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Capítulo II.

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PERSONA NATURAL

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Anexos

- ☐ Copia de estados financieros del año inmediatamente anterior firmados por contador público; o,
- ☐ Otro documento donde conste que se cumple con los parámetros establecidos en el artículo 2 de la ley 590 del 2000 para las micro, pequeñas y medianas empresas.

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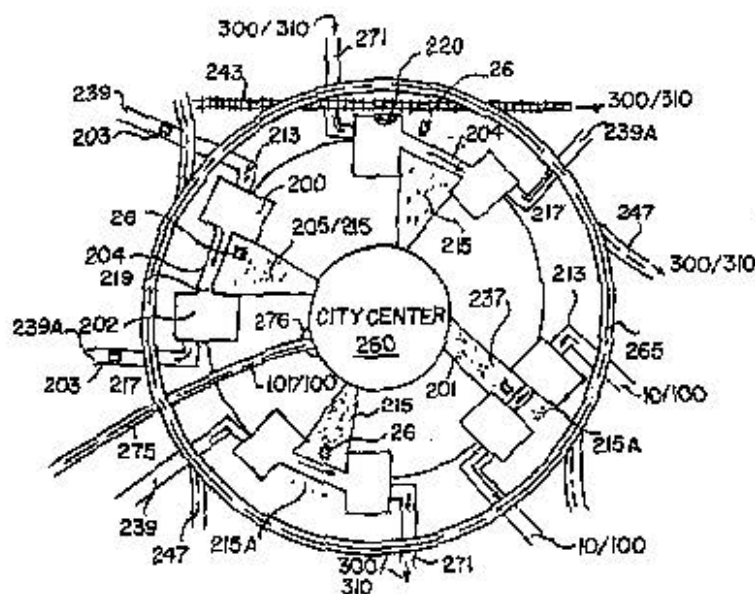
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(54) Title: COMMUNITY INTERMODAL TRANSIT SYSTEM



(57) Abstract: A community intermodal transit system includes a city or town center and low speed mixed-mode corridors ex-
tending substantially radially outwardly from said city center. Further included are a corresponding number of circumferentially
disposed parking structures located proximally to outer ends of the mixed-mode corridors and an outer transportation network in-
cluding various modes of transportation, each mode including a transfer point to at least one of said parking structures. Service
roads are provided to the city center, as are direct public links from the parking structures to airports or a seaport. Low speed, low
profile vehicles may operate on small gauge tracks upon said mixed-mode corridors.

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COMMUNITY INTERMODAL TRANSIT SYSTEMS.

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BACKGROUND OF THE INVENTION

Community-based intermodal facilities, as now conceptualized, induce large-scale pedestrian movements based upon the cumulative pedestrian supportive characteristics of the urban habitat features (the pedestrian-orientation thereof that will hereinafter be referenced as "pedestrian-oriented" structures, building facades components, corridors, transit, hardscape, landscape, or other elements of the urban built environment); increase multimodal transportation system usage by use of innovative corridor, parking, and community transit strategies, and other methods to induce large-scale pedestrian intermodal access; and, stimulate economic, and community, and personal development.

Through the use of pedestrian-oriented corridor and community transit strategies, abundant shared-use, parking structures reduce traffic congestion, frame the new pedestrian-oriented urban form, and reduce private developer costs normally associated with parking requirements. Further, such intermodal community development strategies can provide: more affordable housing and business locations; economic growth for diverse business, social and residential populations; and, a variety of enhanced education, health, and quality of life opportunities.

5 Moreover, by using governmental transportation trust funds and other
public infrastructure financing techniques to develop such community-based,
pedestrian-oriented intermodal transportation solutions (parking, community
transit, and the public places that help to gather passengers in preparation for
intermodal transfers) and reserving the use of private investor funds for a
10 variety of mixed-use projects that support economic development, the financial
burdens on local governments related to such intermodal improvements are
reduced. This method to reduce traffic congestion and promote community
development helps to grow the local tax base and enables these community
and transportation improvements to be self-supporting.

15 These recommendations require a paradigm shift. Transportation trust
funds and other governmental funds used to build highways must be used to
develop a built environment that induce travelers to abandon their nearly
exclusive dependence on the single-occupant, private passenger automobile,
20 to use other modes of transportation as part of virtually every automotive trip
(making every trip to some degree multimodal) and to productively interact
with community residents, visitors, and business, educational, and social
institutions in the new pedestrian-oriented urban and suburban centers along
major highway corridors and in the redeveloped city and town centers.

25 A premise of this invention is that world-class mobility and exceptional
economic growth can be more readily achieved through the development of
seamless multimodal transportation systems, not more road building; therefore
a prudent transportation policy would be to use available road building funds
30 to fully develop community-based, pedestrian-oriented intermodal facilities and
related community and multimodal improvements. Development of such
community intermodal systems ("CIS") as herein described is a method to
achieve sustainable world-class mobility and exceptional economic growth by

- 5 the development of parking and pedestrian linkages between various modes
of transport (especially between cars and rail transit), as well as conditions
that will tend to improve the natural environment of the intermodal community
and the quality of life (i.e., intellectual growth, emotional well-being, physical
health and capabilities) of the residents and frequent visitors to such
10 intermodal communities.

- Transportation systems and community development in the best of
circumstances should represent the two sides of the same coin. The
community should provide for every need of each citizen and visitor and the
15 transportation system should provide high quality citizen and visitor access to
those needs.

- In the last fifty years, there has been a growing incompatibility
between the requirements of an automotive-based transportation system and
20 the urban community capacity to satisfy citizen and visitor needs. Traffic
congestion, air and water quality degradation, pedestrian and automotive
fatalities, slum and blight are but a few of the community problems that have
surfaced as road networks expand and lengthen to satisfy mobility demands.

- 25 Fortunately, transportation policy initiatives to support intermodal
improvements may provide a basis for mutually beneficial community and
transportation system enhancements. Like modern airport terminals, these
intermodal improvements should respond to both the need to park
automobiles near opportunities to board alternative transport modes and
30 provide for an environment where basic human needs are satisfied (places to
eat, read, talk and sit) until the next segment of a multimodal trip begins.

5 Like the best of communities, these needs should be provided not only within the built environments, but also, in the out-of-doors public spaces dispersed throughout the community and urban centers. These areas must be protected from the harshness and discomfort of the natural elements, e.g., too cold, too hot, too wet or humid, too bright or too dark by the structural
10 components of the built environment and therefore are functionally defined as the habitable and desirable places in the spaces between building. Within these public places, the distances actually walked should be mitigated and flexible to provide exercise, but not exhaustion. On the other hand, the dimensions of these urban and suburban centers need to be large enough to
15 accommodate the significant and varied development that support large-scale pedestrian movements and multimodal access and usage.

 This invention presents a fundamentally new way of assembling the building blocks of an intermodal transportation system into sustainable high-
20 quality communities that provides a basis for world-class economic growth throughout a wide diversity of the citizenry.

 To understand the premises upon which the invention is based, it is necessary to focus on both the macro-transportation systems and human-
25 scale community issues that are required for the development of creative, successful, and historically inspired communities. Broadly speaking, transportation systems in America are large capital investments that must accommodate large numbers of private passenger automobiles and, in the case of transportation systems using aircraft, transit or waterborne vessels,
30 large numbers of parked cars and pedestrian movements from parked cars to and within intermodal terminal facilities.

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5 In most developed and rapidly developing nations, everyone wants to drive to their destination. In doing so, however, some very bad things can happen. In America, hundreds of thousands of people suffer sudden accidental death on congested highways (see: Mean Streets 2004 at: [http://www.transact.org/library/reports_html/ms2004/pdf/Final_Mean Streets](http://www.transact.org/library/reports_html/ms2004/pdf/Final_Mean_Streets_2004_4.pdf)
10 [2004_4.pdf](http://www.transact.org/library/reports_html/ms2004/pdf/Final_Mean_Streets_2004_4.pdf)); millions of people suffer with chronic illnesses due to stress, air pollution, and lack of physical exercise (see: Suburban Sprawl and Physical and Mental Health at: [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=15351221&dopt=Citation)
15 [uids=15351221&dopt=Citation](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=15351221&dopt=Citation)); and, the social behavior amongst Americans looks less fraternal, and more aggressively adverse, with each passing year (see: Fast Facts from Texas Department of Public Safety, Road Rage at: [http://www.txdps.state.tx.us/director_staff/public_information/Fast facts/roadra](http://www.txdps.state.tx.us/director_staff/public_information/Fast_facts/roadrage.pdf)
20 [ge.pdf](http://www.txdps.state.tx.us/director_staff/public_information/Fast_facts/roadrage.pdf); Road Rage Becoming Commonplace: Survey at: <http://autonct.ca/Safety/story.cfm?story=/Safety/2004/11/16/715913.html>; and
Federal Motor Carrier Safety Administration Road Rage Survey reference at: <http://www.fmcsa.dot.gov/about/outreach/dsweek/survey.htm>). Many similar sources and observations can be referenced for other car-dominated urban communities around the world and it is expected that such road rage behavior will become more recognized in all car-dominated communities absent the use
25 of the present invention in those world communities.

What should be readily understood is that the travel needs of a speeding automobile (wide, smooth asphalt or concrete surfaces) are exactly the opposite of the safe, comfortable, useful and interesting environments that
30 humans respond to favorably. In short, the natural and best environment for the automobile is inherently a risk and hazard to humans who are not enclosed within the protective cocoon of their own automobile, otherwise separated from the automotive traffic. Conversely, the typical human habitats,

- 5 i.e., your living room, bedroom and office are not suitable for the operation of an automobile at typical design speeds, e.g., 30 to 60 miles per hour or more.

Modern architecture and community designs, however, assume the automobile is welcome everywhere. It is precisely this lack of awareness that moving cars and people don't mix very well, that causes most of the design flaws of our built environment. Flaws that adversely impact all components of our communities and that will hopefully be rectified by the methods described below.

- 15 This does not mean that cars should not be used for many or even most of the trips between the urban, suburban and rural environments. Nor does it mean that car trips are no longer enjoyable and rewarding in very specific car-friendly circumstances: non-congested traffic conditions; interesting views of the natural and built environments that can be observed from a moving vehicle; the comfort of lounge-like seating during air-conditioned, smooth, and uninterrupted car trips; and, the entertainment, food and beverages that can be consumed during such car trips.

- 25 As one of the world's major industry, automotive-based transportation systems represent billions of dollars of investments in the movement, care, and feeding of the car-driving public. Such automotive related investments, however, can not be used as intended and do not provide the benefits envisioned when chronic car traffic congestion destroys productivity and mobility, fouls the air we breath, degrades the esthetics and physically conditions of the natural environment, and helps to support the sedentary lifestyle and obesity epidemic evident in America and other developed nations of the world.

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5 What this does mean, however, is that as more and more of our streets and communities become congested with traffic, continued car use in those congested areas is not cost effective or beneficial and alternative modes of transportation must be successfully encouraged. In traffic congested communities, the air quality endangers health and urban blight threatens safety and the community esthetics, not to mention the economic vitality of the urban and suburban centers. This also means phase-out of car dominated systems of movements from home-to-work-to-home and to social events and the events of daily life in order to:

- reinforce a non-sedentary lifestyle;
- 15 • increase walking, running, and other exercise that is anatomically appropriate for the healthy human condition and that would not typically occur with the continuous availability of car movements; and,
- reduce public health risks due to obesity, traffic injuries and deaths, and diminished air quality.

20 When traffic congestion is a dominant factor of daily life, the allurements and efficiencies of automotive movements are diminished due to substantial loss of work and leisure time, a reducing of quality of life, and increasingly dangerous driving conditions and, within a very short time period (a decade or so), the community benefits of car movements can vanish.

30 In virtually all growing urban and suburban communities, a time comes when more road building no longer is a cost effective means to reduce traffic congestion. Limited right-of-way opportunities in already developed areas, very high costs for right-of-way acquisitions in urban and suburban areas, and significant business losses associated with the right-of-way acquired for road expansion projects, collectively constrain the physical, financial, and public

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- 5 support conditions necessary for recurring road building options. Notwithstanding diminished road building efforts, development continues and traffic congestion exacerbates.

10 When road networks are build outward from the urban and suburban center in more rural communities to avoid such road building and right-of-way constraints, traffic congestion worsens as more cars driving longer distances, traffic conditions leave fewer places to safely walk from one necessary destination to another, and car movements become the only real option notwithstanding the chronic traffic congestion, loss of mobility, and other
15 adverse, but related, effects to health, the economy, and the environment.

What it does mean is that continued road building is a counter productive and self-defeating mobility strategy that creates adverse conditions that community intermodal system development can remedy. By development
20 of intermodally enhanced, pedestrian-oriented urban communities with very significant and convenient, but mostly invisible, parking capacity, this expansion of the roadway transportation system (highways and the intermodally linked mixed-use pedestrian-oriented parking structures) will accommodate more car traffic by diverting large numbers of cars from the
25 highways and local streets into mixed-use, pedestrian-oriented parking structures and thereafter inducing the car occupants to leave their cars behind as they complete their daily trips using a variety of modal options (walking, bicycles, transit, airplanes and water-borne vessels).

30 When such community-based intermodal facilities are provided within the urban and suburban built environments, we would keep driving our cars, but when the traffic congestion occurs, we would park, walk, and use transit to regain mobility, reducing energy demands, improving health, air quality, and

- 5 the economic conditions for each resident and visitor to such pedestrian-oriented, parking enriched, and intermodal enhanced city and town centers

In any monolithic system, fundamental design flaws can lead to systems failures with catastrophic consequences. While car only (or car
10 dominated) movements within the urban and suburban communities and transportation systems, puts all residents and visitors at risk, a multimodal transportation system, with efficient and robust pedestrian-oriented intermodal improvements, will make the entire community safe, secure, sustainable and economically successful.

15

The question that needs to be responded to is specifically what type of intermodal improvements to the transportation system would be good for both the car-driving public in the frequently driven to cities and towns and still support the larger community interests. Further, it must be determined how to
20 reorganize the urban and suburban centers to convert the build and natural environmental conditions from traffic congested, dangerous, unhealthy, unsightly and poor ("slum and blight conditions") into the sustainable, high quality communities that represent the economic engines of a great nation.

SUMMARY OF THE INVENTION

A community intermodal transit system includes a city or town center; a plurality of low speed mixed-mode corridors extending substantially radially outwardly from said city center; a corresponding number of circumferentially disposed parking structures located proximally to outer ends of the mixed-mode corridors; and an outer transportation network including various modes of transportation, each mode including a transfer point to at least one of said parking structures. Service roads are provided to the city or town center, as are direct public links from the parking structures to airports and a seaport.

Low speed, low profile vehicles may operate on small gauge tracks upon said corridors.

More specifically, the defining characteristics of a CIS include:

- car-free or nearly car-free city or town center for all or part of the day, week, or month;
- semi-enclosed pedestrian, mixed-mode corridors, courtyards and plazas within the city or town center that provide for use of pedestrians, bicycles, and low speed community or other pedestrian-compatible transit;
- special structural parking (with mixed-use liner buildings);
- community transit within a car-free center operating on mixed-mode corridors to and from the parking structures and extended outwardly there from for up to five miles or so on ergonomic hybrid transit access corridors to link with other regionally significant destinations and transportation modes;
- limited access roadway ramps to provide direct access from highway to the CIS parking structures;

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- 5
- elevated and below grade traffic aisles between parking structures; and
 - traffic-calmed streets to provide automotive access to the parking structures to and from adjacent or nearby community neighborhoods highways or a beltway.

10

It is an object of the invention to rehabilitate urban communities from slum and blight conditions into centers for economic and human development. To do so, one must accept the premise that cars moving faster than 15 miles per hour should not be mixed with humans unprotected by a similar vehicle, structured barrier or significant distance and that the best human habitats do not have any cars in sight, i.e. quiet restaurant with family and friends, inside
15 any major league baseball park, at a neighborhood swimming pool. Secondly, one must determine how to manage the thousands of cars a day that arrive at our urban and suburban centers so that they can bring, along with the other
20 modes of transportation, the people and goods necessary for the economic, governmental, religious, educational, entertainment, nutritional, health care and cultural activities of a complex and sustainable communities. Thirdly, the city and town centers need to preserve most of their public spaces for people to enjoy without adverse traffic impacts.

25

Given these apparently conflicting requirements, it is another object to offer an alternative to car-based or car-dominant transportation systems and the chronic traffic congestion and socio-economic problems they have created for urban planners.

30

It is not an object to induce people to give up their automobiles for the greater good. Rather, it is proposed rather that if one wants a sustainable, economically vibrant and world-class community where citizens interact in

5 healthy, safe, and socially beneficial ways, one must eliminate car traffic within urban and suburban centers.

It is an object to find better ways to link cars and their parking spaces with opportunities for large-scale pedestrian movements and many other
10 transportation modes, i.e., high speed rail, interregional and regional rail, statewide intercity rail, commuter rail, regional and community transit (narrow gauge rail systems and/or small buses, vans, and community adapted rubber tire vehicles, airplanes and other aircraft, ships, barges, ferries, water taxis, water buses, and other water-borne vessels, bicycles, pedestrian movements.

15

It is therefore further objects of the instant CIS improvements, and their urban centers as taught herein, to:

- Hide automobiles from sight by parking them in structures that are hidden within mixed-use structures (residential, commercial and retail uses);
20
- Position such mixed-use parking structures and other buildings components of the intermodal community to form high-quality corridors and public spaces supporting large-scale pedestrian movements and community transit;
- 25 • Direct truck movements to shared-use freight loading docks or schedule deliveries other than during the times when large-scale pedestrian movements occur; and,
- Configure the built environment to facilitate large-scale pedestrian-based intermodal transfers amongst multiple modes
30 of transportation.

The above and yet other objects and advantages of the present invention will become apparent in the hereinafter Brief Description of

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BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a conceptual view of a CIS.

10 FIGS. 2-4 are schematic view of a mixed-use pedestrian-oriented parking garage structure of the type that surrounds the city or town center.

FIGS. 5-9 are views of an ergonomic hybrid transit access corridor usable in the city or town center.

15 FIG. 10 is a view of low-profile, low speed transit vehicles usable within an ergonomic corridor.

20 FIG. 11 is a view of a liner building typical section of a parking structure,

FIG. 12-13 are views of an intermodal community including a rail corridor, a limited access highway, and other adjacent communities.

25 FIG. 14 is a figure ground depiction of the built urban environment (in gray), parking structure (in gray hatching) and pedestrian areas (in white) within an intermodal community city or town center.

30 FIG. 15 is a view, related to Fig. 4, of an underground portion of a corridor between the two halves of a mixed-use pedestrian-oriented parking structure.

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DETAILED DESCRIPTION OF THE INVENTION

A community Intermodal system (CIS) proposes a method of movement that relies upon, within an urban or suburban community context, high quality public spaces between buildings that are safe, comfortable, useful, and interesting. The interaction of each and every component of the urban form should be constructed and positioned to support large-scale pedestrian movements and to further the principal CIS objective: to cause larger than typical numbers of people to walk longer than typical distances and access transit or other modes of transportation as part of a multimodal trip involving at least one car-based trip segment.

While there have been numerous studies to support the calculation that pedestrian movements are typically limited to one-quarter to one-half mile distances (see: Walking Distances to and from Light-Rail Stations at: <http://www.enhancements.org/trb/1538-003.pdf>), little research or observations have been undertaken or published on the numbers of pedestrians that will occupy public space based upon the specific affects on human behavior that can be caused by the physical characteristics and architectural features (see: Projects for Public Spaces at: <http://www.pps.org/info/aboutpps/>). Nor has the environmental conditions that maximize predictable pedestrian movements (lengthen trips and increase numbers of people walking) been well documented.

What CIS Improvements provide are new and unique urban forms, inclusive of a specific kind of public space, that will draw into an urbanized area large numbers of automotive travelers (10,000 to 30,000 people assuming 10,000 parking spaces), produce large-scale pedestrian movements (80,000 to 215,000 pedestrian trip segments per square mile per day or more)

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5 and cause substantial shifts from automotive to multimodal trips (30 percent or more). Once built, such an intermodal community or urban center would provide a test bed to verify the methods to induce large-scale pedestrian movements and the relationship between such large-scale pedestrian movements, the pedestrian holding capacity or pedestrian-oriented corridors, 10 courtyards, and plazas and highly utilized multimodal transportation systems. A conceptual view of a CIS is shown in FIG. 1.

The components of the CIS and the position of each component relative to other CIS components are constructed to effectuate CIS objectives in 15 multiple ways. Each component and positioning of the component refines the qualities of public space to produce predictable human behaviors within this urban form that favor larger numbers of multimodal movements via: high speed rail; interregional and regional rail; statewide intercity rail; commuter rail; regional and community transit; narrow gauge rail systems; small buses, 20 vans, and other community adapted rubber tire vehicles; airplanes and other aircraft; water-borne vessels, ships, barges, ferries, water taxis, water buses; bicycles; pedestrian movements; and, other modes. Large-scale pedestrian movements (walking distances of one or more miles in concert with community transit by many thousands of people) and substantial modal shifts arise as 25 predictable human behavior within this urban form.

As may be noted in FIG. 1 and FIG. 12, the principal elements of the CIS therefore include a city or town center 260 including the ergonomic hybrid transit access corridor particularly for town and urban centers as taught in my 30 U.S. Patent No. 6,561,727 B1 (2003), circumferentially disposed parking structures 200 and 202 of the type set forth in my PCT Application No. PCT/US03/039804 entitled Mixed-Use Pedestrian-Oriented Parking Structure, low speed mixed-mode pedestrian corridors 215 (more fully described below),

5 which include an outermost region 215A, that connects parking structures 200/202 to city or town center 260, feeder highways 247 that may include a limited access or other highway beltway 265, parking structure entry and exit highways 239 and 239A respectively, limited access highways 271 linked to an airport 300 or seaport 310, a high speed or other rail link 243 linked to
10 airport 300 and/or seaport 310, and traffic-calmed delivery or service roads 275 which approach the mixed-use pedestrian-oriented parking structures 200/202 and city or town 260, preferably as an ergonomic hybrid transit access corridor 10/100 particularly for town and urban centers, including that in my U.S. Patent No. 6,561,727 B1 (2003). As may be noted, service road
15 275 ends at roundabout 276. Also shown in FIG. 1 are parking structure entry ramp or entrance 213, elevated cross-over corridor 204 and parking exit 217. Further shown are bicyclists 201, autos 203, pedestrians 205, and low speed community transit vehicles 26 on mixed mode corridors 215.

20 Further shown in FIGs. 1 and 12 is transfer point 220 for rail link 243, said parking entry ramp 213 as associated with highway 239, said parking exit 217 as associated with highway 239A, and Interstate highway CIS transfer point 263 for Interstate highway 267.

25 CIS improvements are constructed using three-story to eight-story mixed-use buildings 40, 40a and 40b (see Figs. 6-9) that create spaces functionally related to the human needs of the resident and visiting human population during daily pedestrian or pedestrian-based multimodal trips from private dwelling places to formalized business, educational, entertainment,
30 health and governmental settings, i.e., places to shop, to informally socialize and discuss community issues, to prepare for work or school.

5 Public spaces between buildings 40 are framed by the exterior of and entrances or other opening to a series of mixed-use buildings that line the perimeter of parking structures. Such liner buildings 210/212 are positioned along wide sidewalks, pedestrian corridors 262, courtyards 264 and plazas 266, walkable and traffic-calmed streets 209 (see: Walkable Communities at: 10 <http://www.walkable.org/index.htm> and the history and type of measures that describe Traffic Calming at <http://www.trafficcalming.org/>), and mixed-mode corridors (see: John Zacharias, "The Amsterdam experiment in mixing pedestrians, trams and bicycles" ITE Journal, vol. 69, no. 8, pages 22-28, August 1999 available at <http://www.ite.org/itejournal/index.asp>.) designed to 15 accommodate a mix of pedestrian, bicycle and transit movements.

Specific structural components of liner buildings 210/212 (see Figs. 2-4) and corridors 262 provide continuous open-air shelters, i.e., balconies, arcades 241, awnings, roof overhangs, tree and other canopies, covered entry 20 features, courtyards and zaquanes, that protect pedestrians from the sun, rain, wind, heat and cold. This urban environment projects a high quality condition that encourages active human lifestyles and related large-scale pedestrian movements. See Pattern, Language at <http://www.patternlanguage.com> and Nature of Order at: <http://www.math.utsa.edu/~salingar/NatureofOrder.html>).

25 Most parking is accommodated in specially designed parking structures having entrances 213 that are circumscribed by said liner buildings 210/212. Within the parking structures 200/202 (see Figs. 2-3), angled parking spaces 226 are positioned around a central elongated air/light atrium 228 and parallel 30 parking spaces 227 are positioned along the outer edge of the parking structure immediately adjacent the liner building doorways and hallways. The parking spaces are positioned to facilitate one-directional aisles (12 to 18 feet wide) and to be proximate to liner building businesses and residences within

5 the mixed-use liner building component and the destinations along the adjacent mixed-mode corridors and traffic-calmed streets. Intermittent on-street parallel parking spaces provide limited spaces for short term parking opportunities (eight or so spaces per city block).

10 No or very limited surface parking lots (consisting of six or less parking spaces). More particularly, as may be noted with reference to FIGS. 2-4, parking deck 216 within first liner building 210 provides for parallel parking 227 at the perimeter thereof, this interrupted as necessary by pedestrian corridors 262 (see Fig. 4), pedestrian bridges 208, and entrance platforms 211 to
15 provide a place for pedestrian access by residents, guests, business employees, and their clients and by roadways, and preferably configured as an ergonomic hybrid transit access corridor particularly for town and urban centers as is taught in my U.S. Patent No. 6,561,727 B1 (2003), vehicular cross-over 204, and one-directional traffic aisles 207 for delivery services to
20 access back doors 240 located at a perimeter wall 224 which comprises an interface between parking portion 216 and first liner building 210. Further, angled parking 226 surrounds said atrium 228 at the center of portion 216 of first parking structure 200.

25 As may be noted in the embodiment of FIG. 2, direction of travel within the garage is one way (see arrows 207) and allows for sufficient width (12 to 18 feet wide) and height (in a range of 14 to 18 feet high) for automobiles and delivery trucks. Incorporated into the structure may be a central service or loading docks 230 provided at a ground floor (see FIGS. 2-4). There is shown,
30 outwardly of the first liner building 210, a second liner building 212 (see Fig. 3), arcades 241 and awnings, balconies, and roof overhangs which peripherally surround said liner buildings 210/212.

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Further shown in FIG. 2 are a buffer corridor 232 into which HVAC and other environmental facilities 233 may be placed. With further reference to FIG. 3, the mixed-mode corridor 215 is preferably a ground level pedestrian-oriented corridor situated between the mixed-use pedestrian-oriented parking structure parts 200 and 202 that can accommodate pedestrians 205, bicyclists 201 and community transit vehicles 26.

Shown at FIG. 3 is the relationship between garage entry 213 of the embodiment of FIG. 2 and garage exit 217, this inclusive of said vehicular cross-over 204 which connects the respective portions of the garage. The system thereof is shown in vertical axial cross-sectional view in FIG. 4 in which pedestrian bridge 208 and pedestrian corridor 262 may also be seen.

With reference to Figs. 3-4, the resultant parking structure promotes pedestrian activity by providing a rear or back door access 240 to an adjoining liner building 210 and further provides interior pedestrian access corridors 214, arcades 241 (see Fig. 4) and similar structures that protect pedestrians from the adverse weather conditions, covered street crossing (beneath structures that span the street between city blocks such as mixed-use cross-over 208) or mixed mode corridors 215, traffic calmed streets (see Figs. 5-9), as is taught in my U.S. Patent No. 6,561,727 (2003), and mixed-use crossovers 208 and pedestrian corridors 262 to provide pedestrian access between and through the components of the mixed-use, pedestrian-oriented parking structure.

Said parking structure is designed to absorb traffic by efficiently converting automotive trips into pedestrian movements that eliminate traffic congestion and improve intermodal pedestrian access to transit and other transportation modes and to frame public squares and pedestrian or mixed-mode corridors and streets with horizontal components, as discussed in the

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5 Ergonomic Hybrid Transit Access Corridor Particularly for Town and Urban
Centers of said U.S. Patent No. 6,561,727 B1 (2003) 245. Within these public
spaces (plazas, courtyards, and corridors), small transit, parking shuttle and
local circulating vehicles help to more efficiently link parking facilities to
destinations within a one to four square mile area and with the mixed-use,
10 pedestrian-oriented parking structure, collectively, constitute a pedestrian-
oriented design and transit access system that will improve intermodal
movements within the urban community.

The above defines a better method to park automobiles within the
15 shroud of a 20 foot to 90 foot deep liner building (typically 60 feet or so deep)
and to incorporate elements of interior design to produce a mixed-use,
pedestrian-oriented parking structure that positions parking spaces to better
provide access, air, light and security to customers, visitors and residents of
mixed-use liner buildings.

20

Further shown in Figs. 2-3 is a one-directional driving corridor or
parking access isle 207 (see arrows of FIG. 3) to thereby provide an
opportunity to build a matched pair or more of parking structures with a third
floor vehicular cross-over 204 (see Fig. 4) to structurally integrate with a
25 second floor mixed-use crossover 208 for retail, restaurant or mixed-use
activities and to provide cover for mid-block, at grade pedestrian crossings and
mixed-mode corridors 215 (see Fig. 4). The narrow width (approximately 90-
115 feet) allows for structural columns 218 to be moved to the perimeter of the
parking structure or within said air/light well or atrium 228 to thereby avoid
30 shadowing within the parking structure and improve user safety. The narrow
characteristic of such structure also makes for an easier application of use of

- 5 the liner building, given the space needs of retail, office and other commercial or residential uses and the typical dimensions of a city block.

Liner building sections (see FIG. 11 as one example) can be developed through contracts with a single developer (using varied architectural firms to
10 design the sequence of distinctive and varied 10 to 30 to 50 feet long building façade sections that face the pedestrian-oriented corridors) or through incremental development of small, separate out-parcels (different owners, architects and builders developing the distinct and varied liner building sections as multiple individual buildings within and approximating the 60 feet
15 deep by 10 to 30 to 50 feet wide lot dimensions with no or minimal side yards) that surround the parking structure and functionally connect the parking spaces with the pedestrian-oriented corridors, plazas and community transit services.

20 The specific building heights need to provide sufficient light and air to the public realm to respond to all urban health and the multiple environmental needs of the lushly vegetated public places e.g., human and compatible animal and plant life. All components of these three dimensional spaces should appeal to the five human senses (what we see, hear, smell, taste, and
25 feel) and should constitute the urban form of a "green corridor" that provides a sustainable environment for a variety of urban adapted wildlife and urban compatible domestic animals. Because a continuous array of buildings at or above 85 feet in height can create environmental problems within the corridor, courtyard, plaza, pedestrian via, zaquan and other microclimates, buildings
30 sized down to three-story heights or occasional buildings above eight-story heights for specific large scale uses should be placed within the urban form where they add to and do not detract from these CIS objectives (see:

- 5 Microclimate and Downtown Open Space Activity available through;
<http://eab.sagepub.com/cgi/content/abstract/33/2/296>).

Within this pedestrian-oriented environment, large numbers of people walk longer than typical distances because they enjoy the experience.
10 Architectural features vary every 10 to 30 to 50 feet based upon different uses and independently conceived architectural designs that are observable from the public realm at close (30 feet or less), intermediate (30 feet to 300 feet or so) and greater distances (300 feet or more). These features must provide not only visual interest, but also provide other sensory reinforcement opportunities
15 (what one hears, smells, feels, and tastes).

In the traffic calmed streets (see FIGs. 13-14) of the type of the Ergonomic Hybrid Transit Access Corridor Particularly for Town and Urban Centers as is taught in U.S. Patent No. 6,561,727 B1, there are delivery and
20 service roads 275, and elevated ramps from the limited access highways 271, positioned to link the cars and trucks from the limited access and feeder other highways 267 and 247 respectively with the mixed-use pedestrian-oriented parking structure 200/202, the pedestrian corridors 262, mixed-mode corridors 215, courtyards 264, and plazas 266 to connect the car and truck occupants
25 (when they become pedestrians, bicyclists, and community transit users) with the city or town center 260.

With reference to the views of FIGS. 5 to 9, the instant ergonomic hybrid transit access corridor 10 or 100 may be seen to include a plurality of x-axis integral, y-axis corridor segments. Therein, as may be noted, each
30 corridor segment is characterized by a longitudinal or y-axis of indefinite length, however limited by x-axis intersections 12 more fully addressed below. It may, with reference to FIGS. 5 through 8, be appreciated that the instant

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5 ergonomic hybrid transit access corridor is characterized by a preferably centrally disposed bidirectional roadway consisting of lanes 14 and 15, each having a width preferably of 9 to 12 feet, which may be preferably separated by a roadway median 16 having a width of about 5 to about 20 feet. See embodiment of FIG. 7. Provided outwardly of lanes 14 and 15 are parallel
10 parking segments 18, each having a width preferably of 8 to 9 feet.

In the elaborated embodiment of FIGS. 7 and 10, bicycle lane segments 19, each having a width preferably of 4 to 5 feet, are provided between roadway lanes 14a/15a and said parallel parking segments 18, 18a
15 and 18b. In the rudimentary embodiment of FIGS. 5-6, bicycle lane segments may be integrated or separately arranged from first greenscape segments 20 described below. In the alternative, the bicycle lane segments 19 can be widened to 7 feet to accommodate intermittent use of the bicycle lane by narrow gauge rail vehicles 26 as well as bicyclists 201 and that in such
20 instances, the narrow gauge rail tracks 24 may have an x-axis within the range of 30 to 40 inches and thereupon a moderate speed, e.g., 20 to 30 miles per hour, low profile, an electric, diesel hydraulic, steam, or other propulsion system, tram, trolley, train, or like transit vehicles 26 having a floor
25 28 (in the horizontal xy plane) situated as a level not exceeding about 20 inches above the plane of the bicycle lane 19.

Situated yet further symmetrically outwardly from parking segments 18 are said greenscape segments 20, having a width preferably of 3 to 6 feet or more when other segments or other corridor features are incorporated
30 therein, which may include any of a variety of landscape and hardscape treatments and which can be used to laterally move from one corridor segment to another. Outwardly thereof are greenway transit segments 22, having a width preferably of 15 to 40 feet, which generally include narrow gauge rail

5 tracks 24, that is, tracks having an x-axis width in a range of 24 to 30 inches and thereupon, a low speed, e.g., 5 to 10 miles per hour, low profile preferably electric, battery powered, tram, trolley, train or like transit vehicle 26 having a floor 28 (in the horizontal xy plane) situated at a level not exceeding about 20 inches above the plane of the greenway transit segments 22.

10

It is to be appreciated that each of the greenway transit segments 22 are multi-use in character, that is, functional for purposes of pedestrian and low speed bicycle or similar conveyance use both during periods when the small transit vehicles 26 are not present and, at lateral sides of the small-gauge rail tracks 24, when such transit vehicles 26 are upon the rail component of the greenway transit segment 22.

15

Optionally disposed beneath each greenway transit segment 22 (see FIGS. 6 and 7) is a multi-purpose underground utility conduit 30 as is taught in my U.S. Patent No. 6,167,916 B1 (2001) 30 which serves as a means of unified utility delivery. As such, this multi-purpose underground utility conduit 30 includes subconduits for electricity; drinking water, re-use water, sewer lines and storm water drainage; natural or synthetic gas; telephone, cable television, fiber optics, and other communication and data transmission means; pneumatic tubes; security services; fire services; and low current magnetic induction tracks for vehicular propulsion. In addition, utility conduit 30 may be employed for storage, maintenance access, or transit power equipment for the greenway transit segments 22.

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With further reference to FIGS. 5 and 6, there are located, further symmetrically outwardly from the greenway transit segment 22, second greenspace segments 32 which, as in the case with first greenspace segments 20, may include a variety of landscape and hardscape treatments and which can be used to laterally move from one corridor segment to

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5 another. Each of the greenspace segments 20 and 34 provide filtered sunlight and shade tree coverage for an optimum foliage spread of such segments and adjoined areas, as well as opportunities to install fountains and other artistic or architectural features to provide comfort and interest to the individuals traveling within the corridor segments.

10

Symmetrically outwardly beyond lateral segments 32 are pedestrian arcade-like segments 36, 36a and 36b having a width preferably in a range of 10 to 15 feet. The preferred xz plane cross-section of arcades 38 within segments 36 is shown in FIGS. 6 and 7. Therein it may be appreciated that, in
15 a preferred embodiment, arcade 38 of segment 36, 36a or 36b is, in the xz plane, enclosed on two or three sides by architectural structures 40a and 40b which, at surface 42, provide for commercial stores and fronts thereof which may include therein a variety of y-axis uses and attractions.

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The number and length of the store fronts or architectural details of surface 42 are designed to protect the pedestrian from the rain, wind, heat and cold, and to optimize pedestrian spacing and interest to urge the pedestrian to move continually forward along the y-axis toward a destination or transit linkage 12. A maximum distance for such pedestrian movements are defined
25 in accordance with established psychological and medical criteria of how far a pedestrian can comfortably walk, in the given climate where the greenway transit system is located, before beginning to lose interest, perspire or tire, given the typical mental and physiological characteristics of individuals moving through the corridor segment.

30

Related to the time that it would typically take a consumer to walk along a pedestrian arcade segment 36 between destinations or transit use opportunities 12 is the periodicity of the schedule of community transit vehicles

5 26, the various rail services such as said link 243, bus transit systems, and other modal choices and a variety of end uses or refinements of the architectural design details. Accordingly, the schedule of the transit vehicles 26 as well as the land use itself and architectural design variations are a function of typical physiologic and psychological considerations.

10

With reference to the top or xy plane view of FIG. 8, the lateral relationship between the entire above defined integral corridor segments 10 may be seen. Therein, as may be appreciated, are shown said greenway and enclosure ratios, which comprise two of the defining parameters of the present system. More particularly, the greenway ratio is defined as the ratio of the x-axis dimension of roadway 14/15, any roadway median, and parallel parking segments to the entire x-axis dimension of the corridors 10 or 100 (see FIG. 7). This ratio, in the instant system, exhibits dimensions that will not exceed fifty percent. The enclosure ratio is defined as the ratio of the z-axis of height of the architectural structures to the entire x-axis dimension of the corridor. This ratio in the instant system, at optimal dimensions, is at least thirty to about fifty percent. For example, if the width of each vehicular lane is 10 feet and the two lane roadway is therefore a width of 20 feet, the total x-axis dimension of the corridor will be at least 40 feet. With two 8-foot wide segments for parallel parking, the width of the corridor 10 or 100 would be 72 feet or greater. In such an example, the z-axis height of the architectural structures would range from at least 24 feet to about 36 feet.

A four lane roadway 14 and 15 (see FIG. 7) includes parallel parking segments 18 to produce a width of the corridor 10 or 100 of 112 feet or more with a 15 foot roadway median between each two lane roadway sections, the width of the corridor 10 or 100 would be 142 feet or more. The z-axis height of architectural structures 40 and 40a would range from about 37 feet to 56 feet

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- 5 in the first instance and about 47 feet to 71 feet in the second instance. Even at a maximum highway lane width of 12 feet, the overall width of the corridor would typically be at least two times the width of the roadway, the roadway median and the parallel parking segment.
- 10 Per FIGs. 9A/9B, it is noted that arcade 38 may be defined through the use of arcades 38, balconies, porches, awnings, roof overhangs, zaquans, pedestrian vias, and other pedestrian and bicycle related shelters. That is, it is noted that vertical surface 42 defines an xz plane interface between the public right of way and private architectural structures such as structures 40a and
- 15 40b. These structures may be retrofitted to provide for arcades 38 or, alternatively, lobbies, courtyards, zaquans, or pedestrian vias.

In Fig. 9A, it is to be appreciated that within greenway transit segment 22 and greenspace segments 20/32 may be seen bicycle lanes 10 or walking

20 trails. Also, all aspects of the corridor are provided with strategic architectural lighting for purposes of safety and aesthetics.

It is noted that said corridors 10 and 100 may comprise segments of larger linear, bi-directional, uni-directional, or loop-like planning configurations

25 within said city or town center 260.

In the pedestrian corridors 262 (see Figs. 4 and 13-14), the mixed-mode corridor 215, the ergonomic hybrid transit access corridor 10/100 (see Figs. 6-7) for town and urban centers as taught by my U.S. Patent No.

30 6,561,727 B1 (2003), and traffic calmed streets 209 (see Fig. 13-14), different senses operate at different distances, causing each sense to act in sequence to propel or redirect pedestrian movements in very predictable ways. What you see at a distance, you can hear and smell at closer quarters. What you see,

- 5 hear and smell at close quarters, you can touch. What you see, hear, smell, and touch, you can taste, but only with the direct oral contact with the object or entity to be tasted.

10 This differential in the sensory reception distance forms the basis for the pedestrian propulsion system and the steering capacity of CIS urban forms (pedestrian-oriented corridors, plazas, traffic-calmed streets) in conjunction with large-scale pedestrian movements. With the use of a full range of human scales and the fractal qualities in the urban built and naturally-occurring structures and designs to excite visual interest at long, medium and short
 15 distances and the variety of needs that can be satisfied within mixed-use environments, pedestrian interest can be converted into a predictable and fully operational method of intermodal transport. (Salingaros, *The Future of Cities* [2006] at: <http://www.math.utsa.edu/sphere/salingar/futurecities.html>, *A Theory of Architecture* [2006] at: <http://www.math.utsa.edu/~salingar/architecture.html>,
 20 *Principles of Urban Structure* [2005] at: <http://www.math.utsa.edu/sphere/salingar/urbanstructure.html>, and *Pavements as Embodiments of Meaning for a Fractal Mind* [2000] at: <http://www.nexusjournal.com/Miki-Sali-Yu.html>.

25 In addition, the pedestrian corridors 208 and 282, the mixed-mode corridors 215, the ergonomic hybrid transit access corridors 10/100 particularly for town and urban centers as is taught in my U.S. Patent No. 6,561,727 B1 (2003), outer plazas 215A, courtyards 264, traffic-calmed streets 209, and the adjacent built and landscape environment, provide comfortable
 30 places to sit during both the walk and ride phases of typical multimodal trips, i.e., provides comfortable and well-lighted places to sit, eat, socialize, protected from the natural elements. Doorways, windows, balconies and other entry features (see FIG. 11) provide frequent openings to the inner buildings

5 210/212 from plazas 266, courtyards, mixed-mode corridors 215, sidewalks
and traffic-calmed streets 209. Zaguanes, pedestrian vias, and galleria or
shopping mall corridors transect city blocks to create short pedestrian blocks
(see: Jane Jacobs, *The Death and Life of Great American Cities*, 1961) and
pedestrian access to shops, restaurants, hotel lobbies, and residences within
10 the city block structures (see: Bernard Rudowsky, *Streets are for People: A
primer for Americans*, 1969). Places to sit and short blocks help to form a
healthy walking environment, without exhaustion.

Finally, the provision for ultra-low floor community transit vehicles 26
15 (see FIG. 10) allow for easy access from any sidewalk into a very human-
scale vehicles (seven feet wide by nine feet tall) that functionally represent a
slow moving, pedestrian-benign bench on wheels that move generally toward
the many desired areas of the urban center. In such circumstances, the
opportunity to sit, rest, ride and walk provides for larger pedestrian supportive
20 areas and longer pedestrian-oriented multimodal trips.

Cars 203 remain a dominant method of transport, but they are parked
in mixed-use pedestrian-oriented parking structures 200/202 surrounded by
liner buildings 210 (see FIGS. 1-4) that help form this consistently reinforced
25 pedestrian-oriented urban form and habitat in the public space between
buildings. The pedestrian movements are much more visible and automobile
and truck traffic is much less visible when compared to more typical urban
environments elsewhere in the world. Air quality is improved and pedestrian
safety is assured due to the very limited vehicular movements within these
30 urban centers.

All multimodal trip needs are addressed so that a significant pedestrian-
based model shifts to alternative modes of transport (bike racks, clean and

5 safe public wash rooms, lockers, phone and internet services, food and drink outlets, way finding, mobility centers, abundant structured parking spaces, seamless transportation services and modal transfers for individuals and groups. As a result of the large-scale pedestrian movements, nearby mixed-use pedestrian-oriented structured parking and high quality public places for enhanced intermodal access, far larger numbers of the traveling public use public transport, automotive traffic congestion is reduced, and virtually all automotive trips can become multimodal trips.

Such community intermodal systems assume an intermodal community built environment that provides for all human needs, e.g., governmental, religious, commercial, health, education, entertainment, cultural, residential, and employment. Further, it assumes that the transportation systems that operate between and within the community intermodal system car-free centers (see: Carfree.com at: <http://www.carfree.com/>) or other pedestrian-oriented urban centers are safe, reliable, energy efficient, technologically advanced, and environmentally benign and that they enhance the region's global economic competitiveness, productivity, and quality of life. Finally, while specific single purpose buildings, especially those with more than eight floors, will exist within the pedestrian-oriented urban center, their first three floors or more will help to frame the high quality human habitat and provide for specific community needs within the CIS urban form, i.e., restaurants, retail goods and services, health related, social and governmental services.

Further, within a city or town center 260, the CIS components are themselves defined to specify that:

- The corridor, courtyard and plaza components (see FIGS. 5-9, 12-15). These assume wide pedestrian corridors 262 (30 feet

5 wide or more), wider mixed-mode corridors 215 (50 feet wide or
 more), courtyards 264 (60 feet square or so) and larger plazas
 266 of varying shapes and sizes (100 feet square or more) act
 as gathering places for business, social and recreational
 functions, i.e., market in the morning, lunch in the afternoon,
 10 festivals at night; a partial tree canopy provide shade from the
 sun, open areas provide sunny places to sit or walk and water
 features provide for human needs, interest and comfort (drinking
 fountains, decorative fountains, water courses and water falls
 provide cool places to sit, visually interesting places to be and
 15 physically revitalizing environments) public art provides visual
 interest and, when properly constructed and designed, places for
 children to play; brick, stone or similar corridor and plaza
 surfaces provide surfaces sufficiently rough enough so as to be
 inconsistent with fast moving and dangerous automotive traffic
 20 and consistent with pedestrian walking needs; grass areas are
 large enough to sit, run and play and provide for water recharge
 and psychological linkages to our genetic past; continuous
 building faces protect the pedestrian from the sun, rain, wind,
 heat, and cold; elevated and covered entry structures associated
 25 with pedestrian-oriented mid-block crossings provide platforms
 for building and transit entries protected from any adjacent
 automotive traffic and the weather; attractive and useful
 landscape and hardscape provide color, shapes and smells
 responsive to human needs and wants; mixed-use buildings
 30 (See FIG. 11) open to the street at frequent intervals (doors,
 balconies, and windows at 30 foot or more frequent intervals);
 wider sidewalks or arcade-like segments 36 (15 feet wide or
 more), courtyards 264, plazas 266, adjacent traffic calmed

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5 streets 209, Ergonomic Hybrid Transit Access Corridor
Particularly for Town and Urban Centers as is taught in my U.S.
Patent No. 6,561,727 B1 (2003) 245, mixed-mode corridors 215,
and pedestrian vias, zaquanes, and galleria and shopping mall
10 corridors (30 feet wide or more) provide a consistent, predictable
and safe pedestrian course through and to the city center;
narrowed automotive traffic lanes (10 feet wide or less) reduce
average traffic speeds, wider shared-use bicycle and community
transit traffic lanes (seven feet wide or so) improve
15 car-bicycle accident safety, and limited on-street parking
(configured as intermittent parallel parking on traffic-calmed
streets alternating with movable or stationary sidewalk bulb-outs
at each end of city blocks and at mid-block in coordination with
identifiable pedestrian-oriented street crossings) provide with
20 other traffic-calming techniques a safer mix of automotive,
community transit, pedestrian and bicycle movements outward of
the urban center; environmental street shutters that span the
distance between buildings from opposite sides of pedestrian-
oriented corridors above the third floor level are constructed of
25 sail cloth, shade cloth or similar materials and move or rotate
during the hours of the day and night to improve walking
conditions by deflecting wind and rain from or to the public
spaces below; calmed or no vehicular traffic for all or most of the
day, week, and year to induce more pedestrian movements and
30 reduce accidents between pedestrians and automotive traffics
and resulting injuries; and, liner building faces that do not form a
uniform plane reflecting the dimensional differences consistent
with independently designed building face segments every 10 to
30 to 50 feet or so.

- 5 • The structured parking components 200/202 assume that parking structures (see FIGS. 1-4 and 12-16) are located at the perimeter of the pedestrian-oriented downtown or urban center 260; one-directional vehicular movement 207 within the parking structure from access to exit points; parallel parking 207 along
10 the parking structure outer edge; angle parking 226 around a central air/light atrium 228 that provides for landscape and drainage areas; longer and more narrow parking designs than are typical in urban setting today; mixed-use liner buildings 210/212 that surround the parking structure (10 to 30 to 50 feet
15 in width and 60 feet or so in depth); self-powered, handicapped accessible elevator systems; and, elevated and below grade traffic aisles 268 between parking structures.
- 20 • The community transit component (see FIGS. 9-10) assumes: small, fixed guideway community transit 26 (seven feet wide by nine feet tall) with an ultra-low vehicular floor (five inches from the road surface or flush with the sidewalks) to improve access at all places where the transit vehicle might stop; fixed rail and "on demand" rubber tire community transit service between downtown and urban center destinations beyond the length of a
25 comfortable walk (beyond a one-quarter mile distance) and between modal access points, major community destinations, or other CIS sites; sound notification vehicle arrival systems built into the fabric of the community's music and sound systems so that music played on the community transit vehicles interacts
30 with the music played at stationary locations where the community transit vehicle typically stops creating a stereophonic effect at such transit stops; and vehicles that quietly operate at low speed (five to ten miles per hour) on mixed-modes corridors

- 5 within downtowns and urban centers and at higher speeds (ten to twenty-five miles per hour) within wide (seven feet) shared-use bicycle and community transit traffic lanes on traffic-calmed streets outwardly for up to a five mile radius of the CIS.
- 10 • The car-free city or town center 260 (see FIGs. 1, 4 and 13-16) assumes: the absence of a vehicular street grid at the downtown or urban center 260; access to direct freight deliveries at specific times of the day; convenient shared loading docks 230 for nearby freight movement at any time of day; nearby parking structures that keep car movements separate from the
- 15 pedestrians in the care-free center (by use of liner buildings and elevated and below grade traffic aisles 268 between parking structures); pavement surfaces of decorative stone, brick, or similar surfaces that provide a pedestrian supportive pattern, natural drainage, a brick, cobblestone or other mixed-mode traffic-calmed streets 209 (see Fig. 16) that provides a rough ride to rubber tire vehicles and ADA acceptable walking conditions; extra efforts to make the building faces lively, unique, memorable, and characterized by features that provide a
- 20 continuous protection to pedestrians from the natural elements, e.g., the sun, rain, wind, heat, and cold, and to make the plazas and courtyards areas comfortable as places to sit, rest, and socialize, i.e., market in the morning, lunches in the afternoon, festivals at night; smaller corridors that open to much larger plaza areas; significant community buildings 40 positioned on the
- 25 perimeter of plazas 266 (places of worship, government, market areas, health care, education, and entertainment facilities, museums, major residential buildings or hotels and places of employment); underground utilities that can be installed where
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- 5 necessary in conduit beneath the sidewalks, pedestrian-oriented mixed-mode corridors 215, shared-use bicycle and community transit traffic lanes, and traffic-calmed streets 209; and, property values will substantially increase in the car-free areas (at least ten times the pre-CIS values) because people converse more frequently and with greater civility, freight moves efficiently to and from CIS destinations and beyond, the cultural, civic, and family life of the citizens improves and the local economy grows.
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- The limited access roadways 239 (see FIG. 1 and 14) assume that: from existing or to be developed Interstate Highway System, toll roads and other major roadway intersections, access ramps are designed and built to give direct or nearly direct access to the parking structures; and, such direct access reduces congestion on the highway system by providing an alternative to sitting in your car on the congested Interstate Highway, toll road or major roadway segment, i.e., park and find things to do, places to eat, people to see or entertainment within the CIS; park and access other modes of transportation as a pedestrian 205 that are timely alternatives for local, regional or interregional destinations; park and visit friends, businesses at nearby CIS sites.
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- The elevated parking structure cross-over 204 (see Figs. 1 and 4) and below grade parking structure traffic aisles 268 (see Fig. 15) and at-grade traffic-calmed access streets assumes: vehicular movement will generally occur from one parking structure 200 to the next 202 along elevated or below grade traffic aisles to minimize car/pedestrian conflicts in the car-free center; and, when the elevated traffic aisles are routinely positioned at the third level, mixed-use space can be constructed
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