"There was a time in this fair land when the wild, majestic mountain stood alone against the sun... long before the Indian, the White man and the 'Wheel..." (Gordon Lighthart). The "coming of the Railroad" reasonably begins in the period sometime between the 2nd Century B.C. and the 3rd Century A.D., with the Greek mathematician and inventor, Heron of Alexandria, who made advancements run by water, compressed air and steam to turn a wheel (Columbia U. Encyclopedia). But those "engines" were no more than contrivances until 1807, when James Watt, a Scottish inventor and engineer was asked to repair Thomas Newcomen's steam engine and made the first practical solution to the harnessing of steam power. In 1826 the first U.S. Railroad was a few miles of crossties track out of W. Quincy, MASS., its locomotives being horse and oxen" (Max Goulter, NYTimes). Then a self-taught man (only 52 DALLS of schooling), vested with many patents and named Peter Cooper, built the first locomotive in U.S. in 1829—an upright boiler on a flat car known as "Tom Thumb." Other engines and other names followed: "The Kettle" and "Iron Horse"—the latter recently sought on. By 1837 the boiler was horizontal. (NYTimes & Life Map.) By then stories of the wealth and freedom of living in the Far West were stirring young hearts: "Some man looked in the future and wanted to see an Iron Road running from Sea to Sea, Over the mountains and over the plains..." (Lighthart). There were very few who could accept such a dream, but they came anyway, by schooner bound the Horn or by "prison schooner" over the mountains and plains. But Congress was sold on the Railroad Dream and marked a wide right-of-way across the Continent to provide for suitable 5-series of the rails, the route went south to Sacramento from Omaha—the last spike driven in 1869.

Meanwhile, the sawmill town of Seattle was replacing and extending the oxen-powered logging skid roads, with little steam engines and rails also brought "round the Horn. Coal and other mineral deposits were used to be abundant in the Cascades and closer and the logging railroads began to hook up with miners at Kelso on Lake Washington. One "Iron road" headed south towards Walla Walla but soon ran out of funds. The Northern Pacific began a spur line from the Columbia River northwest and Seattle then made a generous bid of funds and waterfront property for an NP terminal here. But Tacoma was better suited for development as a railroad town. Seattle renewed efforts to build its own road headed for the "Pass" to Walla Walla, to make its own connection with the Transcontinental Railroad. The rails "went broke" again—this time of the rich Benton mines—but the road became a financial success and began the process of tying the Puget Sound hinterland to Seattle's port and fabrication facilities (R. Roger Sale).

A twenty-six year old lawyer arrived in Seattle in 1875, two years older than the town itself—his name was THOMAS BURKE. He was a business pioneer—speculator, "boomer" (of Seattle's natural attributes & spirit), promoter and, most importantly, solicitor of and spokesman for Eastern capital. Thomas was the son of an Irish immigrant, born in a New York farmhouse, the eldest of five children. Afflicted with a partially crippled arm, farm work was difficult, his alert intellect, ease and love of learning turned him towards a professional career. After the death of his mother the family moved to various farm sites in town where he studied and did odd jobs like grocery clerking. He enrolled in Ypsilanti Seminary—an experimental school with both classical and modern studies—where he developed his talent for oratory. Mixing classes and teaching, he graduated and entered the Ann Arbor Law School but finances forced him to drop out. By reading law with a practicing attorney he gained admission to the bar. Served very briefly as city attorney of Marshall, Mich., because the town was "sick" from the new transcontinental train to San Francisco, then a steamer to Seattle. (R. Roger Sale.

Through a series of deals the NP acquired the Seattle and Walla Walla RR around 1882 in an effort by Portland to gain control of Puget Sound ports and
facilities.

At this time another lawyer arrived in town: DANIEL HUNT GILMAN. Born in Maine (1845), he graduated from Columbia's Law School in 1877 and went into law practice in New York City. Here he gained considerable commercial experience and acquaintance in Wall Street and other financial centers. He quickly became a close associate of Thomas Burke. Gilman was an astute, optimistic, and a "shoe-string" operator with a talent for keeping up appearances among wealthy people.

The Northern Pacific drove the last spike in the completion of the northern transcontinental railroad in 1883. Its western terminus was in Tacoma and the spur lines to Seattle and Portland were intended to drain the northwest through Tacoma — a plan that Seattle found to be infuriating. Besides, the service to Seattle was poor and the passenger and freight rates were exorbitant, generating even greater hostility. Then, when service stopped altogether, "Seattle" planted potatoes in the right-of-way and the NP restored service in fear of losing their federal franchise due to abandonment of the line (Gordon Newell).

In 1885, a group of twelve Seattle people, led by Thomas Burke and Daniel Gilman decided to have another try for a Seattle-based railroad — this time northward to Spokane and connecting to the Canadian Transcontinental Line at Sumas. Judge Burke sent Daniel Gilman "back east" to secure financial support for their venture while he sought local support in the form of money, commercial and legal facilities attractive to Eastern railroad men. One valuable concession granted by Council was the creation of a man-made Railroad Avenue, on pilings all along the waterfront (Alaskan Way) to be used by all trains coming into Seattle; the inner and most valuable thirty feet of the right-of-way was given to Burke and Gilman for their new road — the Seattle, Lake Shore and Eastern. They built a depot here, at Western and Columbia, and began laying tracks northward thru Interbay to Ballard, along the north shore of Lake Union, through State School lands (University of Washington, in spit of their objections to this intrusion into their future campus; Judge Burke was a trustee. Danny Hall wasn't moved from its downtown location until 1885.) The rails continued around Union Bay with a spur to the logging town of Yestler (west shore of Lakehurst), then north along Lake Washington with a station at Pantocock (where the original Carkeek Park was developed in 1918; taken by the Feds in 1926 as part of the Sand Point Air Facility — itself abandoned and 116 acres granted to the City for a park in 1975.) Continuing along the shoreline past other countrysides along the way (Puget Sound Mill, Maple Mill between Matthews Beach and "Lavelli Station"), a station and RR landhouse at the foot of (NE 125 St.) identified as "Lake" (the adjacent townsite becoming known as Lake City); a station at (NE 63 St. and 41st NE) was named Kerin; immediately to the south (at 51st) was the growing of County Road (8701) from Ravenna to Pantocock; the road crosses again at (NE 70th) — site of the Pantocock Station. At Woodinville (founded by a former Scottdale, M.D. Woodin, partner with Seymour Westmore in the tanning and shoe making business) one spur went along the Sammamish River to Squak (renamed Gilman and now Issaquah) and on to Squaqualicum Falls; the other spur went northward to meet the Issaquah Pacific, but funds and credit ran out of it at Gig Harbor, just north of Everett — a long way from Sumas on the border. Right-of-way property was largely the result of Seattle's citizens determined to establish their independence — however, most of them conditioned their deeds with provisions for housing lots or reverting to them if the railroad were not built within 5 years. A partial list includes G.M. Hall, J.A. McGraw, M.J. Carkeek, Estate of Jones Osborn, Puget Mill Co., etc. (Estelle Barlow, Roger Sale & R.E. Nesbitt) The surveyors for the

2. history: BURKE-GILMAN TRAIL
railroad was Reinald Thompson, who later became City Engineer to undertake the
regrading of Seattle streets and hills, a major series of civic projects creating
considerable fame for Thompson and Seattle. (E. Berkle)

Another person who objected to Burke and Gilman's S.E. RR was Emery
Canfield of Fairhaven (now Bellingham) who himself was building a railroad
that town to Seattle. In order to stop Seattle's efforts to reach Canada, he obtained
a Federal franchise to build any bridge across all rivers between Fairhaven and Seattle.
Seattle was about to bridge the river at the town of Snohomish. Canfield's attorney
boarded the train in Seattle to deliver the injunction to the Snohomish county sheriff.
Judge Burke hopped on the locomotive, unchallenged it from the passenger car and
"wrote full bore "all the way to Snohomish. There the Judge asked his Sheriff, 
if he and his deputies didn't have to hunt for outlaws in the far north part of
the county. The engine returned to Seattle, hitched up the cars and went back
to Snohomish, but the attorney found the Sheriff and deputies out on a lengthy
search party. (David Suffolk) "The locomotive was named "Thomas Burke." So Canfield
headed north but was stopped at the Border (Snohomish) by the Canadian police.

During this time another railroad was crossing the U.S., but it was making
its way from town to town—rather than meeting midway with a golden spike.
James Hill began building his Great Northern Ry from St. Paul in 1886. He was
slowly, ruthlessly and thoroughly, one section at a time with the towns established
or existing ones stabilized and immigrants brought in, and he did not need
to count himself to any destination until he had pressed into one of match each
other, looking for the best possible deal. The most sound term was unam-
mittled through Gilman he hired Judge Burke as his attorney. Hence the Judge
worked feverishly to get Seattle to give Hill anything he wanted—especially
no interference from city or state government. Actually the story was not
favorable, for Seattle was under the people and state's direct control. Not
as Seattle wanted the transcontinental connection, they didn't want to put the
city in Hill. The best that the Judge could do was to secure the entire right-of-
way for the GN and a shabby terminal at the foot of Columbia St.

Obviously James Hill was not pleased with the depot or its location but he
was skilled in the game of "play it." His refusal to accept Federal Land Grants
for his right-of-way gave him the freedom to choose his route across the Columbia
including his route to Seattle. Hill and his agent tried to raise hundred-thousand
acres of NP Land Grant timberland which he sold to his St. Paul neighbor, Frederick
Kepner, gewerke, conditioned by the provision that Hill would build the tender road
east to compete with Southern Pacific (St. Paul & S. Suffolk). The GN trains were
billed from Everett south along the Floyd Sound shoreline to Interbay and Columbia
St. The first GN train arrived in 1893.

Although the "Burke-Gilman" railroad did not become the "mainline" to the
continental! It was not at least significant not only as a freight route connection
between the GN and Puget Sound hinterland, but most importantly kept the city
from being dominated and drained by Tacoma. A further reminder for the S.E.
S.E. RR was its anticipated commuter service to Seattle — but after applications
of the engine, the electric trolley car and the gasoline powered automobile — caused
this "dream" to burst. This dream was revived in 1974 but Metro Transit engineers
felt it was unfeasible.

James Hill's visiting game paid off when R.H. Thompson became City Engineer.
Thompson proposed a railroad tunnel under the city from Union Street to the old
tide flats south of King Street where Hill wanted to locate a cutoff depot. The
5,465 foot long tunnel was completed in 1914 for $2,530,000 and the depot with a
clock tower patterned after the Campanile in Venice was built in 1913. The continued
efforts of the GN, NP, Canadian Pacific and the Chicago, Burlington and Quincy
five years after the Oregon-Washington RR, Northern Co. and the Chicago, Milwaukee
& St. Paul Ry built a depot across the street. Early-troy trolley cars found needed

3. history: BURKE-GILMAN TRAIL
revenue by pulling a freight car to or from or between business/from communities. By 1894 this concept was developed into electric locomotives powerful enough to pull a train of freight/passenger cars. By 1917 the Chicago, Milwaukee, St. Paul & Pacific RR had completed the electrification of its entire route; 3,000 miles of trolley wire - a world's record at the time. By the 1930s diesel powered engines were replacing steam power and by 1974 had replaced the trolley system of the Milwaukee Road.

Having earned the title of "Empire Builder" by developing towns and trade centers as part of his Railroad system, James Hill did not stop when he "arrived" at Seattle. He looked across the Pacifics in 1896 the Japanese freighter Milike Mary docked at Pier 58, inaugurating international trade for Seattle. He developed Pier 88 and built two massive freighters for trade with the Orient. The "era of silk" was developed: a 135-16 ball was worth $2000. But the market was speculative and insurance rates were high, James Hill was able to "high ball" his Silk trains from Seattle to the New York mills with right-of-way over every train - setting a transcontinental record of 70 hours coast-to-coast.

The Empire soon developed truck and airplane capabilities and began to eclipse the Iron Roads; rails and track beds were a constant and costly maintenance especially for high speed trains. To compete with trucks, the railroads developed "piggyback" cars for hauling truck-trailers; as early as the late 1880's had hauled farmers wagons on flat cars to New York City markets. Then came multi-level racks for hauling new passenger cars. Transcontinental buses and planes put passenger trains-and passenger steamers into a steep decline. Mergers of railroads began in the 1900's: the "largest U.S. Rail network rolled into action in 1970 - the B&N, NP (including the Burke-Gilman Road), Chicago-Burlington & Quincy and the Spokane-Portland & Seattle RR - a 24,481 mile system of rails to be known as the Burlington-Northern. By not opposing the merger, the Milwaukee obtained rights to use BN rails. But these mergers were for freight; in 1970 more than 100 of the nation's 500 passenger rail lines had filed petitions for discontinuance of passenger service. So another system was born, chartered by the Federal Government to provide virtually all intercity passenger railroad routes in the U.S., known as Amtrak.

Having never become a part of the main-line transcontinental railroad into Seattle because Hill chose to come by way of Everett, the early-day importance of the "Burke-Gilman Road" began to decline with the conversion of the area from manufacturing-commercial plants to residential plus the increase of trucks handling most of the commercial accounts. This decrease in the use of the tracks together with the increased interest in Bicycle Rails led the League of America Wheelmen (Harry Coe of Seattle), the Park & Recreation and the Engineering Departments to discuss the possibility of a bike way alongside these tracks from the U.W. to the city limits in 1968. But the NP was noncommittal, concerned with insurance liability of such a plan as well as the proposed merger. The Lake City Journal wrote a story suggesting the wonderful potentials of the right-of-way as a safe route for bikers and hikers. The idea kindled community interest. Estelle Berteig repeated the suggestion in a community meeting. In 1970 the Fremont/Wallingford Communities started a "walk-in" along the tracks, followed by a rally at Matthews Beach the following spring.

At this time the new BN system applied to the Interstate Commerce Commission for the abandonment (and sale of right-of-way) of the "Seneca Line" for City

4. history: BURKE-GILMAN TRAIL
immediately countered with a petition to stay the proceedings to permit negotiations with the BN for acquisition of the right-of-way for exactly the same reflection of the strong public spirit which created the railroad. But the BN's determination—and legal right—to sell the property brought strong protests from many groups: the Sierra Club's Puget Sound Group, the Olympic Park Committee, Federation of Western Outdoor Clubs, Mountain Club Society, WN. Recreation & Trails Unlimited, Young Lawyers' Association, King County Bar Association, etc., setting off a lengthy and complicated series of negotiations and legal maneuverings between the City, ICC and BN. ICC placed an indefinite hold on the approval of the result. In 1973, was an exchange of property near the Port of Seattle Grain Elevator (transferred to the City by BN in 1958) for the nine-mile right-of-way, which being of greater value than the submarginal land, resulted in a significant gift by BN to the City.

In the meantime, other interest groups had become involved in the proposed use of the right-of-way. The Puget Sound Railway Historical Association, operating a 14-mile steam railway and exhibit of railroad history, then proposed relocating its whole operation, using the "historic" trackage from University Village to Kenmore. This proposal met with both approval and disdain by everyone concerned. The dispute was irrevocably solved when the City conditioned the agreement with BN for the City to buy the ties for $1500 and BN to remove the rails 1973. Plans proceed for the development of the route as a hiking & biking trail. Removal of the rails and ties was accomplished so quickly that it created a problem for the surveyors, who found that some property descriptions were referenced to the centerline of the tracks. During removal activities, some were stolen before they could be secured in storage for use in the development of parks and play areas as retaining walls, steps and walkways. Some ties were donated to the Wedgwood Elementary School; more than 175 bundles of 25 ties each were sold to 90 different individuals, organizations and companies.

The approved abandonment was from Toltam Avenue to Kenmore—four miles of the remainder of the route was left undivided. Ownership/jurisdiction was split between Park and Recreation & Seattle Dept. of Parks, University of Washington and the State of Washington, north from the City Limits (NE 145th St) to Kenmore; ownership was required by King County for development as part of the Trail—the County was given permission to continue the Trail from Kenmore onto the City-owned Tolt River Pipe line right-of-way. On the BN, connect to the trail connects with the Bike Route from Corinkee Park to Green Lake to the Croft and thence south to Washington Park (Arboretum), south to Lake Washington Blvd and the "North Recreational Trail" from Mt. Baker to Sunset Park.

Phase One of the P&R Dept's development, completed in 1976, used all of the forward thrust funds allocated to this project. Additional funding will be sought to complete the project of path paving and planting plus other required improvements.

Originally identified as the "Burlington-Northern Trail" the Big Trail Park Committee urged that the more historically significant name be officially adopted. It was in 1977.

Some interesting footnotes:

Attracted 300-some railway station, James Hill founded. The agent, Son, a lawyer, sponsored Sam's education and Sam later became pres. of the GRN. Sam built a mansion just west of Volunteer Park at 834 E. Highland Dr.

Daniel Gilman's brother, L. C., was also a lawyer & promoter of railroads. A. G. Gilman was NN's travel agent for the Union Pacific in 1869, the year transcontinental service opened. GN Steet Locomotive Tender #1246 (1917-1955) displayed in Woodland Park in 1961.

NP Caboose #1313 (1913-1950); converted into concert station at Woodland Park in 1961.

The major determinant of the geomorphology and topography of the area has been advancing and re¬
treating glaciers that have inundated the Puget Lowland over the last two to three million years
and have left the area basically as a series of north-south running troughs (ie. Lake Washington,
Lake Sammamish, etc.) and ridges (ie. Capitol Hill, etc.). The soils have developed almost entire¬
ly from unconsolidated materials that were deposited over local rock formations during the glaci¬
ations. Since deposition, weathering, biological processes, and other agents have acted on these
materials to develop the soils as they now exist.

Different soil types have differing degrees of suitability for structural development, and there
are certain characteristics which indicate whether or not a particular form of development will
be structurally successful. Such factors as bearing capacity, drainage characteristics, shrink¬
swell characteristics, depth to bedrock, acidity or alkalinity, topography, etc., all are import¬
ant in determining the developmental capacity of a particular soil type.

The Burke-Gilman Trail is primarily located within two major geological zones, except for a short
portion immediately west of 25th Avenue N.E., where it crosses post-glacial alluvial deposits laid
down by what was once Ravenna Creek. The two major zones are of Vashon Till and a formation des¬
ignated as Older Clay Till and Gravel.

Vashon Till, which extends from the intersection at 25th Avenue N.E. to immediately south of N.E.
70th Street, is a mixture of clay to gravel sizes and is the "hardpan" of common usage. It may
contain occasional lenses of sand or gravel; is very difficult to excavate by hand; is of very
low permeability; an excellent foundation material; and is stable both seismically and in terms
of slide susceptibility. All of these characteristics are essentially favorable in terms of bike¬
way development, the only exception perhaps being the low permeability factor. Drainage is a
problem along a major portion of the trail (see p.18), and a suitable drainage system which will
carry run-off away from the trail development rather that allow it to pond along the edges will
be necessary.

The Older Clay Till and Gravel has within it large, identifiable lenses of sand and gravel which
have properties distinct enough to warrant designation as a separate but related sub-category
(relatively stable, well-drained material). The larger category occurs in two major areas, from
immediately south of N.E. 70th Street to Thorton Creek, and from approximately N.E. 110th Street
to the end of the trail, and is basically similar to the Vashon Till except that it usually con¬
tains water and is highly susceptible to slides where it occurs on steep slopes. Groundwater
that has percolated down through the ground until it reaches an impermeable layer, usually clay or clay silt, has a tendency to saturate and "lubricate" the seam between the layers, which results in the top layer sliding. Within the first area mentioned above, actual slides have been recorded only in those areas of steepest slope, roughly between N.E. 75th Street and N.E. 90th Street. The primary factors (in addition to the general instability of the material) in causing slides in the area have been the excavation at the toe of the slope along Sand Point Way, addition of fills to properties within or adjacent to the slide area, and surface/subsurface water conditions. Slides in the area are relatively minor in nature and generally take the form of gradual down-hill creep as evidenced by curved tree trunks on the slopes and leaning retaining walls at the toe of the slope. The primary implications in terms of bikeway design are in the form of providing for infrequent removal of slide debris from the trail.

The second area of the Older Clay Till and Gravel classification begins at approximately N.E. 110th Street, as mentioned above, and continues north to N.E. 145th Street. From N.E. 110th to approximately N.E. 123rd Street, the threat of sliding is relatively minimal, primarily because the bluff paralleling the trail on the west is generally less steep and is set back from the roadbed. North of N.E. 123rd Street, the bluff is steeper, closer to the roadbed, and thus the slide potential is a greater threat to trail development. There have been several slides onto the roadbed, both large and small, in this area.

The large lenses of sand and gravel mentioned previously (occurring within larger areas of Older Clay Till and Gravel) have essentially the same characteristics as the larger classification with the exception that they are relatively stable on steep slopes and not subject to sliding. This material occurs primarily in a section from Thornton Creek north to approximately N.E. 110th Street.

For the most part, the existing surface of the roadbed, laid as a foundation for the railroad, is composed of sand and gravel, with a small amount of clay-silt binder. This surface averages 10 inches thick and 11-12 feet wide, and is "excellent, firm, dry, and stable," over 95% of the trail. The remaining 5% is either poorly drained or has been muddied or obstructed by recent sliding.

DRAINAGE

There are some drainage problems along a major portion of the trail, as mentioned earlier, which result primarily from inadequate maintenance of the existing drainage system. The existing ditches are generally either poorly defined physically or have been clogged by debris or vegetation. Groundwater seeping out from the bluffs above and running downhill is a major source of water on the trail (see p 18).
VEGETATION

The Seattle area lies within the northern coniferous biome, part of what was once a vast evergreen forest region. Almost all of that original vegetation has been removed for various reasons, and vegetation today along the Burke-Gilman Trail is that which has been retained or planted by adjacent property owners. Some small to medium-sized trees have grown up along the roadbed itself since the railroad discontinued use of the line, and large trees remain on steep slopes where development of any sort has not yet occurred (the large majority of which are deciduous native types).

A great deal of that portion of the right-of-way which lies between the existing roadbed and adjacent properties is overgrown with thick weeds and vines, primarily blackberry (Rubus species). In some cases these are encroaching on the roadbed and require maintenance or removal, while in other areas they do not conflict with proposed trail use and in fact provide a barrier and a source of fruit for adjacent property owners.

by Edward MacLeod & Associates
Landscape Architects/Land Planners
November 1975
51.21 Acres / 8 1/2 mi. Park jurisdiction.

1974: Purch. from Burlington-Northern Ry.
(Predecessors to original Seattle, Lake Shore & Eastern R.R. 1887)

Other jurisdiction: 2 mi. U. of W.
1 mi. St. of W., Nat. Resour.
0 3/4 Engr. Dept.

12 1/4 mi. (NE 145→Denise Hill)

Lake Washington

BURKE-GILMAN TRAIL
Sand Point (Private) Golf Club

NORTH

BURKE-GILMAN TRAIL

Sheet 8
"SUNNYSIDE" BOAT RAMP

Street end: Eng'g Dept. juris.d. + maint.
EXCEPT Dock: Park maint.
2323 N. Northlake Wy. (d)

GAS WORKS PARK

(Engineering Dept. jurisdiction)
BURKE-GILMAN & GAS WORKS PK. TRAIL
Sheet 21
060575
"SUNNYSIDE" BOAT RAMP
Seattle/King County
Burke-Gilman Trail

City of Seattle
Charles Royer, Mayor
Seattle City Council
Phyllis Campman, President
Gerald Benson
Michael Friel
Tim Hill
Paul Knudel
John R. Miller
Randy Neufeld
Sam Smith
Jeanette Williams
Tom Wimmer, Chairman, Board of Park Commissioners
Walter R. Handley, Superintendent of Parks and Recreation
John Völker, Project Manager

City of Seattle
Department of Parks and Recreation
100 Dexter Avenue North
Seattle, Washington 98109

King County
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King County Council
Billina Shill, Chairman
Paul Fair
Ruby Chris
Robert E. Dunn
Gray Grant
K. R. (Bob) Granz
Mike Loeiry
Tracy J. Owen
Bill Reins
Jack Lynch, Director, Planning and Community Development
Jim Webster, Manager, Parks Division
Bud Parker, Project Manager

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Parks Division
W226 King County Courthouse
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