BICYCLE PATH TASK FORCE

GOALS FOR PLANNING PATHS

Purpose

For thousands of people in our city, the bicycle is not a toy, not a leisure-time vehicle, but a necessity. The student needs a bicycle to get to school, the housewife to shop, the teenager or adult to get to work, the middle-aged executive for health-sustaining exercise, the retired person for inexpensive, efficient transportation within his neighborhood. Transportation must assume first priority in planning bicycle routes.

The routes chosen must serve local neighborhoods by linking schools, parks, and shopping centers. They must form a transportation network, connecting sections of the city with each other and with surrounding cities and suburbs. The network should link different areas of the city with downtown Portland.

Although all bicycle riding is "recreational" in part, bicycle routes which are purely recreational, or serve the goal of transportation only minimally, should assume second priority. They should be financed with the help of federal Bureau of Outdoor Recreation funds or other available funds.

During the first year of bicycle path implementation, the City should set up different types of paths to gain experience and information for future planning decisions. Relatively little is known about the "best" system for urban bicycle riding, and the first routes will be the laboratories to test present theories.

Safety

There should be reasonable separation of bicycle, pedestrian, and vehicular traffic. Where vehicular traffic is fast and heavy (as on bridges or arterials), separation should be greatest. On quiet residential streets, separation may be minimal. The methods of separation are here listed from maximum to minimum:

1. Exclusive bicycle right of way: A separate bicycle path off the road or on a sidewalk.

2. Location of bicycle route within roadway:

a. Continuous barriers between vehicular traffic and bicycles on the road itself, for example, an extruded curb;

b. Reflectors or bumps on a painted line separating vehicular traffic and bicycles, with signs or symbols prohibiting parking of cars on bicycle lane;

c. Painted lines (considered a "low barrier" in Davis, California) separating vehicular traffic and bicycles, with stencilled message on bicycle lane: "Bike Only: NO Parking";

d. Same as c, but omit "No Parking." If the street were wide enough, the painted line could be about five feet to the left of parked cars, enabling bicyclists to pass parked cars without entering vehicular traffic;

e. Painted lines parallel to curb, with Bicycle Route signs;

f. Bicycle Route signs only.

Warning signs should be installed at crossings to inform motorists that they are approaching a bicycle route (see Hansen report, page 13). Where night bicycling is expected, adequate lighting must be installed.

Care must be taken to minimize pedestrian-bicycle conflicts. A survey of bicyclists by the task force included a question, "As a pedestrian, would you be bothered by bicyclists on the sidewalk: little, some, much?" Those who answered much greatly outnumbered those who answered little. Pedestrians who are not also bicyclists might be even more "bothered." Where separation of bicycles and pedestrians is impossible, as on bridges, the rules of the road (right of way, etc.) must be clearly established and publicized.

Uphill lanes in hilly areas should be given priority, since this is the more dangerous lane for bicyclists.

Convenience

Routes must be fairly logical and direct or adult bicyclists especially will ignore them and go on more direct, even if more dangerous, streets. If a route is not

direct, there must be significant reasons: dangerous or congested areas to avoid, good views to include, etc. The paving should be smooth, since bumpy surfaces jolt and slow down the rider. Steep grades should be avoided. Bicycle riders tend to "stay on top of the ridge": they won't go up and down hill if they can find a more level route.

Ease of maintenance

The route must be designed so that it can periodically be swept free of broken glass and gravel. Riders will swerve to avoid broken glass, creating hazards for themselves and motorists. This is a particular problem on and under bridges.

Planning for future needs

Are there significant numbers of present or potential riders for a route? In poor areas, students may be more dependent on bicycles to get to school. Areas with heavy concentrations of college students are apt to have more bicycle use. As a route becomes popular and use increases, improvements or embellishments can be added: a route that is at first merely signed may gain an exclusive bicycle lane; rest stops and picnic facilities may be added.

Aesthetics

A route must have some pleasant features: good views, pleasant, tree-lined streets, parks along the route

POLICIES ADOPTED BY BICYCLE PATH TASK FORCE
AUGUST 1, 1972

1. All public works projects within the City of Portland or plans requiring the approval of the Planning Commission or City Council should be reviewed to consider their effect upon bicycle and pedestrian traffic.

   New bridges must include bicycle and pedestrian lanes.

   New streets, arterials, or freeways must have bicycle lanes unless good bicycle routes are closely parallel.

   Streets which are widened should have bicycle lanes.

   New residential construction or subdivisions must provide bicycle lanes, as in Davis, California.

   Urban renewal projects, such as the Portland Center, must provide bicycle lanes and racks.

   City streets that have been designated as bicycle routes should not be vacated for private use unless bicycle and pedestrian lanes are provided on the vacated street or a street closely parallel.

2. All public buildings should provide bicycle racks for their employees and the public they serve.

   All city parks and schools should have sufficient bicycle racks to meet the demand, particularly where there are swimming pools or summer concerts.

   Commercial parking lots should be required to provide safe facilities for parking and locking bicycles under shelter, and to make known the fact with standard bicycle parking signs. High-rise residential buildings should provide such facilities.

3. On streets designated as bicycle routes, on-street parking should be removed to provide exclusive bicycle lanes. Public streets are for the movement of people, not long-term storage of vehicles.

4. The option of using arterials for bicycle routes must be kept open. Generally bicycle routes should not be located on major arterials, in order that the bicycle rider may avoid speeding cars, irate drivers, exhaust fumes, and aesthetic unpleasantness. However, there are areas where the arterials provide the only route through an area (Vancouver, for example), and must be used. The off-arterial routes must be logical and direct to encourage bicycle use.

5. Rather than prohibiting bicycle riding in all city parks, the City should encourage bicycle riding where feasible and develop facilities where bicycle riding would enhance the recreational potential of the park.

6. New and existing storm sewer gratings should be perpendicular to the curb to prevent serious hazards to bicyclists.

7. The City should acquire machinery to clean bridge sidewalks or other narrow bicycle paths.

8. Tri-Met should equip several busses with bicycle racks to assess the demand for such racks,,presently in use in San Francisco. During their training, Tri-Met drivers should be sensitized to the problems of bicycle riders.

9. When the City of Portland uses funds from HB 1700 to obtain federal "matching funds," such as Bureau of Outdoor Recreation funds, the federal funds must be used only for bicycle and pedestrian facilities.

10. A permanent Citizen's Review Board or similar group should be appointed when the present Bicycle Path Task Force completes its work, in order to advise the City Council on future routes and to oversee implementation of present plans.

11. We recognize that bicycle theft is a serious problem and encourage a program that would discourage theft, such as registration of bicycles. We support the proposed state-wide program for providing traffic and safety training in the public schools, from kindergarten through 12th grade.

RATIONALE FOR PARKING REMOVAL

In many cases, the only way safe bicycle lanes can be provided in the city of Portland is by converting traffic lanes or parking spaces to exclusive bicycle lanes. This may be viewed as a withdrawal of "rights"--or as an enhancement of neighborhood and urban life.

1. Safety. The most obvious benefit is increased safety and security. Bicyclists need not worry about competing with cars, and motorists need not fear or cope with bicyclists weaving in and out of traffic, behind and beside parked cars, or riding on the wrong side of the street.

2. Function of streets. Streets are intended for the movement of vehicles, not for the storage of vehicles. Since the bicycle is a vehicle for thousands of children and adults, it has precedence over parked cars.

3. Enhancement of neighborhood unit. The provision of bicycle lanes should help to stabilize the neighborhood unit. If people are encouraged to ride bicycles to shop, for instance, they will probably travel to the smaller stores near their homes rather than drive for miles to the large shopping center. The neighborhood stores--the corner pharmacy, the "Mom and Pop" grocery, the dry cleaner--will be able to remain in business. These stores will continue to serve older people who have no access to large shopping centers.

4. Greenways. The designation of bicycle routes could be coordinated with the City's tree-planting program. It has been our observation while touring Portland that homes are generally better cared for on tree-lined streets. Residents should welcome a bicycle route past their homes if informed that free trees would be provided if desired by the property owners.

5. Improvement of surface. Since rough surfaces are unpleasant and sometimes dangerous for bicyclists, some streets designated as bicycle routes must be repaved. This improvement should be welcome to residents.

6. Assurance of traffic control. There should be assurance that streets chosen for bicycle routes will most likely remain so designated, and will in the future be protected from increased traffic loads. For example, if a street that has at present sufficient room for two lanes of traffic and two parking lanes is converted to a bicycle street by removing parking, the residents should be informed that attempts will be made to keep the traffic loads stable, or in residential areas, to decrease the traffic load by traffic diverters. This policy should enhance the attractiveness, safety and stability of the neighborhood. It follows the direction the Traffic Engineering Department seems to be taking: channel through traffic on specified arterials: divert it from neighborhood streets.

SECOND PHASE RECOMMENDATIONS

BICYCLE PATHS TASK FORCE

Introduction:

These recommendations constitute the second phase program of the Bicycle Paths Task Force as charged by Commissioner Anderson when establishing the Task Force. They provide an additional link to our first term recommendations by connecting to the Broadway Bridge. In total, our recommendations have provided a total North-South route extending from Pier Park to Lewis and Clark College. They constitute an important section of our comprehensive plan to be finished January 1, 1973.

The Task Force recognizes the complexity of these recommendations. However this will serve several purposes: (1) provide a variety of construction types for test purposes (2) serve commuter and recreation bicyclists (3) connect to Port of Portland planned bicycle paths in the Columbia Slough & Kelly Point regions (4) provide parking removal test areas (5) provide a facility answering regional & local needs.

It should be noted that Ainsworth St. has been included in the Model Cities transportation plan as a bicycle route. Also recommended is N. Commercial. However, Task Force evaluation has recommended N. Kerby in lieu of N. Commercial for reasons of street width, safety and street maintenance.

The route from the Broadway Bridge to Pier Park will be an outstanding recreational bike trail, offering excellent views of the City and the Willamette River, providing access to several of Portland's most

beautiful parks and to the Columbia Slough, and leading the cyclist through many attractive, interesting neighborhoods. More important, it will serve as a vital part of Portland's bicycle network, permitting people in North and Northeast Portland to cycle safely to work, to school, and to stores.

Planning the route has been a formidable challenge. Freeways and freeway approaches for the Fremont Bridge had to be avoided. Expansion plans for Emanuel Hospital had to be determined and taken into account. Heavy commuter and industrial traffic combined with the natural terrain, sloping down to the river to further limit the options. The route was originally proposed by Dave Blaska, Todd Sloan and Karen Gustafson of the Portland State University Bicycle Planning Class after many conferences with neighborhood residents and Model Cities planners. It was reviewed by city personnel, and modified by Task Force members after several bicycle field trips.

SECTION 1: BROADWAY DETOUR

After leaving the south sidewalk of the Broadway Bridge, bicyclists would use existing pedestrian signals to cross traffic on Broadway to the north side of the street. They would then proceed north on the sidewalk of Larrabee one block to the intersection with Dixon, where a curb cut would be installed to provide transition to the street. The route would then follow Dixon northeast to Wheeler, go south on Wheeler to the three-way intersection of Flint, Wheeler and Broadway. Although complicated and circuitous, this routing seems essential to avoid the heavy traffic and logistical problems of Broadway and Weidler. It is now used by commuting cyclists.

SECTION 2: FLINT

The route would then go on the roadway of Flint, with a concrete barrier to provide an exclusive lane for bicycles on either side of the street, except directly in front of Eliot School, where bicyclists and school busses must share space. Signs should warn bicyclists of the bus parking area as they approach. Where Flint intersects with Russell, a stop sign should be installed for traffic going east on Russell, or a traffic signal installed to enable the cyclist to proceed safely to the sidewalk on the west side of Vancouver.

SECTION 3: VANCOUVER

The sidewalk on the west side of Vancouver Avenue should be "semi-exclusive bicycle right of way," shared with pedestrians, from Russell to Beech. The sidewalk should be wide enough to provide a two-way

bicycle path (6.5 feet) and a pedestrian path (3 feet), with a barrier of some kind between them, depending upon the level of pedestrian traffic. Curb cuts should be constructed at each corner where traffic intersects. Cars should not be allowed to turn right into the streets crossed by the bicycle path without first stopping to look for approaching cyclists and pedestrians. Cyclists and pedestrians must, of course, obey pedestrian signals. The sidewalk from Russell to Cook is in the Emanuel Hospital complex and is to be rebuilt under the direction of the Portland Development Commission. The portion from Cook to Beech will have heavy cross traffic to and from the Fremont Bridge, which should be signalized.

SECTION 4: KERBY

At Beech, the route would again be transferred to each side of the street. It would go one block west to Gantenbein, north on Gantenbein to Shaver, west on Shaver two blocks to Kerby, and north on Kerby to Ainsworth. The route should be striped. Near Portland Community College and Jefferson High School the route is extremely rough, and a strip on each side of the street should be paved to encourage bicycle traffic. Removal of parking from 7 a.m. - 7 p.m. should be considered where off-street parking exists.

SECTION 5: AINSWORTH

At the southeast corner of Peninsula Park, at Kerby and Ainsworth, a pedestrian-bicycle crosswalk or signal should be provided for safe access to Peninsula Park.

All of Ainsworth Avenue is being recommended for a bicycle path. We deal here only with that portion west of Peninsula Park. Again, striping is recommended to provide a bicycle lane on each side of the street, with parking removal during daylight hours. Potholes would have to be filled or rough sections repaved. The route should end at Willamette Boulevard, but a very narrow portion of Willamette from Ainsworth to Holman could be avoided by slight detour from Ainsworth at Villard or Curtis.

SECTION 6: WILLAMETTE BOULEVARD

Willamette Boulevard is already heavily used by bicyclists. It is scenic, smooth, level; and while automobiles go rather fast, there is no truck traffic, little cross traffic, and little parking. We recommend striping for an exclusive bicycle lane on each shoulder of the road. As bicycle traffic increases, or if funds permit now, a barrier could be installed to prevent incursion by cars. Parking, while light now, must be prohibited entirely as far as Portsmouth. The route would continue on Willamette under the St. John's Bridge (providing access to the proposed Cathedral Park) as far as Reno.

SECTION 7: RENO-PIER PARK

Reno was chosen to provide a fairly safe crossing of Lombard. At Central the route would jog one block southeast to St. Johns, then go northeast on St. Johns into Pier Park. A route through Pier Park to the Columbia Slough area would provide access to future bikeways and natural preserves in the Slough, and to the proposed Kelley Point Park.

We recommend that the City apply for federal aid to finance all or portions of this route. The Bureau of Outdoor Recreation has a program to fund bicycle paths that connect and provide access to parks. This route does so, connection Lillis-Albina, Dawson, Untank, Peninsula, Columbia, and Pier Parks, and the proposed St. John's Cathedral Park and Kelley Point Park.

AINSWORTH BIKEWAY

Routing on Ainsworth from Peninsula Park west is covered in the recommendation for a bicycle route from the Broadway Bridge to Pier Park. The route recommended here would extend from Peninsula Park east to 37th Avenue, and then enter Fernhill Park, following the southern boundary line of the Park to provide access to John Adams High School and 42nd Avenue. The Task Force is presently evaluating 42nd Avenue as a possible bicycle route which could provide another access to the Columbia Slough.

We recommend that parking be removed from 7 a.m. - 7 p.m. on both sides of Ainsworth to provide an exclusive right of way for bicycles. A survey of the area showed that only two houses did not have off-street parking. (See attached report.) Striping should be a sufficient barrier initially, until bicycle use builds up. The center island of grass and large trees and the well-kept houses make this route an extremely pleasant one, but on-street parking leaves no room for a car to pass a cyclist, and conflicts do arise. The alternative, paving a bicycle path on the grass islands and constructing curb cuts, would be expensive and ecologically unsound.

The route connects Peninsula Park, Alberta Park, and Fernhill Park;

provides transportation to Vernon School, Kennedy School, John Adams High School, and Concordia College. The Multnomah County Bicycle Task Force has been advised of the route and requested to extend it beyond 42nd Avenue for the use of students and others.

PLAN FOR IMPLEMENTATION OF

SECOND PHASE RECOMMENDATIONS

The Bicycle Paths Task Force is a citizen's organization composed of persons having only a basic knowledge of traffic engineering, and construction engineering. As a citizen's organization given a planning task to perform there are many essential aspects to the implementation of bicycle path recommendations which are not within the scope of Task Force capabilities.

The Second Phase Recommendations represent an ideal that appears technically and financially feasible. Although solid engineering principles and fiscal realities have been used to formulate these recommendations; it is recognized certain modifications may be necessary.

The Task Force recommends the following plan for action be followed in the implementation of the Second Phase Recommendations:

1. The City should coordinate with the Portland Development Commission to design and construct the bicycle path adjacent to N. Vancouver Avenue and Emmanuel Hospital.
2. Suggested changes of traffic signs and traffic signals should be approved by the Traffic Engineer to determine their need and technical feasibility.
3. The City should develop the requisite design for implementation of these recommendations in preparation for actual construction and striping by the spring of 1973. These designs should be presented to members of the Bicycle Paths Task Force for comments and suggestions prior to construction.
4. The City should remove parking as recommended with priorities as follows:
   a. N.E. Ainsworth
   b. N. Willamette Blvd.
   c. N. Flint
   d. N. Kerby

   It is recognized that on-street parking removal is often a difficult and complicated process. These proposed bicycle facilities will be an asset to both the North and the Northeast Portland communities, and residents. However, certain property owners will be directly affected by any parking bans.

   The Bicycle Paths Task Force recommends the involvement of PTA'S, church youth groups, scouting organizations, Model Cities or neighborhood organizations in seeking the cooperation of affected property owners, and neighborhoods. All affected property owners should be notified by the City. It may be desirable to hold public hearings.

   The Bureau of Traffic Engineering should be incharge, however, if needed, members of the Bicycle Paths Task Force will assist any way needed.

5. The Bureau of Parks should immediately make application for Bureau of Outdoor Recreation matching funds to assist in meeting the costs of this project.

PB.4

M E M O R A N D U M

April 4, 1973

TO: Mayor Goldschmidt
Commissioner Ivancie
Commissioner Mc Cready
Commissioner Schwab

FROM: Commissioner Anderson

SUBJECT: Bicycle Paths Task Force Comprehensive Plan

Attached is a copy of the final report of the Bicycle Paths Task Force, Bicycle Facilities For Portland: A Comprehensive Plan. Also attached is a proposed resolution accepting the document as the guideline plan for bicycle pathway construction within the City, dismissing the Task Force with appreciation, and establishing a new committee.

I am extremely impressed with this document and am satisfied that it constitutes a rational, feasible and workable plan for construction of bicycle facilities as required by law. This resolution would basically commit the City to the plan but allow the necessary flexibility required by our engineers, public and neighborhood demand, and changing conditions. A Citizens Bicycle advisory committee would provide for additional citizen input and oversight for our implementation program and other bicycle related matters.

I intend to discuss this at Council Conference of April 10th. Task Force members will make a short presentation and answer questions.

bd

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OFFICE OF COMMISSIONER
OF PUBLIC SAFETY

RESOLUTION NO. _____

WHEREAS the City Council has appointed the Bicycle Paths Task Force and charged it to produce a comprehensive bicycle pathways plan for the City of Portland and this charge has been fulfilled; and

WHEREAS the City of Portland is required by law to expend at least one per cent of its annual gas tax revenues on bicycle and pedestrian paths construction and bicycles serve as an increasingly important aspect of a balanced transportation system; and

WHEREAS the City Council has approved the First and Second Phase recommendations of the Bicycle Paths Task Force and these recommendations are being actively implemented; and

WHEREAS the document Bicycle Facilities For Portland: A Comprehensive Plan, prepared by the Bicycle Paths Task Force, constitutes a practical and workable plan for development of bicycle pathway facilities; and

WHEREAS additional citizen input will be necessary for implementation of this plan and for working with the City on bicycle related matters; and

WHEREAS it is imperative to maintain flexibility in response to engineering and legal requirements, public and neighborhood demand, and changing conditions for implementation of the comprehensive plan; now, therefore

BE IT RESOLVED that the City Council adopts the document Bicycle Facilities for Portland: A Comprehensive Plan as its guideline plan for bicycle pathway construction within the City of Portland with the understanding that changes should be made as needed by engineering and legal requirements, public and neighborhood demand, and changing conditions; and

BE IT FURTHER RESOLVED that the City Council extends its sincere appreciation to the Bicycle Paths Task Force for its contribution and service to the City of Portland and discharges the Bicycle Paths Task Force for completion of its duties as charged; and

BE IT FURTHER RESOLVED that the City Council direct the Mayor to appoint a seven person Citizens Bicycle Advisory Committee prior to June 1, 1973 to operate under the auspices of the Commissioner of Public Works and charged with the following duties:

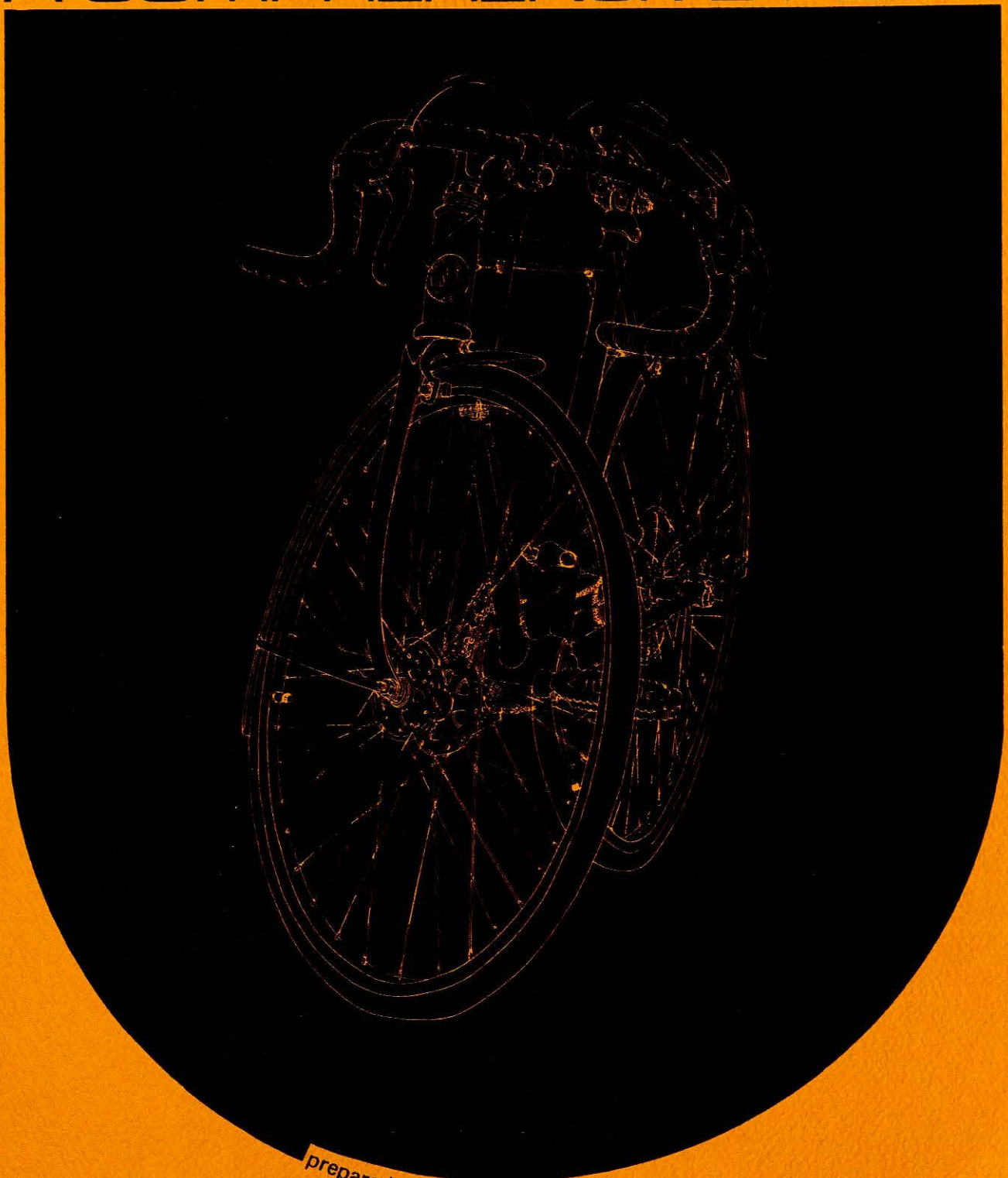
1. Assist the City with implementation of the comprehensive plan described in Bicycle Facilities For Portland: A Comprehensive Plan including review of design, priorities, public contact, and hearings.
2. Advise the City Council regarding bicycle related matters including City policies, bicycle parking, bicycle safety, and bicycle laws.

Adopted by the Council _____

Commissioner Anderson
RBW:bd
4/4/73

Auditor of the City of Portland

BICYCLE FACILITIES FOR PORTLAND
A COMPREHENSIVE PLAN



prepared by THE BICYCLE PATHS TASK FORCE

BICYCLE FACILITIES FOR PORTLAND:
A COMPREHENSIVE PLAN

PREPARED BY

PORTLAND BICYCLE PATHS TASK FORCE

March, 1973

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TECHNICAL APPENDIX (continued)

M E M O R A N D U M

January 31, 1973

TO: Bicycle Paths Task Force Members

FROM: Lloyd Anderson

SUBJECT: Bicycle Paths Comprehensive Plan

Bicycles are an important part of a balanced transportation system. The resurgence of interest in bicycles as an alternative form of transportation has some important implications for our transportation system as a whole. The bicycle is no longer simply a child's toy or excellent exercise, but is a prime mode of movement for many. The bicycle is low-cost, non-polluting, virtually silent, has minimal space requirements and consumes no fuel. These are important considerations at a time when the main form of transportation, the automobile, falls short on all of these.

When the State Legislature passed HB1700 in 1971, they recognized the potential of bicycle travel and the need to provide safe, pleasant facilities that incorporate bicycles into our transportation system. This document carries the Legislature's action one step further and shows how these facilities should be provided.

You have fulfilled entirely each charge you have been given in the specified time frame. In addition, you have given the City vast quantities of information essential to the development of good bicycle facilities and have provided the blueprint for a fine bicycle path network in the City. This sort of detail, viewed from the perspectives of future users of the system, would likely be impossible for City staff to obtain with normal budget and time restrictions.

You have accomplished much more than the Comprehensive Plan, however. You have demonstrated to the City of Portland the great potential of citizen involvement in projects such as this. Completely on your own time, with minimal staff support and assistance you have completed an impressive and useful planning document.

Bicycle interest is high in Portland and needs are great. Be assured your plans and suggestions will be used extensively in the future.

Congratulations on a job well done and thank you very much for your service to the City of Portland.

Lloyd Anderson

bd

INTRODUCTION

Over a year ago, the Bicycle Path Task Force was appointed to prepare a comprehensive bicycle plan for the City of Portland. The members of the Task Force who have finished the marathon, as well as those who joined the effort mid-way, are pleased to offer our plan to the City.

As we have proceeded in our work, we have played two roles: Innovators and coordinators. We had, to begin with, a preliminary plan drawn up by Bob Hansen of the City Engineer's office. We quickly realized that we could not, even as a group, be knowledgeable about the needs of cyclists in every neighborhood of the City. This humbling thought led us to depend on people who were knowledgeable: individual cyclists, the Portland State Bicycle Policy Planning Class sponsored by OSPIRG, high school bicycle clubs, and citizens groups. Many public servants aided us: personnel from the Park Bureau, Traffic Engineering and Safety, the Portland Planning Commission, the Portland Development Commission, Model Cities, the Multnomah County Planning Commission, Columbia Region Association of Governments.

This plan, then, represents the time and energy of hundreds of individuals, but the Task Force is responsible for the final report. We have been dedicated amateurs in

the planning process. Our knowledge of the engineering necessary to produce bicycle paths is superficial; our knowledge of the costs involved is hampered by a general lack of experience in producing urban bicycle paths. The reports on individual routes will reveal inconsistencies of approach because they were written by different people. Finally, we have been hampered by the haziness surrounding the future of our City (in that we are not alone). But we have tried to balance our vision of what could be with realism and objective assessments of alternatives.

Bicycle paths can do much to enhance the use of an inexpensive, efficient, healthy, pleasant means of transportation. They can provide safer cycling for school children. Indirectly, they can help reduce congestion and air pollution in our City. But they cannot do everything. Cyclists must obey traffic laws and avoid unsafe situations and maneuvers. Motorists must be taught to acknowledge the rights of cyclists and pedestrians. New laws should be passed by municipal and state governments to license bicycles and to define the rights and obligations of cyclists. We are pleased to know that such laws are being prepared.

We urgently request that the City Council review the "Policies Adopted by the Bicycle Path Task Force". Our purpose in preparing this document was to recommend

policies that the City could adopt in order to enhance bicycle transportation.

We recommend that city engineers use as a reference or tool the California "Criteria for Bikeway Planning". It is the best document available for urban bikeway design, and has been a valuable source of ideas for the Task Force.

The Task Force has already reaped rewards from the year's effort. We have had many pleasurable moments touring our City, discovered new friends as we worked together, and seen that our City government is responsive to the needs of its citizens and eager to accept the help that we can give. Our special thanks go to Commissioner Lloyd Anderson, William Dirker, and Richard Wagner for their constant encouragement, support, and good humor. Now we shall watch with great interest as the City builds its bicycle network.

BICYCLE PATH TASK FORCE

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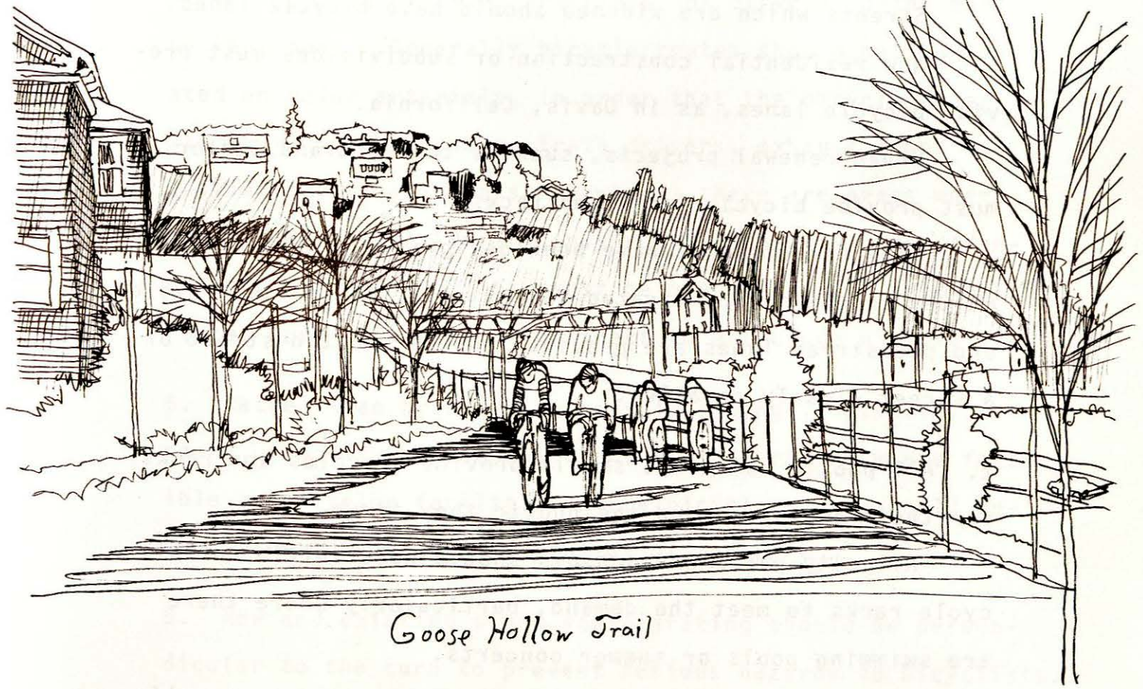

Goose Hollow Trail

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AUGUST 1, 1972

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New streets, arterials, or freeways must have bicycle lanes unless good bicycle routes are closely parallel.

Streets which are widened should have bicycle lanes.

New residential construction or subdivisions must provide bicycle lanes, as in Davis, California.

Urban renewal projects, such as the Portland Center, must provide bicycle lanes and racks.

City streets that have been designated as bicycle routes should not be vacated for private use unless bicycle and pedestrian lanes are provided on the vacated street or a street closely parallel.

2. All public buildings should provide bicycles and racks for their employees and the public they serve.

All city parks and schools should have sufficient bicycle racks to meet the demand, particularly where there are swimming pools or summer concerts.

Commercial parking lots should be required to provide

safe facilities for parking and locking bicycles under shelter, and to make known the fact with standard bicycle parking signs. High-rise residential buildings should provide such facilities.

3. On streets designated as bicycle routes, on-street parking should be removed to provide exclusive bicycle lanes. Public streets are for the movement of people, not long-term storage of vehicles.

4. The option of using arterials for bicycle routes must be kept open. Generally bicycle routes should not be located on major arterials, in order that the bicycle rider may avoid speeding cars, irate drivers, exhaust fumes and aesthetic unpleasantness. However, there are areas where the arterials provide the only route through an area (Vancouver, for example), and must be used. The off-arterial routes must be logical and direct to encourage bicycle use.

5. Rather than prohibiting bicycle riding in all city parks, the City should encourage bicycle riding where feasible and develop facilities where bicycle riding would enhance the recreational potential of the park.

6. New and existing storm sewer grating should be perpendicular to the curb to prevent serious hazards to bicyclists.

7. The City should acquire machinery to clean bridge

sidewalks or other narrow bicycle paths.

8. Tri-Met should equip several busses with bicycle racks to assess the demand for such racks, presently in use in San Francisco. The routes should be publicized. During their training, Tri-Met drivers should be sensitized to the problems of bicycle riders.

9. When the City of Portland uses funds from HB 1700 to obtain federal "matching funds", such as Bureau of Outdoor Recreation funds, the federal funds must be used only for bicycle and pedestrian facilities.

10. A permanent Citizen's Review Board or similar group should be appointed when the present Bicycle Path Task Force completes its work, in order to advise the City Council on future routes and to oversee implementation of present plans.

11. We recognize that bicycle theft is a serious problem and encourage a program that would discourage theft, such as registration of bicycles. We support the proposed statewide program for providing traffic and safety training in the public schools, from kindergarten through 12th grade.

12. The installation of traffic diverters on City streets creates excellent opportunities to provide good, safe streets for bicycle travel. All traffic diverters should be constructed with ramps or cuts to allow for convenient passage of bicycles.

RATIONALE FOR PARKING REMOVAL

In many cases, the only way safe bicycle lanes can be provided in the city of Portland is by converting traffic lanes or parking spaces to exclusive bicycle lanes. This may be viewed as a withdrawal of "rights" - or as an enhancement of neighborhood and urban life.

1. Safety. The most obvious benefit is increased safety and security. Bicyclists need not worry about competing with cars, and motorists need not fear or cope with bicyclists weaving in and out of traffic, behind and beside parked cars, or riding on the wrong side of the street.

2. Function of streets. Streets are intended for the movement of vehicles, not for the storage of vehicles. Since the bicycle is a vehicle for thousands of children and adults, it has precedence over parked cars.

3. Enhancement of neighborhood unit. The provision of bicycle lanes should help to stabilize the neighborhood unit. If people are encouraged to ride bicycles to shop, for instance, they will probably travel to the smaller stores near their homes rather than drive for miles to the large shopping center. The neighborhood stores - the corner pharmacy, the "Mom and Pop" grocery, the dry cleaner - will be able to remain in business. These stores will continue

to serve older people who have no access to large shopping centers.

4. Greenways. The designation of bicycle routes could be coordinated with the City's tree-planting program. It has been our observation while touring Portland that homes are generally better cared for on tree-lined streets. Residents should welcome a bicycle route past their homes if informed that free trees would be provided if desired by the property owners.

5. Improvement of surface. Since rough surfaces are unpleasant and sometimes dangerous for bicyclists, some streets designated as bicycle routes must be repaved. This improvement should be welcome to residents.

6. Assurance of traffic control. There should be assurance that streets chosen for bicycle routes will most likely remain so designated, and will in the future be protected from increased traffic loads. For example, if a street that has at present sufficient room for two lanes of traffic and two parking lanes is converted to a bicycle street by removing parking, the residents should be informed that attempts will be made to keep the traffic loads stable, or in residential areas, to decrease the traffic load by traffic diverters. This policy should enhance the attractiveness, safety and stability of the neighborhood. It

follows the direction the Traffic Engineering Department seems to be taking: channel through traffic on specified arterials; divert it from neighborhood streets.

BICYCLE SAFETY

Throughout the course of our planning, bicycle safety was constantly discussed both in general and in relation to our plans. Bicycle safety is a broad area, but several points should be made.

Urban cycling will always have its dangers. The greatest threat to cyclists is the automobile. Confrontation with the automobile cannot be avoided in an urban setting even if bicycle paths become common. However, dangers can be minimized if bicyclists drive alertly.

The greatest dangers to cyclists are at intersections, from opening car doors, and from right turning vehicles. Although there are many inconsiderate automobile drivers who simply do not care about exposing another person to danger, major problems essentially result from a lack of visibility or underestimation of the bicyclist's speed by the motorist. Frankly, many of these problems will not be solved by on-street bicycle lanes or routes. Bicycle drivers should recognize these problems and drive as defensively as possible. The problems of cars overtaking from the rear, particularly at high or unreasonable speeds, are significant. Because the bicyclist is visible when being approached, however, collisions are less likely.

Among bicyclists and motorists we have seen both

courtesy and discourtesy, safe and hazardous driving, law abidance and law breaking. However, there is a difference. Poor motoring habits can be deadly whereas poor bicycling habits are generally only inconveniencing or self-harmful. We believe efforts should be made to improve the driving habits of both groups, but bicyclists should realize that, despite their legal rights, they are vulnerable and that defensive driving is essential for survival. We also encourage bicyclists to avoid heavy arterials where they will slow traffic and endanger motorists and to obey traffic signals and laws. This is good public relations as well as an excellent means of self-preservation.

Active support for the State Department of Education proposal for traffic safety training, Kindergarten through twelfth grade, is strongly recommended (see Policy Statement - Point 11).

RELATIONSHIP WITH OTHER PLANNING ACTIVITIES

49 52 21 50 53

This report does not deal with many potentially fine bicycle routes that are a part of larger planning efforts. The Bicycle Paths Task Force has attempted to keep informed on the progress of these developments throughout the year and is satisfied with the basic considerations that have been given.

Included in these routes are: bicycle paths in the Columbia Slough area; bicycle paths in conjunction with freeway development including I-205 and I-80 (if built); the use of Harbor Drive for bicycle facilities after its closure; bicycle paths through the John's Landing project; facilities proposed in the Willamette Greenway program; and bicycle routes developed in conjunction with the Downtown Plan. We are particularly interested in the development of bicycle paths in the Columbia Slough and along the Harbor Drive alignment. These will provide excellent recreational paths; Harbor Drive would serve a valuable commuter function as well. We understand the Oregon State Highway Division is preparing plans for a bicycle route in conjunction with I-205 at this time and encourage implementation of these plans.

Although we have madeevery attempt to coordinate our planning with neighborhood planning in the City, there

may be areas where our plans do not correspond with neighborhood plans. Future developments may render portions of our plans unfeasible. Therefore, this comprehensive plan should not be considered to be inflexible. Adjustments should be made where needed to best fulfill neighborhood needs and objectives.

In addition, we have worked closely with Multnomah County and CRAG to assure coordination and connection with planned routes outside the City limits. This has been achieved.

FUNDING OF BICYCLE PATH CONSTRUCTION

Although we have oriented our planning to economic use of Portland's bicycle and pedestrian path funds, implementation of our plan will be very expensive. There are, however, additional sources for funding that should be explored.

Because Multnomah County receives a substantial share of its gasoline tax revenues on the basis of vehicle registration within the City of Portland, Multnomah County should be encouraged to allocate a portion of its revenue for construction within the City limits or for facilities that will be heavily used by Portland's recreational cyclists such as Sauvie Island or the Columbia Slough.

The City should look to the Oregon State Highway Division for a substantial amount of assistance and should encourage changes of Highway Division policy that would allow allocation of Highway Division bicycle path funds for use on regular City streets. The Highway Division policy at present allows for use only on state roads and highways or have close, parallel alignment to state facilities. This is a sensible policy for roadwork, but is inadequate for meeting the needs of the urban bicyclist. The Oregon Trails Commission and Willamette Greenway Committee are also potential sources of revenue.

On the federal level, at least two funding sources

exist. The Federal Highway Administration and the Department of Transportation have indicated a willingness to fund bicycle path development. To our knowledge, criteria for funding have not been established for the FHWA of the Northwest Region, although these criteria are in the process of being formulated for the Southwest Region in California. The Bureau of Outdoor Recreation provides even match grants for bicycle path developments serving recreational purposes. As connections of City parks serve a recreational purpose, and as most of our recommended routes connect City parks, this source of funding should be fully explored. Application for funds must be made through the Bureau of Parks as a part of their annual grant application.

The City should make every effort to be aware of funding potentials from all sources in order to maximize the use of its bicycle paths funds.

BIKE ROUTE CRITERIA CHECK LIST

SHEET #_____ DATE_____

USGS QUAD SHEET TITLE_____ TIME_____

STREET_____ FROM_____ TO_____

1. STREET DESIGN: # OF DRIVING LANES 1 2 3 4 5 6 7 8
   ONE-WAY: YES NO
2. WIDTH OF SHOULDER: NO 3-5 5-8 8+ PAVED: YES NO
3. SIDEWALKS: NONE BOTH SIDES ONE SIDE: N,S,E,W
4. PAVED: YES NO OBSTRUCTIONS: YES NO
5. GRADE: LT MOD EX
6. LENGTH OF GRADE: (SPECIFY)_____

_____

7. TRAFFIC VOLUME: LT MOD HEAVY
8. DESIGNATED SPEEDS: 20 25 30 35 40 45
9. ARE SPEEDS OBSERVED?: YES NO NOT SURE
10. PARKING: NONE BOTH SIDES ONE SIDE: N, S, E, W
11. OBSERVED PARKING DENSITY: LOW MOD. HEAVY
12. RESTRICTIONS ON PARKING: (SPECIFY)_____

_____

13. PEDESTRIAN TRAFFIC OBSERVED: LT. MOD HEAVY
    (# PEDESTRIANS PER BLOCK): 0-2 3-5 5+
14. PEDESTRIAN O AND D POINTS: YES NO
15. DOES ROUTE PROVIDE SCENIC INTEREST: YES NO
16. GREENERY ALONG ROUTE: NONE LITTLE SOME MUCH
17. NATURAL REST STOPS (AND/OR) POINTS OF INTEREST: YES NO
18. STREET LIGHTING: NONE BAD GOOD

Circle appropriate response or fill in observation when specified. List pedestrian generation points and all special interest areas in rank order from greatest to least. When form is filled out please circle grade for route and make any further recommendations concerning the site under study.

1. PROBLEM AREAS (INTERSECTIONS, BLIND CORNERS, PARKING, ETC.):

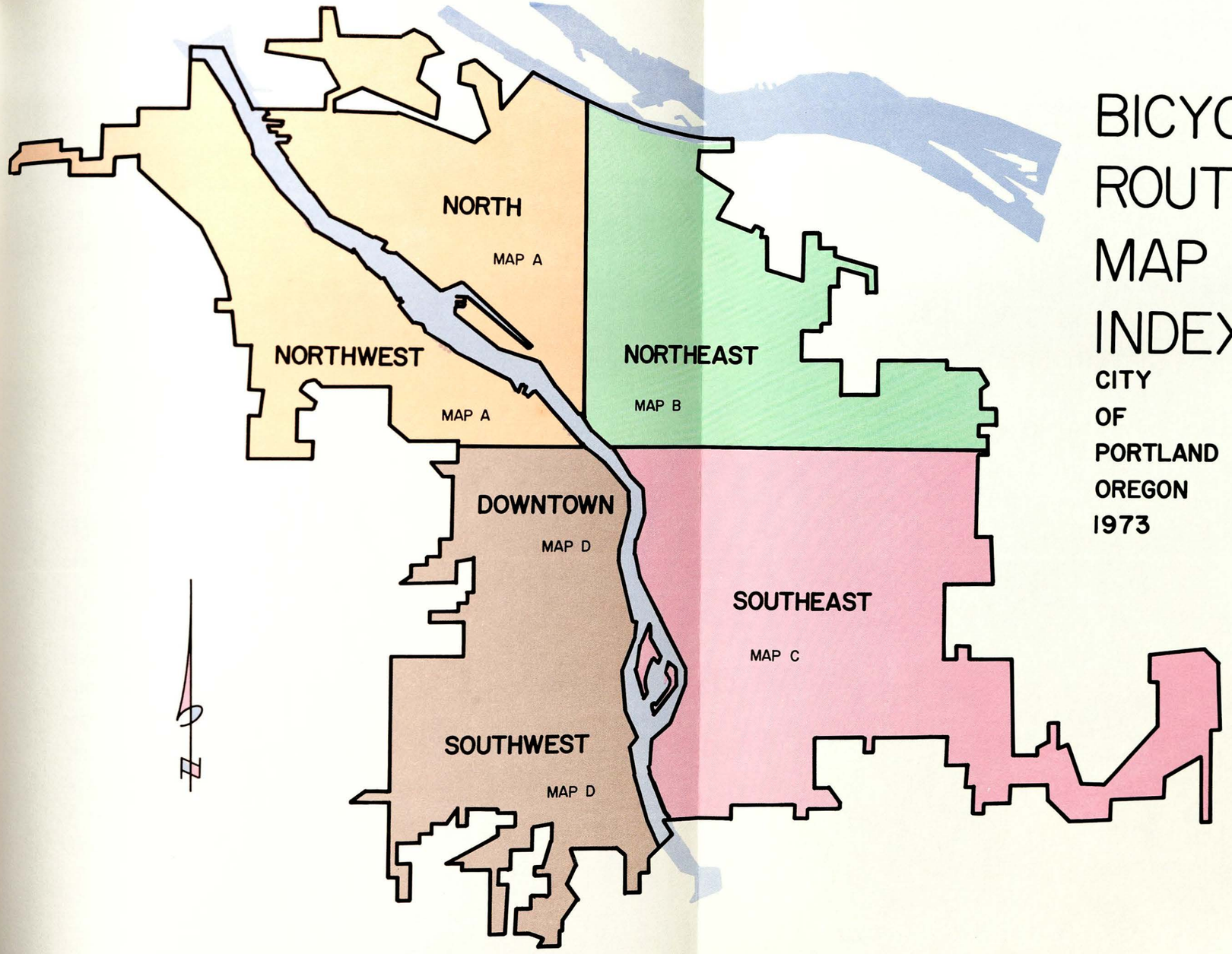
2. SPECIAL INTEREST AREAS (SCENIC, REST STOPS, PARKS, ETC.):

3. ADEQUATE ALTERNATIVES IF PARKING REMOVED (WITHIN 3 BLKS. OF STUDY AREA):

4. ALTERNATIVE ROUTE(S) SHEET #S:

GRADATION OF QUALITY OF ROUTE	RECOMMENDATION
A - EXCELLENT TO GOOD	
B - ACCEPTABLE	
C - QUESTIONABLE	
D - UNFIT	

TECHNICAL APPENDIX



BICYCLE ROUTES MAP INDEX

CITY
OF
PORTLAND
OREGON
1973

NOTE TO THE GENTLE READER

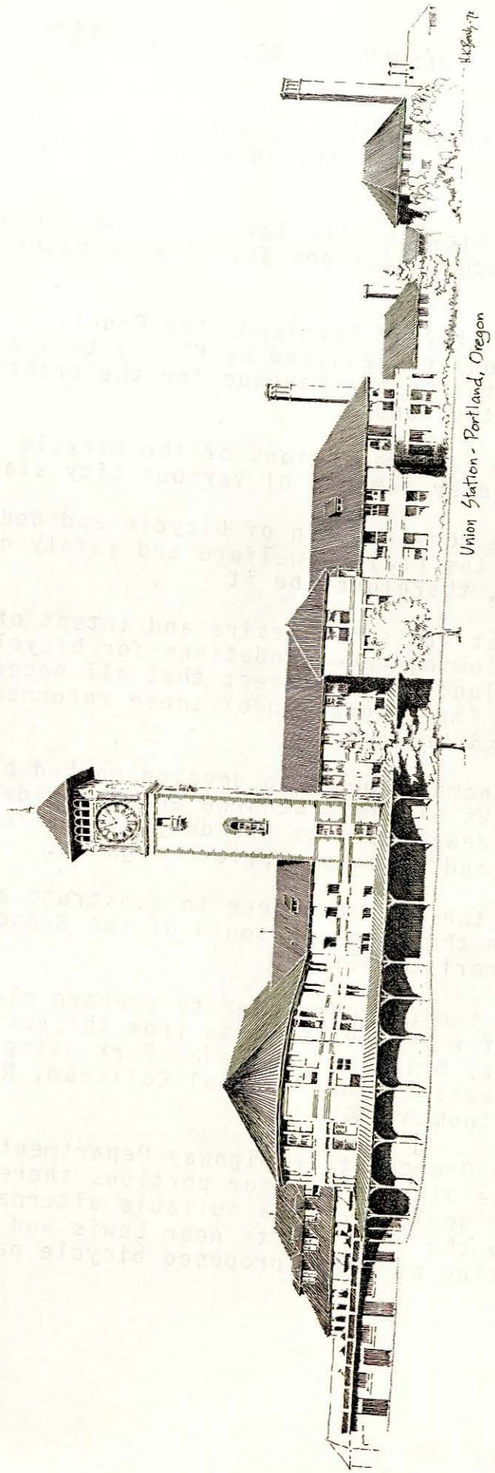
The technical appendix of this report describes in detail the routes proposed by the Task Force. It will not be included in the editions sent out of Oregon unless specifically requested.

The reports were meant to serve two purposes. They will inform the citizens of Portland about plans for bicycle routes in their neighborhoods. Hopefully cyclists and other residents will read those that will affect them most directly and offer further suggestions. They will also serve as "working documents" for the city engineers responsible for designing and constructing bicycle routes.

Each report is divided into four parts. The first is a general description of the route, showing where it goes and usually sketching the urban environment it serves (residential or commerical, tree-lined or barren, etc). The second part shows the advantages of the route: the type of rider it will serve, present use, access to schools, parks and recreational areas, connections with other routes, relative safety. The third part lists necessary improvements to make the route safer or more attractive to cyclists. These might include new traffic signals at dangerous intersections, construction of curb cuts to sidewalks over bridges, stencilling of "bicycle route" on

the street, removal of parking. The fourth part describes alternatives: parallel streets that were considered, and the reasons for their rejection. This section in effect forced the route surveyors to look at all the options before making a final choice, and we believe it is an essential ingredient to good planning.

In addition, we have included pictures and diagrams throughout the text for both diversionary appeal and utility. Where possible, we have tried to relate them directly to the immediate text. The diagrams are taken from State of California Department of Public Works "Bikeway Planning Criteria and Guidelines". Our thanks are expressed for their use.



RESOLUTION NO. 31047

WHEREAS, the Bicycle Path Task Force has been appointed to develop a comprehensive bicycle path plan for the City of Portland; and

WHEREAS, the Bicycle Path Task Force has been directed to make short-term recommendations for bicycle paths by February 1, 1972; and

WHEREAS, the City of Portland, the County of Multnomah and the State of Oregon are required by HB1700 to spend at least one percent of all gasoline tax revenue for the creation of bicycle and pedestrian paths; and

WHEREAS, the recommendations of the Bicycle Path Task Force have been reviewed by members of various City staffs; and

WHEREAS, the construction of bicycle and pedestrian paths is desirable for the health, welfare and safety of the citizens of Portland; now, therefore, be it

RESOLVED that it is the desire and intent of the Council to adopt the following recommendations for bicycle paths within the City of Portland and to direct that all necessary actions be taken for the implementation of these recommendations within funds available for this purpose:

1. Request Multnomah County to develop marked bicycle paths on both sidewalks of the Hawthorne and Burnside Bridges and the south sidewalk of the Broadway Bridge for joint use with pedestrians and with appropriate signing.

   (a) Direct the City Engineer to construct a bicycle crossing between the sidewalk south of the Broadway Bridge and
   48 the Memorial Coliseum.

   (b) Direct the City Engineer to prepare plans and specifications for a bicycle route from the east end of the Broadway Bridge to Holladay Park using the sidewalk south-west of the Memorial Coliseum, NE Hassalo St. and NE Multnomah St.

2. Request the Oregon State Highway Department to construct a new separate bicycle path or portions thereof along S. W.
   36 Terwilliger Boulevard or a suitable alternative from Duniway Park to the City limits near Lewis and Clark College and connecting with the proposed bicycle path for Tryon Creek Park.

3. Direct the City Engineer to prepare plans and specifications for a bicycle path from Duniway Park to the Park Blocks at Portland State University.

4. (a) Direct the Traffic Engineer to install signing designating
   48 S. W. Park Ave. and S. W. 9th Ave. between S. W. Market St. and S. W. Salmon St. as a bicycle route.

   (b) Direct the Traffic Engineer to install signing designating N. W. Park Ave., N. W. 8th Ave. and N. W. Hoyt St. as a bicycle route connecting W. Burnside and the Broadway Bridge.

   (c) Direct the City Engineer to construct a median island at the intersection of S. W. Park Ave. and W. Burnside St.

   (d) Direct the City Engineer to prepare technical plans and phasing programs to be implemented later for bicycle routes through the Park Blocks from S. W. Salmon St. to W. Burnside St.

5. Request the Oregon State Highway Department to construct a bicycle
   37 path along an existing path between S. W. 17th St. and S. W. Montgomery St. known as the Goose Hollow Trail in freeway right of way and direct the City Engineer to construct a bicycle path connecting this path to the Portland Student Services Building and the Portland State University Park Blocks. Request that all portions of this trail be constructed, if possible, at a grade acceptable for the use of wheel chairs.

Adopted by the Council MAR 30 1972

George Yerkovich
Auditor of the City of Portland

Lloyd Anderson, Commissioner

RBW/bg/lfh
3/23/72

SECOND PHASE RECOMMENDATIONS 5 6 8

BICYCLE PATHS TASK FORCE

COMMUNITY FACILITIES: BROADWAY BRIDGE - PIER PARK ROUTE

Parks: The Broadway Bridge - Pier Park Route would serve a total of eight major parks eventually. Six of these are existing parks:

- Lillis-Albina Park
- Dawson Park
- Unthank Park
- Peninsula Park
- Columbia Park
- Pier Park

Two proposed -

- St. Johns Cathedral Park
- Kelley Point Park

Schools and Colleges: A total of eleven schools and colleges are either directly on the route or within a few blocks. They include:

Elementary Schools -

- Eliot
- Boise (1 block)
- Humboldt (1½ blocks)
- Ockley Green
- John Jacob Astor (2 blocks)
- King (Western half of enrollment area)

High Schools -

- Jefferson
- Roosevelt (7 blocks)

MENDATIONS 5 6 8

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Y BRIDGE - PIER PARK ROUTE

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COMPREHENSIVE BICYCLE PATH PLAN

CITY OF PORTLAND, OREGON 1973

NORTHWEST — NORTH MAP A

RECOMMENDED PRIORITIES:

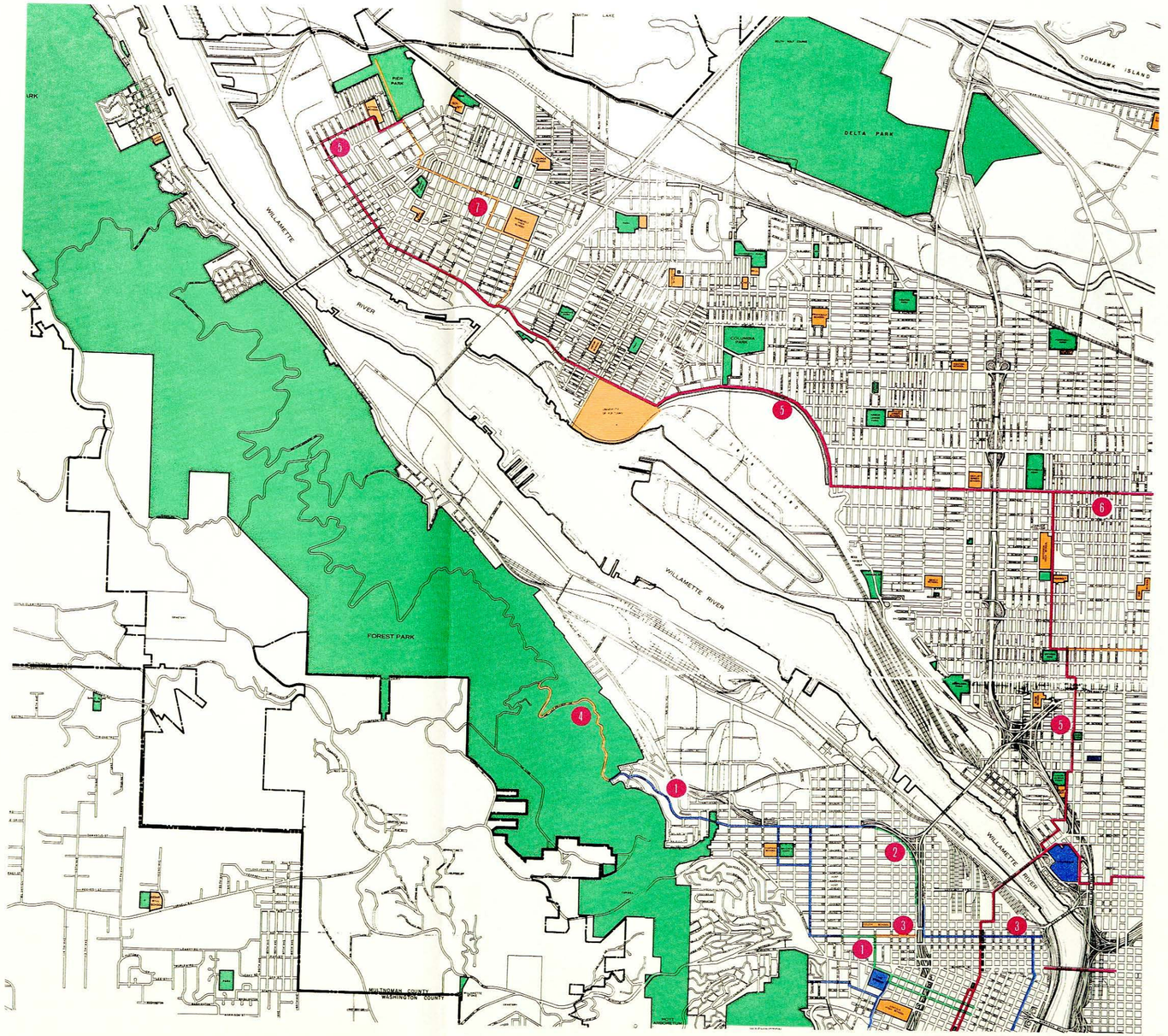
PHASE 1
PHASE 2
PHASE 3
PHASE 4

PROPOSED NORTHWEST AREA ROUTES

Route No.	Description
1	Willamette Heights — Downtown Route: Thurman from Leif Erickson Drive to 24th; 26th from Thurman to Overton; Overton from 26th to 24th; 24th from Thurman to Flanders; Flanders from 24th to 20th; 20th from Flanders to Morrison.
2	Thurman from 24th to 20th; connect with OSHD bikeway under I-405 Freeway, curving from 20th and Thurman to 16th and Johnson; 15th from Johnson to Flanders.
3	Flanders from 20th to Steel Bridge and Harbor Drive.
4	Proposed recreational route along Leif Erickson Drive in Forest Park.
*	Other routes should follow the recommendations of the Northwest Comprehensive Policies Plan prepared by the Northwest District Association & Portland City Planning Commission Staff.

PROPOSED NORTH AREA ROUTES

Route No.	Description
5	Flint — Vancouver — Kerby/Commercial — Ainsworth — Willamette from Broadway Bridge to Pier Park. *Already approved* by City Council.
6	Ainsworth from Willamette Blvd. to Williams. Continues in Northeast on Ainsworth to Fernhill Park. *Already approved* by City Council.
7	St. John's Neighborhood Route: Seneca — Smith — Buchanan — Central — Ida from Pier Park to Willamette Blvd.



North Catholic (3 blocks)

Colleges - Portland Community College (Cascade Campus)

University of Portland

Libraries: Four branch or area libraries are served by this route:

Albina Branch	3630 N. Vancouver
North Portland Branch	512 N. Killingsworth
St. Johns Branch	7510 N. Charleston
Service for Blind	205 N.E. Russell (3 blocks)

In addition to serving these community facilities, this trail would help to meet a critical need by residents for safe and inexpensive transportation. An indication of this need is that four of the elementary schools in the area served had in excess of 50% enrollment of children from welfare families last year. (Eliot, Boise, Humboldt, and King) Student bodies of the two colleges and North Catholic High School are drawn from an extensive area. Implementation of this proposal would improve the possibility of the students of these schools using bicycles also.

SECOND PHASE RECOMMENDATIONS
BICYCLE PATHS TASK FORCE

Introduction:

These recommendations constitute the second phase program of the Bicycle Paths Task Force as charged by Commissioner Anderson when establishing the Task Force. They provide an additional link to our first term recommendations by connecting to the Broadway Bridge. In total, our recommendations have provided a total North-South route extending from Pier Park to Lewis and Clark College. They constitute an important section of our comprehensive plan to be finished January, 1973.

The Task Force recognizes the complexity of these recommendations. However, this will serve several purposes: (1) provide a variety of construction types for test purposes; (2) serve commuter and recreation bicyclists; (3) connect to Port of Portland planned bicycle paths in the Columbia Slough and Kelly Point regions; (4) provide parking removal test areas; (5) provide a facility answering regional and local needs.

It should be noted that Ainsworth has been included in the Model Cities transportation plan as a bicycle route. Also recommended is N. Commercial. However, Task Force evaluation has recommended N. Commercial in lieu of N. Kerby

in accordance with Model Cities planning. However, N. Kerby does provide an excellent alternate route.

The route from the Broadway Bridge to Pier Park will be an outstanding recreational bike trail, offering excellent views of the City and the Willamette River, providing access to several of Portland's most beautiful parks and to the Columbia Slough, and leading the cyclist through many attractive, interesting neighborhoods. More important, it will serve as a vital part of Portland's bicycle network, permitting people in North and Northeast Portland to cycle safely to work, to school, and to stores.

Planning the route has been a formidable challenge. Freeways and freeway approaches for the Fremont Bridge had to be avoided. Expansion plans for Emanuel Hospital had to be determined and taken into account. Heavy commuter and industrial traffic combined with the natural terrain, sloping down to the river to further limit the options. The route was originally proposed by Dave Blaska, Todd Sloan and Karen Gustafson of the Portland State University Bicycle Planning Class after many conferences with neighborhood residents and Model Cities planners. It was reviewed by City personnel, and modified by Task Force members after several bicycle field trips.

SECTION 1: BROADWAY DETOUR

After leaving the south sidewalk of the Broadway Bridge, bicyclists would use existing pedestrian signals to cross traffic on Broadway to the north side of the street. They would then proceed north on the sidewalk of Larrabee one block to the intersection with Dixon, where a curb cut would be installed to provide transition to the street. The route would then follow Dixon northeast to Wheeler, go south on Wheeler to the three-way intersection of Flint, Wheeler and Broadway. Although complicated and circuitous, this routing seems essential to avoid the heavy traffic and logistical problems of Broadway and Weidler. It is now used by commuting cyclists.

SECTION 2: FLINT

The route would then go on the roadway of Flint, with a concrete barrier to provide an exclusive lane for bicycles on either side of the street, except directly in front of Eliot School, where bicyclists and school busses must share space. Signs should warn bicyclists of the bus parking area as they approach. Where Flint intersects with Russell, a stop sign should be installed for traffic going east on Russell, or a traffic signal installed to enable the cyclist to proceed safely to the sidewalk on the west side of Vancouver.

SECTION 3: VANCOUVER

The sidewalk on the west side of Vancouver Avenue should be "semi-exclusive bicycle right of way," shared with pedestrians, from Russell to Beech. The sidewalk should be wide enough to provide a two-way bicycle path (6.5 feet) and a pedestrian path (3 feet), with a barrier of some kind between them, depending upon the level of pedestrian traffic. Curb cuts should be constructed at each corner where traffic intersects. Cars should not be allowed to turn right into the streets crossed by the bicycle path without first stopping to look for approaching cyclists and pedestrians. Cyclists and pedestrians must, of course, obey pedestrian signals. The sidewalk from Russell to Cook is in the Emanuel Hospital complex and is to be rebuilt under the direction of the Portland Development Commission. The portion from Cook to Beech will have heavy cross traffic to and from the Fremont Bridge, which should be signalized.

SECTION 4: COMMERCIAL - KERBY

At Beech, the route would again be transferred to each side of the street. It would go one block west to Gantenbein, north on Gantenbein to Shaver, west on Shaver to Commercial or Kerby, and north on Commercial or Kerby to Ainsworth. The route should be striped. Near Portland Community College and Jefferson High School the route is

extremely rough, and a strip on each side of the street should be paved to encourage bicycle traffic. Removal of parking from 7 A.M. to 7 P.M. should be considered where off-street parking exists. Although both Commercial and Kerby are acceptable to the Task Force, Commercial is preferred because parking has been removed already on the section adjacent to Jefferson High School and because it has been proposed as a pedestrian-bikeway by the Model Cities Transportation plan.

SECTION 5: AINSWORTH

At the southeast corner of Peninsula Park, at Kerby and Ainsworth, a pedestrian-bicycle crosswalk or signal should be provided for safe access to Peninsula Park.

All of Ainsworth Avenue is being recommended for a bicycle path. We deal here only with that portion west of Peninsula Park. Again, striping is recommended to provide a bicycle lane on each side of the street, with parking removal during daylight hours. Potholes would have to be filled or rough sections repaved. The route should end at Willamette Boulevard, but a very narrow portion of Willamette from Ainsworth to Holman could be avoided by slight detour from Ainsworth at Villard or Curtis.

SECTION 6: WILLAMETTE BOULEVARD

Willamette Boulevard is already heavily used by

bicyclists. It is scenic, smooth, level; and while automobiles go rather fast, there is little cross traffic, and little parking. We recommend striping for an exclusive bicycle lane on each shoulder of the road. As bicycle traffic increases, or if funds permit now, a barrier could be installed to prevent incursion by cars. Parking, while light now, must be prohibited entirely as far as Portsmouth. The route would continue on Willamette under the St. Johns Bridge (providing access to the proposed Cathedral Park) as far as Reno.

SECTION 7: RENO-PIER PARK

Reno was chosen to provide a fairly safe crossing of Lombard. At Central the route would jog one block southeast to St. Johns, then go northeast on St. Johns into Pier Park. A route through Pier Park to the Columbia Slough area would provide access to future bikeways and natural preserves in the Slough, and to the proposed Kelley Point Park.

We recommend that the City apply for federal aid to finance all or portions of this route. The Bureau of Outdoor Recreation has a program to fund bicycle paths that connect and provide access to parks. This route does so, connecting Lillis-Albina, Dawson, Unthank, Peninsula, Columbia, and Pier Parks, and the proposed St. Johns Cathedral Park and Kelley Point Park.

AINSWORTH BIKEWAY

Routing on Ainsworth from Peninsula Park west is covered in the recommendation for a bicycle route from the Broadway Bridge to Pier Park. The route recommended here would extend from Peninsula Park east to 37th Avenue, and then enter Fernhill Park, following the southern boundary line of the Park to provide access to John Adams High School and 42nd Avenue. The Task Force is presently evaluating 42nd Avenue as a possible bicycle route which could provide another access to the Columbia Slough.

We recommend that parking be removed from 7 A.M. to 7 P.M. on both side of Ainsworth to provide an exlcusive right of way for bicycles. A survey of the area showed that only two houses did not have off-street parking. Striping should be a sufficient barrier initially, until bicycle use builds up. The center island of grass and large trees and the well-kept houses make this route an extremely pleasant one, but on-street parking leaves no room for a car to pass a cyclist, and conflicts do arise. The alternative, paving a bicycle path on the grass islands and constructing curb cuts, would be expensive and ecologically unsound, as well as unsafe.

The route connects Peninsula Park, Alberta Park, and Fernhill Park; provides transportation to Vernon School, Kennedy School, John Adams High School, and Concordia College.

The Multnomah County Bicycle Task Force has been advised of the route and requested to extend it beyond 42nd Avenue for the use of students and others.

PLAN FOR IMPLEMENTATION OF SECOND PHASE RECOMMENDATIONS

The Bicycle Paths Task Force is a citizen's organization composed of persons having only a basic knowledge of traffic engineering, and construction engineering. As a citizen's organization given a planning task to perform there are many essential aspects to the implementation of bicycle path recommendations which are not within the scope of Task Force capabilities.

The Second Phase Recommendations represent an ideal that appears technically and financially feasible. Although solid engineering principles and fiscal realities have been used to formulate these recommendations; it is recognized certain modifications may be necessary.

The Task Force recommends the following plan for action be followed in the implementation of the Second Phase Recommendations:

1. The City should coordinate with the Portland Development Commission to design and construct the bicycle path adjacent to N. Vancouver Avenue and Emanuel Hospital.

2. Suggested changes of traffic signs and traffic signals should be approved by the Traffic Engineer to determine their need and technical feasibility.

3. The City should develop the requisite design for

implementation of these recommendations in preparation for actual construction and striping by the spring of 1973. These designs should be presented to members of the Bicycle Paths Task Force for comments and suggestions prior to construction.

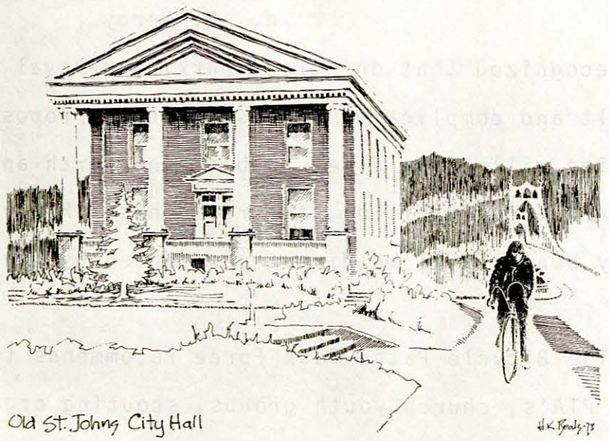
4. The City should remove parking as recommended with priorities as follows:
   a. N.E. Ainsworth
   b. N. Willamette Boulevard
   c. N. Flint
   d. N. Kerby

It is recognized that on-street parking removal is often a difficult and complicated process. These proposed bicycle facilities will be an asset to both the North and the Northeast Portland communities, and residents. However, certain property owners will be directly affected by any parking bans.

The Bicycle Paths Task Force recommends the involvement of PTA's, church youth groups, scouting organizations, Model Cities or neighborhood organizations in seeking the cooperation of affected property owners, and neighborhoods. All affected property owners should be notified by the City. It may be desirable to hold public hearings.

The Bureau of Traffic Engineering should be in charge, however, if needed, members of the Bicycle Paths Task Force will assist any way needed.

5. The Bureau of Parks should immediately make application for Bureau of Outdoor Recreation matching funds to assist in meeting the costs of this project.



BEAVERTON-ZOO OMSI BIKEWAY 43

The bikeway originates in Beaverton at the intersection of S.W. Allen Avenue and S.W. Murray Boulevard. It proceeds east through Beaverton to the intersection with S.W. Scholls Ferry Road. There it turns east on Scholls Ferry to Laurelwood, and north on Laurelwood, crossing the Beaverton Hillsdale Highway to Brentwood, and north on 78 to Canyon Drive. Here it follows Canyon Drive to the intersection with Canyon Road and the Sunset Freeway. At that point the route goes east 50 feet to Raab Road to the State Highway Commission Sylvan Maintenance Station. The bikeway then goes south on a service road on the south side of the maintenance station to the intersection with Scholls Ferry Road. Crossing Scholls to a sidewalk and following the sidewalk around the corner and crossing Hewit Boulevard, and then crossing Scholls Ferry again and the Sunset Highway to Canyon Court. The route follows Canyon Court to the Zoo-OMSI complex.

Northwest Area ❶ ❷ ❸ ❹

Schools - Couch School
Lincoln High School Access and Downtown

Parks - John Brown House (Historical)
Couch Park
Forest Park
Wallace Park

The Northwest Comprehensive Policies Plan includes a network of bicycle routes. The routes selected are generally streets that do not carry heavy automobile traffic. They provide access to schools, parks and the downtown business district.

The Task Force has adopted the Northwest Comprehensive Plan bicycle routes. First priority should be given to "collector routes" from Willamette Heights to the downtown area:

Thurman Street from Leif Erickson Drive to 24th
26th from Thurman to Overton
24th from Thurman to Flanders. Parking should be removed on the short street from Glisan to Flanders, so that 24th may be two-way all the way to Flanders, at least for bicycles.
Overton from 26th to 22nd
Flanders from 24th to 20th
20th from Flanders to Burnside. Provide a traffic light at Burnside

It will not be possible to remove parking on these streets, because of the high density of apartment buildings, businesses, and hospitals. However, the Northwest

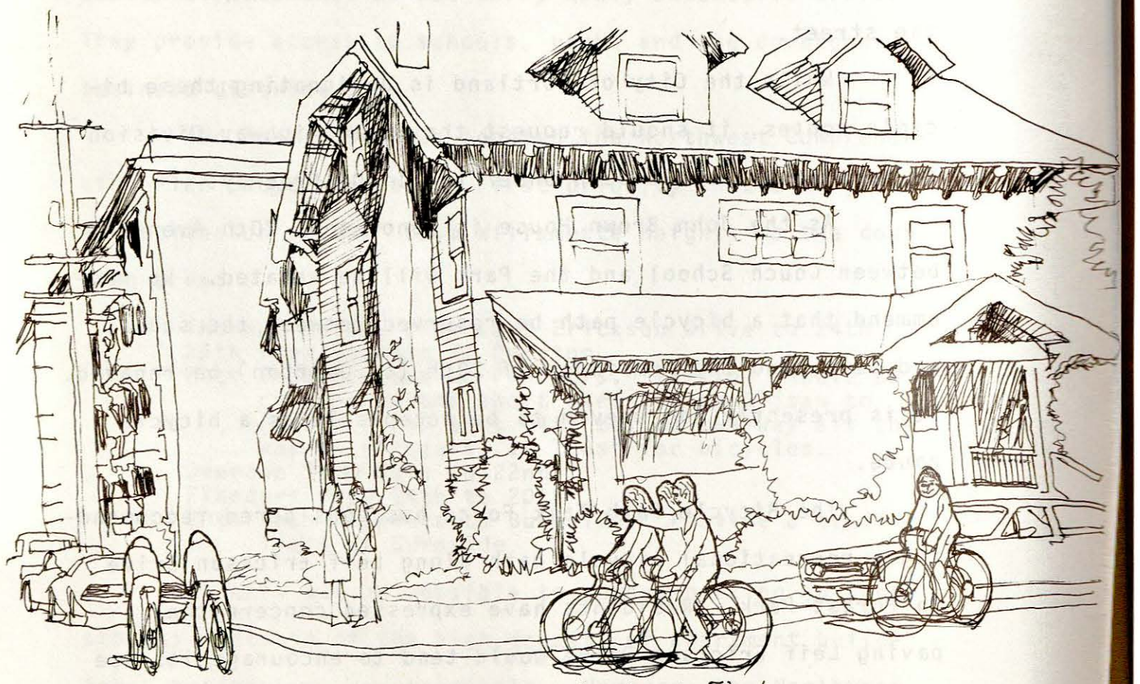
area seems to be the ideal neighborhood in which to experiment with the concept of the "bicycle street." Because legal speed limits are low and vehicles turning right or left present great hazards to cyclists, the bicyclist travelling at speeds equal to automobiles should be encouraged to use a full traffic lane. If the street itself is marked in such a way that automobile drivers are aware of potential cyclists, they may tend to avoid these streets. The words "Bike Street" could be stencilled on the street, or outlines of bicycles (several on each block) painted on the street.

While the City of Portland is designating these bicycle routes, it should request the State Highway Division to provide a bicycle path under the I 405 Freeway.

As the John Brown House is renovated, 20th Avenue between Couch School and the Park will be vacated. We recommend that a bicycle path be reserved between the school and park, and the remainder of 20th (to Overton) be repaved. It is presently too uneven to be acceptable as a bicycle route.

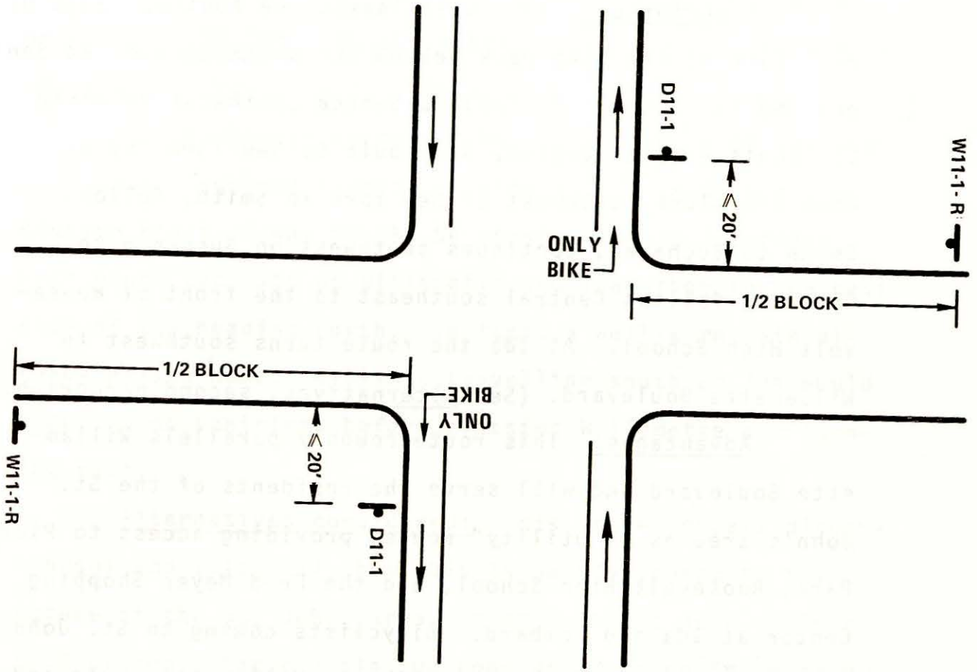
The Bicycle Path Task Force has considered recommending a recreational bicycle path along Leif Erickson Drive in Forest Park. Residents have expressed concern that paving Leif Erickson Drive would tend to encourage its use by motocyclists and sports car buffs, thus destroying the

peaceful pleasures of the area. Paving of the Drive should be considered only if supported by the Northwest District Association and other citizen groups in the northwest area.



Northwest 22nd & Northwest Flanders

Intersection Signing Plan: Class II Bikeway Crossing a Non-Bikeway Street



St. Johns Neighborhood Route 7

Schools - Roosevelt High School
Sitton Elementary (1 block)
James John (4 blocks)

Parks - Pier Park
Johns Park
St. Johns Community Center

Library

Description: The route leaves the southern edge of Pier Park at the bike rack behind the swimming pool at Seneca and St. Johns. It follows Seneca southeast to North St. Louis Avenue, crosses St. Louis to New York Avenue, goes one block southwest on New York to Smith, follows Smith to Buchanan, continues southwest on Buchanan to Central, follows Central southeast to the front of Roosevelt High School. At Ida the route turns southwest to Willamette Boulevard. (See Alternatives, second paragraph.)

Advantages: This route roughly parallels Willamette Boulevard and will serve the residents of the St. John's area as a "utility" route, providing access to Pier Park, Roosevelt High School, and the Fred Meyer Shopping Center at Ida and Lombard. Bicyclists coming to St. John's from other parts of the city via the Willamette Boulevard route may vary their return trip by using this route to explore the St. John's neighborhood. The route uses residential streets, avoiding streets with automobile traffic of high volume and speed as well as the trucks that make heavy use of this area.

Problem areas and solutions: Several portions of the route need special treatment. A light at North St. Louis and New York would provide safe crossing. Smith

Avenue between Oswego and New York has no paved shoulder. The cost of paving a 6' shoulder on each side would be approximately $4,000. North Central between Burr and Buchanan is very narrow (24'), although the right-of-way is 80'.

The northeast corner of the intersection of Ida and Willamette requires special consideration. A path on exclusive right-of-way should be constructed to intercept west bound cyclists on Willamette and lead them to the east side of Ida heading north. In fact, a well-worn path already exists here. Cyclists travelling south on Ida would stop, as do vehicles, before crossing Willamette and turning east.

Alternatives considered: This route appears discontinuous and illogical, but this is partly caused by the nature of the St. Johns area, which does not have a clear grid system. For example, we considered using Smith from St. Johns all the way to Ida. However, the cyclists would be travelling two blocks further (assuming they used the bike rack at Seneca). Also, the juncture of Columbia and Smith seemed hazardous, and the paving on Ida to the east of Roosevelt is extraordinarily bumpy. Parking is already prohibited in front of Roosevelt, on Central, providing space for a bike lane. Fessenden and Oswego were considered but rejected because of fast automobile traffic.

Consideration should be given to changing the New

York Avenue - Smith Street - Buchanan Avenue segment of the Pier Park - Roosevelt High School route to the following: use Smith (one block) to Chicago Avenue, proceed south on Chicago to St. Johns Park and the St. Johns Community Center at 8427 N. Central (approximately 100 feet distance). Then proceed east along Central, past Buchanan Avenue where both routes intersect.

This route change would tie the bike route to the St. Johns Community Center, a community attraction which presently draws young cyclists. Also it would run through a park and a playground. Central Street has less traffic than Smith.

The drawbacks are (1) Central is narrower than Smith (though more than 24' in the proposed route change), and (2) Central has no sidewalks on the south side from Chicago to John Avenue and no paved shoulder from Chicago to Buchanan Avenue. Lighting is also poor.

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COMPREHENSIVE BICYCLE PATH PLAN

CITY OF PORTLAND, OREGON 1973

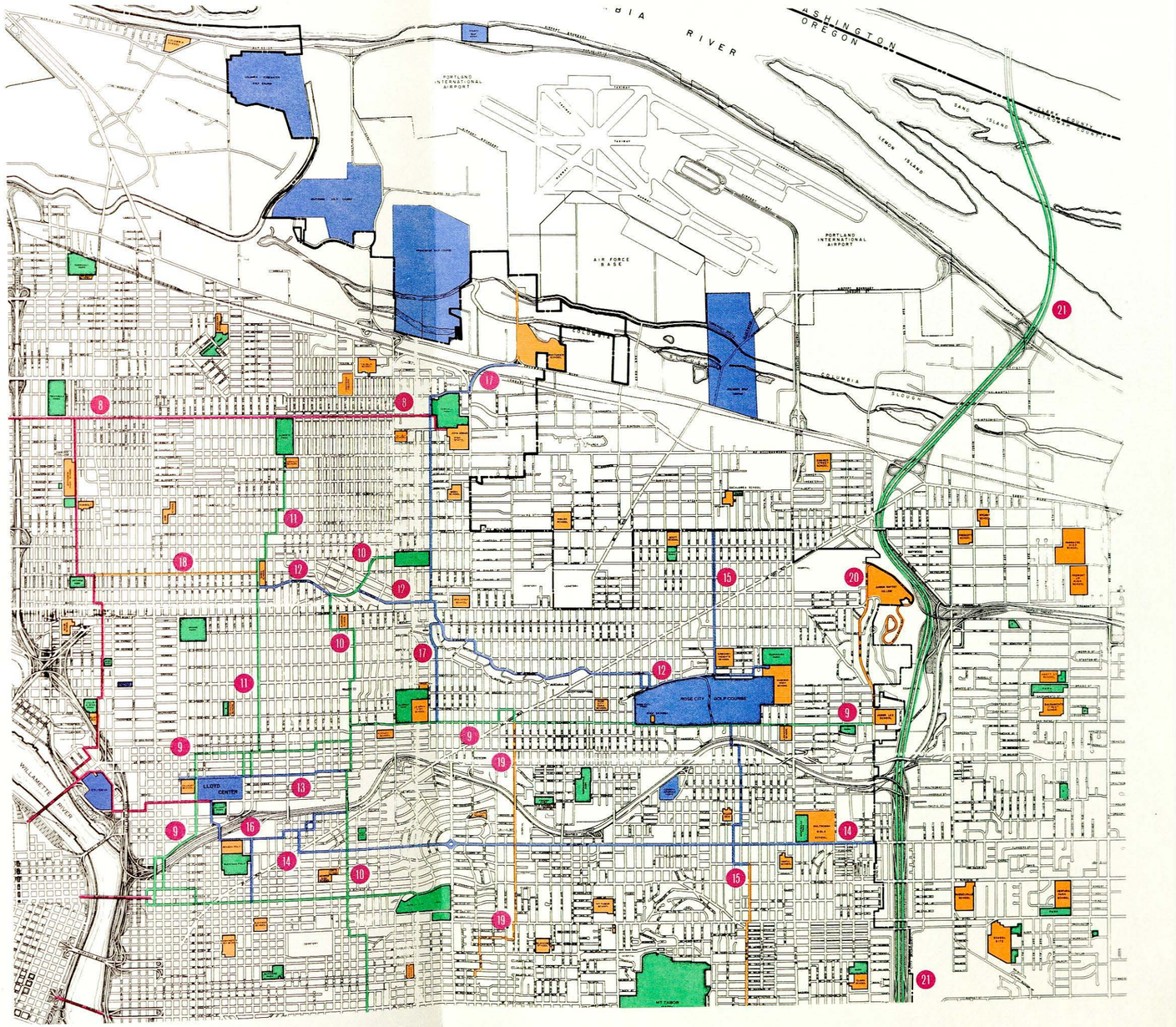
NORTHEAST MAP B

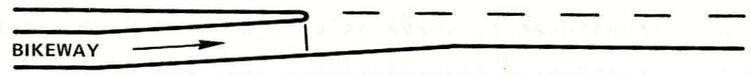
RECOMMENDED PRIORITIES:

PHASE 1
PHASE 2
PHASE 3
PHASE 4

PROPOSED NORTHEAST AREA ROUTES

Route No.	Description
8	Ainsworth from Fernhill Park to Williams. Continues in North Area on Ainsworth from Williams to Willamette Blvd. ***Already approved*** by City Council.
9	Tillamook – Schuyler from 92nd to 9th. 9th – Lloyd – Grand/Union to Burnside Bridge. 15th – 16th from Halsey to Schuyler.
10	28th from Burnside to Knott (continuation of Southeast route), 29th – 26th to Fremont, Regents – Mason to Wilshire Park.
11	17th – 18th – 19th – 20th from Schuyler to Killingsworth. (From Sabin School to Alberta Park this will be an experimental greenway funded through the Portland Development Commission).
12	Ridgewood – Alameda – Sacramento from 17th to 78th.
13	Halsey from 7th to 28th.
14	Glisan from 22nd to 92nd.
15	72nd from North City limits to Rose City Golf Course, 75th – 74th to Everett (continues through Southeast area).
16	Benson Complex: 12th from Lloyd Center to Irving, Irving – Oregon – Holladay from 12th to 28th, 16th from Irving to Burnside.
17	37th from Tillamook to Holman, Holman to 42nd, 42nd – 47th – Cornfoot to Columbia Slough.
18	Shaver from 17th to Unthank Park. (Portland Development Commission).
19	47th from Thompson to Burnside, connection to 41st at Taylor in Southeast area.
20	Rocky Butte Road from 92nd to Tillamook.
21	Separate bikeways parallel to new I-205 Freeway, to be constructed by Oregon State Highway Division.





Northeast Schuyler - U.S. Grant - Tillamook 9 20

Schools - Irvington (3 blocks)
Fernwood Elementary
Rose City Park Elementary
Charles Rice Elementary
Glenhaven Elementary
Jason Lee Elementary
U.S. Grant High School
James Madison High School

Parks - U.S. Grant Park - Rocky Butte
Rose City Park
Rose City Golf Course
Jason Lee Playground and Park

Library - Hollywood Branch

Community Facilities - Holladay Park Post Office
Irvington Tennis Club
Charles Rice Dance Center
Y.M.C.A. (Hollywood)

Lloyd Center

Hollywood Shopping Center

General Description: This route is about 4.15 miles long and is designed to serve as a major east-west arterial and as a neighborhood transportation and recreation route. The streets utilized are all two-way residential except for the short segment from 37th to 45th that crosses the Hollywood shopping area. There are few parking restrictions now and heavy parking occurs adjacent to Grant High School (33rd - 37th) and through the Hollywood area. Multi-family housing units on Schuyler/Hancock are new and provide off-street tenant parking. The large apartment complexes on Tillamook that face Rose City Park are older but exceptionally well-kept and also provide off-street parking. Single-family homes have garages and there is very little need for parking in the street, particularly in the daytime.

Starting at the 9th Avenue access to Lloyd Center and the Broadway Bridge, the route uses Schuyler from 9th to 24th, turns north on 24th one block to Hancock, east on Hancock to 28th (Bicycle north-south route), north on 28th to U.S. Grant, U.S. Grant from 28th to 37th where it becomes Tillamook. Access to the north is provided by 37th Bike route. Continue east on Tillamook from 37th to 92nd Avenue, with a diversion one block north to Thompson at 45th and back to Tillamook at 47th to take advantage of the 47th Avenue traffic signal to cross Sandy Boulevard.

Access to the south is provided at 47th Avenue and the route crosses a major north-south bike route at 72nd Avenue.

Streets are wider than average for this area of the City and for most of the route range from 36' to 43' (Hollywood). However, four narrow segments are: Schuyler (15th-24th) - 24'; U.S. Grant (28th-32nd) - 24'; Tillamook (48th-62nd) - 24'; Tillamook (80th-82nd) - 28'.

Intersections are controlled at 37th - 39th - 42nd with four-way flashing red signals. Standard traffic signals are at 47th and Sandy Boulevard, and at 82nd and Tillamook. An existing pedestrian-actuated signal now located ½ block south of U.S. Grant on 33rd should be moved to the corner of 33rd and U.S. Grant. This would permit its use by high school as well as grade school students and would facilitate crossing 33rd for other pedestrians and bicyclists as well.

Advantages: Bicycle use is high in this family-oriented section of the city but streets are becoming more congested with autos every year. Implementation of this route would enhance the safety of bicyclists of all ages. It has high recreational value as well as a school-shopping-work transportation function. Mature trees and well-kept homes line the route which connects several major

parks (Grant, Rose City, Jason Lee), and serves a total of seven elementary schools (Irvington, Fernwood, Rose City Park, Charles Rice, Glenhaven, Jason Lee) and two high schools (Grant, Madison); and the two major shopping centers (Lloyd Center and Hollywood). Other community facilities that attract people from a wide area are: Holladay Post Office, Irvington Tennis and Swim Club, Grant Pool and tennis courts, Charles Rice Dance Center, Hollywood Branch Library, Hollywood Y.M.C.A. The route is extremely pretty from 62nd Avenue east and would connect into the proposed bike route along I-205 by using Hancock Drive. The route provides excellent access to the Judson Bible College - Rocky Butte areas. (This is a favorite spot for recreational cycling with many people in the city and consideration should be given to its development as an Oregon Recreational Trail.)

Recommended improvements: Sign and stripe the entire route. Striping only may be sufficient where the route is adjacent to parks. Place appropriate warning signs at all intersections.

Paving improvements are needed on two segments at least: (a) 45th and Thompson through the 47th/Sandy intersection and east on Tillamook to 62nd; (b) Tillamook Street between 82nd and 92nd. (New curbs are being installed between 86th and 92nd. Check for paving possibly scheduled

for area.)

Intersections: Use bold striping to designate route change from Schuyler to Hancock via 24th Avenue and Hancock to U.S. Grant via 28th Avenue.

Move existing pedestrian-activated signal on 33rd Avenue north ½ block to the corner of 33rd and U.S. Grant. Place post for signal so it is accessible to bicyclists as well as pedestrians.

Special attention in the design process is vital to ensure a safe crossing of Sandy Boulevard on 47th Avenue and in making the transition from Thompson to 47th to Tillamook. The collision potential from cars turning right onto Sandy is high and the problem will require special engineering if it is to be solved satisfactorily.

Use bold striping where Tillamook crosses 82nd Avenue and post warning signs for right-turning motorists.

Parking: Remove parking adjacent to Grant Park/ High School (33rd to 37th) to permit a "bike only" lane on both sides of the street.

Set in parking lanes through the Hollywood shopping area to permit "bike only" lanes between the parked cars and the curb. (37th to 45th)

Remove parking on 47th Avenue on both sides of the street between Thompson and Tillamook and on Thompson within 20 feet of the intersection. Businesses involved have

adequate offstreet parking without exception.

Remove parking on the north side of Tillamook between 48th and 81st. (No parking permitted now between 81st and 82nd). Removal parking on the south side of Tillamook from 48th and 62nd. (Only one house was noted between 48th and 62nd that fronts on Tillamook - 5325 N.E. Tillamook - and it has a garage and driveway.)

In general, everything possible should be done to enhance the <u>through</u> capability of this route in order to reduce bike use of Broadway and Sandy.

<u>Alternatives Considered:</u> <u>Broadway - Weidler - Sandy</u>: Traffic loads vary between 15,000 and 17,000 per day on Broadway and exceed 20,000 per day on Sandy Boulevard. Much of the commercial development along these streets depends on the availability of street parking for survival.

<u>Knott Street</u>: Knott is an attractive alternative to Tillamook/Schuyler between 9th and 33rd and many bicyclists use it. East of 33rd, however, the street narrows and parking is already restricted from 33rd to 42nd on the north side of the street. Knott carries 6,500 cars per day and peak hour traffic is particularly heavy. If all parking was removed, Knott would be a fast, attractive bike route and could connect to the east via Wisteria and Alameda Drive.

None of the alternatives considered offer the

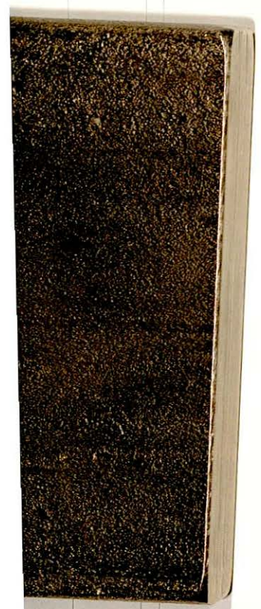
potential for connection with future recreation routes or serve residential areas and community facilities as well as the recommended route.

Burnside Bridge to Lloyd Center 9

<u>Description</u>: The route connects downtown Portland, via the Burnside Bridge, with northeast Portland. Eastbound bicyclists would proceed as follows: leaving the Burnside Bridge sidwalk, make a circle to avoid crossing heavy traffic on Burnside. Turn right (south) on Union, right to Ankeny, right to 3rd, right once more to Couch. At Couch and Grand, turn left (north) on Grand. Use the east sidewalk, via curb cuts, on the bridge over the 80N Freeway. Continue on the sidewalk to the end of the parking lot on Lloyd Boulevard (about 20' from the corner of Grand and Lloyd). Merge with automobile traffic on Lloyd

Boulevard. At 9th Avenue, bicycle traffic will go north (left). Cyclists would then have the option of using Halsey and 16th to get to the 17th Avenue bicycle route, or using Halsey to get to the 28th Avenue bicycle route, or continuing on 9th as far as Schuyler to use that route.

West bound traffic would use the same route except in the area from Lloyd boulevard and Grand to the Bridge sidewalk. Bicycle traffic here would go in the same direction as automobile traffic, following Union to the Bridge. Cyclists coming from the 17th Avenue bicycle route would probably use 15th from Broadway to Halsey.



Advantages: The route should provide an efficient, relatively safe commuter-shopper route. Lloyd Boulevard, accoring to the Traffic Engineering office, is still relatively lightly travelled. It provides good access to Lloyd Center and the residential areas of northeast Portland. The route connects with all other proposed routes in the area.

Improvements: Concrete strips on the roadway at 3rd and Couch should be removed to allow cyclists to use the right turn lane. Part of the strips could be left to form a barrier between cars and bicycles.

The roadway over the freeway on Grand and Union is too narrow and automobiles too thick and fast for safe cycling. Cyclists should have access to the sidewalk by

curb cuts. Pedestrian traffic is light, so few conflicts should arise.

The sidewalk must be extended around the corner of Lloyd and Grand on the border of what is now a parking lot. A stop sign for cyclists should be installed at the end of the parking lot so that they will look before merging with traffic on Lloyd. Consideration was given to providing a bicycle path on the green strip beside Lloyd, but it now appears too narrow and slides might result. "Bicycle Route" should be stencilled on the right hand lane to warn automobiles.

The intersection of Lloyd and 9th may require a flashing light or some other safety device to allow cyclists to cross automobile traffic on Lloyd. This is the roughest spot in the route. Parked cars should be prohibited on 9th to allow an exclusive bicycle lane. There is or shold be adequate off-street parking in the Lloyd Center complex so that the street will not be cluttered with cars.

Alternatives: We considered 7th Avenue instead of 9th, but it is too narrow, hazardous, and has too many trucks. There is also too much grade further north.

Northeast 28th Avenue - Wilshire Park Route 10

Schools - Included in body of report

Parks - Included in body of report

General Description: This route is designed to serve both as a neighborhood transportation and recreation route and as part of a major north/south arterial. It is a continuation of the S.E. 28th/Eastmoreland route.

Using 28th Avenue, the route proceeds north from Burnside, crosses the Banfield Freeway, and continues to N.E. Knott Street. At Knott, 28th is offset and 29th is recommended to Klickitat. At Klickitat, the route turns west passes the Alameda School playground and turns north again at 26th, and uses 26th to Regents Drive. It follows Regents Drive and Shaver Street to 33rd Avenue. A new pedestrian/bicycle cross-walk is needed to cross to Wilshire

Park. A cycle path within the park is recommended to Skidmore, then continue on Skidmore to N.E. 37th Avenue.

The 28th Avenue overpass is the least traveled of the Banfield Freeway crossings and is preferred by bicyclists in the northeast area for this reason. Major intersections are signalized at Burnside, Glisan, Sandy, and Broadway. Twenty-eighth is a through street in the light commercial area south of Broadway; the portion of the route north of Broadway uses pleasant residential streets. Regents Drive is a through street but speeds are regulated because of school crossings.

Advantages: The N.E. 28th Avenue route is an integral part of the northeast bike grid system and is part of a major north/south arterial. Together with the 37th Avenue Route, it extends from the Columbia Slough south to Eastmoreland Park and Reed College, and eventually would connect the Oregon City/Milwaukee area to the Columbia River. Many cyclists, both commuter and recreation, presently use this route and improvements for safety are needed.

The route serves an important neighborhood transportation function and offers extremely pretty scenery from Broadway north.

The route ties Wilshire Park, a popular multi-use playground, with much of the area served by the park. The

elementary school areas of Sabin, Fernwood and Alameda are tied to Grant High School, Grant Park, and the Hollywood area via U.S. Grant Place.

Improvements:

Signing and striping: Sign and stripe the entire route between Broadway and the 37th/Skidmore intersection. Little parking occurs in the residential area and residents have adequate garage and driveway space to permit parking restriction without serious dislocation or inconvenience.

Implementation of the route south of Broadway offers some problems and will require special attention in the engineering phase of planning. Use of the sidewalk is recommended from Weidler to Pacific due to a blind curve and lack of shoulder at N.E. Halsey. The extruded curb bumpers on Banfield overpass could be partially removed to permit a separated bike lane on each side of the roadway on the bridge proper.

From Pacific to Burnside, remove parking as necessary to provide a bike lane on each side of the roadway; sign and stripe.

Intersections: Use bold crossing markings and caution signs to motorists at intersections. Post warnings to right-turning motorists well in advance of major arterial crossings at Burnside, Glisan, Sandy, Broadway, Knott and Fremont.

A new crosswalk for pedestrians and one for cyclists should be installed where Shaver intersects 33rd Avenue to provide a safe crossing to Wilshire Park.

A safety waiting area for cyclists should be provided on Knott Street (between 28th and 29th Avenues) both sides of the street, since a left turn maneuver is required. Special caution signs to motorists on Knott Street recommended.

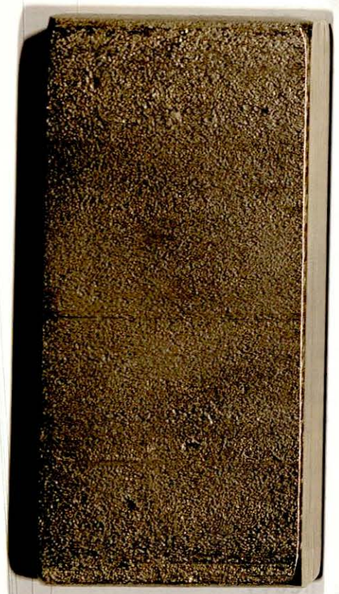
Wilshire Park: A separate bike path within Wilshire Park to connect the 33rd/Shaver intersection to Skidmore Street. The traffic load on 33rd is extremely heavy at peak hours and bicyclists should not be routed on and off 33rd for safety reasons.

Alternatives considered:

33rd Avenue: Heavy traffic and freeway access and egress removed 33rd from consideration. The street is four-lane at intervals and would not permit a separate bike path even if all parking was removed. Heavy sidewalk use precludes its use for bicycles especially near Broadway and the Banfield.

21st Avenue: North of Broadway, 21st is superior in some respects and was considered very seriously for this reason. The problem with bike use of 21st is the heavy commercial traffic that uses the street south of Broadway.

The presence of so many trucks offers serious safety problems; bicycles are invisible to truck drivers when they are alongside the cab.



Northeast 17th - 20th Avenues (11)

Schools - Vernon Elementary
Sabin Elementary
Irvington Elementary (3 blocks)

Parks - Alberta Park
Irvington Park and Playground (3 blocks, under construction)

Community Facilities - Lloyd Center

Description: The King/Vernon/Sabin Neighborhood Associations have submitted a proposal for a bicycle route from Sabin School at N.E. Shaver and 17th to Alberta Park at N.E. Killingsworth and 20th. The route is described in the attached proposal.

The route should be extended southward along 17th Avenue from Sabin School to the Lloyd Center. This section of 17th Avenue is very wide; there is no need to restrict on-street parking (although little is evident). It is a beautiful residential street, with large, well-kept older homes and fine old trees.

Advantages: The K/V/S proposal presents the city with the opportunity of experimenting with a "greenway" for bicycle routes at little or no cost to the city, since

funds are already available through the Portland Development Commission.

Automobile traffic on this street is minimal, since a traffic diverter was installed at Thompson and 17th to prevent cars from using 17th as an alternate to N.E. 15th.

This will be an "all-purpose" route, serving children going to school or to parks, shoppers going to the Lloyd Center, and commuters to downtown Portland.

Problem areas and Solutions: Suggested changes for the northern half of the route are described in the attached proposal. From Sabin School south to the Lloyd Center, stop signs should be installed at intersections to stop traffic crossing 17th. Curb cuts will have to be installed at the traffic diverter at Thompson to allow cyclists easy passage.

Alternatives considered: Northeast 15th was considered as a major north-south route but rejected because in some areas it is only two lanes wide. In these areas rapid automobile and bus traffic would create extreme hazards for the cyclists.

Bike Route Proposal 11

1. Applicant: King/Vernon/Sabin Neighborhood Associations.
2. Area of City: Northeast Portland, within the Model

Cities area.

3. Street Route: Linking Sabin and Vernon Schools. From Sabin School, proceeding north along the east side of 17th to Mason; then, east along the south side of Mason to 18th; then, north along the east side of 18th to Prescott; then, east along the south side of Prescott to 19th; then, north along the east side of 19th to Wygant; then, east along the south side of Wygant to 20th; then, north along the east side of 20th to Killingsworth, at Vernon School.
4. Character of the Route: The proposed route passes along interior neighborhood streets of fairly low traffic volume. The entire route is on two-way, two-lane streets (one lane each way), with curb parking allowed on each side. The route is generally north-south, crossing two east-west collector streets: Prescott and Alberta. Some form of pedestrian/bike traffic control should be considered at those two intersections.

The majority of the route is along paved streets, with sidewalks on each side. The topography is generally flat, with the exception of that portion between Mason to Skidmore on 18th, which consists of 11.6% grade.

The existing land use along the route is single family residential, with the exception of the strip of commercial along Alberta. The route from Sabin School to Alberta is currently zoned R5L; Alberta is zoned C2L; and the

remainder of the route to Killingsworth is zoned A2.5L. The density for the area, as proposed by the neighborhood plan, is 8-9 units per acre, or essentially what exists now. The area is designated for residential rehabilitation, with no clearance, except along the Alberta strip (which is proposed to be down-zoned to residential).

5. Route Selection: Over the past two years, the King/Vernon/Sabin Neighborhood Associations have been developing a "neighborhood plan" which includes housing, transportation, commercial and community facilities elements. A recurring topic of discussion over the last two years has been pedestrian safety. In 1971, a system of "greenways" was proposed, in which the greenways were intended to be interneighborhood links to schools, parks and small convenience stores for residents. From this proposal and proposals from other neighborhoods, the Portland City Planning Commission developed an overall "Proposed Bicycle Facilities for Model Cities" in January, 1972. In the spring and summer of 1972, as planning continued, the "greenway" proposals and bike route proposals were modified and combined into one "greenway/bike route" system. As part of the 1972-73 Action year budget of the Portland Development Commission, a sum of $30,000 was allocated for the initial phase of the route construction. This was a fourth priority item as approved by the KVS Coordinating Committee.

This money can be spent for improvements within the public rights-of-way, and can include paving, sidewalk and curb demolition and reconstruction, plant material, and numerous other items. In addition, funds may be available from the Federal LEAA grant for lighting along the proposed bike route. Other funds may be available from other sources, and investigation is underway at this time.

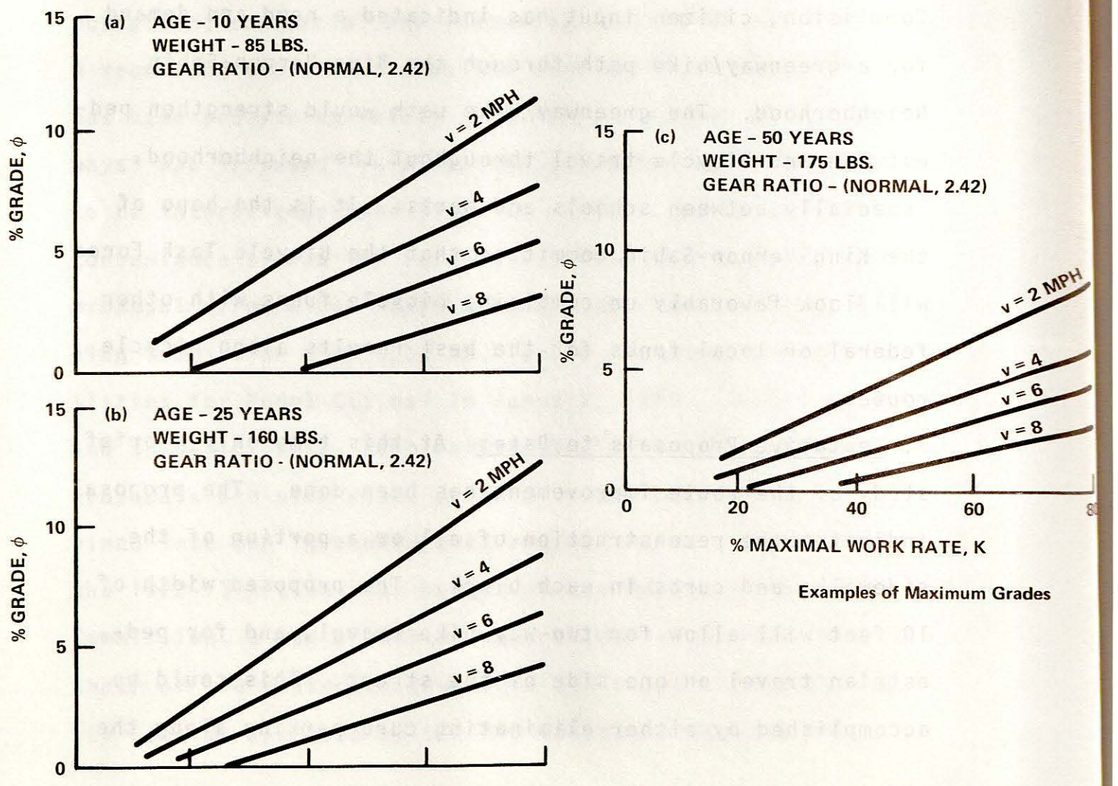
6. Resident Input: As part of the Neighborhood Development Program (NDP) administered through the Portland Development Commission, citizen input has indicated a need and demand for a greenway/bike path through the King-Vernon-Sabin Neighborhood. The greenway/bike path would strengthen pedestrian and bicycle travel throughout the neighborhood, especially between schools and parks. It is the hope of the King-Vernon-Sabin Committee that the Bicycle Task Force will look favorably on combining bicycle funds with other federal or local funds for the best results along bicycle routes.

7. Tentative Proposals to Date: At this time only a brief study of the route improvement has been done. The proposal indicates the reconstruction of all or a portion of the sidewalks and curbs in each block. The proposed width of 10 feet will allow for two-way bike travel, and for pedestrian travel on one side of the street. This could be accomplished by either eliminating curb parking along the

whole block and extending the curb out; or, by eliminating the planting strip and retaining all curb parking; or some combination of the two.

Needless to say, much more investigation has to be done. Discussions with both the residents along the route, and with City agencies will have to be held before a firm route and design details are finished.

9/25/72



Examples of Maximum Grades

Northeast Alameda - Sacramento 12

Schools - Sabin Elementary
Alameda Elementary (2 blocks)
Beaumont Elementary (1 block)
Rose City Park Elementary
Gregory Heights Elementary
James Madison High School

Parks - Rose City Park
Glenhaven Park
(Alameda is designated a scenic drive)

Description: The route begins at N.E. 17th Avenue (a proposed north-south route) and Failing. It follows Failing east to 19th, where Failing becomes Ridgewood, continues on Ridgewood to Regents Drive, transfers to Regents and follows it to the juncture with Alameda Drive. It then proceeds on Alameda across 33rd, where Alameda merges with Milton, to 38th, crosses Fremont, and continues to 63rd. Southbound traffic to Brazee and Sacramento would use 63rd; northbound traffic from Sacramento to Alameda would use 64th. The last lap would be from 63rd-64th to 78th on Sacramento, along the Rose City Golf Course, ending at Madison High School.

Advantages: Many cyclists already use this smooth and scenic city drive. Large homes of varying architectural styles, beautiful landscaping, and the view of the Rose City Golf Course and the city to the south and west make this a very pleasurable drive, and it receives heavy use on weekends and evenings. It is also used by commuters and students. As Shaver is developed for a bicycle-greenway west of Sabin School, this route will provide access to the Kerby-Commercial-Willamette route to both downtown Portland and North Portland. Via 37th Avenue, it will provide access to the Columbia Slough. Connections to routes on 17th, 28th, 47th, and 72nd will give access to the south.

Problem areas and solutions: Failing is too narrow. The removal of parking on one side would provide adequate space. Lighting is needed on Failing and Ridgewood. Warning signs are needed to slow automobile traffic on Ridgewood to a reasonable speed. A flashing orange light could be useful at 33rd and Alameda. The entire route should be striped. Bike route signs, preferably, would be a minimal one per block.

Northeast Halsey

Community Facilities - Lloyd Center 13

Description: This route follows Halsey from N.E. 28th to N.E. 7th. From 28th to 24th the road is quite narrow, lined with homes and apartments. From 24th to 19th it is wide enough to allow parking and an exclusive bicycle lane in addition to two lanes of auto traffic. From 19th to 16th the street narrows again. Northeast 16th marks the beginning of the Lloyd Center complex. There are many more cars, but they move at a reasonable speed. From 16th to 7th there are four lanes of traffic (two each way), with parking on both sides.

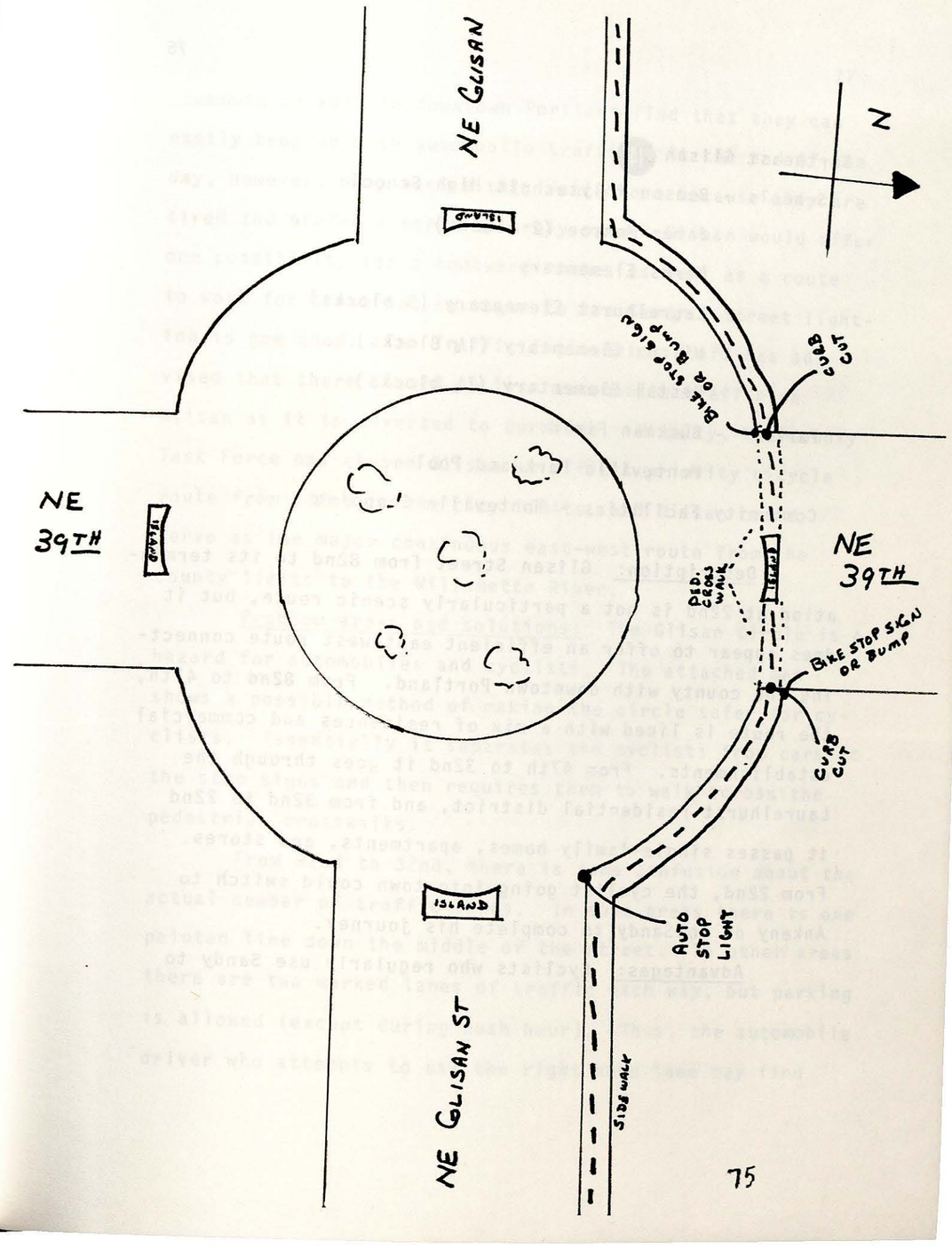
Advantages: The route is a good connector between the proposed 28th Avenue route and the Lloyd Center. It avoids the heavy through traffic on Broadway and Weidler, while leading the shopper directly to the main shopping area and the bicycle racks. It also enables commuters to travel west to 7th and thence to the Burnside Bridge, or to Hassalo and the Broadway Bridge. The view of the West Hills from the Lloyd Center is an added benefit.

Problem areas and solutions: The portions between 28th and 24th, and 19th and 16th, are so narrow that as bicycle traffic builds up, on-street parking should be prohibited to provide an exclusive bicycle lane. Lighting should also be improved in this section. Traffic is

uncontrolled from 28th to 16th, except at 21st. In order to make cycling safer and increase the cyslist's feeling of security, stop signs should be installed at each corner to stop traffic crossing Halsey (except at 21st).

In the Lloyd Center, all intersections are now controlled. It is conceivable that bicycles and cars can coexist peacefully in this section, but Bicycle Route should be painted on the right hand lanes of the street to alert motorists to the possible presence of bicycles, and to inform them that bicyclists have the right to share space on the street.

Alternatives: Broadway and Weidler were rejected because of heavy automobile and bus traffic. Multnomah is also a bus route, and is slightly removed from the major shopping area. Clackamas is too narrow.



Northeast Glisan 14

Schools - Benson Polytechnic High School
James Monroe (2 blocks)
Kerns Elementary
Laurelhurst Elementary (3 blocks)
Wilcox Elementary (1½ Blocks)
Vestal Elementary (1½ blocks)

Parks - Buckman Field
Montevilla Park and Pool

Community Facilities - Montevilla Shopping

Description: Glisan Street from 82nd to its termination at 22nd is not a particularly scenic route, but it does appear to offer an efficient east-west route connecting the county with downtown Portland. From 82nd to 47th, the route is lined with a mix of residences and commercial establishments. From 47th to 32nd it goes through the Laurelhurst residential district, and from 32nd to 22nd it passes single-family homes, apartments, and stores. From 22nd, the cyclist going into town could switch to Ankeny or to Sandy to complete his journey.

Advantages: Cyclists who regularly use Sandy to

commute to work in downtown Portland find that they can easily keep up with automobile traffic. At the end of the day, however, many eschew this route home because they are tired and prefer a more leisurely pace. Glisan would offer one possibility for a homeward route, as well as a route to work for those not so eager to use Sandy. Street lighting is now good. The Traffic Engineering staff has advised that there should be less automobile traffic on Glisan as it is diverted to Burnside. Finally, the County Task Force has chosen Glisan as a first priority bicycle route from 132nd to the city limits, and Glisan could serve as the major continuous east-west route from the county limits to the Willamette River.

Problem areas and solutions: The Glisan Circle is a hazard for automobiles and cyclists. The attached map shows a possible method of making the circle safer for cyclists. Essentially it separates the cyclists from cars at the stop signs and then requires them to walk across the pedestrian crosswalks.

From 82nd to 32nd, there is some confusion about the actual number of traffic lanes. In some areas there is one painted line down the middle of the street. In other areas there are two marked lanes of traffic each way, but parking is allowed (except during rush hour). Thus, the automobile driver who attempts to use the right hand lane may find

himself trapped behind a parked car. The provision of an exclusive bicycle lane would offer safety to the cyclist and to the confused automobile driver.

There are two possibilities for an exclusive bicycle lane. A painted line or an extruded curb could be provided about four feet from and parallel to the curb. Parked cars would then be a buffer between cyclists and traffic (there would be only one lane of traffic each way). This method would cost more, and increases the possibility that cars turning right at intersections will not see the cyclist going straight ahead. The other alternative is to mark a bicycle lane to the left of parked cars, prohibiting auto traffic in the right hand lane. This method may not effectively keep cars out of the bicycle lane, and would submit cyclists to the danger of opening doors from parked cars.

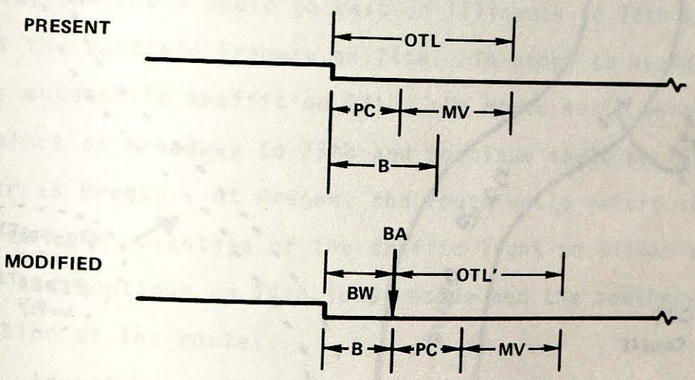
From 32nd to 22nd, there are four lanes of traffic and solid lines of parked cars. If automobile traffic is supposed to be de-emphasized on Glisan, one traffic lane each way should be converted to a bicycle lane.

Glisan ends at 22nd as Sandy slices across it. A light is needed here to enable both cars and cyclists to make the transition to Sandy or to 22nd and Irving, which leads to Benson High and the Lloyd Center.

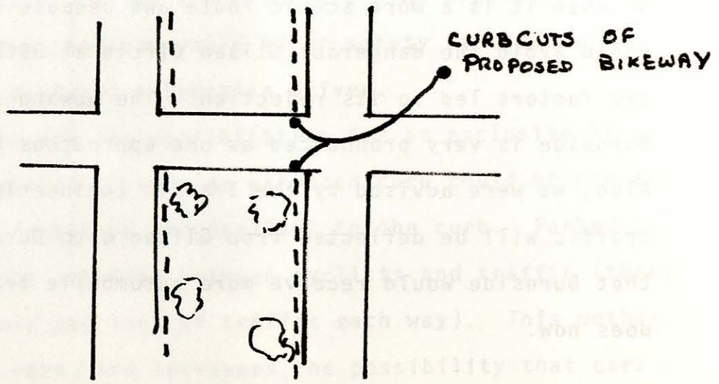
Alternatives: Burnside was considered very seriously

because it is a more scenic route and because cyclists could avoid the dangerous Glisan Circle at 39th. However, two factors led to its rejection. The upward slope of Burnside is very pronounced as one approaches Mt. Tabor. Also, we were advised by the Traffic Engineering staff that traffic will be deflected from Glisan onto Burnside, so that Burnside would receive more automobile traffic than it does now.

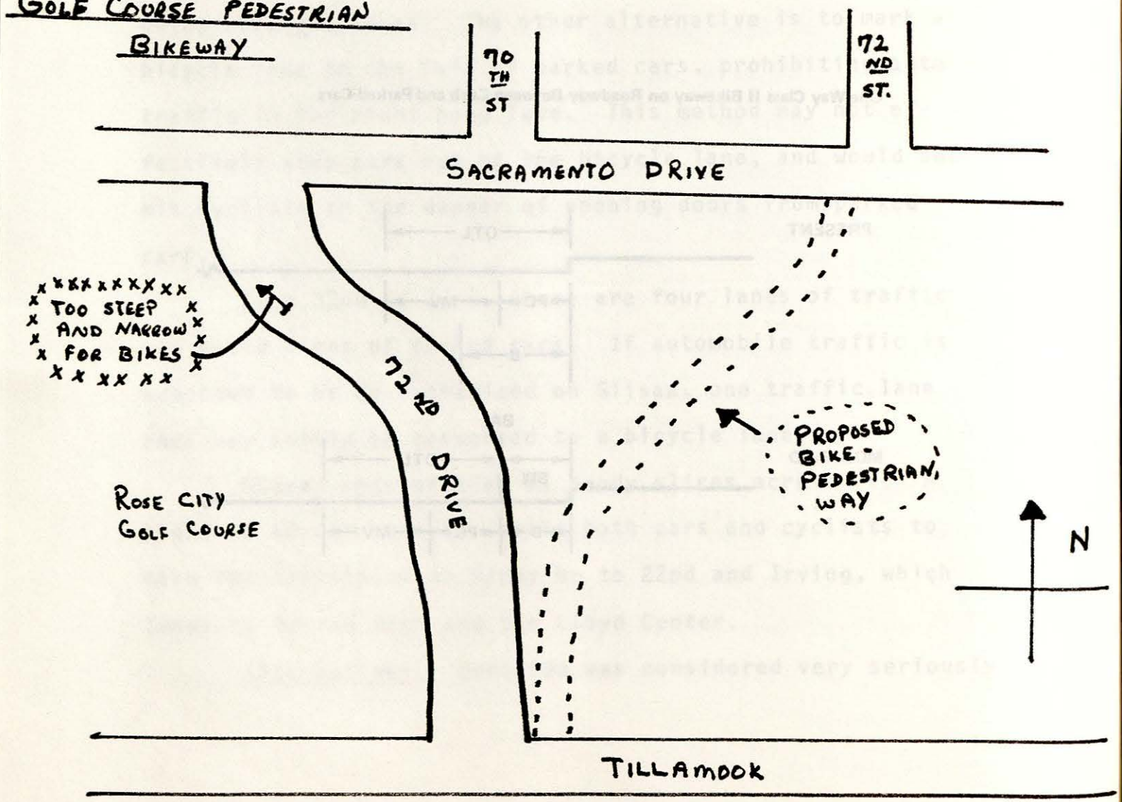
One-Way Class II Bikeway on Roadway Between Curb and Parked Cars



MEDIAN PARK, 72ND AVENUE, PRESCOTT — SANDY



GOLF COURSE PEDESTRIAN BIKEWAY



Northeast 72nd - 75th Avenues 15

Schools - Included in body of report

Parks - Included in body of report

Community facilities - Parkrose Shopping Area, Theater, etc.

Description: The route begins at N.E. Killingsworth and 72nd, proceeds south across Sandy Boulevard and past Gregory Heights Grade School to Sacramento, the northern boundary of the Rose City Golf Course. A bicycle-pedestrian path is recommended parallel to 72nd Drive through the Golf Course. At the southern boundary of the Golf Course, the route would go east on Tillamook to 74th and cross the Banfield Freeway on 74th. In order to avoid heavy automobile traffic on 74th, the route would go east one block on Broadway to 75th and continue south on 75th as far as Oregon. At Oregon, the route would return to 74th to take advantage of the traffic light on Glisan and 74th, and continue on 74th to Burnside and the southeast extension of the route.

Advantages: The route goes through residential

neighborhoods with relatively light automobile traffic and no truck traffic. Sections of the route, along the divided park strip from Prescott to Sandy and through the Golf Course, are very scenic. It will be a fine local recreational bicycle route for evening and weekend "minirides". It serves shoppers to the area around Sandy Boulevard, students at Gregory Heights Grade School and Madison High, Sacajawea and Wilcox Grade Schools, and commuters. It will provide a major north-south route, providing access to Mt. Tabor Park and southeast Portland. It will connect with the proposed Alameda and Tillamook routes, leading from this point westward. Finally, it appears that there is heavier bicycle use in this area than anywhere in northeast Portland. This heavy use needs sanction and protection.

Problem areas and solutions: From Prescott to Sandy, there is a park strip down the middle of the street. The one-way street on either side is much like Ainsworth: parked cars and moving cars leave no space for bicycles. Paving a path down the middle of the strip would be unacceptable because the center is used by youngsters playing football. One solution might be to pave a bicycle lane on each side of the center strip. See illustration attached.

Seventy-Second Drive winds through the Golf Course.

It is steep and narrow, with no shoulder or sidewalk. On the east side of the road is a dirt footpath used by pedestrians, especially Madison High students. We propose that this path be graded and paved as a pedestrian-bicycle path, as an efficient and safe connection between 72nd Avenue and Sacramento, and 72nd Avenue and Tillamook. It is the only north-south crossing for pedestrians and cyclists between 60th and 82nd. See illustration attached.

Repaving: Repave 72nd from Morris to Sacramento. Pave shoulder on Broadway, and on 75th from Broadway to Multnomah.

Remove parking: On 72nd Avenue, from Sandy to Sacramento, the street is too narrow for bicycles and automobiles. The parking strips could be removed and utility wires buried, or parking removed, or a combination of both. Parking is already restricted on the east side of 72nd near Gregory Heights Grade School.

Parking should be removed from the west side of 74th between Tillamook and Broadway. Off-street parking is provided for the apartment houses here.

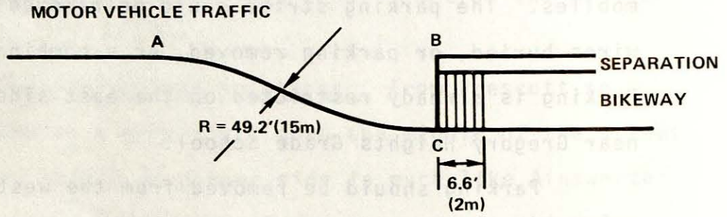
Remove parking on one side of 74th between Oregon and Burnside and move the center line. Since automobiles use this as a through street and travel fast, adequate space must be provided for bicycles.

Improve lighting: All of route from Sandy Boulevard south.

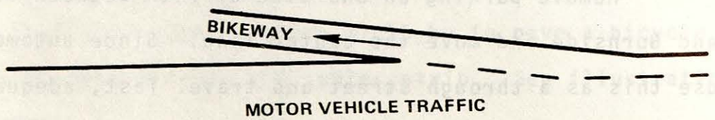
Stripe and sign: All of route.

Alternatives: At Klickitat, a one-way (southbound) bicycle lane could be routed west two blocks to N.E. 70th, and south on 70th to Sacramento. This is more scenic than 72nd; however, it does not provide access to Gregory Heights Grade School and leads away from Madison High.

Between Broadway and Oregon, 74th could be used rather than divert bicycle traffic to 75th. Unfortunately, automobile traffic is quite heavy and the shoulders must be paved.



German Design for Beginning a One-Way Bikeway. The Area Enclosed by Points A, B, C Should be of a Different Surface Color [Reference: Der Senator für Bau-und Wohnungswesen, Radwege, Auf- und Abfahrten, B.07, Berlin, Dec. 30, 1969]



Dutch Design for Beginning a One-Way Bikeway

BIKE PARKING AT BENSON

Northeast Holladay, Irving, 16th Avenues 16

Schools - Benson Tech. High School

Parks - Buckman Field

Holladay Park

Community Facilities - Lloyd Center

Burnside Bridge - Downtown

Holladay/Irving (28th Avenue to 12th Avenue)

General Description: This route is designed to

link the north-south route on 28th Avenue to Benson High and to provide a safe, direct commuter route to the Burnside Bridge crossing.

The route follows Holladay to the one-way couplet at 23rd and 24th Avenues; utilizes this couplet to N.E. Oregon; continues west on Oregon to N.E. 19th Avenue; then west again from 19th to Irving Street. Irving provides access to Lloyd Center at 12th.

Advantages: Essentially a linkage route, it will improve access to Benson Tech for the many students who commute by bicycle from all over the northeast area. Access to Benson's protected bike parking is provided from Irving Street.

A faster and more direct access to the Burnside Bridge is provided for commuters to downtown by this route and the 16th Avenue link described below.

Improvements: Between 28th and the 23rd/24th one-way couplet remove parking on the north side of Holladay next to the ridge overlooking the Banfield. Provide a two-way bike trail, separated from the roadway by a bumper or shrub strip.

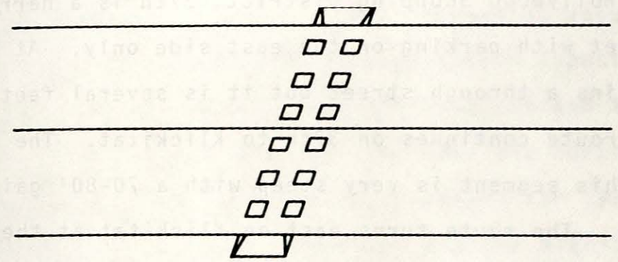
Mark "Bike Route" on roadway on 23rd and 24th (one-way with traffic) to N.E. Oregon.

Mark "Bike Route" on roadway on N.E. Oregon to 19th and on 19th to N.E. Irving.

There is no sidewalk on the north side of Irving at present. Provide a two-way bike path, in lieu of the sidewalk, from 19th to 12th Avenue.

Provide crossing markings on Irving at 16th Avenue and at the Benson Bike parking area.

Bikeway Crossing



16th Avenue

General Description: This is a short linkage, entirely on 16th Avenue between Irving and Ankeny. A traffic signal facilitates a safe bike crossing of Sandy Boulevard. Downtown commuters would continue south on 16th to Ankeny and the access to the Burnside Bridge it provides.

Improvements: The street is exceptionally wide between Irving and Sandy (60'), and traffic is light, This segment would require only signing and striping.

South of Sandy, remove parking on one side of the street; and sign and stripe as needed to make a continuous lane on both sides of 16th Avenue.

Northeast 37th Avenue - Cornfoot Road 17

Schools - Included in body of report

Parks - Included in body of report

General Description: This route uses 37th Avenue almost exclusively and extends for 3.3 miles from N.E. Tillamook to Cornfoot Road. From Tillamook to Brazee in the Hollywood Shopping District, 37th is a narrow through street with parking on the east side only. At Knott, it remains a through street but it is several feet wider. The route continues on 37th to Klickitat. The last block of this segment is very steep with a 70-80' gain in elevation. The route turns east on Klickitat at the top of the hill, then north on 37th Place, crosses Fremont and turns west one block on Alameda Drive. At 37th Avenue, the route turns north again and continues past Wilshire and Fernhill Parks to N.E. Holman. On Holman, the route skirts the north side of Fernhill Park and continues east to 42nd Avenue. Using the Portland Highway over-pass, the route crosses Columbia Boulevard at 47th Avenue where there is a flashing red traffic signal. Continuation of the route

north on 47th to Cornfoot Road opens the Columbia Slough area for bicycling.

The route offers only two real problems - Alameda Bluff for the bicyclists, and improvement of the Portland Highway over-pass for the engineers - with a little extra effort, both problems should be manageable.

Advantages: The scenic and recreation value of this route is as important as its transportation aspect. It passes through very attractive neighborhoods and the segments next to Wilshire Park and the west and north sides of Fernhill Park are particularly pleasant for cycling. In addition, the 47th Avenue extension via the over-pass provides the only feasible gateway to the Columbia Slough for several miles in either direction. This aspect of the route will increase in importance to city residents as the Slough is developed for recreation. Cornfoot and Alderwood Roads are excellent for bicycling now. Cornfoot parallels the slough and, with Alderwood, cuts through Colwood Country Club. The Air Base and Airport add interest also. The route through the slough area is the most pleasant and safest way to reach Marine Drive, Blue Lake Park and beyond for the day-tripper.

A major north-south bike arterial was needed to serve the central northeast section of the city - 37th Avenue meets this requirement. It connects three popular parks

(Grant, Wilshire, and Fernhill); serves several elementary schools (Hollyrood, Beaumont, Meek, St. Charles) and two high schools (Grant and Adams).

The route will serve as a collector/distributor for east-west bike routes on Tillamook, Alameda Drive, Skidmore, and Ainsworth. Connection to the southeast is provided by Tillamook and 47th Avenue. Access to Hollywood and the community facilities located there is provided for a large portion of the area served by this shopping district. The proposed Portland Highway State Bikeway can be connected readily.

Improvements: Sign and stripe the entire route. (The 24' section of 37th between Tillamook and Brazee is difficult to improve. Consideration should be given to simply signing this section and adding "BIKE ROUTE" "CAUTION" decals on the driving lanes.) Striping only should be sufficient adjacent to parks.

The section of 47th Avenue north of Columbia is already striped at the right edge of each driving lane with a 5-6 foot paved shoulder. Signing only should be sufficient at the outset.

Repaving is needed from Shaver to Morris.

Intersections: Use bold crossing markings where the trail crosses Knott, Fremont, Killingsworth, and Columbia. Post warning signs well in advance on these major streets.

Prescott is offset at 37th and special attention will be necessary to achieve a safe bike crossing.

A boldly marked crossing for pedestrians and one for bicyclists are needed where Holman crosses 42nd Avenue. Although visibility is good for both motorists and cyclists, the higher speds permitted on Columbia and Portland call for adequate warning signs to motorists on egresses from these streets to 42nd Avenue.

Post warning signs to alert motorists turning right from 47th to Columbia Boulevard.

Parking: Very little street parking was noted, particularly north of Alameda Drive. A formal program to encourage residents to avoid street parking during daylight hours is recommended rather than parking removal for this segment of the route. Striping and "Bike Route" pavement decals recommended.

Selective parking removal for safety reasons may prove necessary between Knott and Alameda.

No parking should be permitted from the 42nd/Holman intersection north to Cornfoot Road.

The Overpass: Use of the 5' walkways on each side of the overpass proper is recommended. (Roadway width - 26') For the balance of the section between 42nd and 47th, combination pedestrian-bicycle pathways are needed. Provision for a more adequate Tri-Met bus stop waiting area

should be incorporated in improvements to the overpass.

Intergovernmental Co-ordination: Implementation of the bikeway on Portland Highway and Lombard, west of N.E. 45th Avenue is recommended, as proposed by the state. This link is needed to provide a tie-in with access to the Columbia River Interstate Bridge. Use of Union, Interstate or Vancouver should be investigated by appropriate agencies to complete that portion of the system in the metropolitan area north of Portland.

The Portland Highway overpass is part of Multnomah County Road #1388. The county has been notified of our interest in improvements for the overpass for joint use by county and City residents in the neighborhood, as well as access to the Columbia Slough.

Cooperation of Tri-Met should be encouraged to provide a proper bus waiting area on the north side of the overpass.

Northeast Shaver 18

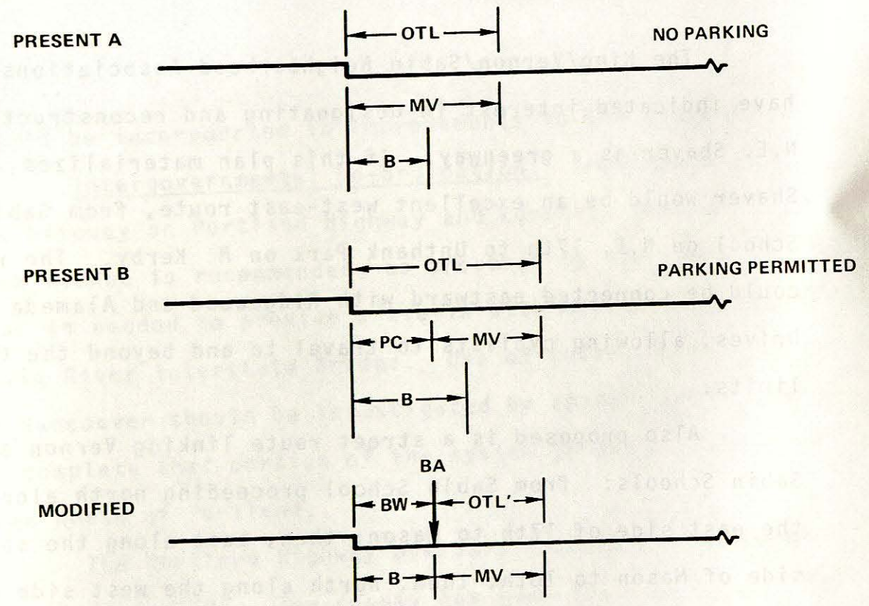
Schools - Sabin Elementary
Highland Elementary (4 blocks)

Parks - Unthank Park

The King/Vernon/Sabin Neighborhood Associations have indicated interest in designating and reconstructing N.E. Shaver as a greenway. If this plan materializes, Shaver would be an excellent west-east route, from Sabin School on N.E. 17th to Unthank Park on N. Kerby. The route could be connected eastward with Ridgewood and Alameda Drives, allowing cyclists to travel to and beyond the City limits.

Also proposed is a street route linking Vernon and Sabin Schools: from Sabin School proceeding north along the east side of 17th to Mason; then, east along the south side of Mason to 18th; then, north along the west side of 18th to Prescott; then, east along the north side of Prescott to 20th; then, north along the east side of 20th to Killingsworth, at Vernon School. We approve of their plan if funding can be obtained from sources other than City bicycle path funds.

One-Way Class II Bikeway on Roadway: Bicyclists Have Semi-Exclusive Right of Way. (No Parking Allowed on Present Street or Parking Removed)



Northeast 47th Avenue 19

Schools - Normandale School (3 blocks)
Laurelhurst School (3 blocks)

Parks - Frazer Park (2 blocks)

Community Facilities - Providence Hospital

Description: This is a route of great variety. From Thompson south to Halsey, the street is wide and lined with residences, single-family houses and large apartment buildings. Just north of the freeway crossing there is a substantial manufacturing plant (Western Electric), attractive and well-landscaped, but creating a good deal of traffic. South of the freeway bridge, on the eastern side of the street, is the gigantic Providence Hospital complex. Beyond Providence there are more residences and stores serving the neighborhood.

Advantages: The route is being recommended as a major north-south arterial, connecting the Hollywood Shopping District with southeast Portland. If made sufficiently attractive and safe, it could link with Glisan to provide commuter access to the central city, enable students from the Laurelhurst area to get to Grant High School, and perhaps enable Providence Hospital and Western Electric employees to bicycle to their jobs. (This writer uses it in good weather to pick up her child from the Montessori School at Providence.)

Problem areas and Solutions: The one great problem is parking. Second in intensity is the changing of work shifts at Western Electric and Providence. To illustrate:

employees and visitors at both of these establishments appear to use on-street parking, although off-street parking is available to both. Between 3 and 3:30 workers leave Western Electric, crossing the street in clusters to get to their cars in the lot a block away. Automobile traffic builds up for blocks. This is the same time during which mothers are picking up their children at the Providence Montessori School, and the same time when children are riding their bicycles on the sidewalk or street.

On a street of such high traffic volume, maximum separation of cars and bicycles is necessary. The only way to achieve this, in an area where the sidewalk is heavily used by pedestrians, is by the removal of on-street parking. It appears that this will be necessary from Thompson to Sandy and from Halsey to Burnside. Between Couch and Flanders the north-bound lane is only one lane wide, but the grass strip between the sidewalk and street could be paved (there are no poles) at a slightly lower elevation than the sidewalk.

Alternatives: At present, the 47th Avenue route seems to provide the only feasible bicycle crossing of the freeway between 28th and 74th. The 39th Avenue is too heavily travelled by cars, while the 60th Avenue crossing is too narrow at the base of Mount Tabor, where the posted speed for autos is 40 m.p.h. However, 47th will not be a viable bicycle route without changes such as those recommended.

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COMPREHENSIVE BICYCLE PATH PLAN

CITY OF PORTLAND, OREGON 1973

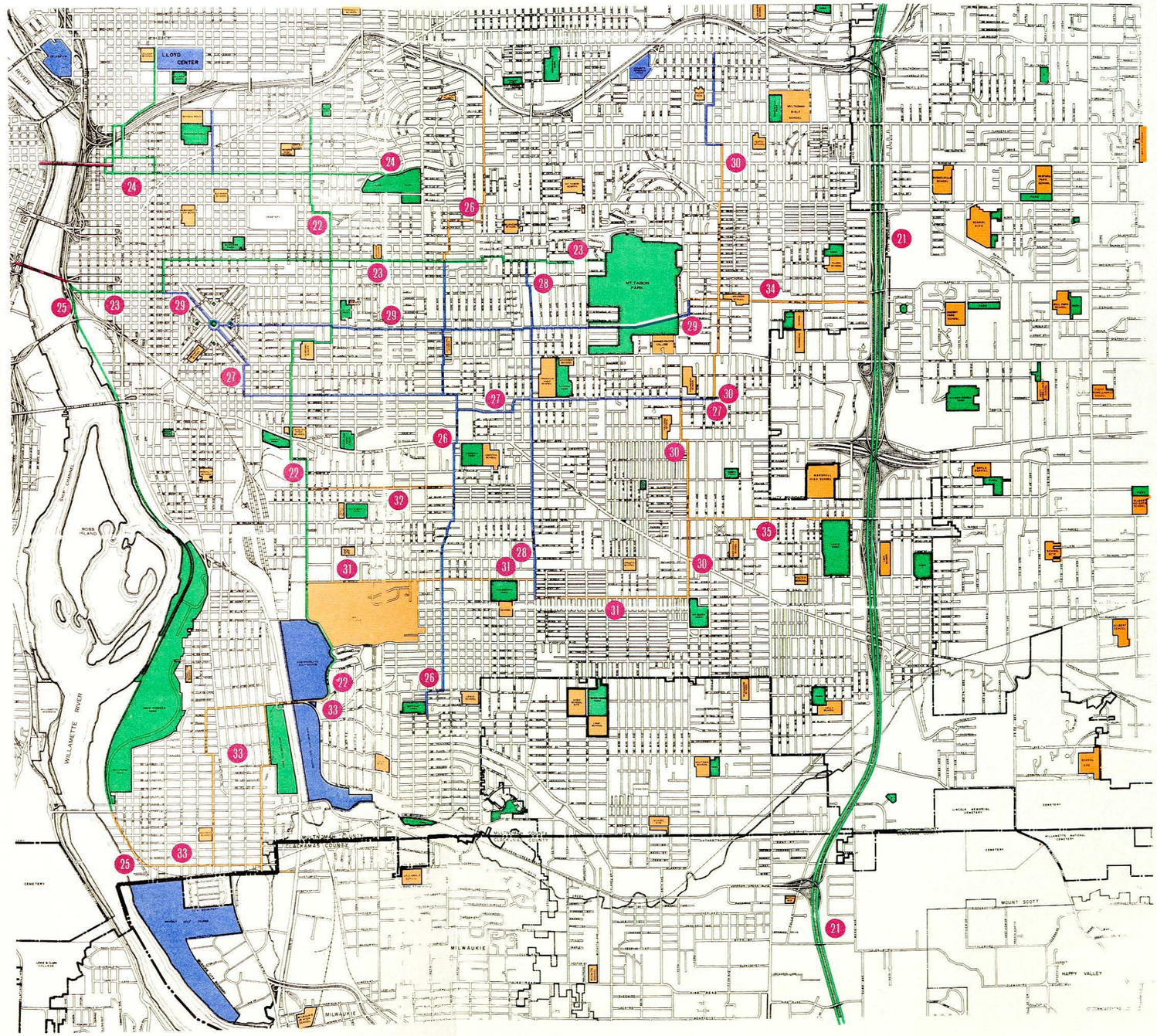
SOUTHEAST MAP C

RECOMMENDED PRIORITIES:

PHASE 1
PHASE 2
PHASE 3
PHASE 4

PROPOSED SOUTHEAST AREA ROUTES

Route No.	Description
21	Separate bikeways parallel to new I-205 Freeway, to be constructed by Oregon State Highway Division.
22	28th from Burnside to Washington, 30th to Grant, 26th to Rhone, 28th to Bybee.
23	Salmon from Mt. Tabor Park (60th) to 10th, 10th to Clay, Clay to Hawthorne Bridge. New access ramp to Bridge.
24	Ankeny from 39th to Union (west-bound traffic to use 9th, Couch to Burnside Bridge.)
25	Along Portland Traction Co. tracks from Linn to the Hawthorne Bridge.
26	39th from Bybee to Glenwood, 41st-42nd-43rd to Woodward, 41st to Taylor, connection to 47th on Northeast side.
27	Woodward from 75th to 50th, Tibbets 50th to 43rd, Woodward to 20th, 20th to Ladd, Ladd to Harrison.
28	52nd from Harold to Salmon.
29	From Mill and 72nd through Mt. Tabor Park (using existing dirt road, to be paved), Lincoln-Harrison-Ladd to 10th and Clay.
30	76th from Everett to Division, 75th to Woodward, 71st-72nd to Harold.
31	Steele 28th to 52nd, Harold 52nd to 72nd.
32	Gladstone 28th to 52nd.
33	Linn from Johnson Creek or River Road to 16th, 16th to Bybee, Bybee to 28th. Or 21st from Ochoco to Lambert, 22nd from Lambert to Bybee along Westmoreland Park, Bybee to 28th.
34	Mill from 72nd East to City Boundary.
35	Holgate from 72nd East to Lents Park.

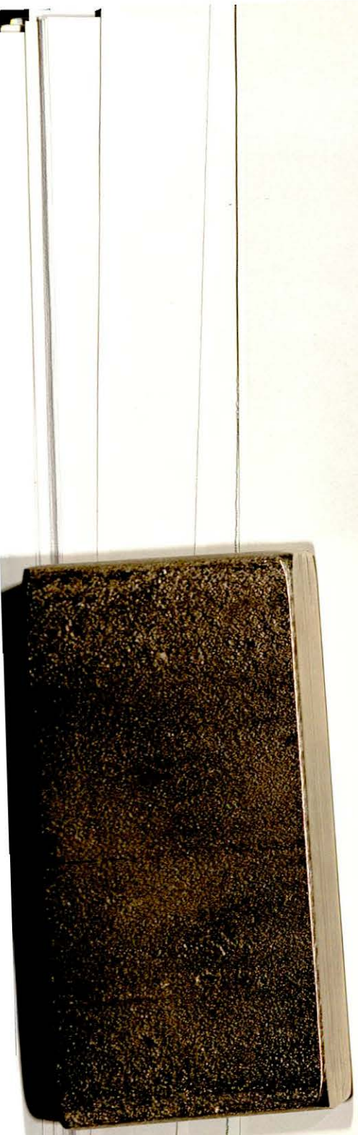


Southeast 28th Avenue (22)

Schools - Reed College
Cleveland High School
Grout Elementary (4 blocks)
Hosford (1 block)
Edwards Elementary

Parks - Eastmoreland Golf Course/Rhododendron Test Gardens
Laurelhurst Park
Powell Park
Sewallcrest Park/Lone Fir Pioneer Cemetery (County Park)

Description: The 28th-26th-30th bicycle route connects Eastmoreland Golf Course on the south end with the Lloyd Center and many other points of interest and places of work in northeast Portland. It is all two-way traffic with two moving lanes. The grade is light except for a few hills which last only two to three blocks. The traffic volume (including cyclists) is heavy during rush hours. The speed limit changes from 25 to 30 back to 25 m.p.h. as it moves through residential neighborhoods into small business areas. There are many lovely green residential (single and multi-family) areas along the route.



Advantages: This route connects with northeast Portland, downtown, schools, business and residential districts. Grade, high school and college students will and do now use this route heavily for commuting as do adults to and from work. It provides good access to Lloyd Center from the southeast. It will also serve recreational purposes, connecting Laurelhurst Park, Mt. Tabor Park, the Rhododentron Test Gardens, Powell Park and the Eastmoreland Golf Course. It is a relatively direct route and with a few improvements would provide safe, fast cycling for commuters of all ages to a variety of destinations.

Improvments: Stripe a wide line along the east side of 28th where it curves around the golf course to alert northbound cars of a bike lane.

Pave the gravel path along the golf course for southbound bike traffic. Also pave the shoulder between Woodstock and Steele on southeast 28th and repair the pot holes.

Control the intersection of 28th and Gladstone with at least two signs controlling the 28th cross traffic and possibly a four-way stop. Possibly no turns (either left or right) should be permitted at the intersection of southeast 28th and Stark to provide safe through movement for bicyclists.

Curb cuts are needed on the east side of the street between Holgate and Gladstone where sidewalks will be needed for northbound bike traffic due to lack of shoulder. Good existing visibility and alertness will lessen pedestrian-cyclist conflicts here.

Lighting needs improvement between Woodstock and Holgate on southeast 28th.

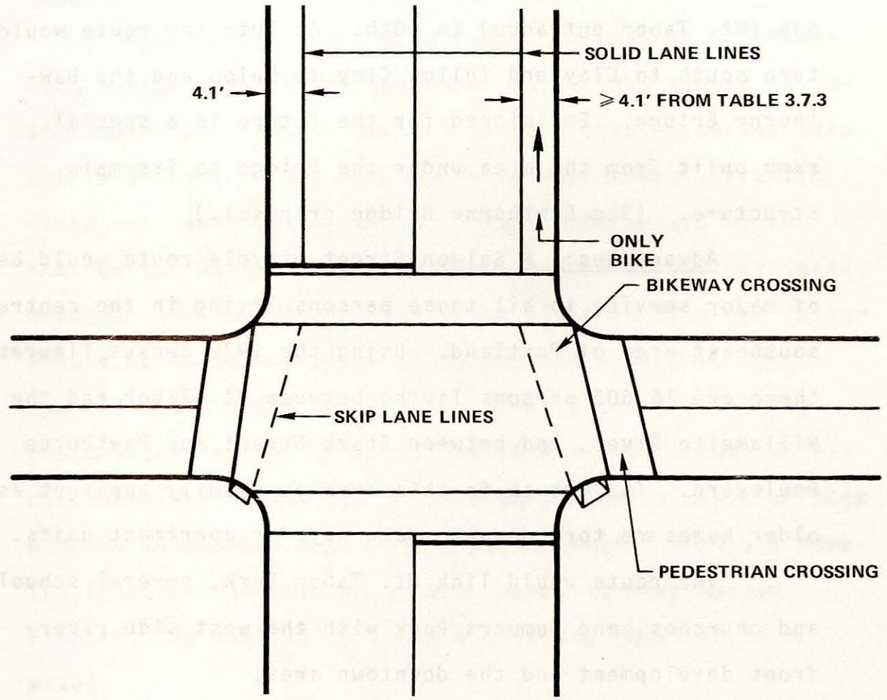
Remove parking on the west side of 28th between Holgate and Gladstone. (Most homes have driveways or garages.) Also between Rhone and Powell on 26th. (A factory west of 26th at Powell will need to find alternative parking.) Parking should be removed between rush hours on 26th between Clinton and Caruthers (very congested even for cars).

Alternatives: A possible alternative is to keep bicycle traffic on 30th through the Stark intersection to avoid problems at 28th and Stark. This is undesirable because of the extreme grade and poor visibility for motorists would probably necessitate a light. Lights at 28th and 30th would be impractical.

Future additions to this route: Continuing south on 28th to Bybee, across the Bybee viaduct to southeast Bybee and Milwaukie (busy business district and destination of many shoppers) proceeding west on Bybee to 13th where it curves and overlooks the river (beautiful!). Hopefully this route can be continued through the Sellwood area to

connect on the other side of Waverly Country Club with the State's proposal for a bike path to Oregon City via the abandoned Portland Traction Co. line. One problem with this connection is Waverly Country Club's "No Trespassing" policy. Seventeenth, (the only other alternative), is a poor solution as it would need many expensive improvements. The east side of the Bybee viaduct needs signs warning motorists to watch for bikes continuing east. Autos cross the viaduct and turn 30 degrees to the right to continue parallelling the golf course, thus cutting off cyclists who need the momentum gained from the downgrade to get up the next hill.

An Intersection Design where the Bikeway Changes from a Roadway Alternative to a Sidewalk Alternative at the Intersection.



Southeast Salmon (23)

Schools - Sunnyside Elementary School
Glencoe Elementary School (2 blocks)
Washington High School

Parks - Mt. Tabor
Summers

Description: Salmon Street is a tree-lined

residential street with attractive homes, schools and churches. The proposed route would extend from 60th Avenue (Mt. Tabor entrance) to 10th. At 10th the route would turn south to Clay and follow Clay to Union and the Hawthorne Bridge. Envisioned for the future is a special ramp built from the area under the bridge to its main structure. (See Hawthorne Bridge proposal.)

Advantages: A Salmon Street bicycle route would be of major service to all those persons living in the central southeast area of Portland. Using the 1970 census figures there are 16,606 persons living between Mt. Tabor and the Willamette River, and between Stark Street and Hawthorne Boulevard. The growth in this area is readily apparent as older homes are torn down to make way for apartment units.

The route would link Mt. Tabor Park, several schools and churches, and Summers Park with the west side river-front development and the downtown area.

The route provides a safe bikeway that avoids major arterials. In many sections, Salmon does not have complete intersections; that is, the cross street comes from the north but does not go through Salmon (20th-26th, 30-32nd, 41st-44th, 46th-49th, 55th-60th). This means that less auto traffic will be interrupted by a bicycle route, and that the route will therefore be safer for cyclists.

Finally, the route has many fine trees and is a

pleasure to ride, at least going west. The major disadvantage is the grade approaching Mt. Tabor.

Problem areas and solutions: To control intersecting automobile traffic, yield or stop signs should be installed on all cross streets. (Should this encourage automobile drivers to use the new "bike expressway", traffic diverters could be installed.) Curb cuts should be installed for easier access to the sidewalk of the Hawthorne Bridge. The pedestrian-activated light at 39th and Taylor should be moved one block to Salmon and placed so that a cyclist could reach it easily. Signing or striping the route should be sufficient at present along Salmon; an exclusive bicycle lane may be necessary on both sides of 10th between Salmon and Clay, and on Clay itself. Prohibit parking from 59th to 60th on Salmon, which is very narrow. Finally, the dirt alley between 54th and 55th should be paved.

At the moment the bridges are a problem area for the bicycle rider. The bridges are the key to the city, yet a cyclist endangers himself and others as he crosses them. At the present time they are difficult to get at and difficult to use as a bicyclist. The current mixed use of walkways by cyclist and pedestrian is quite dangerous, as is the mixed use of traffic lanes by bicycles and motor vehicles. Mr. Kenneth Wheatly, the County Bridge Engineer,

has said that he will only recommend that bicycle route which separates the three types of traffic now using the bridges, for reasons of safety.

The Hawthorne Bridge offers an interesting possibility for a bicycle lane. Recent studies indicate that this bridge will be used through 1990. It could be used longer as a bridge for the exclusive use of pedestrians, cyclists, and buses. When Harbor Drive is closed, a portion of one of the former ramps to the Hawthorne Bridge could serve as a bicycle access on the west side of the river. The walkways are of wood, which will probably be replaced with steel or concrete. Concrete, of course, would be preferable for a bikeway. The north side of the bridge would be an exclusive pedestrian walkway, while the south side would serve cyclists. On the east side of the river, a short on-off ramp for bicycles should be built from the bridge - which is only about fifteen feet off the ground - to an existing cement base near the riverbank. If this were provided, the cyclist would not have to use the very narrow cement sidewalk from the wooden sidewalk on the main structure of the bridge to Union Avenue. Safety railings should be installed.

Southeast Ankeny 24

Schools - James Monroe High School
Kerns Elementary
Buckman School (2 blocks)
Washington High School (4 blocks)

Parks - Laurelhurst Park

Description and Advantages: The Ankeny route in southeast Portland connects bicyclists in the southeast with Laurelhurst Park and downtown. The Burnside Bridge is heavily used by bicyclists commuting to and from downtown and Ankeny is a safe, through alternative to using Burnside itself once across the bridge. The street is mostly residential, two-way (except one way east only between Union and 6th). The posted speed is 25 m.p.h. and the autos are used to watching for bicyclists as it is heavily used at the present time.

Improvements: Curb cuts are needed on both sides of the west end of the Burnside Bridge sidewalks. Sidewalks could be used on Union between Couch and Ankeny to make bridge approaches less hazardous.

A striped crossing at Sandy and a yellow blinking light to assist in crossing is suggested. The intersection is so wide it is easy to get into trouble on a bike (or a car) in the middle of this intersection.

Re-pave holes and cracks in the street. Old storm drains on the north side of Ankeny between 33rd and 39th should be replaced. They are perpendicular to the curb

but because they stick up and out from the curb could still dump a rider.

Parking removal is not necessary at this time. As bike traffic increases it may become desirable to provide an exclusive lane.

Alternatives: Options for eastbound traffic were Burnside Bridge to Burnside and 6th, 6th to Ankeny; or south on Union on sidewalk to Ankeny, crossing in cross-walk to Ankeny and proceed east. Because of heavy traffic on Burnside the sidewalk on Union alternative was chosen.

Three options for traveling west were considered: 1) west on Ankeny to 6th, 6th to Couch, Couch to Union, sidewalks of Union to bridge; 2) instead of 6th use 9th to couch; 3) 6th south to Stark, Stark to Grand, north on Grand to cross at light to Burnside Bridge. Ninth to Couch was chosen as the most direct, safest and least expensive (light exists at Burnside and 9th).

Southeast Willamette River 25

Purpose: To provide a major north-south bicycle arterial from the downtown region to the southeast area and other southeastern connections with the most desirable route to and through major recreational facilities in the area.

Description: The trail is to begin on the east side of the Hawthorne Bridge running south through Oaks-Pioneer Park. Ramp construction should lead from the south side of the Hawthorne Bridge to the river bank. The course then turns southeast and follows under the Marquam Bridge and then eastward one block on Clay to S.E. Water Street where it turns south. The trail continues south past the Portland Traction Company and on through the Portland Heliport and merges into S.E. Fourth at S.E. Caruthers. At this point the trail continues south along the Portland Traction Company railroad tracks and encounters two intersections at S.E. Division and S.E. Ivon. It then continues along the tracks to Oaks-Pioneer Park with no occurrence of cross streets. At this point the trail could be tied into a Sellwood Bridge connection and/or south to the proposed state trail system on the old roadbed of the Portland Traction Company in Milwaukie.

Improvements: A ramp is needed to get from the walkway of the Hawthorne Bridge to the river bank. Ample

room for an underpass is in existence to the north and the eastside parkway. Paving would be needed under the bridge, on S.E. Fourth between S.E. Caruthers and S.E. Division and from S.E. Ivon south to Sellwood Bridge and beyond depending on the route. Trail guidelines should be painted to denote the route and keep vehicles from parking on it. Ample signs would be a must. Rights-of-way must be obtained on private property.

Safety: The section of trail from the Hawthorne Bridge to the Ross Island Bridge is through a light industrial part of the City. The traffic here is light and slow, comprised mostly of trucks and trains. There are no curbs or sharp turns with obstructing views. If and when there is an industrial need for blockage of the trail, it would be an easy maneuver to go around the obstacle as there are any number of places to safely pull into. There are few cross streets in this section and there are none from S.E. Ivon to S.E. Spokane near the Sellwood Bridge, aa distance of over a mile.

Advantages: The trail affords a direct commuter link between the City Center and connections in the south going both east and west as well as further south. Construction advantages include a firm roadbed already established along the entire route with the industrial section being mostly paved already. The trail offers an excellent

opportunity for businesses along the route to promote their products and/or services by site association of names, and goodwill provided by noting right-of-ways given, general beautification, and property renewal projects. Informative signs by these businesses could enchance public awareness of the industrial relationship to the community as a whole. The assumption of control on bike paths could further be an advantage to the business community especially in keeping motorcycles clear of the area and encroaching upon railroad right-of-ways and destruction of banks.

An interesting highlight to this trail system would be the educational value. There are four major bridges involved (plus more to the north) all of which are of various types of construction and a possibility of more which would link Ross Island to the system. There is the business movement in the industrial section as well as a heliport. The trail provides direct access to the proposed new sites for the Children's Museum and Nature Center. From the railroad bed which is raised above the nature area in Oaks Bottom, one can easily observe wildlife from a great vantage point. And a tie-in trail could be constructed to Reed College which lies not too far to the east.

Major recreational facilities are close to the trail system in Sellwood Park, the proposed tournament ballfields on the fill areas to the east, and Ross Island water sports.

Picnic grounds in the Oaks-Pioneer Park complex can be easily reached by businessmen from the City Center in a matter of minutes. The final obvious advantage is the existing beauty through which the railroad tracks now pass.

Alternatives: There are no other alternative routes in this region which offer such a wide range of advantages including safety, low cost and natural beauty. Any other route would encounter many cross streets and very heavy traffic.

Problems: It is recognized that significant problems will be encountered in attempts to gain the necessary easements and/or right-of-way, particularly as regards the railroad areas. However, the results of any efforts would be well worth the trouble.

Southeast 41st Avenue (26)

Schools - Glencoe (2 blocks)
Richmond
Lewis School (2 blocks)

Parks - Creston Park
Berkeley Park

Library - Belmont Branch (2 blocks), 1038 S.E. 39th.

Description: The streets that are proposed for this north-south commuter route are all quiet, residential, light-traffic, tree-lined streets. It is an attempt to satisfy the needs of the bicyclists commuting north and south on 39th. With a few minor improvements the route could be fast, safe and serve a large population of bicyclists. There are now many bicyclists using 41st and 42nd in the southern part of this route. However, the pavement is too bumpy between Woodward and Stark. The automobile dangers at each uncontrolled intersection discourage the bicyclist.

Advantages: There are many bicyclists of all ages using this route now to commute to school, shopping, work and for recreation at the parks along the route. With some paving and signing the route could be a safe, quick route enjoyed and utilized by many.

Problem areas and solutions: The improvements needed are as follows: A warning sign for bicyclists to watch for right turning cars at 47th and Stark. Slow speed limit on 47th and stripe. Remove parking during the daylight hours between Stark and Alder on 46th and between Madison and Clay on 42nd. There is much side street parking available. Shoulder needs paving between Alder and Belmont or

42nd. The whole street needs paving between Belmont and Taylor; Taylor to Madison on 41st needs paving. Stop signs to control cross traffic at Clay and Ivon are needed. A warning sign on Division east of 41st to alert motorists to bicycles crossing would make crossing Division safer due to a bend in the street which reduces motorists' visibility. Pedestrian crossings are needed on both east and west sides of Division.

At Powell and 43rd bicyclists will use the sidewalks and cross with pedestrians. This will require curb cuts or ramps. From Powell south the road widens and the route becomes prettier and safer. The only bad intersection is at 42nd and Holgate where the bicyclist is continuing south on 41st. A bus alley at this location could be shared by bicyclists. The addition of a crossing painted on the street would make this intersection easier to cross.

The route is then switched down to 39th from 41st at Glenwood (39th is quieter at this end). The shoulder on the west side of 39th needs to be paved. This then leads to Berkeley Park, the southern point of the route.

Alternatives: Fourty-fifth was considered as an alternative to 41st and 42nd between Woodward and Stark. However, the streets, although better paved, are narrow. In addition, they have unremovable parking problems. It is also felt that 39th Street should be paralleled as closely as possible, particularly to Laurelhurst Park in order to encourage use. Those heading north across the freeway are advised to use the 47th crossing rather than 39th, as demonstrated by the recent fatal accident.

Southeast Woodward (27)

Schools - Franklin High School
Atkinson Elementary
Youngson Elementary

Parks - Clinton Park

Description: Southeast Woodward from 20th Avenue to 75th Avenue is a residential street. At its western terminus it will connect with Ladd, Clay and the Hawthorne Bridge; at the eastern end it will connect with the 75th Avenue route and the division bicycle route being planned by Multnomah County.

Advantages: Woodward provides an important east-west route in the bicycle grid system. It will divert bicycle traffic from Powell Boulevard and from the Clinton-Division bus routes. There is relatively little automobile traffic at present. The route provides access to Franklin High School and Clinton Park between 53rd and 58th Avenues.

Problem areas and solutions: Immediate improvements for the entire route should include the provision of stop signs to intercept traffic crossing Woodward. Long-range improvements should include removal of parking on at least one side of the street, repaving of rough sections, and tree planting. Specific problems are as follows:

Woodward crosses 39th Avenue at the crest of a hill. Visibility is poor; traffic is fast and heavy. A traffic signal is needed.

Woodward is discontinuous between 46th and 50th. There is private property between 46th and 47th where the road would be. The most feasible alternative is a detour to S.E. Tibbets via 43rd, two blocks south of Woodward, then back to Woodward at 50th.

The shoulder requires paving in some sections, as between 57th and 62nd, and 66th and 67th.

Alternatives: Powell Boulevard was rejected because of heavy automobile traffic, and because of the possibility that the Mt. Hood Freeway will be built. Clinton was rejected because it is projected as a major bus route. Several alternatives were explored for the Tibbets detour: Clinton, Brooklyn (which also dead-ends at private property around 47th), and a sidewalk between 49th and 50th (too steep and narrow).

If the Mt. Hood Freeway is built, it should include bicycle paths. In this event, the S.E. Woodward route should be removed from further consideration.

Southeast 52nd Avenue 28

Schools - Franklin High School
Atkinson School
Woodstock School
Glencoe School (2 blocks)

Parks - Woodstock Park
Clinton Park

Description: The southeast 52nd route connects Mt. Tabor Park and the Hawthorne shopping area with Woodstock Park and Mt. Scott Park using the Lincoln and Steele proposed bicycle routes. It is a good north-south route with heavy auto and bicycle traffic - especially during rush hour. A long section of this street is wide enough to handle 30 m.p.h. traffic and cycle traffic without conflict, but between southeast Francis and southeast Lincoln on 52nd safety measures are required.

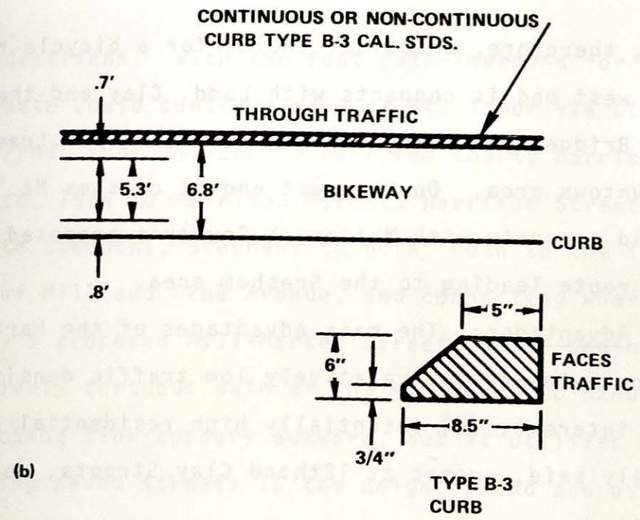
Advantages: Much of the route is residential with pleasant scenery. It is an important commuter route for Franklin High students that have to travel as much as three miles in some neighborhoods to reach school. Bus service exists on 52nd but because of schedules and school activities the bike is preferred by many youths. Southeast

52nd is heavily used by children, teenagers and adults at the present. It is badly in need of some improvements to be safe.

Improvements: Stripe and sign the entire route and install a curb five feet from the existing curb on both sides of the street to provide an exclusive bike lane between parked cars and existing curb from Lincoln to Francis (one block south of Foster) on 52nd. This is necessary to provide the extra separation needed between cyclists and moving cars as the traffic is faster, heavier and parking denser on this section of 52nd. Because Franklin High is on the route sidewalks are busy with pedestrians. Bike traffic is also heavy. Moving parking out appears to be the best solution even though it is costly. This improvement would, however, allow no space for a right turn lane at Foster, Powell and Division. Signing to warn autos to be alert for through bike traffic is essential at these three intersections. Special stop signs to stop bikes before proceeding, even if the light is green, are needed also.

Alternatives: Sixtieth Avenue was considered briefly and rejected because it does not go through. It is narrow and traffic is heavy and fast.

Use of sidewalks at the intersections of Division, Powell and Foster may be necessary to provide a right turn lane for autos. Curb cuts would be needed.



(b)

Southeast Harrison and Lincoln 29

Schools - Abernathy School (1 block)
Hosford School (1 block)
Richmond School (1 block)
Bridger School
Binnsmead School (1 block)

Parks - Sewallcrest Park
Mt. Tabor Park
Harrison Park

Description: The Harrison-Lincoln Street route is the only through route between Hawthorne and Division Streets. This street has a relatively low traffic density

and is, therefore, a logical choice for a bicycle route. On its west end it connects with Ladd, Clay and the Hawthorne Bridge, providing a potential route for travel to the downtown area. On the east end it crosses Mt. Tabor Park and connects with Multnomah County's proposed Mill-Market route leading to the Gresham area.

Advantages: The main advantages of the Harrison-Lincoln route are (a) relatively low traffic density, (b) scenic interest, (c) potentially high residential use, (d) generally safe, except at 12th and Clay Streets, (e) a directness.

Problem areas and solutions: There are two problems which should be solved: (a) The intersection of 12th and Clay presently is not controlled. Since 12th carries heavy traffic it is difficult for bicycles and pedestrians to cross. A traffic light in this location, preferably with puch button operated crossing signal, could be considered as a possible solution.

(b) There are grade difficulties on Lincoln Street through Mt. Tabor Park. For most bike riders this means pushing the bike. However, an existing gravel and dirt path crosses the park at a lower elevation. This foot path could easily be improved to serve as a bike path through the park. At present the path is primarily used

by pedestrians. With the foot path improved for bike use, the route could continue east of Mt. Tabor via Lincoln to S.E. 72nd, then on 72nd to Harrison Court, Harrison Court to 75th, 75th to Harrison Street, Harrison Street to 76th, 76th to Stephens, Stephens to 80th, 80th to the intersection of Mill and 82nd Avenue, and connecting where the County's proposed Mill-Market Streets route begins. This relatively tortuous path of the Mt. Tabor to 82nd Avenue connecting link appears awkward, but it utilizes best the existing paved streets in the neighborhood and avoids steep grades.

A possible alternative to that routing would run via Lincoln to 76th, thence north to Stephens. That alternative route would be more direct, but would have a dangerous bottleneck at Lincoln and 75th, where the street curves and is narrow, with the view obstructed.

In view of the alternatives, it is recommended that the Harrison-Lincoln-improved footpath-connecting link route to S.E. 82nd and Mill be used. The work required includes: (a) Install bicycle-pedestrian activated light at 12th and Clay; (b) Striping and signing from S.E. 12th to Mt. Tabor Park; (c) Paving of existing foot path through the park; (d) Signing of route from Mt. Tabor to S.E. 82nd; (e) Improve lighting where necessary.

Southeast 72nd - 75th (30)

Schools - Vestal School (3 blocks)
Bridger School
Youngson School

Parks - Mt. Scott Park

Library - Montavilla, 211 S.E. 80th

Description: The route goes from 72nd and Mt. Scott Park along 72nd to Powell, from Powell along 71st to Woodward, along Woodward to 75th, 75th to Division, Division to 76th, 76th to Burnside.

Advantages: It is the only through route between S.E. 60th and S.E. 82nd that is feasible as a bike route. It would serve commuters, recreationalists, students and shoppers, and would help to divert them from less desirable routes such as S.E. 60th and S.E. 82nd. It has a few minor problems.

Problem areas and solutions: Beginning at S.E. Burnside on 76th, a signal light is needed because of the

heavy traffic on Burnside. A possible bicycle lane and warning signs are needed, both on Stark and Washington, for south-bound bicyclists when crossing on 75th to south-bound 76th Street. This is because of the one-way traffic on both Washington and Stark streets.

The paving is in ill-repair on 76th Street between Stark and Division, which makes this area on the route somewhat hazardous at this time. Curb cuts and special signing for bicycles are needed on the south side of Division at 76th, so that both north and south-bound bicyclists will stay on the sidewalks between 76th and 75th Streets.

A curb cut is again needed on 71st and Powell so that bicyclists can easily get up on the sidewalk on the north side of Powell going to the signal on 72nd. Again curb cut is needed on both crosswalks on Powell on the north side at 72nd. Also, warning signs are needed on Powell, both east and west for east-and west-bound traffic, even though a signal presently exists.

A striped bicycle lane is probably desirable from Woodward to Powell on 71st, from 72nd and Powell on 72nd to Mt. Scott Park. Seventy Second between Main and Cora needs to have, as a minimum, paved shoulders. Existing shoulders are extremely rough. As only a short distance is involved, expense would be minimal.

It appears there is enough parking available

between Holgate and Foster that parking might be eliminated at this point. It should be eliminated on the east side of 72nd from Raymond 150 feet north to the first residential drive.

In summary, this seems to be an extremely feasible bike route with a few minor changes, bike-way signing throughout, the suggested striping from Woodward to Mt. Scott Park, and correction of the few minor problems mentioned above. The major problem is the rough paving; resurfacing would be desirable for both the motorist and the bicyclist.

Southeast Holgate, Harold, Steele 31 35

Schools - Woodstock
Arleta (2 blocks)
Marysville Elementary (1½ blocks)
Marshall High School (2 blocks)
Reed College

Parks - Eastmoreland
Woodstock
Mt. Scott
Lents Park

Library - Holgate Branch

Description: The Holgate, Harold, Steele route connects the east county proposed bike path with Lents Park, Mt. Scott Park, Woodstock Park, Reed College and Eastmoreland Golf Course. There are some neighborhood shopping areas, schools, library, etc. along the way. It provides access to Eastport Plaza and takes the high school (nearby) cyclists to downtown via the 28th Avenue route which connects with Steele on the west end of this route.

Advantages: It is already a good bicycle route at present and thus would cost little to implement. The extremely wide streets can handle fast moving traffic (mostly 30 m.p.h.) and remain safe for cyclists because the width allows for much natural separation even between the limited parking that exists and the moving autos.

JOHNSON CREEK AND OCHOCO 33

EXTENSION OF THE STATE'S BIKE PATH ALONG THE OLD PORTLAND TRACTION

Description

The State Highway Department proposal for a Bike Path along the Old Portland Traction lines ends at S.E. 17th and Ochoco. Our proposal is to connect this path with the S.E. 28th route at Bybee to complete bicycle facilities between Oregon City and downtown Portland.

At Ochoco and S.E. 17th follow Ochoco approximately one block east to an old train trestle. The bike route will go under the trestle and along the bank of Johnson Creek to 21st Street, from 21st to Lambert, along 22nd from Lambert, where it meets Bybee to join the 28th Street route.

Advantages

It is beautiful. It makes the necessary connection to complete a N-S route from Oregon City to Portland.

Improvements

Pave the route which goes under the trestle and along the creek.

Sign and strip 21st, Lambert and 22nd.

Alternatives

From Ochoco and 17th to S.E. Linn, Linn to 16th; 16th to Bybee was recommended because the existing street could be used. The paving is poor, however. The Johnson Creek alternative is more desirable esthetically, although it will be more expensive.

COMPREHENSIVE BICYCLE PATH PLAN

CITY OF PORTLAND, OREGON 1973

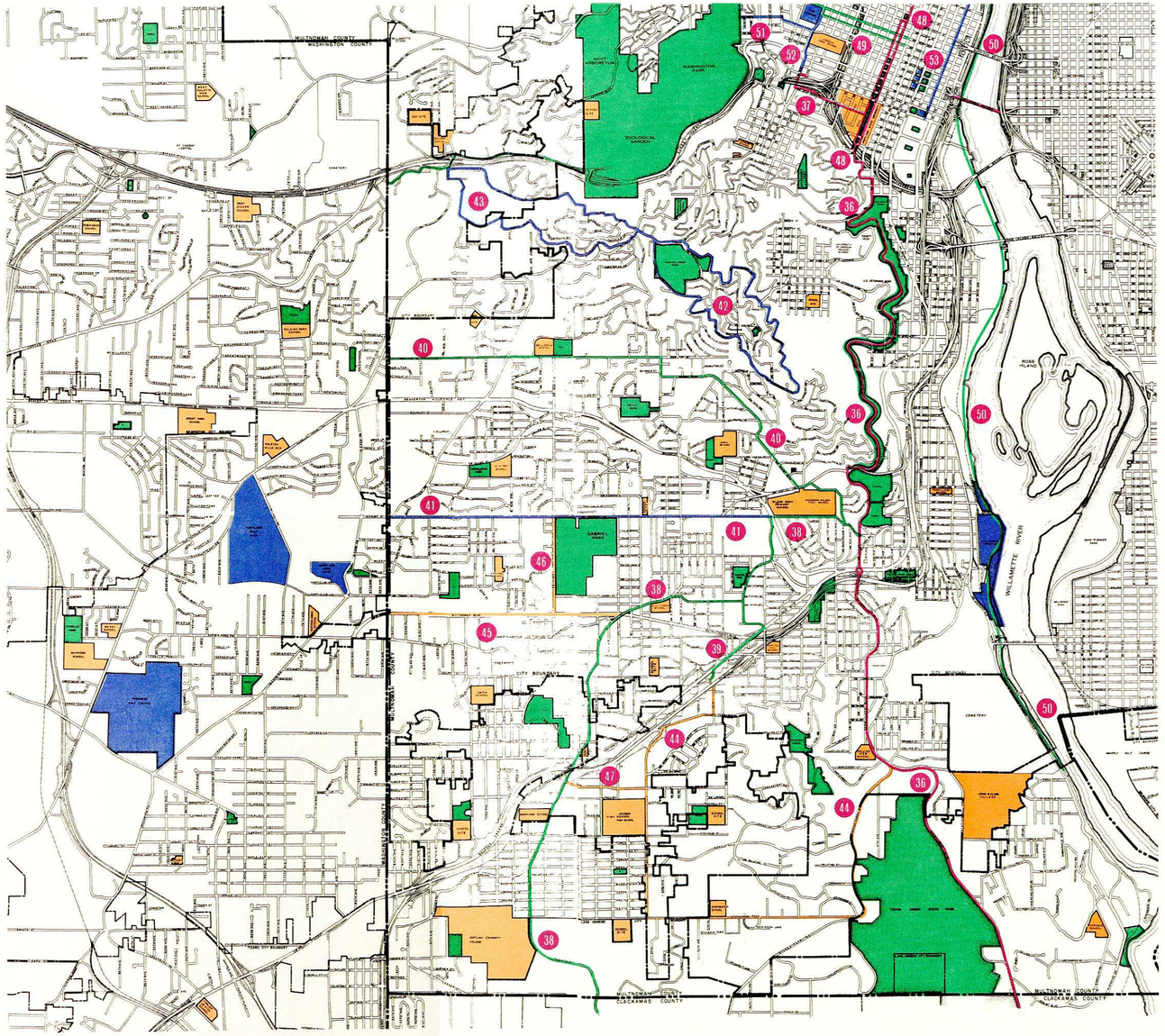
SOUTHWEST — DOWNTOWN MAP D

RECOMMENDED PRIORITIES:

PHASE 1
PHASE 2
PHASE 3
PHASE 4

PROPOSED SOUTHWEST AREA ROUTES

Route No.	Description
36	Terwilliger Boulevard or Terwilliger Alternate Greenway from City limits to Duniway Park. *Already approved* by City Council.
37	Goose Hollow Trail. ***Under construction*** by the Oregon State Highway Division.
38	Chestnut-Vermont-Capitol Hill Road-Troy-Capitol Highway 49th from Terwilliger Boulevard to County line.
39	Barbur Boulevard from 26th Way to Capitol Hill Road, especially overpass over Multnomah Boulevard.
40	Sunset-Dosch-Hamilton from Wilson High School to County line.
41	Vermont from Capitol Hill Road to County line.
42	Fairmount Boulevard around Council Crest.
43	Humphrey and Hewitt Boulevards from Council Crest Park to Sunset Highway. CRAG (Columbia Region Association of Governments) is coordinating efforts to extend this path to the Zoo and OMSI.
44	Boones Ferry-Stephenson-35th-Taylor's Ferry from Terwilliger to Barbur.
45	Multnomah from Capitol Highway to County line.
46	45th from Multnomah to Vermont.
47	Huber from 35th to Capitol Highway.
	DOWNTOWN AREA
48	Park and 9th Avenues to be a pedestrian-bicycle way (*already approved* by the City Council as part of Downtown Transportation Plan).
49	Yamhill and Morrison Avenues from 20th to Central Business District, providing access to and from Northwest Portland.
50	Harbor Drive and south along the Willamette River.
51	Park Place to provide access to Washington Park. Recommend that Washington Park be closed to cars during certain weekend hours, for example, 8-12 a.m. Saturday & Sunday.
52	18th from Goose Hollow to Yamhill.
53	2nd Avenue from Market to Flanders.
	Other bicycle-pedestrian routes to fit into Downtown Plan include the use of Main, Madison & Hall.



Southwest Chestnut - Vermont - Capitol Highway (38)

Schools - Woodrow Wilson High School
Wilson Park Elementary
Multnomah Elementary
Markham Elementary and Markham Annex
Portland Community College
(Jackson High - West portion)

Parks - Custer Park
Wilson Playground
Woods Park (2 blocks)

Description: Capitol Highway.

Advantages: This route would eventually connect with routes that Lake Oswego is planning (Country Club Road) and would link the Community College with our main north-south routes.

Improvements: Beyond the Community College, Capitol Highway is quite narrow, with no shoulders; however, once past the college there is more room for the bicyclist and with striping it might be made a fairly adequate Class III bike route. On the northern side of Barbur Boulevard, Capitol Highway again becomes narrow with unpaved shoulders which would have to be paved in order to make this a safe place to ride. The connection on Troy between Capitol Highway and Capitol Hill Road is also quite narrow and would need a paved shoulder.

Southwest Hamilton - Sunset 40 39

Schools - Wilson High School
Wilson Park Elementary
Robert Gray Elementary (3 blocks)
Bridlemile Elementary

Parks - Albert Kelly Park
Hamilton Park
Robert Gray Park

Library - Southwest Hills Branch

Description: Sunset - Hamilton.

Advantages: This route was proposed by the public as a bike route and is used by both bikes and pedestrians now mainly to go to and from Hamilton Elementary and Wilson High Schools.

Improvements: In general this route is very narrow with no shoulder. Traffic moves quite fast. Despite a speed limit of 35 m.p.h. cars seem to go 45-50 m.p.h. on Hamilton because it is straight. Sunset is quite curvy and narrow. Signs or stripes might only make the bicyclist feel safer when in reality there is no way to make this a safer route.

For continuity we are also recommending the following two small links: 1) Huber Street between 35th and Capitol Highway; 2) Boones Ferry Road between Stephenson and Terwilliger.

Our priorities for work in the southwest are based on meeting the greatest need for safety. We feel that construction should be done in the following order: 1) From Terwilliger to the county line via Chestnut, Vermont, Capitol Hill Road, Troy, and Capitol Highway. This is a heavily populated area and this route would link many schools and parks and provide greater safety for younger bicyclists. 2) Curb cuts on the overpass over Multnomah Boulevard on Barbur Boulevard would make the short part of Barbur included in our general grid much safer. 3) The route along Sunset Boulevard and Hamilton to the county line. This again is generally used by both grade school and high school students both for bicycling and walking and we feel that any improvements in the safety along this route is important. 4) Vermont from Capitol Hill Road to the county line. This is an important link for parks and schools and commuting. 5) Any of the rest of the routes on our southwest map.

Amendment suggested by Jackson Community Association
(S.W. Huber Street and S.W. 35th Avenue Section)

The proposed Bicycle Pathway along S.W. Huber Street and S.W. 35th Avenue which connects S.W. Taylors Ferry Road to the Capitol Highway Bicycle Path should include, as an alternative, the following route:

Starting at the intersection of S.W. Capitol Highway and S.W. Pomona and extending from the Capitol Highway bicycle pathway easterly on S.W. Pomona to S.W. 47th, thence northerly on S.W. 47th to S.W. Pasadena, thence easterly on S.W. Pasadena to S.W. 39th, thence northerly on S.W. 39th to the intersection of S.W. Dickinson and S.W. 39th. At this point the pathway would follow generally the easement of the S.W. Capitol Highway, S.W. 35th Avenue and Private Property Sewer Line as it passes through Tax Lot 22, Section 29 T.I.S.R.I.E. (Jackson High School) Lot Block Huber Tracts, Tax Lots 21, 250, 192, 91, 188, and 18, Section 29 Tl S.R.I.E. and the Oregon State Highway Department storage yard. Once through the storage yard the pathway will connect to the proposed pathway along S.W. Taylors Ferry Road.

This suggestion has much merit and should be considered at the time the route is designed.

Southwest Vermont **41**

Schools - Woodrow Wilson High School

Parks - Gabriel Park

Description: Chestnut, Vermont.

Advantages: This route would provide a commuting and recreation link east-west to connect to the main north-south route (Terwilliger). It connects Wilson High School, Wilson Park Elementary School, Jewish Community Center, Gabriel Park and could link Hillsdale and Raleigh Hills shopping areas. It is fairly scenic and has places where it is wide enough for bikes and cars.

Improvements: This, like all southwest routes, is quite narrow in places with no room for bikes and no shoulder. Signing and striping might make it a, not ideal, Class III bike way.

Fairmont Boulevard **42**

Parks - Council Crest Park

Zoo Access

Description: Fairmont Boulevard.

Advantages: This is primarily a recreation route used by bicycle racers for practice as well as for family outings. It is popular because it is level (unique in the southwest) as well as scenic. It is also heavily used by

pedestrians.

Improvements: Unfortunately, this route is narrow, curvy and used by sports cars and motorcycles as a test ground. However, it is already a publicly recognized "de facto" bike path. To help the situation it might be signed with warnings to motorists. Paving the turnouts may also help the flow of traffic.

Southwest Humphrey and Hewitt 43

Description: Humphrey and Hewitt link to the Zoo.

Advantages and Improvements: This route would make for access to the zoo by southwest residents but we see little that can be done to make it a safe bike route since it is so narrow. Warning signs ("Watch for Bikes") might be better than nothing.

Southwest 35th - Stephenson 44

Schools - Andrew Jackson High School

Collinsview Elementary

Description: Stephenson, 35th, Taylor's Ferry Road, Barbur Boulevard, Capitol Hill to Vermont. This route will connect the southernmost part of the southwest with the main north-south route. It will provide a means for bicyclists from the Jackson High and Community College areas to get into downtown Portland.

Advantages: Stephenson and 35th are lightly traveled and need only be signed and striped to provide a Class III bike route.

Improvements: The two most dangerous parts of the route are the short section on Barbur Boulevard and Capitol Hill Road. Curb cuts on the bridge over Multnomah Boulevard are absolutely necessary for safety. Warning signs along this part of the route might also help. Capitol Hill Road is heavily used by both bike and pedestrians going to and from the Vermont Street area to Custer Playground and to Capitol Hill School. The shoulder needs to be paved if possible and warning signs and stripes would help. Taylor's Ferry Road between 35th and 26th is also hazardous because of lack of a shoulder and the many curves. It is a short section so that widening the shoulder might be possible.

Description: Multnomah Boulevard. 45

Advantages and Improvements: Multnomah Boulevard would make an ideal bike route if the shoulder was kept properly swept and repaired. It would be much safer if the speed limits were lower or even enforced at the limits posted. It would link the Garden Home and Multnomah areas with the rest of the southwest.

Southwest 45th and Capitol Hill Road 46

Description: 45th and Capitol Hill Road

Advantages and Improvements: These are both connections to link major east-west routes. They are both unsatisfactory for the bicyclist but he has no choice if he wishes to go from place to place in the southwest but to use routes like this. Warning signs ("Bikes in the Roadway") might increase safety.

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