management) and, in general, of the maps AUDIS (Associazione Aree Urbane Dismesse).

It is also important to underline that, in some examples of greenways (the Pedemontana in Lombardy, the green path of Torchiara in Campania and the route of food and drink tourism in Friuli Venezia Giulia), the promoters and financers are private companies or associations, such as Coldiretti for Pordenone. This constitutes a tangible sign of how these interventions can increase credibility in the business world, with the possibility of profits being made - particularly for the agricultural sector –, just like the patronage that characterised the Renaissance. These measures tell us about the possibilities inherent in the definition of greenways especially if used for planning resources on the rural area affecting not only the historical and environmental-naturalistic but also productive and economic development.

## 4. Conclusion

The material used has made it possible for us to compare the characteristics of individual greenways with the official greenway definitions created in recent years, in a way to ascertain the project's adherence to and/or the moving away from the official definitions of a greenway. This operation has also given us an opportunity to reflect on the way in which greenways can be a tool supporting the planning and organization of rural areas, a system that can connect multiple issues relating to social and cultural aspects of transformations that affect rural landscape.

The most evident, consistent and ecological opportunities a greenway or a greenway network may offer as a tool to plan and transform the territory, are linked to the valorisation of the existing trails as well as to the heritage of rural architecture and food products (farm houses, rural houses, villages, roadman's houses, green tourism facilities, protection of typical and endangered productions) that is able to produce economies of scale at a local and regional level, and so on.

The greenway projects and creations, by promoting the use of eco-compatible means and methods, contribute to safeguarding the agricultural landscape, valorising agro-environmental and naturalistic resources, developing recreational and tourist forms of use, while providing an opportunity to sustain agricultural activities by favouring their environmental compatibility [Valentini 2005].

Indeed, the relationship between greenways and the rural territory is a key element for the actual feasibility of the projects. Greenways find in the agricultural landscape an ideal substrate for their development, where routes to discover, resources to be valorised and the living places to be connected, are all closely intertwined. They can become tools for a new organisation of the rural territory since, by integrating the objective of valorising the resources with the one of making them usable, they are able to channel the territorial policies towards a sustainable development, thus improving the connection between urban and extra urban environments and triggering mechanisms for the valorisation of the rural territory (green tourism, local trade, etc.).

In Italy a huge heritage of infrastructures that can be used for a new mobility is present. These can play a supporting role to the existing road network, dedicated only to motor traffic, which are environmentally friendly and, at the same time, able to support activities that affect rural areas.

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#### SUMMARY

The study analyses the greenway projects implemented in Italy, summarising their characteristics in a table that contains basic information concerning the geographical location, year of implementation, the type of layout and size, the state of implementation; the Institution that proposed the implementation, the official name, the territorial feature, the socio-economic and cultural aims, references to bibliographic and web resources and to their inclusion in plans and projects. The analysis has allowed to verify the compliance of individual contributions to the definitions attributed to the greenway from national and international associations. It has been possible to verify the use of greenways as physical support to spatial planning and the promotion of economic and productive development of rural areas.

**Keywords:** planning wide area - rural territory - table of greenway.