

# Seattle Monorail Project

## The New Plan



## Overview of the Monorail Ballot Measures

In September 2005, the Seattle Popular Monorail Authority (Seattle Monorail Project or SMP) Board of Directors approved placing two ballot measures before the voters this November.

The first measure (Proposition 1) would modify the 2002 Seattle Popular Monorail Plan, authorizing an initial monorail phase of 10 miles and 12 stations. Phasing would save over \$330 million from the original plan, resulting in an estimated project cost of \$1.7 billion. The second measure (Proposition 2) would provide for a majority of the Board to be elected rather than appointed.

These materials have been prepared to inform the general public about factual issues relevant to these propositions. They are not intended to influence voters to support or oppose either measure.

### ● Proposition 1 - Phased Construction

Proposition 1 asks voters for authorization to construct an initial 10-mile, 12-station monorail line. If approved by the voters, SMP will initially construct a rapid transit system that links Dravus Station (Interbay) and Alaska Junction Station (West Seattle) to Downtown. With connections to light rail, streetcar and buses, the initial line will serve an expected 42,200 riders per day at start-up in 2010 and 57,000 riders per day in 2030. Stations will serve major activity centers and Downtown, with trains departing every six minutes during the commute hours from all stations. The remainder of the 14-mile Green Line will be completed if the City approves construction permits following review of SMP's Finance Plan.

Project costs have been reduced by over \$330 million to an estimated \$1.7 billion. Debt repayment is estimated to be 31 years, and principal and interest is estimated at \$3.9 billion. SMP is funded by a 1.4% Motor Vehicle Excise Tax (MVET, also known as the car tab tax) on vehicles owned by Seattle residents. Under the Plan, the MVET tax rate will not increase, tax revenues cannot be used to support operations after 2020, and the tax will be terminated when the debt is paid. If revenues from the car tab tax grow more slowly than expected by SMP, bonds will be paid off over a longer period. If car tab tax revenues grow more quickly than expected, bonds could be paid off sooner than 31 years.

### ● Proposition 2 - SMP Governance

Proposition 2 asks voters if a majority of the Board of Directors should be elected. Currently, two Board Members are elected and seven are appointed by the City Council, Mayor and the SMP Board. Approval of this measure would result in a total of five elected and four appointed Board positions.

# Seattle Monorail

## Initial Phase Route & Station Locations

### LEGEND

Initial Monorail Green Line Route



Deferred Green Line Route and Stations



Sound Transit Light Rail

Central Link



Planned North Link



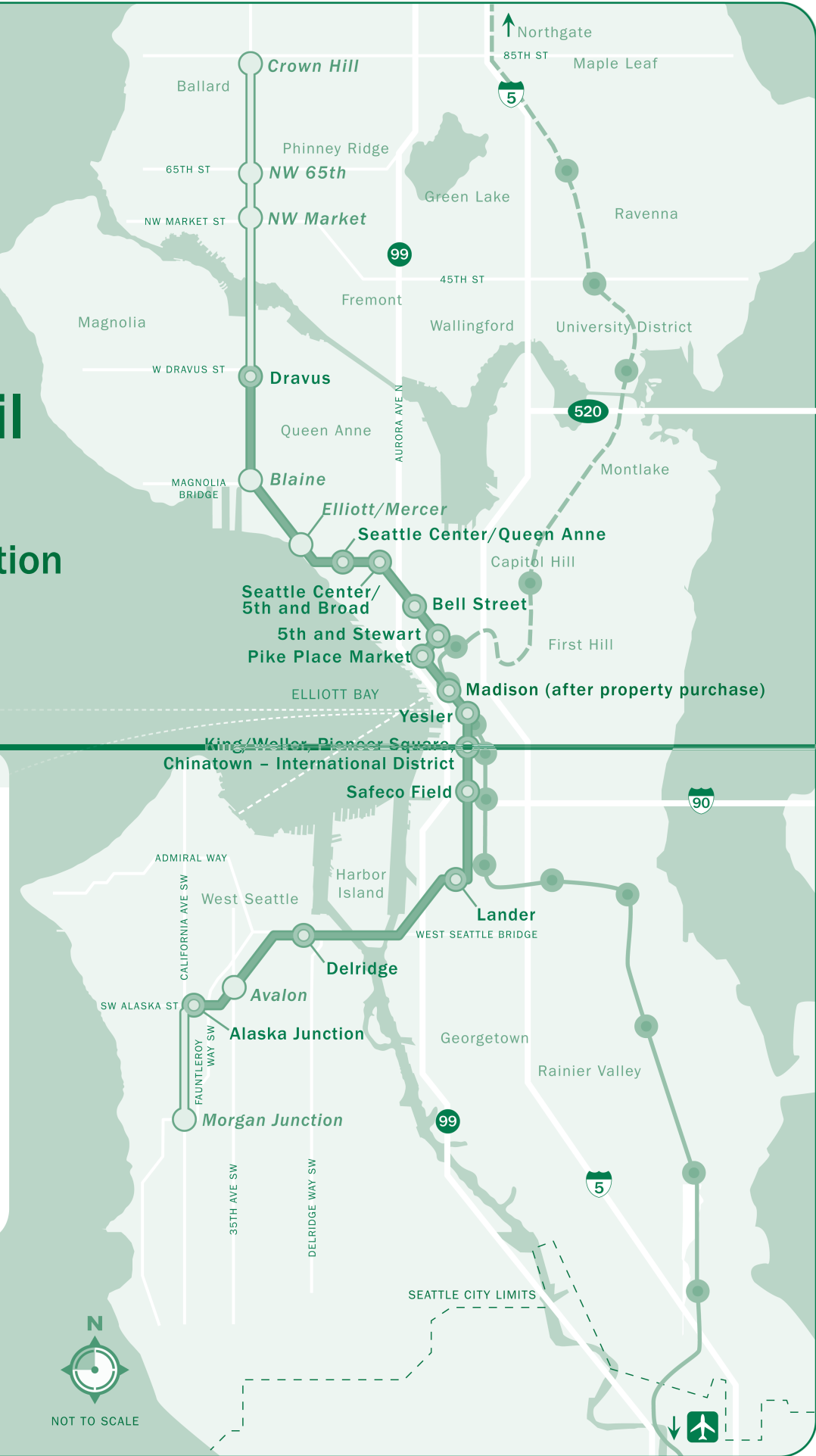
There will be connections to Metro buses at every station. A number of stations will also allow connections to other transit, including light rail, regional buses, ferries, streetcar, and commuter rail.

#### NOTE:

This map is solely the creation of the Seattle Monorail Project and does not represent the detailed route or access plans.



NOT TO SCALE



# Project Description

## Background

The Seattle Monorail Project (SMP) Board has placed a measure on the November 2005 ballot asking voters for authority to modify the **2002 Seattle Popular Monorail Plan**. The measure seeks authorization to construct an initial 10-mile, 12-station phase from the Dravus Station (Interbay) to the Alaska Junction Station (West Seattle) through Downtown.

The project follows a clearly defined route and alignment approved by the SMP Board and Seattle City Council in 2004. It will meet transit needs identified in the City of Seattle's **2000 Intermediate Capacity Transit Study** and add new transit capacity to two of the most congested transit corridors identified in the Study. The remainder of the 14-mile Green Line will be completed if the City approves construction permits following review of SMP's Finance Plan.

## Initial Phase – Dravus Station (Interbay) to the Alaska Junction Station (West Seattle) through Downtown

The initial phase will be an electrically powered, elevated rapid transit system. The guideway will be configured to allow extending the Green Line south from Alaska Junction to Morgan Junction in West Seattle and north from Dravus to Crown Hill in Ballard.

Trains will depart every six minutes from all stations during commute hours. The system will operate 19 hours on weekdays and longer on weekends.

The system is designed so that service can be adjusted to meet varying ridership demands at busier times, such as during festivals, concerts, and sporting events, by using operational techniques that increase frequency or stage trains to coincide with events.

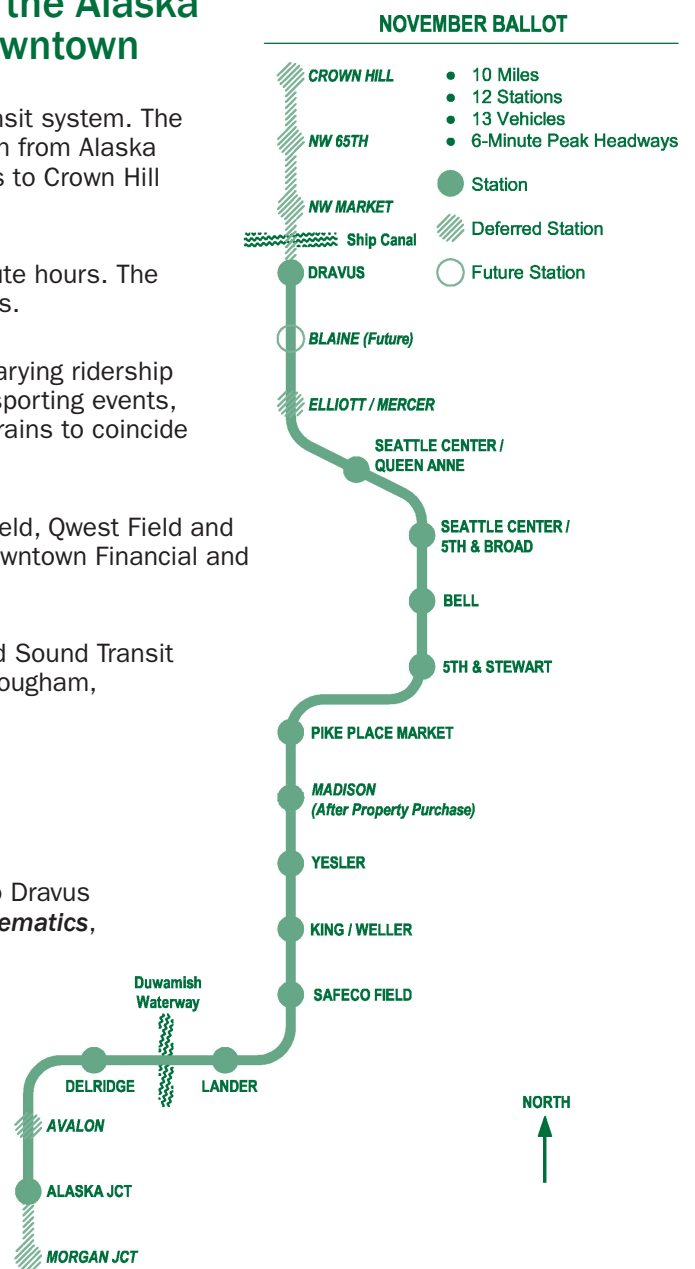
The plan has stations at major activity centers, including Safeco Field, Qwest Field and Exhibition Center, the International District, Pioneer Square, the Downtown Financial and Retail Core, Pike Place Market, Key Arena, and Seattle Center.

The system connects to other transit systems, including buses and Sound Transit Light Rail stations at King Street Station, Pioneer Square, Royal Brougham, and Westlake.

## Ridership and Travel Time Comparison

Daily ridership for this initial phase from Alaska Junction Station to Dravus Station is identified by SMP's ridership consultant, **Cambridge Systematics**, as approximately 42,200 and 57,000 passengers per day in 2010 and 2030 respectively.

The initial phase will provide a 15-minute trip from the Alaska Junction Station to Pioneer Square and a 9-minute trip from the Dravus Station to Downtown.



# Financing the Project

## The Initial Phase of the Green Line

The SMP Board has placed a measure on the November ballot (Proposition 1) asking for voter approval for an initial monorail of just over 10 miles and 12 stations at a project cost estimated at \$1.7 billion. This initial phase from Dravus Station (Interbay) to Alaska Junction (West Seattle) through Downtown will result in estimated cost savings of \$330 million; and repayment of all debt and termination of the car tab tax in approximately 31 years. The remainder of the 14-mile Green Line can be completed if the City approves construction permits following review of SMP's Finance Plan.

## Reducing Capital Costs

Project costs have been reduced by an estimated \$330 million from the original Green Line Plan. The estimated reductions include the following:

- Design, Build & Equip Contracts \$280 million
- Contingencies and Reserves \$30 million
- Construction Oversight \$9.9 million
- Utility Relocation \$9.3 million
- Third Party Payments \$3.1 million

SMP's Finance Plan is available for review at [http://www.elevated.org/\\_downloads/project/updates/10-17-05\\_Finance\\_Plan.pdf](http://www.elevated.org/_downloads/project/updates/10-17-05_Finance_Plan.pdf).

## Effect of Cost Reductions on Borrowing

Estimated project costs have been reduced by over \$330 million to \$1.7 billion. Lower up-front costs result in shorter debt repayment and lower overall project costs. Debt repayment is estimated to be 31 years, and total principal and interest is estimated at \$3.9 billion.

The SMP is funded by a 1.4% MVET on vehicles owned by Seattle residents. The tax is a dedicated revenue stream, projected to grow at an average annual rate of 6.1% through 2030, as forecast by an ECONorthwest report from May 2005 **A Projection of Motor Vehicle Excise Tax Revenues**. Under the plan, the tax rate paid by motor vehicle owners will not increase, tax revenues cannot be used to support operations after 2020, and the tax will be terminated when the debt is repaid. If revenues from the car tab tax grow more slowly than expected, bonds would be paid off over a longer period. If car tab tax revenues grow more quickly than expected, however, bonds would be paid off sooner than 31 years.

SMP's forecasters have projected that the MVET will grow at an average annual rate of 6.1%. Others have suggested different rates. Although SMP believes that its forecast is appropriate, the finance plan is designed to work at a variety of different levels of projected growth. The following table indicates how the total debt service and repayment period will vary if annual MVET growth is lower or higher than projected.

MVET average annual growth rate used for repayment of bonds	6.1%	5.5%	5.0%	7.1%
Estimated Total Debt Service (principal and interest)	\$3.9 billion	\$4.4 billion	\$4.9 billion	\$3.5 billion
Estimated Repayment Period	31 years	36 years	38 years	31 years

# Project Opening and Operating Services

If voters approve Proposition 1, the first phase is expected to begin service with passengers in late 2010. The service will operate approximately 19 hours a day during the work week with extended service on weekends, including service to 2:00 a.m. on Friday and Saturday. The system is also designed to provide more frequent service for special events by staging special trains for events or providing express service.

The Green Line trains will depart a station every six minutes during the commute hours. The train departure times are designed to vary during the day depending on passenger demand. The following table shows a typical Friday train timetable for any monorail station for the first phase of service with a six-minute train frequency.

## Sample Monorail Time Table Typical Friday schedule at any station

Trains leave station at (a.m. - Lighter Type, p.m. - Darker Type):

5:00 a	6:34 a	7:52 a	9:12 a	10:56 a	<b>12:40 p</b>	<b>2:24 p</b>	<b>4:06 p</b>	<b>5:24 p</b>	<b>6:42 p</b>	<b>8:36 p</b>	12:04 a
5:08 a	6:40 a	7:58 a	9:20 a	11:04 a	<b>12:48 p</b>	<b>2:32 p</b>	<b>4:12 p</b>	<b>5:30 p</b>	<b>6:48 p</b>	<b>8:52 p</b>	12:20 a
5:16 a	6:46 a	8:04 a	9:28 a	11:12 a	<b>12:56 p</b>	<b>2:40 p</b>	<b>4:18 p</b>	<b>5:36 p</b>	<b>6:54 p</b>	<b>9:08 p</b>	12:36 a
5:24 a	6:52 a	8:10 a	9:36 a	11:20 a	<b>1:04 p</b>	<b>2:48 p</b>	<b>4:24 p</b>	<b>5:42 p</b>	<b>7:00 p</b>	<b>9:24 p</b>	12:52 a
5:32 a	6:58 a	8:16 a	9:44 a	11:28 a	<b>1:12 p</b>	<b>2:56 p</b>	<b>4:30 p</b>	<b>5:48 p</b>	<b>7:08 p</b>	<b>9:40 p</b>	1:08 a
5:40 a	7:04 a	8:22 a	9:52 a	11:36 a	<b>1:20 p</b>	<b>3:04 p</b>	<b>4:36 p</b>	<b>5:54 p</b>	<b>7:16 p</b>	<b>9:56 p</b>	1:24 a
5:48 a	7:10 a	8:28 a	10:00 a	11:44 a	<b>1:28 p</b>	<b>3:12 p</b>	<b>4:42 p</b>	<b>6:00 p</b>	<b>7:24 p</b>	<b>10:12 p</b>	1:40 a
5:56 a	7:16 a	8:34 a	10:08 a	11:52 a	<b>1:36 p</b>	<b>3:20 p</b>	<b>4:48 p</b>	<b>6:06 p</b>	<b>7:32 p</b>	<b>10:28 p</b>	1:56 a
6:04 a	7:22 a	8:40 a	10:16 a	<b>12:00 p</b>	<b>1:44 p</b>	<b>3:28 p</b>	<b>4:54 p</b>	<b>6:12 p</b>	<b>7:40 p</b>	<b>10:44 p</b>	
6:10 a	7:28 a	8:46 a	10:24 a	<b>12:08 p</b>	<b>1:52 p</b>	<b>3:36 p</b>	<b>5:00 p</b>	<b>6:18 p</b>	<b>7:48 p</b>	<b>11:00 p</b>	
6:16 a	7:34 a	8:52 a	10:32 a	<b>12:16 p</b>	<b>2:00 p</b>	<b>3:44 p</b>	<b>5:06 p</b>	<b>6:24 p</b>	<b>7:56 p</b>	<b>11:16 p</b>	
6:22 a	7:40 a	8:58 a	10:40 a	<b>12:24 p</b>	<b>2:08 p</b>	<b>3:52 p</b>	<b>5:12 p</b>	<b>6:30 p</b>	<b>8:04 p</b>	<b>11:32 p</b>	
6:28 a	7:46 a	9:04 a	10:48 a	<b>12:32 p</b>	<b>2:16 p</b>	<b>4:00 p</b>	<b>5:18 p</b>	<b>6:36 p</b>	<b>8:20 p</b>	<b>11:48 p</b>	

The Monorail trains provided by Cascadia, the selected Design, Build, Operate, and Maintain contractor, will be capable of running on the elevated fixed guideway at speeds up to 50 miles per hour. The attached table shows the expected travel times between the Green Line stations, including time for stopping and loading of passengers. First phase stations are shown in the dark green.

## Estimated Travel Times

Total Elapsed Time Between Stations Including Intermediate Stops

Station	Travel To												
	Alaska Junction	Delridge	Lander	Safeco Field	King / Weller	Yesler	Madison*	Pike Place Market	Fifth & Stewart	Bell	Seattle Center / Fifth & Broad	Seattle Center / Queen Anne	Dravus
<b>Alaska Junction</b>		04:40	09:20	11:40	13:20	14:50	16:10	17:40	19:10	20:20	21:40	23:30	28:40
<b>Delridge</b>	04:40		04:20	06:40	08:20	09:50	11:10	12:40	14:10	15:20	16:40	18:30	23:40
<b>Lander</b>	09:30	04:30		02:00	03:40	05:10	06:30	08:00	09:30	10:40	12:00	13:50	19:00
<b>Safeco Field</b>	11:50	06:50	02:00		01:20	02:50	04:10	05:40	07:10	08:20	09:40	11:30	16:40
<b>King / Weller</b>	13:30	08:30	03:40	01:20		01:00	02:30	03:50	05:30	06:30	08:00	09:40	15:00
<b>Yesler</b>	15:00	10:00	05:10	02:50	01:00		00:50	02:20	03:50	04:50	06:20	08:10	13:20
<b>Madison*</b>	16:20	11:20	06:30	04:20	02:30	00:50		01:00	02:30	03:30	05:00	06:50	12:00
<b>Pike Place Market</b>	17:50	12:50	08:00	05:40	03:50	02:20	00:50		01:10	02:10	03:30	05:20	10:30
<b>Fifth &amp; Stewart</b>	19:20	14:20	09:30	07:20	05:30	03:50	02:30	01:10		00:40	02:10	04:00	09:10
<b>Bell</b>	20:30	15:30	10:30	08:20	06:30	04:50	03:30	02:10	00:40		01:10	03:00	08:10
<b>Seattle Center / Fifth &amp; Broad</b>	22:00	16:50	12:00	09:50	08:00	06:20	05:00	03:40	02:10	01:10		01:30	06:40
<b>Seattle Center / Queen Anne</b>	23:50	18:50	14:00	11:40	09:50	08:20	06:50	05:30	04:10	03:00	01:40		05:00
<b>Dravus</b>	28:40	23:40	18:50	16:40	14:50	13:10	11:50	10:30	09:00	08:00	06:30	04:40	

Some typical trips would include an 18-minute trip from Alaska Junction to Pike Place Market, and a 20-minute trip from the Dravus Station to Safeco Field. A passenger transferring from the Sound Transit Light Rail line or the Sounder commuter rail at the King Weller Station would get to the Seattle Center/Queen Anne Station near Key Arena in about 10 minutes after boarding the Monorail.

# Voting on the Monorail in November

## SMP Propositions 1 and 2

### Background

The SMP Board has placed two measures before voters on the November 8th general election ballot. The full text of the Board resolutions that led to these ballot measures can be found at [www.elevated.org](http://www.elevated.org).

The first measure, Proposition 1, asks voters for the authority to modify the 2002 Seattle Popular Monorail Plan. The measure seeks authorization to construct an initial 10-mile, 12-station phase from the Dravus Station (Interbay) to the Alaska Junction Station (West Seattle) through Downtown. The second measure, Proposition 2, seeks approval to create a majority-elected Board.

### Proposition 1

Proposition 1 is the result of SMP Board Resolution No. 05-36A. Proposition 1 would direct SMP to initially build a monorail from Dravus in Interbay, through downtown Seattle, and to Alaska Junction in West Seattle. The initial monorail would be approximately 10 miles long, and would include 12 stations. The precise monorail route could be modified if necessary to secure construction permits from the City of Seattle. The 14-mile Green Line will be built if the city approves the construction permits following review of SMP's Finance Plan.

The full text of Proposition 1 is as follows:

SEATTLE POPULAR MONORAIL AUTHORITY  
(SEATTLE MONORAIL PROJECT)  
PROPOSITION 1  
CONSTRUCTION OF MONORAIL BY MODIFYING PLAN

The Board of Directors of the Seattle Monorail Project adopted Resolution No. 05-36-A which concerns constructing a monorail by modifying the Seattle Popular Monorail Plan. This measure would modify the Plan to allow SMP to: initially build a monorail from Dravus (Interbay) to Alaska Junction (West Seattle); further modify the Plan's route if necessary to obtain City consent for construction permits following City review of SMP's finance plan; and, if possible, build the remainder of the 14-mile Green Line. If this proposition is enacted, SMP would be directed to build a monorail. If it is rejected, no new monorail would be built. Should this proposition be enacted into law?

Yes

No

## Proposition 2

Proposition 2 is the result of SMP Board Resolution No. 05-32. Proposition 2 would change the composition of the SMP Board to result in a majority-elected Board. Currently, seven of the Board's nine positions are appointed and two are elected. If approved, this measure would reduce the number of appointed Board positions to four and increase the number of elected positions to five. The terms of all elected Board members would be changed to four years, and the election of Board members would be staggered.

The full text of Proposition 2 is as follows:

SEATTLE POPULAR MONORAIL AUTHORITY  
(SEATTLE MONORAIL PROJECT)  
PROPOSITION 2  
CHANGE IN COMPOSITION OF THE BOARD

The Board of the Seattle Monorail Project ("Board") adopted Resolution No. 05-32 concerning a proposition to change the composition of the Board. This proposition will increase the number of elected Board members, resulting in a 5-4 majority of elected members, beginning in November 2007. It will also change the terms of all elected Board positions to four-year terms. Finally, it will stagger the elections of Board members. Should this proposition be enacted into law?

Yes

No

# Monorail Timeline

## If Proposition 1 is Approved:

SMP is directed to complete construction of the first phase of the Monorail:

### 2005

NOVEMBER TO DECEMBER

- Finalize preparations for construction
- Finalize financing
- City-SMP action on Right-of-Way Agreement

### 2006

EARLY 2006

- Begin issuing bonds
- Break ground and begin construction

### 2010

- Open Green Line to passenger service

## If Proposition 1 is Rejected:

Monorail will not be built:

- Agency will maximize return on disposal of assets
- Monorail Car Tab Tax will continue until all debts are paid
- Agency will dissolve as quickly as possible



## Building the Project

SMP has negotiated a fixed-price agreement for the construction of the Green Line with Cascadia Monorail Company, LLC. Cascadia was formed specifically to build the Green Line. Cascadia Monorail Company includes a project team of local and international companies, and is wholly owned by the Fluor Corporation. The proposed agreement includes a fixed price to design, build, and provide all equipment, including trains, for the Green Line. Some negotiation will be required to implement the proposed phasing of the Green Line to address the initial guideway length and number of stations. The contract includes performance guarantees from Cascadia including a parent guarantee of all contract obligations from the Fluor Corporation. Other taxpayer and performance protections include: financial penalties to Cascadia for unexcused delay in completing the Green Line, a surety performance and payment bonding package totaling \$500 million, and a comprehensive insurance package provided by the contractor.

SMP has also negotiated an Operations and Maintenance Contract with Cascadia that includes fixed prices for most of the operations and maintenance of the system after construction for a period of at least five years. SMP has the option to extend the period to 15 years, depending on the performance of Cascadia. Some modifications to this contract will also be required to address a shorter initial alignment and fewer stations in the first phase of the Green Line implementation.

For more detailed information, please visit [www.elevated.org/project/board/actionplan](http://www.elevated.org/project/board/actionplan)