

Abstract

Role Research of Autonomous District for Securing Walk Space of Community Road

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In Seoul, many policies that related to walking environment for making a campaign, 'Seoul, walking city', are come out, however, there is a continuous comment that the policy of Seoul city is divorced from actual live in terms of the space which is mostly walk is a community road. Also, there is not enough walk space at community road with the existing traffic policy that a vehicle has priority.

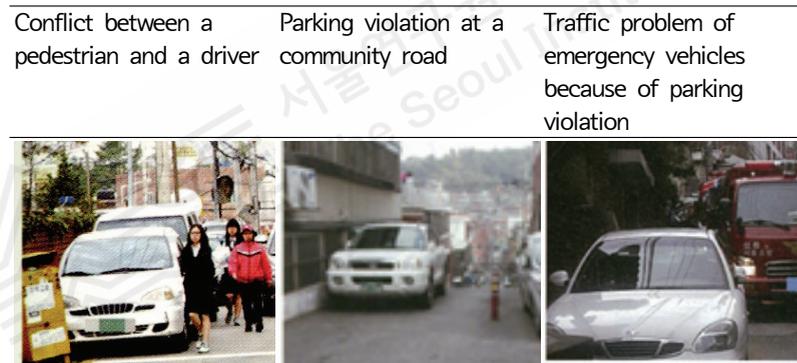
Autonomous district manages the road and the sidewalk in the district, however, it doesn't pulling its weight as the road management administration well. Community road is mostly walk space, and this area needs autonomous district's control for securing the residents' walk space. On this, we review the role of autonomous district for securing walk space of community road as institutional aspect and for progress detailed project, and suggest an improvement plan.

'Community road' is a term that is used in the domain of traffic, and an undefined term by law. Also, it has many limited factors with existing road classification system, and the system is difficult to be used because community road is hard to be measured intuitively. In the research, the spatial extent of community road is set as narrow path in dense residential area of existing urban district which is hard to secure walk space as existing regulation.

[Table 1] Definition of a side street in of the research

Sort	Content
Characteristic of Area	- Existing urban area(excluding new development land for housing and reconstruction area) - Dense residential area
Road Classification	- Below 12meters wide road(narrow road)

The narrow path which has below 12meters wide road has 77.2% of the whole road of Seoul city, and it includes community road. In community road, a pedestrian and a vehicle are coexist, and providing space access function takes priority over mobility, so pedestrians conflict with vehicles more than other types of roads in the community road. Hereupon, securing walk space and community road management for residents' parking are needed, improve parking problem has to be decided for secure walk space.

**[Figure 1] Problems at a community road**

Understanding about current condition of community road operation is essential for securing walk space and solution of resident's parking problem, and community road DB construction is needed for respond to relation problems of gait immediately. However, the present autonomous district doesn't figure out the current condition of community road operation. Community road DB's purposes are understand of current situation of road and securing walk space. The spatial information has to include the road's width, road type

(one-way, two-way), footpath's location and type, width of footpath, etc, for figure out the road management status. The walk space information has to examine closely, in terms of building, and it has to include footpath's existence or nonexistence, width, type, and status.

Survey demand and supply of parking, which is an autonomous district's service, is being conducted at the area directly, it is possible to construct community road DB with existing human resources and administrative procedures if add the necessary information into the community road DB. Also, the result of construction community road DB can be used for solving parking violation problems of autonomous districts and securing residents' parking space, so it correspond to the intent of existing survey demand and supply of parking.

[Table 2] Necessary information of road space

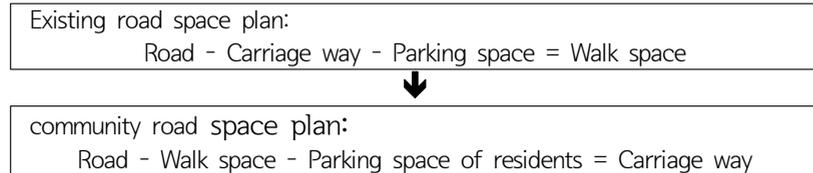
Section	Width of road	Road type	Road parking lot	Walk space	Location of footpath	Type of footpath	Width of footpath	Parking violation
Road space	m	One-way Two-way	No Yes	No / Yes_One side / Yes_Two sides	In the road Beside the road	Precast paver/Bollard/Setback of a building line	m	Yes No

[Table 3] Necessary information of walk space

Section	Footpath	Footpath type	Status of walk space	Width of walk space	ETC
Walk space	Yes	Precast paver/Bollard/Fence/Setback of a building line	Pile /Parking space /ETC	m	Blocked wall with neighbor building/Difficulty of building line's boundary section /ETC

Existing road space is planned space for vehicle, but community road is the space which the residents are living in there. Therefore, community road has to be considered for walk space and residents' parking space preferentially. Thereupon, the space planning of

community road is securing walk space and residents' parking space first, and then planning the other vehicle space with the rest area, so the community road management project is planned for walk space mainly. The existing urban district's walk space includes the setback of a building line.



[Figure 2] Community road space plan

[Table 4] Types that need improvement of operation

Section	Type of road space	Example
Type 1	Cannot separate carriage ways and walk spaces	
Type 2	Walking space location	An the road
	Type of walk space type	Precast pavers
	Walking space status	Parking
Type 3	Walking space location	Beside the road
	Type of walk space type	Setback of a building line
	Walking space status	Parking

[Table 5] Improvement operation plan of community road

Order of priority of the space plan	Improvement operation plan
<ol style="list-style-type: none"> 1. Securing walk space 2. Securing the parking space of residents 3. Passing vehicle 4. Parking of outsiders 	<ol style="list-style-type: none"> 1. Parking violation vehicle → Parking enforcement (Resident vehicle → Using community road DB, provide legal residents' parking area of priority) 2. Operate '30 Area' 3. Decide mixed traffic street or devise carriage way management plan as the road width 4. Road has more than 7meters width: Consideration the parking space plan for outsiders

Autonomous district is responsibility for manage the community road which the residents are living in there, and the securing walk space in the road is priority as of now. For this, establishment of improvement of community road operation that uses the community road DB which can understand management state and deduct the problem of community road. Construction DB and adjustment of improvement of operation need maintenance control consistently, and an immediate response as the change of condition of community road. If the contents of the construction community road DB and improvement of operation are applied to the autonomous district's plan, they can be managed as continuous subject by the autonomous district.

The walking environment subject of autonomous district is going along mainly with a contest project in Seoul city, and put into operation mainly with gait Specialization Street, and the improvement of walk environment project without differentiation with other autonomous districts. Finding an own business of the autonomous district is needed, and the business is an opportunity to perform the business which the area need with the district as a center. If the characteristic of community road of autonomous district is verified with construction of the community road DB of autonomous district, it is expected to lead finding an own business of the autonomous district with the district's characteristic as well as securing the walk space.

The characteristic of the autonomous districts can be reflected in 'Construction community road DB' and 'Community road management plan' well. Also, they are related to the securing walk space, solving the residents' parking problem, and pedestrians' safety, so the traffic safety master plan of the area has to include the 'Construction community road DB' and 'Community road management plan' which have characteristic of the autonomous district, and make the autonomous district is able to establish the traffic planning that considers program and use of budget as the autonomous district.

To continue the 'Construction community road DB' business for securing walk space and management road through solving parking problems, security of budget is for the project is essential. There is a special parking lot account which is due to the 'Parking Lot Act' as traffic related special account of an autonomous district. 'Construction community road DB' business is a basic inspection for securing the walk space of a autonomous district and residents' parking space, and it can contribute to the improvement of parking environment of the area directly and indirectly. With the expansion of the scale of expenditure, continuous the business promotion is possible as well as resolution of the parking problem of the area.

Moreover, the specialization of the scope of expenditure which in consideration of the characteristic the area is needed for efficient use the expenditure. The businesses like making public parking lot are needed in the old housing sites which have lack of parking facilities. However, making public parking lot is costly, so various using expenditure, as the characteristic of the area, to use substantive improvement of parking environment businesses for solving the residents' parking problems like 'Securing the residents' parking space through improvement community road operation' is desirable.

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