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MOBILIZATION OF THE MULTI-TASKING MACHINE
Up-cycling the Interstate and Defense Highways

by

Wyatt J. Frantom

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IN PARTIAL FULFILLMENT OF THE
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ABSTRACT

MOBILIZATION OF THE MULTI-TASKING MACHINE:
Up-cycling the Interstate and Defense Highways

by

Wyatt J. Frantom

The metropolis is governed by a certain internal logic, an 'operating system' that we are often blind to; initiated at the command line and materialized through mass mobility. The code for this operating system is realized through both very specific and more esoteric social rules and practices, conventions (local code restrictions, signs and semantics) which encode our motive environment, directing our movement, allowing or more often determining our personal inertia. This operating system has more to do with timing and the interactivity of planned coincidences than with built form.

While speculative, this thesis amends the jurisdictional constraints between architects and developers, planners and policymakers; seeking a collaborative and comprehensive approach to reconditioning the metropolis by up-cycling our highways for alternate occupation and intermodality. This thesis functions as a precursor to a larger manifesto; an initial attempt to decipher, decode and recode the metropolis.

To mobilize the multi-tasking machine.
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Lars Lerup spirit

To Nicole, my wife, for a sustained semblance of sanity confidence encouragement
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metropolitan mobility

The metropolis has developed under seemingly deterministic conditions, as if the godsend seed of the cardo and decumanus held within them the innate properties for incubating civilization. Regardless of what man might do to mold his environ, the plan rarely runs its course undeterred. In fact, civilization is as much a derivative of these deterrents, the consequential responses to our plans, as the plans themselves.

What began as the intersection between two distinct trajectories has grown from the infancy of a Roman camp town, mutating with age into the modern, grided city form. Most recently, that city has undergone yet another permutation, entering a stage of pubescence in which its infrastructural faculties have become evident and realized. Where once the cardo and decumanus delineated one true city center, the metropolis today is polycentric, composed of many such interchanges (each functioning as an erector-set component snapped to the next to permit expansion or to instigate sprawl). In this way, the interchanges compose a metropolitan webwork that approximates the global village by allowing extension through connection.

The difference between the American town grid and that of the Roman camp town is the lack of designated center. By making the necessity for one center negligible, Jefferson’s “democratizing” grid establishes a field where many centers are possible. The possibility then for the polycentric city becomes an inevitability determined not by the mystical seed of the interchange, but by somewhat arbitrary settlement and development patterns (i.e. sprawl). These patterns have to do with the notion of “location theory.” Location theory being how economic processes (attempts at minimizing cost) affect the location decisions of individuals, communities, and businesses. Or, in the case of the Roman camp town, a locale best suited for mobilizing the armed regimes.

The major proponent of location theory is the means of transit between locales. An effective means of transit when coupled with proper location makes the system efficient and therefore makes its constituents (those individuals, communities and businesses) economically viable. The grided street system, and its polycentric properties, permits that any intersection may be settled or developed as a center; and with the exception of distance and speed between points, all positions within the grid are egalitarian because they share a universal connectedness. That is to say, that within the grid system, any one center can be reached from any other center – the adage that all roads lead to Rome seems appropriate to this argument both figuratively and historically.

In all truth, the American metropolis is a side effect, one that could not have been predicted, let alone planned. Those components that were planned, like the Interchange and associated Interstate System, while functioning as proposed, consequently affected adjacent modes of inhabiting and motivating within the American city. The Jeffersonian grid (1785 Continental Congress Land Ordinance), for instance, was primarily used as a political and economic tool for stimulating land speculation and western expansion, but the ordinance ultimately served as the template for the American city.

The grid impacted the manner by which other systems (sewage, telephone, cable lines and electricity) were planned. The American grid system, in this sense, not only provided the means to go elsewhere, it functioned as the umbilici for bringing services from elsewhere. To further amplify this connectivity, the American street system had to overcome the difficulty of distances and to do so the speed of the automobile was utilized; compressing distances and making national centers proximal within reasonable timetables.
The compression factor came in a report to Congress in 1939 as The System of Interstate and Defense Highways. Proposed by Roosevelt, the Interstate and Defense Highways would be a "special system of direct interregional highways with all necessary connections through and around cities, designed to meet the requirements of the national defense". Intended for the mobilization of armed forces and evacuation of the inner cities in case of war, the Interstate System was also a grand scheme to relieve cities of automobile congestion by providing high-speed long-distance travel from coast-to-coast without the necessity of entering the city.

Proclaimed the "largest public works program since the Pyramids," the 41,000 miles of asphalt Interstate radically transformed the American city. "More than any single action by the government, this one would change the face of America ... its impact on the American economy, the jobs it would produce in manufacturing and construction, the rural areas it would open up, was beyond calculation." Ultimately, the Interstate and Defense highway defined modern day metropolitan mobility, the high-bandwidth transit corridors which permit us universal connectivity. They operate towards mobilizing the capitalist machine moreso today than serving any wartime necessity. It is that same capitalist machine that churns the suits to work and home, constructs retail and service industries in its wake, and whose blueprints evidence this cyclical location theory. The highway is the physical manifestation of this capitalist machine and its processes; processes which when logistically orchestrated, synthesize the hardware with the intelligence of a multi-tasking machine.

As man breaks his earthly bonds, propelling himself to places no man has ever gone before ... and as gravity fails away, speculation runs amuck back on terra firma: man reverts back to the nomad, the hunter, freed by machine. Everyone (and everything) breaking chthonic shackles become satellites - held sessile by the slanted planet no longer. Location adopts a universal potential as distances are compressed by the moving machine: trains, planes and automobiles, mobile homes, house boats, hovercraft, the moon probe. Archigram's "the walking city," elevators, escalators, tractors, trains, aircraft carriers, cruise ships, helicopters, sub and elevated trains.

The American metropolis, in the broadest terms, can be subdivided into two distinct scales of activity: the urban and the sub-urban, the urb and civitas. The urb refers to the city, while civitas refers to those activities that connect its citizenry. This subdivision is made explicit by the highway system's loops and radials as they demarcate zones of habitation.

The Houston downtown for instance is demarcated by the centrifugal / centripetal composition of I-10, 45, and 59. Yet, Houston's center isn't as central as once it was, its fringe now ambiguous as it almost leaks into midtown and the museum district or westward to the galleria area. Houston's displaced downtown. Within the greater part of this century there has been a shifting propensities towards the large-scale development of these fringes, as much a shift in our perception. The coal-smudged industrial engine has been placed in suspended animation and replaced by the sprawling sub(ex)urbia. The metropolis today consists primarily of this sub(ex)urban fabric, those homogenous fields of atomized and decentralized development at the fringe. The term exurbania generally refers to regions that span the middle landscape between the urban / suburban and rural landscape and contain nearly 60 million people, constituting the fastest growing portion of the urban landscape.

First Americans moved their homes out of the traditional city and commuted to their jobs in the city <sub-urbanization>. The marketplace followed when people cultivated of driving downtown <the "malling of America">. Third, we moved our means of creating wealth - our jobs out to "where most of us have lived and shopped for two generations <ex-urbanization>.* That is the edge city.** The formation of the suburban city is an effect of the outer migration noted above, but is often confused with the term sprawl. The original application of the term sprawl in the planning context was to describe the commercial ribbon development along highways over considerable distances.

The suburbs comprise the polycentric Metropolis and have developed many of the central components of the city. Suburbs are no longer simply places where individuals who work in the city live and commute. As more and more businesses have moved outside of the city for less expensive operating costs, availability of land and office space. Beltways designed for long-distance travelers to bypass crowded cities soon became the suburban main street.

The trend of suburbia, "edge cities", "new towns", etc. is their evolution into self-subsisting city forms; they themselves have emerged as intermodal communes. Each sub-assembly (the office park, the mall, the residential enclave) are whole unto themselves, but function outside themselves to form a larger assemblage strung along this contrivance of the capitalist machine (consume, create and expend).

In his article “Cityscape and Landscape”, architect Victor Gruen describes the demarcation of such synthetic landscapes (webworks).

"There is technoscapes - an environment shaped nearly exclusively by the apparatus of technology in its respectable and less reputable forms. It is a cityscape dotted with oil wells, refineries, high voltage lines, derricks, chimneys, conveyors, dump heaps, auto cemeteries.

There is transportationscapes - featuring the tiny surfaces of miles of cars on the concrete deserts of highways, freeways, expressways, parking lots, clover leaves, tastefully trimmed with traffic signs, garlands of power lines, and other dangling wire.

There is suburbanscapes - in all of its manifestations from plush settlements of more or less historic mansions to the parade of grounds of the anonymous mass housing industry where dingbats are lined up for inspection. Suburbia with phony respectability and genuine boredom effectively isolated from the world by traffic jams.

And there is saltvscapes: a category covering probably more acreage than all the others combined, a collection of the worst elements of cityscape, technoscapes, and transportationscapes - the 'red and green light district' of our major cities - the degrading of façade of suburbia, the shameful introduction to our cities, the scourge of the metropolis: the elements which cling like leeches to our roadways - the gas stations, shacks and shanties, the car lots, posters, billboards, dump heaps, roadside stands and trash.

The suburban fly is the remains of the city, knotted within the webwork - shrink-wrapped and liquefied for easy consumption by the general masses.

2 Garreau, Joel. "Edge City"
houston_control_city

mobilization of the multitasking machine

switch_v
erector set global switches

mobilization of the multi-tasking machine
The US Highway Act of 1925 gave Houston three highways: US 75, US 90, US 290 (US 75 has since been decommissioned), but the first real effort at major street planning wasn’t undertaken until 1942; by which time Houston had become one of the largest cities in the US without a land zoning ordinance and was pursuing a vigorous campaign towards extraterritorial annexation. Consequently Houston annexed enough land area to double its size in 1948 and again in 1956. This inestimable increase necessitated the already long overdue thoroughfare plan of 1953, which called for a quick adoption of the latest in radial and circumferential freeways.

Urban expansion was accomplished, if necessary by enclosing additional area. Outside was the countryside with its assorted inconveniences. The far more elaborately networked cities of the 19th and 20th century grew by extending their infrastructures. Being beyond the metropolitan limits came to mean being beyond the reach of the modern conveniences such as water supply system and sewers. The radial and circumferential highways, and roadways alike, facilitated the extension of these systems.

This plan and the Interstate Highway Act of 1956 gave Houston two Interstates (I-10 and I-45) and one 3-digit loop (I-610 which opened in 1963), in this original plan, Houston’s freeway system was designed to resemble a spider’s web, with four concentric loops and 12 radiating roads centered on the downtown.

The encirclement of Rome by Romulus and Remus to create four gateways for the entrance of the cardo and decumanus into the city, could be seen as the first loop system. Although later transformed into the medieval city wall and moat system, the loop continued to function as the threshold from civitas to urb. It divides the city functionally and now with the loop road system, truly manifests the notion of circumventing the city and separating one physically and cognitively from urbity.

There are currently seven freeways radiating out of Downtown Houston, two more from I-610, and two more from Beltway 8. Houston has three full loops, two of which are fully functional expressways (those being Loop 610 and the Downtown Loop created by the parameterization of I-10, I-45 and US 59. Beltway 8 is a full loop, but only functions as an expressway through the adjacent Sam Houston Tollway. The Grand Parkway, which will be the fourth loop, is a proposed 170-mile circumferential scenic highway traversing seven counties and encircling the greater Houston metropolis. With the addition of the Hardy Toll Road, the Grand Parkway and the Westpark Tollway, the 1955 spider’s web scheme, in essence, will come to be realized.


These destination cities, seen on the overhead freeway signs as one leaves the city center, are called “Control Cities”. Generally, Interstates have the furthest control cities, followed by US highways, and then state highways. The loops have no control cities and are intended to bypass the city, alleviating traffic along the radial arms leading into the city proper. A trip from a distant suburb to either airport can be made around the outside of the county without fighting inner city or radial corridor traffic.

The most ancient name for these arteries of travel seems to be the antecedent of the modern “way”. Way stems from the Latin veho (“I carry”). The word highway goes back to the elevated Roman roads that had a mound or hill formed by earth from the side ditches thrown toward the center, thus “high” “way.” The word street originates with the Latin strata (initially “paved”) and later strata via (“a way paved with stones”). The more recent word road, derived from the Old English word rœd (“to ride”) and the Middle English rode or rade (“a mounted journey”), is now used to indicate all vehicular ways.

Modern roads can be classified by both type of function. The basic type is the conventional undivided two-way road. Beyond this are divided roads, expressways (divided roads with most side access controlled and some minor at-grade intersections), and freeways or highways are expressways with side access fully controlled and no at-grade intersections. An access-controlled road with direct user charges is known as a tollway.
In Ersilia, to establish the relationships that sustain the city's life, the inhabitants stretch strings from the corners of the houses, white or black or gray or black-and-white according to whether they mark a relationship of blood, of trade, of authority, or agency. When the strings become so numerous that you can no longer pass among them, the inhabitants leave the houses are dismantled; only the strings and their supports remain.

From a mountainside, camping with their household goods, Ersilia's refugees look at the labyrinth of taut strings and poles that rise in the plain. That is the city of Ersilia still, and they are nothing.

They rebuild Ersilia elsewhere. They weave a similar pattern of strings which they would like to be more complex and at the same time more regular than the other. Then they abandon it and take themselves and their houses farther away.

Thus, when traveling in the territory of Ersilia, you come upon the ruins of the abandoned cities, without the walls which do not last, without the bones of the dead which the wind rolls away, spider webs of intricate relationships seeking a form.

Italo Calvino, *Invisible Cities*
The webwork of Houston comprises its urban topography more so than any natural landscape, a concrete terrain comprising an endless diminishing public realm. Just as a natural landscape is known through its trees, lakes, rivers, and hill—the synthetic ecology which is Houston’s webwork is known in its loops, spurs, loopholes, radials, and interchanges.

Given the levels and types of development within and between each loop, the loops themselves act as thresholds for varying modes of use. For instance: I-610 is predominantly used by commuters and those traversing between suburbs, while the Downtown Loop serves Houston thru-traffic and commercial modes because, although it is a loop, it is comprised of three radials. Beltway 8 is recognized as the bypass loop and many commercial, industrial, and distributional entities reside along it for access to both Houston and interregional transit.

These concentric loops are basically growth rings of the control city, where density and activity define an order of magnitude between the rings at any given time. Just as in a tree there may be a larger growth ring during a year of good weather, the city too shows periods of escalation (development) or reduction (such as the outer migration of Houston and other post-war American cities). These concentric loops are perimetal, demarcating “fringe city”, “edge city”, “suburbia”, the “middle landscape”, etc.—whatever the nomenclature, while taking on a programmatic depth in themselves. The loops, analogous to the defensive wall of the medieval town, construct a threshold that refines the traditional city as a figurative entity.

The loops also function as conurbations unto themselves: the agglomeration of retail (big box, shopping malls) and services that accrete near highly trafficked areas. The loopholes those areas where the highway delaminates to allow passage below from one side to the next (inner to outer loop or vice versa), allow for a cross-fertilization of programs from respective sides.

What either of these typologies have in common is that they function most effectively in series, as a redundancy to other systems; permitting users more mobility options and more ways to access the grid. The frontage road, in fact, is inexorably linked to yet another redundancy in the highway system: the turnarounds. These U-turn lanes allow traffic heading in one direction on a one-way frontage road to turn around and head on the opposite frontage road without having to traverse two signalized intersections. This greatly eases congestion at the intersections.

Due to their easy accessibility from the highways, the frontage roads along the southwest freeway assume the character of the ubiquitous commercial strip with fast food establishments, small office buildings, and big box development running their length. The frontage road, for this reason, mediates between the highway system and their interstices that is the gridded network. Mediating speeds, scales, and program, the frontage road is the switch between webwork and network.

Operating Typologies

auxiliary road .1
Technically termed an operational road, the auxiliary is an extra lane(s) provided for the entire length of highway between interchanges, giving motorists more time to merge on and off the mainline. The lane(s) is created when an entrance ramp meets the highway, and drops out with the “exit only” exit ramp. The auxiliary road functions similarly as the frontage road by helping merge traffic from one speed to the next. It is a redundancy in the system, but is not separated from the mainline like the frontage road and thus does not allow direct access to local programs.

braid .2
A design feature in which two nearly parallel ramps must weave sectionally by way of grade separation to avoid crossing. The braid occurs most often when an on-ramp from a nearby interchange is braid-ed to avoid interfering with an on-ramp from another nearby interchange.

cloverleaf .3
A form of interchange that provides indirect right-of-way movement in all four quadrants by means of fly-over loops. The cloverleaf eliminates all crossing conflicts typically found in a diamond interchange but requires more land area.

diamond .4
The simplest form of interchange is the diamond. Diamond interchanges provide a high standard of ramp alignment, direct turning maneuvers at the crossroads, and usually have minimum construction costs.

fused trumpet .5
An interchange between two highways where access is provided by an auxiliary divided road, connected to each highway with a trumpet interchange. Full nonstop access can be provided by this configuration, but typically a double trumpet serves a toll road, with all access to it conveniently served by a tollbooth on the access road.
Technically termed a collector-distributor road, the frontage is a one-way road running parallel to the mainline and providing access from that corridor via a series of ramps and auxiliary lanes. The collector-distributor roads also function as redundancies to the mainline by allowing traffic to move along the route at a rate greater than the local arterial roads while allowing direct access to locales along that route. The frontage road is a switch between the hierarchic arterial road system and the highway system. These are primitive switches dealing with binary oppositions.

The thin triangle of pavement between the thru lanes and the exit lanes as they diverge. The gore is often diagonally striped to remind traffic to stay off while collapsible barriers or barrels filled with water or sand are often employed to protect drivers in a crash.

HOV lanes are those reserved for vehicles with more than one passenger; car pools, van pools, buses, etc. High-occupancy vehicle (HOV) facilities represent one approach being used in many metropolitan areas today to respond to increasing traffic congestion, declining mobility levels, and environmental concerns, and limit use resources.

An interstitial space where the highway delaminates to allow for under-passage and potential reprogramming. These residual zones have been neglected for decades by zoning and planning agencies and offer opportunities for development.

A concept which essentially combines two separate diamond ramp intersections into one. A large at-grade intersection (governed by traffic signals). It is also known as an urban interchange.
roundabout. 11
A roundabout is a form of intersection which accommodates traffic flow in one direction around a central island, operating with yield control at the entry points and giving priority to vehicles within the roundabout (circulation flow). Approach and exit are both on the right, the bypass lane is leftmost. A multi-point entry interchange, this interchange allows 360 degree redirection.

stack. 12
A four level semi-directional interchange with no loop ramps, typically serving two high traffic highways. For the driver: the 4-level stack is the nicest choice for two intersecting freeways. Each road has a direct connection to the other roadways, with no looping or weaving, and the ramps cross in a 4-level deck you can see for about a mile.

surface street. 13
Technically termed an arterial road, a surface street allows access by traffic signal or stop sign or allows turns across opposing traffic. Hierarchically the smallest member of the public access road system which allows access to local programs - typically residential or suburban in nature - surface as opposed to elevated street in the case of freeways and bridges.

trumpet. 14
May be used when a crossroad terminating at a freeway. This is a conceptually simple way to end one freeway into another, a three-way interchange with no crossing movements, featuring a 270-degree loop ramp opposite the terminating roadway, a semi-directional ramp following the loop to the outside. It features directional ramps (no loops, or weaving right to turn left).

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interchange_switch

As modes of transportation have evolved, so too has the Interchange. The upscale in speed has basically obliterated most notions of common civic or commercial space that might have once afforded public interaction. Today, public interaction consists of the dynamic flow of automobiles and interfacing of driver's through a presupposed social agreement.
Connectivity affords us the convenient, rapid, efficient, and safe transfer of people or goods from one mode to another.

The freeways furrow themselves through our cities with little relation more than exit ramps, leaving a wake of transportation scape in their midst the dead zones beneath and around, the technocratic right-of-way guarded by lumbering high-voltage sentinels. We pay the price for connectivity by loss of local connectivity as our neighborhoods are bifurcated by the medieval wall of infrastructure.

Yet, cities as global nodes and as sites for the speculative development of economies are required to be connected, not only by vast physical and virtual infrastructures, but by concentrations of similarly oriented persons working towards a general outcome — no longer survival, the outcome is one of affluence and acquisition (i.e. capitalist machine). These like-minded people get in their cars and drive twenty miles one way to work, ten miles another way for lunch, back to work, back home and thirty miles in combined errands and chauffeuring. Meanwhile, the people next door remain strangers. Our communities are no longer local as people travel long distances in order to interact. Comprised of communities without propinquity, the contemporary metropolis can best be represented as a space-time assembly. The spatiotemporal factor, otherwise put, is operating within the province of proximity and mobility - being connected.

The access protocol for this space-time assembly is metaphorical of the apparatus that is the turnpike – a revolving gateway which closes in on itself unless access is privileged. Access won’t be privileged, however, until large cross-sections of the society begin to function under the umbrella of these technologies, accepting the nature and therefore the responsibility of a tech-ed-out lifestyle.

Our tech-less transportation systems can be seen as what complexity theorists call “self-organizing systems” – entities that manifest a cohesive behavior even though they lack a singular, central controller. Many cities, however, are approaching a more controlled and connected system. Houston traffic, in fact, is already managed telematically through Transtar: an intelligent monitoring system coordinated by TXDOT and Metro.

Telecommunications in the private sector have changed the spatial distribution of economic and social activity “by enabling dispersed, decentralized transactions among people and organization, and by facilitating new, flexible and efficient systems of production, storage and distribution.” What then are the implications for these technologies when assumed the norm by society? Universal connectivity more akin to a hive mentality.
Betty and Clyde are SWITCHED_ON.

Are you?
Interactivity affords the collaboration among transportation organizations for the purpose of improving transportation services, quality, safety, and economy for all modes or combinations of modes in an environmentally sound manner.

In 1991's ISTEA bill Congress authorized substantial new funding for what has come to be known as Intelligent Transportation Systems (ITS). Originally conceived as a system to maximize the number of cars that could use freeways by automating all or part of the driving cycle, ITS is increasingly being seen as a way to improve transit routing and dispatching, provide reliable information on road conditions and transit service and clear traffic pile-ups. If integrated with advances in telecommuting, teleshopping and the like, these technologies can help in managing the transportation system without adding expensive and disruptive new capacity.

"The real use of the computer is not to reduce staff or costs, or to speed up or smooth out anything that has been going on. Its true function is to program and orchestrate terrestrial ... environments and energies in a harmonious way ... All media or technologies, languages as much as weaponry, create new environments or habitats, which become the milieu for new species ... the real-time city, in which conditions can be monitored and reacted to instantaneously. Mobile communication technologies reinforce the competitive advantage of central city business districts by making them more efficient, yet at the same time make megalopolitan automobile based urban sprawl manageable and livable."

Today's information networks are immense infrastructures in which vast quantities of digital information are stored in distributed fashion, in which information can rapidly be moved from any node to any other, in which machine intelligence is used to manage and interpret in conceivably complex info flows. Packet Switching is the means of effectively managing high-speed, high volume information flows through telecommunications networks. Packet switching breaks messages up into small "packets" of data, each one of which is tagged with information specifying its point of destination. The packets are directed through the network and reassembled into their correct sequence at the receiving end. Within an intelligent highway system, each commodity, person, and vehicle is tagged with a transponder in order to best map their movement logistically.

Production is no longer central. With electronic data interchange, it is possible to coordinate the dispersed production through a series of remote subsystems. Just as newspapers were printed centrally and distributed through an immense freight network, today newspapers are first distributed as data and printed at multiple local destinations. Our highways have the potential through telematics to function as local components within a greater global system, as umbilici for the already distributed suburban enclaves.

Telematics (AKA communications) will further advance our movement through the city, not only expediting the process by timing our personal inertia by the control of traffic signals, an approximated telepathy or hive mentality where social interaction will move towards the "common". Part of this telematic society is transport-based, as we all become integrated members of the synchronous social flux - transmitting, receiving, carrying, storing. Mankind and his vehicles will become the automatons of a complex assembly machine - a mobile human resource in alliance with its vehicular counterparts; identified by web addresses, they will be in constant interaction with the net.

The telematic environment as such is an open and "living" system of supply and demand by which automobiles already on the roads become pawns or carriers towards corporate, capitalistic ends. For instance, using a GPS system, a central computer keeps track of the whereabouts and final destination of a vehicle, the computer guides that vehicle on the most efficient route, and the computer also establishes pick-ups and drop-offs or hand-offs with depots at red-light intersections.

Traffic signals are primarily used to control traffic in urban street systems—particularly at conventional intersections accommodating large traffic volumes, where they allocate right-of-way to the various traffic streams. They can also meter traffic entering access lanes onto busy freeways or to indicate the lanes to use on two-way roads. Simple traffic signals work on preset timing plans that vary with the time of day. More advanced traffic-actuated signals automatically monitor the traffic streams and allocate right-of-way accordingly. Signals can also be linked to a computer so that traffic traveling along a major route can receive a continuous wave of green signals, obtaining maximum traffic output from the system.

cycling traffic signal

temporal, electronically controlled, switching based on empirical studies of traffic flow at varying times of day. Cycling traffic lights function like an assembly machine in that it is a closed system, performing on empirically predetermined and preset timing plans which vary with time of day - granting right-of-ways hierarchically during rush hours - it is authoritarian.

actuated traffic signal

sensate, electronically controlled, switching activated by pressure on road surface or motion sensors. Actuating traffic lights are an open system, one as fluctuating as the traffic; automatically monitoring the traffic streams, vehicle counts and speeds and properly allocate right-of-ways. A computer processes the traffic flow data to determine the proper sequence for the lights at the intersections or ramps. The sequencing information is transmitted from the computer through communications equipment to the signals. In order to assure safe and proper operation, information is also transmitted from the traffic signals to the computer, confirming proper operation through a feedback loop.
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quotes

navigation assistance and
gps tracking

full wireless services /
cellular and voice mail

mobilization of the multitasking machine

switch_xv
Interactivity impulse purchase

When it comes to impulse purchasing, web retailers have an advantage over traditional retailing, applying sophisticated personalization software integrated with the logistical databases to predict what items shoppers will impulse buy.

This personalization software uses sophisticated mathematical models linked to an Internet retailer’s inventory, merchandising, and transaction history databases to predict what products a shopper may buy spur-of-the-moment. Some personalization applications ask the shopper to fill out a series of electronic forms and create a customer profile.

The next time the shopper visits the site and clicks on a particular merchandise category, the retailer’s “frequent customer program” calls up the profile and begins offering them products they’re likely to buy.

But new product recommendation engine technology using collaborative filtering goes far beyond just individual profiling. This advanced software considers what item a shopper is looking at, searches through integrated databases for profiles of other customers who’ve bought that product, identifies what else those people purchased and then uses that information to make other merchandise selections to the original customer.

Interactivity cookies

Our web browsers are a form of remote surveillance as we are constantly being monitored through the click of our mouse, creating an information commodity for those interested in the profiling of a consumer.

Cookies tell web retailers that it is you every time you click. Many organizations use “cookies” to track your every move on their site. A cookie is a unique identifier that a web server places on your computer: a serial number for you personally that can be used to retrieve your records from their databases.

These same cookies can be used to direct your experience of moving through the city as much as the internet as your car serves as your drive-by browser, launching retailer websites as you near their physical establishment.

A French philosopher, Roland Barthes, has compared cars to medieval Gothic cathedrals; both of them, he says, are “the supreme creation of an era”, regarded by ordinary people as “purely magical objects”. Marshall McLuhan, the futurist who coined the term “the global village”, pronounced 30 years ago that “the car has become the carapace, the protective and aggressive shell, of urban and suburban man.” Without it, he said, people feel “uncertain, unclad and incomplete in the urban compound.”

The automobile is not only the mobile content platform for our “FLUIDS”, carriers for the transient parts of our house and business.
vehicle operations commercial fleet and freight management

SPEEDING?
We'll catch you in a flash.

Video Enforcement System
The Harris County Toll Road Authority's Video Enforcement System was implemented to reduce the number of driving violations within the toll and switch systems - recording all travel and transactions 24 hours a day.

Transponder System
That transponder behind your windshield is now not only a fast, cash-free way to pay for the toll roads, but for drive-thru and drive-by purchases, gasoline, and all of your git n' go orders as well. The transponder system has transformed your car into a mobile content platform - a shopping cart at the metropolitan scale.

It also serves as your personal and vehicular identification when your within the toll and switch systems - taking the place of both license plate, registration and making it possible to access your driving records, insurance as well as shopping habits and preferences.

How it works:
This state-of-the-art electronic technology makes it possible for motorists to pay tolls at highway speeds via a tag mounted inside the windshield. Simple and convenient, the E-Tag 
creates free-flow traffic conditions throughout the network resulting in faster, hassle-free driving with no toll booths or boom gates and no need for cash or tokens.

As a tagged vehicle travels through one of the switch's thresholds, an overhead gantry detects, scans and classifies the vehicle. A computerized visual recognition system ensures the vehicle class matches the tag type. There are unique tags for cars, light commercial vehicles and heavy commercial...

mobilization of the multitasking machine
Telematic monitoring and management system

Electronic Commerce

Commercial transactions that are enabled by some electronic means (telephone, wire, etc., terminal/host)

**COMMERCIAL TRANSACTIONS INVOLVE:**
- Death (payment)
- Distribution

**COMMERCIAL TRANSACTIONS CAN BE:**
- Business to business
- Business to bank

Electronic Data Interchange

**E-DATA INTERCHANGE:**
Transactions that take place between the computer without human intervention beyond the initiation of the transaction.

As manual processes are re-engineered and automated, the resultant computer applications can be integrated into the commerce value chain by way of activity-based costing, re-invoicing, and inventory.

**Electronic Services**

- Inventory and logistics control
- Traveler services
- Travel management
- Traffic management
- Emergency administration
- Commercial vehicle administration

**Transport Subsystems**

- Remote traveler support
- Personal information access

**Wide Area Wireless Communication**

- Vehicle
- Transit vehicle
- Commercial vehicle
- Emergency vehicle

**Wireline Communication**

- Roadway
- Parking management
- Toll collection
- Commercial vehicle check

**Bluetooth Chip Technology**

**mobilization of the multitasking machine**

Houston TranStar's agencies are responsible for the planning, design, operations and maintenance of transportation operations and traffic emergency management operations within the Greater Houston Area. The service area encompasses 5,500 square miles with a population of 4.2 million.

Houston TranStar is a multi-governmental facility and truly integrated in terms of both systems, personnel, and work functions that makes it one jurisdictional function. The ultimate focus of TranStar is to integrate the agencies, policies and procedures that makes it one seamless system.

The integrated structure creates an effective environment in terms of responsiveness, elimination of administrative and inventory costs, and pooling of resources, personnel and equipment resources. For each participating agency, TranStar provides the opportunity to aggressively focus on implementing transportation practices and emergency management response and recovery functions.
Sustainability affords a flexibility to the hardware of the transportation system which is already inherent in the technologies which will operate it (allowing for efficient upgrades and maintenance).

For forty years, the government pursued a "build at any cost" policy of highway construction; offering state transportation agencies up to 95 percent of the funding to construct Interstates, little subsidy for maintenance and practically nothing for investing in alternatives other than automobility.

The 1981 Intermodal Surface Transportation Efficiency Act amendment declared that the Interstate system was complete and established a new role for the federal government in transportation policy. It stated that we cannot continue to build our way out of congestion without further degrading our quality of life. In the post-Interstate era, federal funds are available to support local decisions about transportation service to communities, and to encourage local planning that promotes transportation's contribution to protecting the environment, making jobs and housing more accessible and giving Americans more transportation choices.

The ISTEA amendment and the Clean Air Act Amendment of 1990 require a fundamentally new and comprehensive level of transportation planning at state and regional levels. Planning must link transportation to land use and must consider intermodality and management of congestion. States must develop and implement management systems for congestion, public transportation, and intermodal connections. Metropolitan area transportation plans must conform with state implementation plans for meeting federal air quality standards ... directed at reducing emissions of air pollutants from transportation sources by improving traffic flow, reducing congestion, or reducing vehicle use.

"Intermodal Transportation: It is the policy of the United States Government to encourage and promote development of a national intermodal transportation system in the United States to move people and goods in an energy-efficient manner, provide the foundation for improved productivity growth, strengthen the Nation's ability to compete in the global economy, and obtain the optimum yield from the Nation's transportation resources." 4

The concepts of intermodality have been applied by the freight industry for many years to provide the shipper with the most efficient movement of goods for the best value. The same concepts that work for freight have broad applications to all types of transportation. In its simplest terms, intermodality covers all of the issues and activities which may affect or involve more than one mode of transportation. It has several aspects.

The movement of goods within the Houston-Galveston region is made possible by an extensive intermodal network. There are 72 regionally significant intermodal facilities in the Houston-Galveston region. These facilities include commercial airports, ports, truck/rail terminals, pipeline, terminals, an Amtrak station, intercity bus terminals, public transit centers, and ferries. The National Highway System (NHS) forms the cornerstone of the intermodal network that distributes goods throughout the region by truck. Access to the NHS from the intermodal facilities and efficient mobility on the NHS is imperative to the network's success. Identification of the system's mobility and access attributes, such as congestion and traffic signalization, will help to rectify intermodal system deficiencies.

The Interstate, having been legislated as a long distance interregional network, was never conceived in its generic form to interface with the complexities of the metropolis or translating between carriers and infrastructures. The metropolis requires something more than a generic form of exchange / interchange; it requires intelligence and flexibility - a system of "switching between heterogeneous components and multiple scales of activity." 5

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4 Title 49 - Section 5001.302 United States Intermodal Transportation Code
5 Easterling, Keller. "Organization Space"
The 1991 ISTEA amendment declared that the Interstate System was complete and established a new federal government transportation policy. It states that we can no longer continue to build our way out of congestion without further degrading our quality of life. In the post-Interstate era, federal funds are available to support local decisions about transportation service to communities and to encourage local planning that promotes transportation’s contribution to protecting the environment, making jobs and housing more accessible and giving Americans more transportation choices.
Recognizing the need to take a broader, community-wide focus rather than continuing to concentrate solely on one-house-at-a-time mortgages, Fannie Mae (a government-chartered but private corporation) has begun experimenting with LEM as a home loan that links housing finance to public transportation. Current mortgage assessments only consider housing costs and treat automobile ownership as a financial asset rather than a liability, encouraging homebuyers to choose automobile-dependent locations (such as suburbs and New Towns).

By realizing that households in urban neighborhoods spend less on transportation, and therefore have more disposable income, than the national average, the Location Efficient Mortgages increases the borrowing capacity for people buying homes in urban communities. Standard loan underwriting recognizes that a buyer can afford to spend 28 percent of his or her gross monthly income on a mortgage payment; the Location Efficient Mortgage increases this to up to 39 percent by recognizing transportation-related cost savings.

The Location Efficient Mortgage program was designed to encourage the development of efficient, environmentally progressive communities and to reduce urban sprawl and dependence on cars. The LEM acknowledges that families save money when they "live locally." Those who shop, work, recreate, socialize, learn, and participate in the resources of their local community don't need to travel because their more densely populated, urban area is pedestrian friendly and amenity-accessible. The big difference between the LEM and a traditional mortgage is that it takes into consideration the transportation-related savings that are achieved by an urban household that uses public transportation and relies on local services and amenities.
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<th>Vehicles Registered</th>
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mobilization of the multitasking machine
LESS ABSTRACT

“Our enthusiasm for speed and change must be tempered. And the metropolis’ spatial flows must 
be manipulated, shaped and rerouted.”

Architecture traditionally is the grounding of events in static space, obliging us a rootedness and permanence within an often 
tumultuous existence; and buildings satisfy these programs perfectly well just by sitting there. Conventionally, buildings are 
the solid, relatively permanent fixtures through which the itinerant mass of the metropolis, person and respective appliqué, 
pass daily.

Yet while the mass of being has changed dramatically in the last century (increasing in size and speed), built form has 
changed little in response. The “SOLID” has compensated, as only it knows how, by increasing its own mass to encompass 
the viscous FLUID® (the guttural stuff that we fill our homes, offices and cars with, those disposable objects and upgradeable 
appliances, the stuff that dreams are made of – at least the American dream: a car in the garage and a chicken in every 
pot).

Today, Americans pick-up their chicken in bucket form at the curbside KFC in one of their two cars, the SUV of course is 
at the dealer getting a wireless dataport installed.

Because cars, unlike buildings, are concerned with motion. They convert work into energy, transforming static space into 
dynamic dwelling. The automobile, plays the role of physical segue from the Industrial era to that of the Technological era, 
now allowing for a mobility and interactivity beyond its own initial utility. The automobile, especially evidenced in its corporate 
vehicular cousins, is the site for our telematic lifestyle as we move about the real-time city.

The car radio was once the means of connecting us to this real-time city, making an event of pulling up to a signal only to 
notice that our roadway neighbor was listening to the same station; the radio station bumper sticker functioning as personal 
identification for a privileged class of listener (I tune into K-ROK, how ‘bout you?). Today, though, radio transmission pales 
in comparison to the telematic technologies that transmit live and streaming data to remote and defined locations, not only 
radio, but cd quality audio, cellular voice, image-based internet, even video.

And again the conundrum: with the proliferation of these available fluid technologies, the solid state of habitating through 
their application is inadequate. The roadway infrastructures are, like our buildings, primitive containers for intelligent 
instruments with little interface between. Yet, like buildings, the roadways serve their function perfectly well (although 
stigmatized by their congestion, pollution and being perilous to traverse at times, what can be expected of a system so 
complex). Part of the complexity has to do with the roadway being a self-governing system in which its thousands of daily 
users are liable for proper functioning The road, in all its complexity, may be understood as belonging to no place; that 
no place, constructed by the act of movement and as a means of connecting the metropolitan stuff, both solid and fluid.

And while the metropolis has become diffuse, decentralized, extended and most importantly, extraterritorial; it remains 
tethered by the complex webwork of transportation and telecommunications. The webworks become conurbations unto 
themselves. The road functions as linear city and has the potential to become as much an event as those fixed practices 
we move towards.

The switch is the linear city. A telematically-driven device for toggling between modes of use, amplitude, scale and direction. 
It is the physical and operative mediation between the local and the global, the surface street and the highway, public and 
private domains, speeds and modes of mobility. The switch makes the solid more fluid and the fluid flow faster.

It's time to switch.

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6 Lerup, Lars. “After the City”
7 O'Briant, Alex. “Introducing the Liquid House”

mobilization of the multitasking machine
switch (swich) n.

5. a device used to open, close, or divert movement

mobilization of the multitasking machine
switchboard (-bord) n.

1. a board or panel equipped with apparatus for controlling the operation of a system of circuits
making the switch
switch_on
"I believe the time is at hand when by a paranoid and active advance of the mind, it will be possible to systematize the confusion..." Koolhaas, Rem. "Delinious New York"

SITE
The Metro Millennium Mobility Plan has sold a portion of the Westpark right-of-way to the Harris County Toll Road Authority for a $200 million toll road to begin construction in 2001, preserving land along Westpark for future development of a high capacity transit route.

I will play out several scenarios along the projected toll road stretch, which will function as the manifold for the intermodal operations within. The success of these components relies not on their implementation, but through their speculation, acting more as rhetorical components to better understand their position as much socially and historically as physically.
making the switch

This thesis proposes the insertion of a new kind of urbanity into the vacuum left by the increasingly itinerant workforce, unprecedented consumerism and those technologies that instigate them; a new kind of community reinforced by trends in the gentrification of suburbia through the insular inhabitation of enclave communities. Sited by the necessary merger of the tactile world and the virtual systems that today govern it, the installation functions as a local stem of the global nervous system. It is this fundamental integration of the static and motive forces of the metropolis that serve as the bond between the old city and the new.

The development of a switch system is a way of orchestrating existing potentials. Based upon a flexible prototype, the switch logistically responds to local trends and demands. At a larger scale, the switch acts to focus the disparate field of suburban sprawl surrounding the corridor, rethinking how urbanity might emerge from private development. That is to say, the switch functions on two levels: that of the circuit and that of the cell, it is not only a trajectory of the local terrain, but it is an operating node within both the local and global systems.

We humans, in fact all physical bodies, have a natural tendency towards motion; per Newton’s law of inertia, this motion can be viewed as a state - a constant state of movement in ‘a right line’ until gravity impels us from our earthly orbit to a state of apparent rest. The “switch” allows for this rest, bringing the machine to a momentary idle - the encounter of planned coincidence. It is a sub-assembly of a larger multi-tasking machine.

The notion of the multi-tasking machine is most apparent in the 1836 invention of the reaper; a portable machine for harvesting, threshing, cleaning, and bagging grain. Like the city, the multi-tasking machine is a manifold for constituent operations, the skin and skeleton which house those productive organs. These operations, our daily rituals and routines, are governed by the metropolitan operating system which directs our movement, allowing or more often determining our personal inertia.

A personal inertia which can be understood presently by our accelerated pace of living, the rapidly procedural practices of the multi-tasking environment augmented by communication technologies, frenetic consumerism, fast capital and the incessant influence of shifting trends: all enforcing speed, mobility and the horizontal distribution of the city. The vertical mode of living and the skyscraper which housed it are obsolete, the horizontal orientation is preferred (as evidenced in the mall, the office park, big box retail, etc) – the free section has defined our mobility since the inception of the walked path. This horizontal style of living promotes interaction, free mobility from place to place, and ease of progress, whereas vertically oriented living stresses hierarchy, isolation, ambition, and competition.

Henry Ford and Albert Khan discovered the best arrangement for isolated, yet coincident programs was horizontal displacement along fixed axes rather than the flow of materials up only to come down again. This concept can also be seen in the linear city as devised much earlier (1882) by a Spanish architect, Arturo Soria y Mata, to fit the city to the needs of traffic. For his plan of Madrid, Soria y Mata fused streetcars, freestanding houses, and landscaping into an archetypal long distance boulevard that would tie together the fragments of an emerging regional metropolis ... functioning as an overland link between existing towns and cities as well as functioning as an instrument for developing that in-between space.

One promising strategy, then, is to pursue the development of polycentric cities composed of compact, multi-functional pedestrian-scale neighborhoods interconnected by efficient transportation and intermodal programming arranged linearly to encourage intelligent sprawl.

Here are several scenarios for making the switch.
main street u.s.a.
the switch system serves as main street for those suburbs that affronts anew umbrella supplying transit and services a direct pipeline for goods to the home
the retail concourse and drive-by browsing lanes comprise the new main street shopping experience where your automobile functions as a shopping cart at the metropolitan scale
drive-by browsing
your browser-ready vehicle is also your online catalog to the many retail and service establishments within the switch system
through ‘bluetooth’ technology, your switch Old Navy store can transmit their ‘item of the week’ sales poster to your dashboard or windshield monitor. the switch Starbucks can e-mail your car a frequent-drinker coupon as it accesses your profiling ‘cookies’ and drink preferences

: place your order for git n’ go or swing by a particular establishment’s pick-up window
: your car is your metropolitan shopping cart

mobilization of the multi-tasking machine
retail concourse

the metro light rail stops at over twenty switch locations, five of these stops access varied retail concourses for five very unique shopping and dining experiences

go window shopping at our brand ‘contained’ stores or the consortium ‘automats’, dine at the many sit-down or pick-up restaurants and cafes ... or just hang out at the piazzas

come out of the closet

allow your local switch to maintain your wardrobe and personal applique’ - drycleaning, purchasing and pick-up services available

our designers will establish your color set, attire schedule so you appear diversified, and maintain your wardrobe in accord with seasonal trends, geographic fads or your personal preference

the switch serves as your closet by allowing you to pick-up your attire for tomorrow while on your way home from work today

: switched-out ‘container’ stores
: logistically-controlled client wardrobes
piggybacking
the container stores are loaded into their respective slips by way of the piggyback system (also known as circus loading)
the containers are hauled in via the cargo-rail line, lifted on a gantry cargo crane, and plugged into the utility wall for instant connectivity
containers are periodically restocked with merchandise via the same line
containers can be located and relocated as sales or demographic studies demand
the switch logistically monitors retail feasibility to provide customers with a mixed and varied shopping experience
likewise, containers can be easily dismounted if they are no longer economically viable or if the establishment does a wholesale switch out to change their entire stock at once - this is most often applied for switching out seasonal lines
location theory

Gas stations have traditionally been located at the corners of major intersections in order to take advantage of traffic flows from the merging thoroughfares while allowing motorists more options for redirection.

In this sense, the gas station is a redundancy to the intersection itself - an auxiliary lane providing a privileged alternative for its customers.

mobile fueling station

Now your local gas station is as mobile as your own vehicle being comprised of the petrol tankers which carry the fuel to begin with. The tankers simply pull up through a curb cut to allow you easy interface with pumps on both sides of the hull.

The switch operating system not only logistically monitors traffic flow and congestion but it also monitors the levels of fuel in each of the gas station holdings. A tanker can then be relocated for optimum customer demand or temporarily moved for peak-hour usage.

: real-time pricing
: switched out fuel tankers

mobilization of the multi-tasking machine
real-time pricing

the switch monitors fuel stock trends, OPEC pricing and regional
gas taxes to offer you the fairest and most accurate market rates
for your fuel - electronically updating price signs on-the-fly

we take pay-at-the-pump to another level

with that transponder behind your windshield, you can pay for
gas without opening your wallet or leaving your car

pit stop service station

the pit stop service station is also located in the switch's turnout
lanes. merely transmit ahead to find a vacant pit stop nearest
your vehicle's current location. our mechanics can have you
 serviced in under five flat*

also subscribe to our e-mechanic program to allow us to
automatically monitor your vehicle's performance and vital systems
in real-time. your automobile will notify us of any potential
malfunction

*no guarantee. service time depends on what 'service' entails

: we recognize 13 of 15 major transponders
: many vehicle malfunctions can be remedied through a downloaded patch or OS upgrade
The switch gas station is sited in a series of turnabout lanes, taking advantage of a redundancy already in the system.
refueling turnabout

signaled turnabout
traffic up-cycling mechanism

the turbine generator and air filtration device functions by way of a pressure plate built into the expressway deck that is triggered by the weighted impact of traffic continually passing over it.

this pressure turns a spindle shaft, ratcheting the shaft into revolution. the shaft, when turned quickly enough creates (provided traffic is sufficient and moving at a sufficient rate) a magnetic flux within the turbine generator, providing electricity.

the electricity is used in two manners: primarily to power the exhaust filtration system also embedded in the expressway deck; and when reserves are met, to power those businesses within the switch - there is also potential for spillover energy to be donated to communities adjacent to and surrounding the switch.

just another way the switch gives back to the community.

: regenerative kinetics | traffic up-cycling
: exhaust filtration offered to you as a complimentary service of your local switch system
 exhaust filtration

Houston is fast approaching being considered a non-attainment area: a region, determined by population density in accordance with the U.S. census bureau, which exceeds maximum 'criteria pollutants', and may for that reason, be mandated to take extreme measures at alleviating pollution or suffer imposed fines, construction bans, and be denied federal grant revenues until the city complies.

The turbine generator is a means to up-cycle an underestimated urban resource: the ubiquitous traffic. The water turbine collects particulates in the air that would typically remain clouded beneath the expressway decks - removing them from the switch's air to the local waste water treatment plant for further processing.

<table>
<thead>
<tr>
<th>Energy provided for by turbine generation</th>
</tr>
</thead>
</table>

- Free charging for electrically-automated and hybrid vehicles
- Assisted utilities for switch businesses
mobilization of the multi-tasking machine
urban assault mobile office | commuter housing

the urban assault is a redundancy to both your home and your office. it is the physical manifestation of the commuter and commuter appliqué - all those gadgets and gizmos we carry with and on us as we travel to and from work. the urban assault is the FLUID house.

those commuters dwelling in outlying areas, who commute daily to houston, may wish to purchase an urban assault and tow it to a parking facility within the switch. parking spaces can be rented on a short or long-term basis. most commuters subscribing to this system, dwell in their assault through the week and return to their SOLID home for the weekend.

other commuters and businesspersons alike, may rent the urban assault daily or even hourly if they wish to utilize it as an office space. to this effect, it has all the necessary accoutrements for white-collar exchange, every peripheral imaginable; and with its hot-swappable hard-drive series, the urban assault is a mobile content platform for goods and information.

:: mobile office | commuter housing
:: rents automatically debited from your transponder account
flexible redundancy

the urban assault functions in coalition with the office_parking structures, fitting easily into their drive-in cubicles for temporary or permanent fixture

the urban assault can just as easily be liberated from the urban infrastructure and sited virtually anywhere, including any kampgrounds of america [ KOA ] park around the country

renter-rider program

metro offers lower transit fares to those who frequently rent urban assaults or those who rent their parking site

corporate sponsorship

your urban assault can also make you money by doubling as a billboard at one of the metro transit stops, these semi-transparent mesh billboards are easily attached and detached to your assault's carapace for display to the general public

: light-rail frontage

: direct access to parks | retail | dining | entertainment within the switch system
tired of this situation?

get switched_on | check out the wide variety of urban assault sitting at your nearest metro park and ride
location theory

Processes are liabilities when they drain capital without adding economic value. The idea with git n' go is not to automate the process holistically, but to provide a redundancy to the current mode of consumption and delivery. Instead of deploying vehicles to deliver goods to many homes, the git n' go allows for pick-up of your parcels en route to your destination. The model reconfigures the supply chain to better suit the commuter and his/her timetable.

git n' go delivery

Git n' go is a collaborative operation between the switch authority and several privately-owned delivery and dispatch corporations to subsidize the next generation of highway by implementing delivery processes within the roadway infrastructure.

Git n' go is an extension of the switch model of electronic commerce - a 'clicks and mortar' establishment, by which information technologies (IT) are utilized to enable the physical processing of goods and the virtual logistics of delivery.

step one: place your order.
Order by phone or online to make git n' go your one-stop shopping venue.

step two: shop locally or globally.
Git n' go combines brand name corporations with your local retailers to bring you any product you might desire.

mobilization of the multi-tasking machine
logistics

logistics have changed the structure of product management through scheduling and routing, inventory flows and worldwide distribution coordination. it comprises all those activities of product movement: that is ‘delivering the right product to the right place at the right time for the right price’.

within this framework of logistical management, the concepts of time and space operate in necessary confluence

advances in IT and the internet not only allows the customer to access this logistical data from tracking their order to point of receipt, but similarly allows third-party clients and vendors the interaction necessary to optimize delivery and retain leverage within this ‘instantaneous’ economy

step three: git it to go.
just pick up your order on the way home or to work - we’re on our way
packet_switching hub

the distribution center functions as a 'virtual warehouse' which essentially gives businesses an opportunity to outsource their logistical operation by integrating with other supply chain partners to provide merge-in-transit or just-in-time order-filling. This is advantageous for businesses by lowering their inventory and making warehouse space unnecessary. The hub within the switch system contains shared-use inventory for those retail businesses who carry similar stock. St. Louis based groceryworks.com, take-out taxi

the term packet_switching comes from the process of transferring information data from computer to computer over vast networks - the technology which makes the internet and streaming data possible. It works by breaking a file into smaller parts for easier transfer and reassembling those parts upon destination.

the packet_switching hub functions on this level as well by accepting and even retrieving an individual's parcels from multiple destinations and reassembling them into one parcel for easier pick-up and distribution. This process involves an automation to the system, employing smaller freight vehicles making more trips within smaller zones by way of logistically coordinated operations.
we're on your way

switch

subscribe today and get switched on
office_parking

The office park complex is a series of structures built as lettable space for multiple uses, although they specifically meet the needs of the growing itinerant workforce. The structures appear as nothing more than parking garages, but they function as ports to the global information network - they are connected for this reason, telecommuters can pull in and rent a parking site, physically connect via high bandwidth cable lines or take advantage of the complex's wireless faculties.

The units are secure, air-conditioned and sealable - just drop the garage door. The office park may also be leased for the siting of your urban assault mobile office | commuter housing, your vehicle or simply for random storage space.

events and activities

The switch holds numerous monthly, seasonal and annual events:

- festivals | circus | houston livestock show | outdoor concerts | parades | marathons | drag races and car shows

see your switch schedule of events online now!

: the orchestration of planned coincidence
: all recreational activities are included in base subscription and coordinated by switch management

mobilization of the multi-tasking machine
central_parking

when the office_park spaces lie vacant, the leasing company offers that space to adjacent communities at no charge to be utilized for whatever purpose they may wish, be it for school or latchkey kid programs, as meeting halls or activity space for dances, weddings and socials. the switch would like to be the spine of your community

automobile parking at the switch level similarly switches over to the alternate program of recreational and sport courts. below all of this is the central_park space, a vast series of interconnected parks, event space and sporting arenas. central_park is the most successful example of intermodality, offering infinite ways in which to use the space

: golf | football | baseball | swimming | diving | soccer | basketball | rollerblading
: biking | jogging | horseback riding | hackey sack for beginners | lounging also allowed
mobilization of the multi-tasking machine
switch_off
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