

**ALASKA LEGISLATURE**

**2606**

**HOUSE and SENATE FINANCE COMMITTEE FILES, 2003-2004**

272

**HB**

**511**

SFIN

FILE

# SENATE FINANCE COMMITTEE REPORT

REPORTED OUT  
MAY 08 2004  
SENATE FINANCE  
COMMITTEE

DATE: 5/7/04

FURTHER:

DATE TURNED  
IN TO OFFICE: 8 May 2004

Finance Committee considered CS FOR HOUSE BILL NO. 511(HES) am

## HB 511 CERTIFICATE OF NEED PROGRAM

"An Act relating to the certificate of need program for health care facilities; and providing for an effective date."

and recommends:

- be replaced with S cs CS HB 511 (FIN)
- adopt previous \_\_\_\_\_ cs CS forthcoming (\_\_\_\_\_)
- attached amendment(s)
- adopt Letter of Intent by Senate HES Committee
- further referral to \_\_\_\_\_ Committee

**Senate Bill:**  
 Same Title  
 New Title

**House Bill:**  
 Same Title  
 Technical Title Change  
 New Title w/ SCR # \_\_\_\_\_

**NEW FISCAL NOTE(S):**

Department	Date	Fiscal	Indet.	Zero.	FN#

**PREVIOUS FISCAL NOTE(S):**

Department	Date	Fiscal	Indet.	Zero	FN#
H#55 Public Health	5/1/04			✓	#1
H#55 Behav. Health	5/1/04			✓	#2

APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS:	DO PASS	DO NOT PASS	NO REC	AMEND
<i>Tom Hays</i>				✓
<i>Tom Hays</i>			✓	
<i>Donald C. Green</i>			✓	
<i>Bob Ventor</i>			✓	
<i>Ken Stumm</i>			✓	
COCHAIR: <i>Byles Green</i>			✓	
COCHAIR: <i>Gary Wilson</i>	✓			

MAY 08 2004

# FISCAL NOTE

STATE OF ALASKA  
2004 LEGISLATIVE SESSION

Fiscal Note Number: 2  
 Bill Version: CSHB 511(HES)  
 ( H ) Publish Date: 3/24/04  
 Dept. Affected: Health & Social Services  
 RDU: Behavioral Health  
 Component: Behavioral Hlth Medicaid Svcs

SENATE FINANCE  
COMMITTEE

Revision: Date/Time (Note if correction):  
 Title: RELATING TO CERTIFICATES OF NEED

Sponsor: SAMUELS  
 Requester: HOUSE (HES)

Component No. 2660

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

CAPITAL EXPENDITURES						
CHANGE IN REVENUES (0)						

**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1037 GF/Mental Health						
Other(Specify Type-do not abbreviate)						
Other(Specify Type-do not abbreviate)						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2004) cost: \_\_\_\_\_

Mark this box (X) if funding for this bill is included in the Governor's FY 2004 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

Passage of this legislation will make Residential Psychiatric Treatment Centers (RPTC) subject to the requirements of the state's Certificate of Need law. While the department is aware that there is considerable interest in developing additional RPTC capacity, the department has no reliable data to predict how many additional facilities or beds may be licensed in the near-term and is therefore unable to calculate the impact on the Medicaid program.

Over the long-term, the department believes that controlling RPTC capacity through the CON program and encouraging the development of lower levels of health care for children, Medicaid costs will be less than would otherwise be the case and the quality of care provided to Alaskan children will be improved. (continued on page 2)

Prepared by: Sherry Hill, Special Assistant  
 Division: Office of the Commissioner  
 Approved by: Joel S. Gilbertson, Commissioner  
 Agency: Department of Health and Social Services

Phone 465-1618  
 Date/Time 03/01/2004  
 Date 03/01/2004

COMMITTEE COPY

FISCAL NOTE  
FN # 2

STATE OF ALASKA  
2004 LEGISLATIVE SESSION

BILL NO. CSHB 511(HES)

ANALYSIS CONTINUATION

RPTC services are expensive and the costs continue to increase. In FY 02 Alaska spent \$32.2 million to provide RPTC services to 728 children, most between the ages of 7 and 19. The total number of youth served in the program has increased 222% from 226 in 1998 to 728 in 2002. The total amount spent on RPTC care has risen 485% in four years, from \$5.5 million in 1998 to \$32.2 million in 2002.

The average per diem rate to keep children in RPTC facilities outside Alaska in 2002 was \$55 per day lower than in-state care (\$303 in-state to \$248 per day out-of-state). However, the average length of stay for a child in out-of-state placement was longer (141 days compared to 118 days). Some out of state services are specialized services not currently offered in Alaska. Best practices indicate children are better served closer to home and that in-state care facilitates involvement in treatment and discharge planning to improve transition for children or youth back into community based care, reducing length of stay and readmissions.

Although the cost cannot be estimated, the transition from out-of-state care to in-state care could be very costly if proper planning and development are not done. It is important to ensure that the beds are distributed according to community need and that support services are in place so that children do not end up in higher, more expensive levels of care for a longer period than necessary. Developing capacity to serve these children in Alaska will create more jobs in Alaska and ensure that Alaskan dollars are spent in Alaska. It is conceivable that up to 150 new RPTC beds could be built in Alaska in a number of facilities with construction costs of up to \$3 to \$10 million and cost of care could be up to \$20 million.

This \$20 million is not expected to be a cost that is in addition to the \$32 million currently spent, but will reduce the amount spent out of state if the development is well planned. If development is not well planned, there will be additional costs.

MAY 08 2004

# FISCAL NOTE

STATE OF ALASKA  
2004 LEGISLATIVE SESSION

Fiscal Note Number: 1  
 Bill Version: CSHB 511(HES) SENATE FINANCE  
 ( H ) Publish Date: 3/24/04 COMMITTEE

Revision Date/Time (Note if correction):  
 Title RELATING TO CERTIFICATES OF NEED  
 Dept. Affected: Health & Social Services  
 RDU Public Health  
 Component Community Health/EMS Services

Sponsor SAMUELS  
 Requester HOUSE (HES) Component No. 2078

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES (0)						
------------------------	--	--	--	--	--	--

**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1037 GF/Mental Health						
Other(Specify Type-do not abbreviate)						
Other(Specify Type-do not abbreviate)						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2004) cost: \_\_\_\_\_  
 Mark this box (X) if funding for this bill is included in the Governor's FY 2004 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)  
 It is difficult to estimate how much actual additional CON work this bill would generate for the Department. Our rough projection of 5 new CON applications per year would be absorbed by existing staff, thus this zero fiscal note.  
  
 However, should CON applications increase dramatically in the future, then a new position (Health Planner II, \$82,500) would be needed, as well as additional travel (\$10,000) and contractual services (\$10,000) - for a total projected annual cost of \$102,500.

Prepared by: Sherry Hill, Special Assistant Phone 465-1618  
 Division: Office of the Commissioner Date/Time 03/01/2004  
 Approved by: Joel S. Gilbertson, Commissioner Date 03/01/2004  
 Agency: Department of Health and Social Services

COMMITTEE COPY

ADOPTE

SENATE FINANCE  
COMMITTEE  
Amendment Number: #1  
Bill Number: HB 511  
Sponsor: Green Date: 5/8/04  
Logged In By: Mindy

AMENDMENT

OFFERED IN THE SENATE

BY: SENATOR GREEN

TO: SCS CSHB 511 (HES)

Page 2, line 1:

Insert a new section to read:

(d) Beginning July 1, 2005, the \$1,000,000 threshold in (a) of this section shall be increased by \$50,000 annually until July 1, 2014.

Renumber the following bill sections accordingly and make necessary technical changes.

Explanation:

The \$1,000,000 threshold would increase in \$50,000 increments each year until it reached \$1,500,000 in 2014.

SENATE FINANCE COMMITTEE  
S 18 / 2004 COMMITTEE ACTION

Bill Number	HB 511		
Amendment	#1		
Motion	to ADOPT		
<u>Motion by</u>	Green		
<u>Objection by</u>	Wilken		
<u>Removed</u>	✓		
<u>Second Objection by</u>			
<u>Committee Member</u>	Y	<u>Vote</u>	N
Senator Stevens			
Senator Bunde			
Senator Dyson			
Senator Hoffman			
Senator Olson			
Co-Chair Green			
Co-Chair Wilken			
<u>Tally</u>			
Yea			
Nay			
Absent			
<u>MOTION</u>	ADOPTED		

1 (A) 24 hours a day for children with severe emotional or  
2 behavioral disorders;

3 (B) under the direction of a physician; and

4 (C) under a professionally developed and supervised individual  
5 plan of care designed to achieve the recipient's discharge from inpatient status  
6 at the earliest possible time that is intensively and collaboratively delivered by  
7 an interdisciplinary team involving medical, mental health, educational, and  
8 social service components.

9 \* Sec. 8. The uncodified law of the State of Alaska is amended by adding a new section to  
10 read:

11 APPLICABILITY. (a) AS 18.07.031(d), enacted by sec. 2 of this Act, applies to a  
12 health care facility that enters into a lease agreement for the space occupied or equipment  
13 required for that facility on or after the effective date of this Act.

14 (b) AS 18.07.035(b) and (c) and 18.07.045, enacted by secs. 3 and 5 of this Act,  
15 respectively, apply to a certificate of need application filed with the Department of Health and  
16 Social Services after the effective date of this Act.

17 (c) AS 18.07.043, as amended by sec. 4 of this Act, does not apply to a health care  
18 facility that is a residential psychiatric treatment center that is under construction before the  
19 effective date of this Act if the facility is in compliance with all other applicable federal, state,  
20 and local laws. For purposes of this subsection, "under construction" means that

21 (1) the owner of the facility has for the facility

22 (A) complete architectural plans approved by the applicable agency;

23 (B) a building permit, if required;

24 (2) the foundation of the facility is being or has been laid; and

25 (3) the construction of the facility is completed within two years after the  
26 effective date of this Act.

27 \* Sec. 9. This Act takes effect immediately under AS 01.10.070(c).

Intent: If facility is constructed in a location that would otherwise not involve a building permit, such as outside of an organized borough, this legislation would not require a building permit.

SENATE FINANCE COMMITTEE  
5 / 8 / 2004 COMMITTEE ACTION

<b>Bill Number</b>	HB 511	
<b>Amendment</b>	#2	
<b>Motion</b>	to adopt	
<b><u>Motion by</u></b>	Dyson	
<b><u>Objection by</u></b>		
<b><u>Removed</u></b>		
<b><u>Second Objection by</u></b>		
<b><u>Committee Member</u></b>	<b>Y</b>	<b><u>Vote</u></b> <b>N</b>
Senator Bunde		
Senator Dyson		
Senator Hoffman		
Senator Olson		
Senator Stevens		
Co-Chair Green		
Co-Chair Wilken		
<b><u>Tally</u></b>		
Yea		
Nay		
Absent		
<b><u>MOTION</u></b>	ADOPTED	

*no objection*



Official Business

# Alaska State Senate

## Senate Finance Committee

Mail Stop 3100  
State Capitol  
Juneau, Alaska 99801-1182

### FAX COVER SHEET

DATE: 8 May 2004 TIME: 10:25 am

TO: Legal Services

NUMBER OF PAGES, INCLUDING COVER SHEET: 3

FROM: MINDY ROWLAND  
SENATE FINANCE COMMITTEE SECRETARY  
PHONE: 465-4935  
FAX: 465-2187

NOTES: Final Please

SCS CS HB 511 (FIN)

23-LS1755 \ X

Plus two amendments - attached

Call if any questions


Thx  
Mindy

Attention: Traci / Deb  
Of Senator Green's office  
RE: HB 511  
Date: 5/8 Time: 2:05pm

The attached Senate Finance CS incorporates the amendment(s) your boss sponsored. Please review and approve so the bill can be forwarded to the Senate Secretary.

The CS is your copy.

Thanks,  
Senate Finance Secretary  
Mindy #4935  
Robin #2618

Approved:   
(please initial)

Return ASAP

Attention: Sheila  
Of Senator Wilken's office  
RE: HB 511  
Date: 5/8 Time: 7:05pm

The attached Senate Finance CS incorporates the amendment(s) your boss sponsored. Please review and approve so the bill can be forwarded to the Senate Secretary.

copy to Traci/  
Deb

The CS is your copy.

Thanks,  
Senate Finance Secretary  
Mindy #4935  
Robin #2618

Approved: \_\_\_\_\_  
(please initial)

Return ASAP

A-OK  
Sheila

SENATE CS FOR CS FOR HOUSE BILL NO. 511(FIN)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-THIRD LEGISLATURE - SECOND SESSION

BY THE SENATE FINANCE COMMITTEE

Offered:

Referred:

Sponsor(s): REPRESENTATIVE SAMUELS

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to the certificate of need program for health care facilities; and  
2 providing for an effective date."

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

4 \* Section 1. AS 18.07.031(a) is amended to read:

5 (a) Except as provided in (c) and (d) of this section, a person may not make  
6 an expenditure of \$1,000,000 or more for any of the following unless authorized under  
7 the terms of a certificate of need issued by the department:

- 8 (1) construction of a health care facility;
- 9 (2) alteration of the bed capacity of a health care facility; or
- 10 (3) addition of a category of health services provided by a health care
- 11 facility.

12 \* Sec. 2. AS 18.07.031(c) is amended to read:

13 (c) Notwithstanding (a) of this section, a person who is lawfully operating a  
14 health care facility that is an ambulatory surgical facility at a site may make an

*Amend #1 technical change*

1 expenditure of any amount in order to relocate the services of that facility to a new site  
 2 in the same community without obtaining a certificate of need as long as neither the  
 3 bed capacity nor the number of categories of health services provided at the new site is  
 4 greater. [HOWEVER, NOTWITHSTANDING THE EXPENDITURE THRESHOLD  
 5 IN (a) OF THIS SECTION, A PERSON MAY NOT USE THE SITE FROM WHICH  
 6 THE HEALTH CARE FACILITY RELOCATED FOR ANOTHER HEALTH CARE  
 7 FACILITY UNLESS AUTHORIZED UNDER A CERTIFICATE OF NEED ISSUED  
 8 BY THE DEPARTMENT.]

9 \* Sec. 3. AS 18.07.031 is amended by adding new subsections to read:

10 (d) Beginning July 1, 2005, the \$1,000,000 expenditure threshold in (a) of this  
 11 section is increased by \$50,000 annually on July 1 of each year up to and including  
 12 July 1, 2014.

13 (e) In (a) of this section, "expenditure" includes the purchase of property  
 14 occupied by or the equipment required for the health care facility and the net present  
 15 value of a lease for space occupied by or the equipment required for the health care  
 16 facility; "expenditure" does not include costs associated with routine maintenance and  
 17 replacement of equipment at an existing health care facility.

18 \* Sec. 4. AS 18.07.035 is amended by adding new subsections to read:

19 (b) The department may require a person who intends to submit an application  
 20 under (a) of this section to submit a letter of intent to the department, except in the  
 21 case of an application for an emergency or temporary certificate of need authorized  
 22 under AS 18.07.071.

23 (c) The department shall notify the applicant in writing when the application is  
 24 complete under this chapter.

25 \* Sec. 5. AS 18.07.043 is amended to read:

26 **Sec. 18.07.043. Standard of review for applications for certificates of need**  
 27 **relating to nursing homes, [AND] nursing home beds, and residential psychiatric**  
 28 **treatment centers.** (a) The department shall develop review standards for an  
 29 application for a certificate of need, or for a modification of a certificate of need,  
 30 issued under this chapter for a health care facility that is a nursing home or residential  
 31 psychiatric treatment center, or that has nursing home beds.

Amend  
#1

1 (b) In developing the review standards under (a) of this section, the  
2 department shall consider whether

3 (i) a public process and existing appropriate statewide, regional, and  
4 local plans were included in planning and designing the residential psychiatric  
5 treatment center, the additional nursing home beds, or the nursing home [HEALTH  
6 CARE FACILITY];

7 (2) the residential psychiatric treatment center, the additional  
8 nursing home beds, or the nursing home [HEALTH CARE FACILITY] meets  
9 minimum required use rates for, as applicable, the residential psychiatric treatment  
10 center or new nursing beds, and the effect on use rates for existing nursing home  
11 beds;

12 (3) the residential psychiatric treatment center, the facility  
13 proposing additional nursing home beds, or the nursing home [HEALTH CARE  
14 FACILITY] demonstrates consideration of the community, regional, and statewide  
15 needs for, as applicable, the residential psychiatric treatment center or the new  
16 nursing home beds;

17 (4) the residential psychiatric treatment center, the additional  
18 nursing home beds, or the nursing home [HEALTH CARE FACILITY] meets the  
19 minimum number of, as applicable, residential psychiatric treatment beds or new  
20 nursing beds that should be required in a facility to ensure efficiency and economies of  
21 scale;

22 (5) the residential psychiatric treatment center, the facility  
23 proposing additional nursing home beds, or the nursing home [HEALTH CARE  
24 FACILITY] demonstrates the proposed service will provide a quality of care  
25 equivalent to existing community, regional, or statewide services;

26 (6) the residential psychiatric treatment center, the facility  
27 proposing additional nursing home beds, or the nursing home [HEALTH CARE  
28 FACILITY] demonstrates financial feasibility, including long-term viability, and what  
29 the financial effect will be on consumers and the state; and

30 (7) the sponsor has demonstrated cost effectiveness through  
31 considering the availability of appropriate, less costly alternatives of providing the

1 services planned.

2 (c) The department shall grant a sponsor a certificate of need or modify a  
3 certificate of need that authorizes a residential psychiatric treatment center or  
4 nursing home beds, or that is for a health care facility that is a nursing home, if the  
5 department finds that the sponsor meets the standards established in or under this  
6 chapter.

7 \* Sec. 6. AS 18.07 is amended by adding a new section to read:

8 **Sec. 18.07.045. Time standards for review of applications for certificates**  
9 **of need.** (a) The following time standards apply for a review by the department of an  
10 application for a certificate of need under this chapter:

11 (1) the department may defer commencement of the review process  
12 under this chapter for an application for a period not to exceed 60 days after the  
13 determination that the application is complete in order to allow the department to  
14 receive and consider concurrent applications from each person who has submitted a  
15 letter of intent to submit an application proposing an activity that is similar to the  
16 activity proposed by the application in the geographic area;

17 (2) the department shall review the application made under this chapter  
18 and submit an analysis and recommendation to the commissioner within 60 days after  
19 the date that notification under AS 18.07.035(c) is sent to the applicant stating that the  
20 application is complete.

21 (b) The commissioner may extend the time periods set out in (a) of this section  
22 for not more than 30 days for any of the following reasons:

23 (1) the applicant amends the application under this chapter;

24 (2) the department requests an extension of time within which to  
25 prepare its findings and recommendations on the application; the commissioner may  
26 grant only one extension under this paragraph.

27 \* Sec. 7. AS 18.07.111(8) is amended to read:

28 (8) "health care facility" means a private, municipal, state, or federal  
29 hospital, psychiatric hospital, independent diagnostic testing facility, residential  
30 psychiatric treatment center, tuberculosis hospital, skilled nursing facility, kidney  
31 disease treatment center (including freestanding hemodialysis units), intermediate care

1 facility, and ambulatory surgical facility; the term excludes

2 (A) an Alaska Pioneers' Home administered by the Department  
3 of Health and Social Services [ADMINISTRATION] under [AS 44.21.020(9)  
4 AND] AS 47.55; and

5 (B) the offices of private physicians or dentists whether in  
6 individual or group practice;

7 \* **Sec. 8.** AS 18.07.111 is amended by adding a new paragraph to read:

8 (10) "residential psychiatric treatment center" means a secure or semi-  
9 secure psychiatric facility or inpatient program in a psychiatric facility that is licensed  
10 by the Department of Health and Social Services and that provides therapeutically  
11 appropriate and medically necessary diagnostic, evaluation, and treatment services

12 (A) 24 hours a day for children with severe emotional or  
13 behavioral disorders;

14 (B) under the direction of a physician; and

15 (C) under a professionally developed and supervised individual  
16 plan of care designed to achieve the recipient's discharge from inpatient status  
17 at the earliest possible time that is intensively and collaboratively delivered by  
18 an interdisciplinary team involving medical, mental health, educational, and  
19 social service components.

20 \* **Sec. 9.** The uncodified law of the State of Alaska is amended by adding a new section to  
21 read:

22 **APPLICABILITY.** (a) AS 18.07.031(d), enacted by sec. 3 of this Act, applies to a  
23 health care facility that enters into a lease agreement for the space occupied or equipment  
24 required for that facility on or after the effective date of this Act.

25 (b) AS 18.07.035(b) and (c) and 18.07.045, enacted by secs. 4 and 6 of this Act,  
26 respectively, apply to a certificate of need application filed with the Department of Health and  
27 Social Services after the effective date of this Act.

28 (c) AS 18.07.043, as amended by sec. 5 of this Act, does not apply to a health care  
29 facility that is a residential psychiatric treatment center that is under construction before the  
30 effective date of this Act if the facility is in compliance with all other applicable federal, state,  
31 and local laws. For purposes of this subsection, "under construction" means that

1  
2  
3  
4  
5  
6  
7

(1) the owner of the facility has for the facility

(A) complete architectural plans approved by the applicable agency;

(B) a building permit if required;

(2) the foundation of the facility is being or has been laid; and

(3) the construction of the facility is completed within two years after the effective date of this Act.

\* **Sec. 10.** This Act takes effect immediately under AS 01.10.070(c).

#2

SENATE FINANCE COMMITTEE  
5/18/2004 COMMITTEE ACTION

<b>Bill Number</b>	HB 511		
<b>Amendment</b>			
<b>Motion</b>	to adopt Senate		
<b>Motion by</b>	Dyson		
<b>Objection by</b>	Green		
<b>Removed</b>	✓		
<b>Second Objection by</b>			
<b>Committee Member</b>	<b>Y</b>	<b>Vote</b>	<b>N</b>
Senator Dyson			
Senator Hoffman			
Senator Olson			
Senator Stevens			
Senator Bunde			
Co-Chair Green			
Co-Chair Wilken			
<b>Tally</b>			
Yea			
Nay			
Absent			
<b>MOTION</b>			

HES letter of intent

Senator Fred Dyson, Chair  
Senator Lyda Green, Vice-Chair  
Senator Gary Wilken  
Senator Bettye Davis  
Senator Gretchen Guess



## Health, Education, and Social Services Committee Alaska State Senate

HB 511 Letter of Intent

It is the intent of the Legislature that the Commissioner of the Department of Health and Social Services convene a task force to review existing Certificate of Need procedures and standards. The task force shall identify measures to improve the efficiency and effectiveness of the Certificate of Need Program. The task force shall include members who represent a broad range of health care facilities, providers, and representatives with a background in health care policy development. The task force will report its findings and recommendations directly to the Commissioner.

It is further the intent of the Legislature that the Commissioner of the Department of Health and Social Services move expeditiously to update Certificate of Need regulations, policies, and procedures including developing standards including those for concurrent review, the public release of documents under the certificate of need program, and time lines regarding the certificate of need process. In so doing, the Commissioner shall fully consider the recommendations of the Certificate of Need task force.

**COMMITTEE COPY**

# Alaska State Legislature



Session  
State Capitol Building, Room 118  
Juneau, Alaska 99801-1182  
Phone (907) 465-2995  
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716 West Fourth Avenue, Suite 430  
Anchorage, Alaska 99501  
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Fax 9907) 269-0249



Chair, Judiciary Committee  
Vice-Chair, House Committee on  
Economic Development,  
Trade and Tourism

Member  
Oil & Gas Committee

## Representative Lesil McGuire

*House District 28*

### Letter of Intent CSHB 511 (HES) *am*

It is the intent of the legislature that the Commissioner of the Department of Health and Social Services convene a task force to review existing Certificate of Need procedures and standards. The task force shall identify measures to improve the efficiency and effectiveness of the Certificate of Need Program. The task force shall include members who represent a broad range of health care facilities and providers subject to the Certificate of Need statute. The task force will report its findings and recommendations directly to the Commissioner.

It is further the intent of the legislature that the Commissioner of the Department of Health and Social Services move expeditiously to update Certificate of Need regulations, policies and procedures. In so doing, the Commissioner shall fully consider the recommendations of the Certificate of Need task force.

*Lesil McGuire 4/23/04*

**Adopted by the House  
April 28, 2004**

COMMITTEE COPY

# **REPRESENTATIVE RALPH SAMUELS**

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## **HOUSE DISTRICT 29**

### **CS House Bill 511 Sponsor Statement**

**“An Act relating to the certificate of need program for health care facilities; and providing for an effective date.”**

The Certificate of Need review process, which is administered by the Department of Health and Social Services, establishes a set of statutory criteria to guide the development of new healthcare facilities and services in Alaska. Among the objectives of the program are ensuring reasonable access to needed healthcare services throughout the state without unnecessary service duplication and assuring that the need, cost, type, level, quality, and feasibility of providing any new health services be subject to review and assessment prior to any offering or development. In that process, a focus is placed on managing growth in capital expenditures in order to ensure that the new services will provide high-quality services in a cost-effective manner.

With the demand for healthcare services constantly evolving and technology rapidly changing, the resulting impact on the state's existing statutes must be addressed from time to time. It is in that vein that I am sponsoring this piece of legislation. Current state law governing this program requires any person wishing to expend \$1,000,000 or more to construct a health care facility, alter the bed capacity of a health care facility, or add a category of health services provided by a health care facility, must apply for a Certificate of Need. That law leaves a gaping hole in state oversight in that any person who wishes to establish or alter a health care facility or related service may circumvent the Certificate of Need process by simply leasing space and equipment. This legislation seeks to “level the playing field” by subjecting all those seeking to provide these services to the same rules.

Additionally, the number of Alaska's children and youth who are sent out of state for residential psychiatric treatment has skyrocketed from 83 children in FY98 to 528 children in FY02. The state infrastructure must be developed to provide a comprehensive system of behavioral health care. However, uncontrolled growth could result in a system focused on the most intensive care, not necessarily the most effective or needed care. While the state is anxious to build up the necessary in-state capacity needed to serve Alaskan children with in-state care, without safeguards in place, secure care could quickly be overbuilt. Since all children and youth served by residential psychiatric treatment centers (RPTCs) are paid for by Medicaid after 30 days in an out-of-home placement, this becomes a Medicaid issue. Adding secure residential psychiatric treatment facilities to the Certificate of Need (CON) program would be an advantage to the state in managing the way in which the service delivery system is developed.

Email: [Representative\\_Ralph\\_Samuels@legis.state.ak.us](mailto:Representative_Ralph_Samuels@legis.state.ak.us)

Session: Alaska State Capitol, Juneau, Alaska 99801-1182 • Phone: (907) 465-2095 Fax: (907) 465-3810  
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# Alaska State Legislature

Session  
State Capitol Building, Room 118  
Juneau, Alaska 99801-1182  
Phone (907) 465-2995  
Fax (907) 465-6592

Interim  
716 West Fourth Avenue, Suite 430  
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Chair, Judiciary Committee  
Vice-Chair, House Committee on  
Economic Development,  
Trade and Tourism

Member  
Oil & Gas Committee

## Representative Lesil McGuire

*House District 28*

### Letter of Intent CSHB 511 (HES)

It is the intent of the legislature that the Commissioner of the Department of Health and Social Services convene a task force to review existing Certificate of Need procedures and standards. The task force shall identify measures to improve the efficiency and effectiveness of the Certificate of Need Program. The task force shall include members who represent a broad range of health care facilities and providers subject to the Certificate of Need statute. The task force will report its findings and recommendations directly to the Commissioner.

It is further the intent of the legislature that the Commissioner of the Department of Health and Social Services move expeditiously to update Certificate of Need regulations, policies and procedures. In so doing, the Commissioner shall fully consider the recommendations of the Certificate of Need task force.

# LEGAL SERVICES

DIVISION OF LEGAL AND RESEARCH SERVICES  
LEGISLATIVE AFFAIRS AGENCY  
STATE OF ALASKA

(907) 465-3867 or 465-2450  
FAX (907) 465-2029  
Mail Stop 3101


State Capitol  
Juneau, Alaska 99801-1182  
Deliveries to: 129 6th St., Rm. 329

## MEMORANDUM

March 31, 2004

**SUBJECT:** Certificate of Need Program (CSHB 511(HES))

**TO:** Representative Ralph Samuels  
Attn: Sara Nielsen

**FROM:** Jean M. Mischel  
Legislative Counsel 

You have requested a sectional summary of the above-described bill.

As a preliminary matter, note that a sectional summary of a bill should not be considered an authoritative interpretation of the bill and the bill itself is the best statement of its contents. If you would like an interpretation of the bill as it may apply to a particular set of circumstances, please advise.

**Section 1.** Removes the prohibition on using the site from a relocated health care facility for another health care facility without a new certificate of need.

**Section 2.** Limits the relocation of a health care facility without a certificate of need to one time. Defines the term "expenditure" for purposes of relocating a health care facility.

**Section 3.** Adds residential psychiatric treatment centers to current requirement for review standards for certificate of need applicants. Changes the term "health care facility" to "nursing home" in the context of review standards.

**Section 4.** Amends definition of "health care facility" to include independent diagnostic testing facilities and residential psychiatric treatment centers. Changes reference to Department of Administration to the correct reference to the Department of Health and Social Services as administrator of Alaska Pioneers' Homes.

**Section 5.** Adds a definition of "residential psychiatric treatment center."

**Section 6.** Provides applicability section for section 2 of the bill for certain lease agreements entered into on or after the effective date of the bill.

**Section 7.** Establishes an immediate effective date for the bill.

JMM:med  
04-348.med

# STATE OF ALASKA

## DEPT. OF HEALTH AND SOCIAL SERVICES

### DIVISION OF ADMINISTRATIVE SERVICES

FRANK H. MURKOWSKI, GOVERNOR

P.O. BOX 110650  
JUNEAU, ALASKA 99811-0650  
PHONE: (907) 465-3082  
FAX: (907) 465-2499

March 15, 2004

The Honorable Peggy Wilson, Chair  
The Honorable Carl Gatto, Vice-Chair  
House HESS Committee  
State Capitol, Room 104 and 411  
Juneau, AK 99801-1182

Dear Representatives Wilson and Gatto:

Recently, members of the House Health Education and Social Services (HESS) Committee received correspondence from Tanana Valley Clinic regarding HB 511-Certificate of Need Bill. The correspondence alleges that the Certificate of Need program has approved 99% of all the projects submitted for CON consideration, which is not accurate.

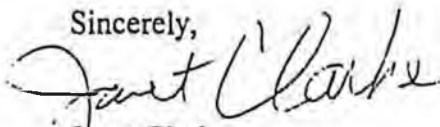
To clear up any confusion on the subject, the department completed an analysis of Certificate of Need approvals, disapprovals, etc. and in *Attachment #1* have provided the analysis.

Also attached for your information, in *Attachment #2*, is a summary of Questions and Answers related to Certificate of Need.

We have also had questions concerning the number and activity of "competing applications", *Attachment #3* includes information on this subject.

I hope this information is useful to all members of the House HESS Committee. If you have any further questions I will be available on Thursday March 18, 2004 to testify on HB 511 you can also contact me at 465-1630.

Sincerely,



Janet Clarke  
Assistant Commissioner

cc: Representative John Coghill, Capitol Building 204  
Representative Paul Seaton, Capitol Building, Room 428  
Representative Kelly Wolf, Capitol Building, Room 418  
Representative Sharon Cissna, Capitol Building, Room 420  
Representative Mary Kapsner, Capitol Building, Room 424  
Joel Gilbertson, Commissioner  
Sherry Hill, Special Assistant

## RESPONSE TO TVC ASSERTIONS

Tanana Valley Clinic has asserted that 1) the CON review process automatically "rubber stamps" hospital projects; 2) none of the non-hospital CONs are approved; 3) that the true purpose of the CON program is to protect hospitals from competition; and 4) that 99% of applicants are approved, which indicates that CON is an unnecessary and expensive process. The clinic urges that the program be eliminated.

**1) Rubber Stamping:** There are 5 possible outcomes to a certificate of need review 1) approval as requested; 2) denial; 3) partial approval (which could be considered partial denial); 4) approval but with special conditions; and 5) withdrawal of an application. The Commissioner has the authority to approve an application, but may attach special conditions such as allowing an activity to be shelved in but delaying full implementation until a certain use rate is reached.

The Department has reviewed 36 certificate of need applications since 1996; 61% were approved as requested and 39% were not approved as requested. Of those not approved as requested, 11% were denied, 11% partially approved, 6% withdrawn and 14% were given special conditions that had to be met. (See attached chart. Percentages are more than 100% because a decision may include both a special condition and partial approval).

Of the 39% that were not approved as requested: 50% of the denials or partial approval/denials were for hospitals or collocated facilities (hospital and nursing home together), 38% were for Ambulatory Surgery Centers; and 12% were freestanding nursing home beds. 50% of withdrawn applications were for nursing home beds and 50% for acute inpatient psych beds. 60% of the special conditions were for acute hospitals and 40% for acute inpatient psych beds. *The fact that only 61% of all applications are approved as requested, that hospitals and nursing homes are denied or given conditional approval shows that there is no "rubber stamping" going on.*

**2) Non-hospital CON approval:** Most of the approved CON applications are from acute care hospitals, nursing homes and kidney dialysis centers because they are required to go through the CON process while other organizations are not required to go through the process or can avoid the process in some way. Most ambulatory surgery centers are able to lease equipment or space in a building and avoid CON. Only 6 CON applications for freestanding ambulatory surgery centers have been received since the inception of the CON program 27 years ago. Fifty percent of these were approved. Independent diagnostic testing facilities are not required to go through the CON process, so no applications have ever been received from them. Other non-acute care hospital facilities that have had CON applications approved include free-standing nursing home facilities, freestanding psychiatric hospitals, and kidney dialysis centers. Although there are no longer any Intermediate Care facilities for the Mentally Retarded in the Alaska, the CON applications for these services were approved in the past.

**3) The CON program protect's hospitals from competition:** It is difficult to imagine that the CON program is protecting hospitals from competition since many ambulatory surgery centers are able to avoid CON and independent diagnostic centers are not covered by CON. Since 1996 a number of freestanding facilities in Anchorage, Wasilla and Kenai have been built without a CON that would have required a CON if built by a hospital. For example, Alaska Open

imaging has opened facilities in Wasilla, Anchorage and Soldotna without a CON and purchased a PET scanner. Providence had to go through the CON process to get approval for a PET scanner. Anchorage Fracture Clinic purchased an MRI, and several ASCs in Anchorage were able to develop projects without a CON that hospitals would have to go through the CON process to build or buy the equipment. A private group of physicians built a cardiac cath lab without a CON. Also, if the Department's goal is to protect hospitals from competition, why do hospitals appeal our decisions?

**4) 99% of applicants are approved, which indicates that CON is unnecessary:**

This is not true. As can be seen from the data supplied on the attached page *only 61% of the applications were approved as requested* and overall, *11% of the applications were denied outright*. The fact that most applications are approved is exhibited as proof that the program has little or no effect. If the number of projects denied is the benchmark for showing how well certificate of need is working, then the more projects denied the better, and the very best program would deny all applications. This obviously isn't true. Over time, healthcare providers gain expertise in writing applications and the CON process and gain an understanding of the trends in healthcare. They avoid the time and expense of applying for projects that are unlikely to be approved. Technical assistance and current state plans produced by senior services and behavioral health help eliminate poorly conceived and marginal projects before submission of a CON application. Development of new review criteria and standards in the new State Health Systems Plan will help even more. In the regulation of healthcare, just as in the promotion of health, prevention is by far the most effective strategy.

Projects that are denied may be few and far between, but the ongoing cost of one poorly planned project will last for many years. As someone once said, build it and they will come. The 10-year life of one CON program in a sparsely populated state, 573 nursing home beds, 100 long-term care hospital beds, 9 ambulatory surgery suites, 144 substance abuse beds, 60 psychiatric beds, and 30 rehab beds were denied. This resulted in the avoidance of nearly \$200 million in construction costs alone and an additional \$240 million in annual operating costs. Also, going through the CON process has resulted in improved project planning for many facilities. The brief information that TVC gathered from the internet to develop their assertions does not present the whole picture. For example, the 1996 Providence-Seward Medical Center project looks like it was a blanket approval as requested, and it was. However, the Department spent years working with the applicant and informed them that a 35-bed facility recommended by outside consultants was not feasible and had a poor chance of being approved. As a result, they submitted an approvable application.

Certificate of need programs have assisted other agencies in promoting changes in service delivery methods. In particular, it has been helpful in changing the direction of the long-term care industry and psychiatric care in Alaska and other states. It has been a tool used to slow nursing home bed growth to allow development of home and community based alternatives to nursing homes. Since many patients can be served in either a hospital or residential setting, the CON program has been helpful in defining the continuum of care.

The cost of Medicaid is a serious problem facing Alaska. Commissioner Gilbertson is working to contain that. CON is only one of the tools needed to contain costs, but it is an important one.

## CERTIFICATE OF NEED DECISIONS FROM 1996-2003

	No. of CON Decisions*	Approved as Requested	CONs Denied	Partial** Approval	Withdrawn	Special Conditions	Shape Helped by CON***
2003	6	4	0	1	0	1	0
2002	6	4	0	0	0	2	2
2001	3	2	0	1	0	0	1
2000	1	1	0	0	0	0	0
1999	9	3	3	1	1	1	0
1998	5	3	1	1	0	1	1
1997	4	3	0	0	1	0	1
1996	2	2	0	0	0	0	1
<b>Total</b>	<b>36</b>	<b>22</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>5</b>	<b>6</b>
<b>%</b>	<b>100%</b>	<b>61%</b>	<b>11%</b>	<b>11%</b>	<b>6%</b>	<b>14%</b>	<b>17%</b>

\*Number of CON applications approved, denied or withdrawn in that year.

Other CONs may have been in progress, but not finished.

\*\* Partial approval means that part of the project was approved and part denied.

\*\*\* CON efforts influenced shape or scope of project before it was submitted or helped outcome.

### CON Influences Project or Assists by being there:

1996	PSMC	Number of beds reduced from 20 to 6 - a change from prior proposals
1997	Valley Hosp	CON influenced the withdrawal of application after assisting with moratorium
1998	WFC	Included adult day and 10 assisted living beds
1999	API	Withdrew due to planning prob, need for alternatives CON gave time
2001	BRH	Included Kidney Dialysis in CON App
2002	PAMC	Psych design included Single Pt of entry & DET
2002	Valdez	No of acute & NH beds influenced

### Special Conditions:

1998	ARH	May not convert Surg Suite to OHC for 5 years.
1999	PAMC	Open Heart shelled, not avail for 5 yrs.
2002	PAMC	8 Psych Beds Shelled until higher use
2002	API	8 Beds shelled until higher use
2003	MSVMC	Conditions for shelled space and Cath Lab

### Partial Approval/Denial or Complete Denial:

1998	SPH	10 Nursing home beds not approved/delayed
1998	FSC	Denied an extension or modification due to lack of need
1999	FBKS Surg	3 denials, TVC, McGuire & FMH
1999	SPH	Partial Denial - only 5 NH Beds approved
2001	FMH	Partial Denial - Reduced acute beds, healing garden
2003	WFC	Denied conversion but offered 5 -bed unit.

## History of Concurrent (Competing) Certificate of Need Reviews

There have been only 6 concurrent reviews since the inception of the CON program in 1976. Only 8.2% of all applications since 1990 were reviewed concurrently. 7 AAC 07.060(a), states: "In the commissioner's discretion, the agency shall defer commencement of the review process for a period not to exceed 60 days after the determination that the application is complete to enable the state agency and the appropriate health systems agency to receive and consider concurrently applications from each person who has submitted a letter of intent... proposing an activity within the appropriate health service area which is similar to the activity proposed by the applicant." *Key Points: A letter of intent must be in hand from a competing project in order for a concurrent review to be allowed and a competing application must be submitted within 60 days after the first application has been declared complete.* The six concurrent reviews are:

- |      |  |
|------|--|
| 1982 | Charter Medical Corporation submitted a CON to construct a \$12.2 million 80-bed psychiatric/alcohol/drug abuse hospital in Anchorage. An application for a 34-bed, \$3.4 million alcohol/drug hospital was received from Advanced Health Systems/Raleigh Hills. Comprehensive Care Corporation submitted a letter of intent for \$5.5 million, 50-bed alcohol/drug treatment hospital but did not submit an application. Charter and Advanced Health Systems were approved. |
| 1982 | Providence Hospital submitted a CON application for an \$80 million, 150-bed addition and Humana Hospital (now Alaska Regional) submitted a CON for a \$21.6 million, 93-bed addition. The projects were approved, but reduced to 53 additional beds and 39 additional beds respectively.  |
| 1985 | Heritage Place (Soldotna) and South Peninsula Hospital (Homer) submitted CON applications for 60 nursing home beds. Heritage Place was approved for 45 nursing beds and a shelved in space for 15 additional beds to be opened later when use increased. South Peninsula's request for 60 beds was denied.   |
| 1985 | Camai Care Center, Palmer; Careage Nursing Center, Wasilla; and Cook Inlet Housing Development Corporation submitted CON applications for 90-bed nursing facilities. Cook Inlet Housing Development Corporation was approved to build a 60-bed facility and 30 assisted living beds at a cost of \$8.8 million. This facility was named the Mary Conrad Center. Careage was denied, Camai Care approved, but was later denied a time extension due to lack of process.       |
| 1995 | Fairbanks Memorial Hospital (FMH) submitted a CON application for outpatient services including ambulatory surgery, and Fairbanks Surgery Center (FSC) submitted a CON for a freestanding ambulatory surgery center. Only the surgery portion of the FMH CON was reviewed concurrently with the FSC CON. Both were approved. FSC was later denied due to lack of progress.   |
| 1999 | Tanana Valley Clinic, Fairbanks Surgery Center, Inc. and Fairbanks Memorial Hospital submitted CON applications for 5 surgery suites and 4 procedure rooms costing \$11 million. None of the applicants were approved.   |

## Certificate of Need Questions & Answers

**Question: What types of projects are required to submit a certificate of need application and go through the review process?**

Answer: Any health care facility project that involves the expenditure of \$1 million or more for construction, renovation or the purchase of new equipment, and any project, regardless of cost, that converts space into nursing home beds is required to submit a certificate of need application.

**Question: Are there any types of "health care facility" projects that are currently exempt from the certificate of need program?**

Answer: Projects are exempt from certificate of need if: 1) the project cost is under the \$1 million threshold; 2) the project is for routine maintenance or routine replacement regardless of the cost; 3) the project is for specifically exempted Pioneer Homes, private physicians' offices, or dentists' offices; or 4) the project is not included in the definition of "health care facility."

**Question: Will the definition of a "health care facility" change if HB 511 passes?**

Answer: Yes. If HB 511 passes, two additional types of facilities will be added to the list of those projects that may be required to go through the CON process: 1) Residential Psychiatric Treatment Centers (RPTCs), and 2) independent diagnostic testing facilities.

**Question: Are all projects exempt from certificate of need if they fall below the dollar threshold?**

Answer: All projects that fall below \$1 million are exempt from certificate of need except for space converted to nursing home beds, which must submit a CON application regardless of the cost.

**Question: What are the components of the certificate of need (CON) process?**

- Submission of a letter of intent - (includes who, what, where, how large, the cost and timeline);
- Letter of intent (LOI) determination - a decision is made as to whether a CON is required;
- 60-Day wait - A CON application may be submitted 60 day after the LOI determination;
- Completeness Check - The application is checked for completeness, and more information is requested if the application is incomplete. The applicant has 60-days to submit information;
- Review Period - The analysis document must be submitted to the Commissioner in 90 days;
- Public Notice & Public Comment - Public notice is given at the beginning of a review and the public comment period runs concurrently with the review,
- Commissioner's Decision - The Commissioner makes the decision, which is published, and
- Appeal - The applicant has 30 days to appeal if dissatisfied.

**Question: If I apply for a certificate of need, how long will it take for a decision?**

Answer: Once your application is received and declared complete, a review document must be submitted to the Commissioner for a decision within 90 days. The Commissioner does not have a timeline to make a decision, but generally makes one in about two weeks.

**Question: How much does it cost to prepare a certificate of need application?**

Answer: That depends on the size of the project, its complexity and whether it is controversial. A rule of thumb is that a certificate of need application should not cost more than 1% of the total project cost with a maximum of \$25,000. Health Facilities Planning and Development, a consulting firm that writes approximately 70% of all CON applications for facilities in Washington State and has done at least 4 applications in Alaska, charges approximately \$15,000 per application, regardless of the size of the facility.

**Certificate of Need Thresholds by State - 2001**

State	Capital	Equipment	New Service
Alabama	\$ 3,200,000	\$ 1,500,000	All
Alaska	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Arkansas (LTC)	\$ 500,000	N/A	All Home Health
Connecticut	\$ 1,000,000	\$ 400,000	All
Delaware	\$ 5,000,000	\$ 5,000,000	N/A
Dist. of Columbia	\$ 2,000,000	\$ 1,300,000	\$ 600,000
Florida	None	None	All
Georgia	\$ 1,155,881	\$ 642,157	All
Hawaii	\$ 4,000,000	\$ 1,000,000	All
Illinois	\$ 6,000,000	\$ 6,000,000	All new, expansions
Iowa	\$ 1,500,000	\$ 1,500,000	\$ 500,000
Kentucky	\$ 1,772,224	\$ 1,772,224	N/A
Louisiana	N/A	N/A	All LTC/MR
Maine	.5M-NH/2M-Hosp	\$ 1,000,000	\$100,000 Capital
Maryland	\$ 1,450,000	N/A	All
Massachusetts (Acute)	\$ 9,841,075	\$ 524,857	All
Mass. (Non Acute)	\$ 1,049,715		
Mass. (LTC Op Budget)	\$ 558,461		
Michigan	\$ 2,352,000	All	All Clinical
Mississippi	\$ 2,000,000	\$ 1,500,000	All
Missouri	.6M-LTC/1M-Other	.4M-LTC/1M-Other	\$ 1,000,000
Montana	\$ 1,500,000	N/A	\$ 150,000
Nebraska	All LTC	All LTC	All LTC
Nevada	\$ 2,000,000	N/A	n/a
New Hampshire	\$ 1,759,512	\$ 400,000	All
New Jersey	\$ 1,000,000	\$ 1,000,000	All
New York	\$ 3,000,000	\$ 3,000,000	All
North Carolina	\$ 2,000,000	\$ 750,000	certain services
Ohio	\$2M Renovations	n/a	n/a
Oklahoma	\$ 500,000	N/A	All/w beds
Oregon	All LTC/Hosp	N/A	All LTC/Hosp
Rhode Island	\$ 2,000,000	\$ 1,000,000	\$ 750,000
South Carolina	\$ 1,000,000	\$ 600,000	\$ 400,000
Tennessee	\$ 2,000,000	\$ 1,000,000	All w/beds
Vermont	\$1.5M Hsp/\$.75M Other	\$ 500,000	\$ 300,000
Virginia	\$ 5,000,000	N/A	n/a
Washington	\$ 1,202,000	N/A	All
West Virginia	\$ 2,000,000	\$ 2,000,000	23 Services
Wisconsin	\$ 1,000,000	\$ 600,000	All LTC
Mean	\$ 1,500,000	\$ 1,000,000	All
Mode	\$ 2,000,000	\$ 1,000,000	All
Average	\$ 1,788,429	\$ 1,258,861	\$ 150,000





# SENATE COMMITTEE REPORT

DATE: 04/29/04

FURTHER: Finance

DATE TURNED 5.7.04  
IN TO OFFICE: \_\_\_\_\_

Health, Education & Social Services Committee considered CS FOR HOUSE BILL NO. 511(HES) am

## HB 511 CERTIFICATE OF NEED PROGRAM

"An Act relating to the certificate of need program for health care facilities; and providing for an effective date."

and recommends:

- be replaced with S CS for CS for HB 511 (HES)
- adopt previous \_\_\_\_\_ CS \_\_\_\_\_
- attached amendment(s)
- adopt Letter of Intent by S HES Committee
- further referral to \_\_\_\_\_ Committee

<b>Senate Bill:</b>	
<input type="checkbox"/>	Same Title
<input type="checkbox"/>	New Title
<b>House Bill:</b>	
<input checked="" type="checkbox"/>	Same Title
<input type="checkbox"/>	Technical Title Change
<input type="checkbox"/>	New Title w/ SCR # _____

**NEW FISCAL NOTE(S):**

Department	Date	Fiscal	Indet.	Zero	FN#

**PREVIOUS FISCAL NOTE(S):**

Department	Date	Fiscal	Indet.	Zero	FN#
HSS	3/01			X	1
HSS	3/01			X	2

APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS:	DO PASS	DO NOT PASS	NO REC	AMEND
Green <i>Linda Green</i>			✓	
Guess <i>Richard Guess</i>			✓	
Wilken <i>Conrad Wilken</i>			✓	
Davis <i>Betty Davis</i>	X			
Dyson CHAIR: <i>Paul Dyson</i>				✓

## Bill History/Action Display



**BILL:** HB 511

**SHORT TITLE:** CERTIFICATE OF NEED PROGRAM

**BILL VERSION:** CSHB 511(HES) AM

**CURRENT STATUS:** (S) FIN

**STATUS DATE:** 05/07/04

**SPONSOR(s):** REPRESENTATIVE(s) SAMUELS

**HEARING:** (S) FIN May 08 9:00 AM SENATE FINANCE 532 -- Time Change -- TELECONFERENCE

**TITLE:** "An Act relating to the certificate of need program for health care facilities; and providing for an effective date."

<b>Bill Root:</b>	Display Bill Root	Next Bill
Full Text	Fiscal Notes	Amendments
Committee Action with Bill History		

Jrn-Date	Jrn-Page	Action
02/16/04	<a href="#">2619</a>	(H) READ THE FIRST TIME - REFERRALS
02/16/04	<a href="#">2619</a>	(H) HES, FIN
03/24/04	<a href="#">3051</a>	(H) HES RPT CS(HES) 3DP 1DNP 2NR
03/24/04	<a href="#">3051</a>	(H) DF: KAPSNER, CISSNA, WILSON; DNP: WOLF;
03/24/04	<a href="#">3051</a>	(H) NR: GATTO, COGHILL
03/24/04	<a href="#">3052</a>	(H) FN1: ZERO(HSS)
03/24/04	<a href="#">3052</a>	(H) FN2: ZERO(HSS)
04/01/04	<a href="#">3164</a>	(H) FIN RPT CS(HES) 4DP 2NR 2AM
04/01/04	<a href="#">3164</a>	(H) DP: MEYER, HAWKER, HARRIS, WILLIAMS;
04/01/04	<a href="#">3164</a>	(H) NR: FATE, FOSTER; AM: STOLTZE, CHENAULT
04/01/04	<a href="#">3164</a>	(H) FN1: ZERO(HSS)
04/01/04	<a href="#">3164</a>	(H) FN2: ZERO(HSS)
04/23/04	<a href="#">3488</a>	(H) RULES TO 1ST SUP CALENDAR 4/23/04
04/23/04	<a href="#">3488</a>	(H) READ THE SECOND TIME
04/23/04	<a href="#">3489</a>	(H) HES CS ADOPTED UNAN CONSENT
04/23/04	<a href="#">3489</a>	(H) AM NO 1 ADOPTED UNAN CONSENT
04/23/04	<a href="#">3491</a>	(H) ADVANCED TO THIRD READING 4/26 CALENDAR
04/26/04	<a href="#">3525</a>	(H) MOVED TO BOTTOM OF CALENDAR
04/26/04	<a href="#">3527</a>	(H) NOT TAKEN UP 4/26 - ON 4/27 CALENDAR
04/27/04	<a href="#">3562</a>	(H) NOT TAKEN UP 4/27 - ON 4/28 CALENDAR
04/28/04	<a href="#">3596</a>	(H) READ THE THIRD TIME CSHB 511(HES) AM
04/28/04	<a href="#">3596</a>	(H) RTN TO 2ND FOR AM 2 FLD Y20 N15 E2 A3
04/28/04	<a href="#">3597</a>	(H) PASSED Y28 N10 E2
04/28/04	<a href="#">3598</a>	(H) EFFECTIVE DATE(S) SAME AS PASSAGE
04/28/04	<a href="#">3598</a>	(H) SAMUELS NOTICE OF RECONSIDERATION
04/28/04	<a href="#">3598</a>	(H) RECON TAKEN UP SAME DAY Y31 N7 E2

04/28/04 [3599](#) (H) PASSED ON RECONSIDERATION Y29 N9 E2  
 04/28/04 [3600](#) (H) EFFECTIVE DATE(S) SAME AS PASSAGE  
 04/28/04 [3600](#) (H) ADOPTED HOUSE LETTER OF INTENT UC  
 04/28/04 [3611](#) (H) TRANSMITTED TO (S)  
 04/28/04 [3611](#) (H) VERSION: CSHB 511(HES) AM  
 04/29/04 [3156](#) (S) READ THE FIRST TIME - REFERRALS  
 04/29/04 [3156](#) (S) HES, FIN  
 05/07/04 (S) HES RPT SCS 1DP 3NR 1AM SAME TITLE  
 05/07/04 (S) LETTER OF INTENT WITH HES REPORT  
 05/07/04 (S) AM: DYSON; DP: DAVIS  
 05/07/04 (S) NR: GREEN, GUESS, WILKEN  
 05/07/04 (S) FN1: ZERO(HSS)  
 05/07/04 (S) FN2: ZERO(HSS)  
 05/07/04 (S) REFERRED TO FINANCE

Similar Subject Match or Exact Subject MatchHEALTH & SOCIAL SERVICESHOSPITALSMEDICAL CAREMENTAL HEALTHNURSING HOMESBill Root: [Display Bill Root](#)[Next Bill](#)[To Report Problems with Basis Inquiry](#)[Live KTOO Streams](#)[Return to Basis Main Menu \(23 Legislature\)](#)[Return to Legislature Home Page](#)

**HB**

**512**

**HFIN**

**FILE**

# HOUSE COMMITTEE REPORT

(11)

Date Referred to Committee: March 3, 2004

FURTHER REFERRALS:

Date of Committee Action: 4.22.04

The FINANCE Committee considered:

HB 512

HOUSE BILL NO. 512

HYDROGEN ENERGY RESEARCH PROGRAM

"An Act establishing the Hydrogen Energy Partnership in the Department of Community and Economic Development; requiring the commissioner of community and economic development to seek public and private funding for the partnership; providing for the contingent repeal of an effective date; and providing for an effective date."

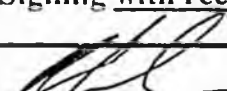
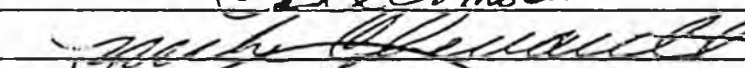

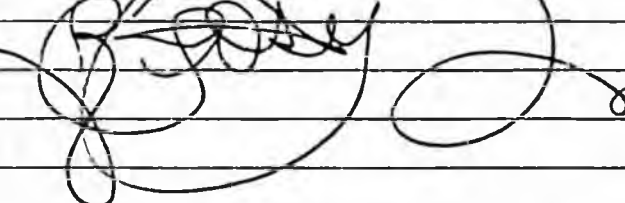
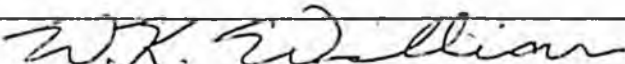
Recommends it be replaced with  HCS or  CS for HB 512 (FIN)  
 For Senate Bills with new title:  Technical Title  New Title: HCR \_\_\_\_\_  Same Title  New Title

- attach amendments
- add new referral to \_\_\_\_\_ Committee
- Letter of Intent \_\_\_\_\_ Committee

List of Abbrev for Depts.:  
 ADM  
 CED  
 COR  
 CRT  
 EED  
 DEC  
 DFG  
 GOV  
 HSS  
 LEG  
 LAW  
 LWF  
 MVA  
 DNR  
 DPS  
 REV  
 DOT  
 UA

<u>NEW FISCAL NOTES</u>				
*Assigned by Chief Clerk's Office				
List by Dept(s):	*FN#	Fiscal	Indet.	Zero
CED		✓		

<u>PREVIOUS FISCAL NOTES</u>				
List by Dept(s):	FN#	Fiscal	Indet.	Zero
UA	1			✓

<u>Signing with recommendations</u>	Printed Last Name	DP	DNP	NR	AM
	Joubert	✓			
Carla E. Moses	MOSES	✓			
	Chénault	✓			
	Foster	✓			
	Foster	X			
Chair:					
Chair: 	Williams	X			

# FISCAL NOTE

STATE OF ALASKA  
2004 LEGISLATIVE SESSION

Fiscal Note Number: 1  
Bill Version: HB 512  
(H) Publish Date: 3/3/04

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: University of Alaska  
Title HYDROGEN ENERGY RESEARCH PROGRAM RDU \_\_\_\_\_  
Component \_\_\_\_\_  
Sponsor Representative(s) Crawford, Berkowitz, Gara, Morgan  
Requester \_\_\_\_\_ Component No. \_\_\_\_\_

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ( )						
------------------------	--	--	--	--	--	--

**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2004) cost: 0.0  
Mark this box (X) if funding for this bill is included in the Governor's FY 2005 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

This is the estimated cost of participating in the Hydrogen Energy Partnership.

Prepared by: Paul Jenny Phone 907-474-7358  
Division: University of Alaska Date/Time 2/23/04 4:19 PM  
Approved by: Paul Jenny Date 2/23/2004  
Agency: University of Alaska

# FISCAL NOTE

STATE OF ALASKA  
2004 LEGISLATIVE SESSION

Fiscal Note Number: \_\_\_\_\_  
Bill Version: CSHB(FIN) 512  
( ) Publish Date: \_\_\_\_\_

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: DCED  
Title Hydrogen Energy Research RDU Executive Admin & Dev (119)  
Component Office of Economic Development  
Sponsor Representatives Crawford, et al  
Requester House Finance Component No. 2743

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Personal Services	65.0					
Travel	4.0					
Contractual						
Supplies	1.0					
Equipment	5.0					
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>75.0</b>	*	*	*	*	*

<b>CAPITAL EXPENDITURES</b>						
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<b>CHANGE IN REVENUES ( )</b>						
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts	35.0					
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
1108 Statutory Designated Program Rcpts	40.0					
<b>TOTAL</b>	<b>75.0</b>	*	*	*	*	*

Estimate of any current year (FY2004) cost: 0.0  
Mark this box (X) if funding for this bill is included in the Governor's FY 2005 budget proposal:

**POSITIONS**

Full-time	1	*	*	*	*	*
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

This legislation creates the Hydrogen Energy Partnership to facilitate the development of a hydrogen fuel industry in Alaska. The partnership would consist of nine members and be housed in the department. The department is charged with securing federal and private funding sources to cover the costs of establishing and operating the partnership. If funding is secured, the department would appoint partnership members and continue to provide staff support.

DCED estimates needing a Development Specialist II to secure the federal or private funding sources and begin organizational work for the partnership. Because responsibilities could not be absorbed by existing staff, one new FTE would be required along with funds for a computer and supplies. Travel funds are included for partnership members to meet up to three times annually. After FY05, federal and/or private funding sources would fund partnership operations and staff.

Prepared by: Albert H. Clough, Deputy Commissioner Phone (907) 465-2500  
Division Office of Economic Development Date/Time 4/22/04 8:04 AM  
Approved by: Edgar Blatchford, Commissioner Date 4/22/2004  
Agency Department of Community & Economic Development

# Alaska State Legislature

## House of Representatives

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Juneau, Alaska 99801-1182  
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Interim Address  
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(fax) 1-907-269-0105

Representative Harry Crawford  
District 21

### SPONSOR STATEMENT FOR HB 512

House Bill 512 establishes a hydrogen energy partnership within the Department of Community and Economic Development. The partnership is tasked with facilitating the development of a hydrogen fuel industry in Alaska.

Hawaii has already established a similar commission in preparation for potentially using their geothermal energy resource for producing hydrogen for dispersal throughout the Pacific Rim. If Alaska is going to remain competitive in the field of energy in the United States and throughout the world, we must prepare for the possibility that hydrogen will become a viable fuel.

House Bill 512 addresses this eventuality and establishes the structure necessary for the State of Alaska to accept funding for a hydrogen project in the state.

# FISCAL NOTE

STATE OF ALASKA  
2004 LEGISLATIVE SESSION

Fiscal Note Number: 1  
Bill Version: HB 512  
(H) Publish Date: 3/3/04

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: University of Alaska  
Title HYDROGEN ENERGY RESEARCH PROGRAM RDU \_\_\_\_\_  
Component \_\_\_\_\_  
Sponsor Representative(s) Crawford, Berkowitz, Gara, Morgan  
Requester \_\_\_\_\_ Component No. \_\_\_\_\_

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ( )						
------------------------	--	--	--	--	--	--

**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2004) cost: 0.0  
Mark this box (X) if funding for this bill is included in the Governor's FY 2005 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

This is the estimated cost of participating in the Hydrogen Energy Partnership.

Prepared by: Paul Jenny Phone 907-474-7958  
Division: University of Alaska Date/Time 2/23/04 4:19 PM  
Approved by: Paul Jenny Date 2/23/2004  
Agency: University of Alaska

Adopted w/o objection  
4.22.04

23-LS1690D.1  
Craver  
4/21/04

AMENDMENT |

OFFERED IN THE HOUSE  
TO: HB 512

BY REPRESENTATIVE WILLIAMS

- 1 Page 2, line 3, following "energy":
- 2       Insert ", hydropower, wind power, and tidal power"
- 3
- 4 Page 2, following line 21:
- 5       Insert a new paragraph to read:
- 6               "(6) the electric utility industry;"
- 7
- 8 Renumber the following paragraphs accordingly.

4/22/04

called  
8:45

Requested  
new fiscal  
note from  
DCED

# FISCAL NOTE

OF ALASKA  
LEGISLATIVE SESSION

Fiscal Note Number: 2  
Bill Version: HB 512  
(H) Publish Date: 3/3/04

Date/Time (Note if correction): Hydrogen Energy Research Dept. Affected: DCED  
RDU Executive Admin & Dev (119)  
Component Office of Economic Development

Sponsor Representatives Crawford, et al  
Requester House Econ Dev. Int'l. Trade & Tourism Component No. 2743

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Personal Services	65.0	0.0	0.0	0.0	0.0	0.0
Travel						
Contractual						
Supplies	1.0					
Equipment	5.0					
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>71.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ( )						
------------------------	--	--	--	--	--	--

**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	71.0	0.0	0.0	0.0	0.0	0.0
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>71.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2004) cost: 0.0  
Mark this box (X) if funding for this bill is included in the Governor's FY 2005 budget proposal:

**POSITIONS**

Full-time	1	0	0	0	0	0
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

This legislation creates the Hydrogen Energy Partnership to facilitate the development of a hydrogen fuel industry in Alaska. The partnership would consist of eight members and be housed in the department. The department is charged with securing federal and private funding sources to cover the costs of establishing and operating the partnership. If funding is secured, the department would appoint partnership members and continue to provide staff support.

DCED estimates needing a Development Specialist II to write grant applications, secure the federal or private funding sources and begin organizational work for the partnership. Because responsibilities could not be absorbed by existing staff, one new FTE would be required along with funds for a computer and supplies. After FY05, federal and/or private funding sources would fund partnership operations and staff.

Prepared by: Albert H. Clough, Deputy Commissioner Phone (907) 465-2500  
Division Office of Economic Development Date/Time 2/24/04 10:38 AM  
Approved by: Edgar Blatchford, Commissioner Date 2/24/2004  
Agency Department of Community & Economic Development

## Fuel Cells Provide Reliable Power to U.S. Postal Service Facility in Anchorage, Alaska

*Combined heat and power project provides reliable power at reduced cost*

### Overview

Working together, the U.S. Postal Service (USPS) and Chugach Electric Association, partnering with the Department of Defense (DOD), Department of Energy (DOE), US Army Corps of Engineers Construction Engineering Research Laboratories (USA CERL), Electric Power Research Institute (EPRI), and National Rural Electric Cooperative Association (NRECA), developed and installed one of the largest fuel cell installations in the world.

The one-megawatt fuel cell combined heat and power plant sits behind the Anchorage U.S. Postal Service Mail Processing and Distribution Facility. Chugach Electric owns, operates, and maintains the fuel cell power plant, which provides clean, reliable power to the USPS facility. In addition, heat recovered from the fuel cells, in the form of hot water, is used to heat the USPS Mail Processing and Distribution Facility. By taking a leadership role, the USPS will save over \$800,000 in electricity and natural gas costs over the 5½-year contract term with Chugach Electric.

**"Fuel cells solved a handful of problems."**

*—Cathe Grosshandler, Alaska District Environmental Coordinator, U.S. Postal Service*

### Background

The U.S. Postal Service Mail Processing and Distribution Facility, adjacent to the Anchorage International Airport, serves as the postal hub for all of Alaska. The facility processes, on average, over one million pieces of mail every day,

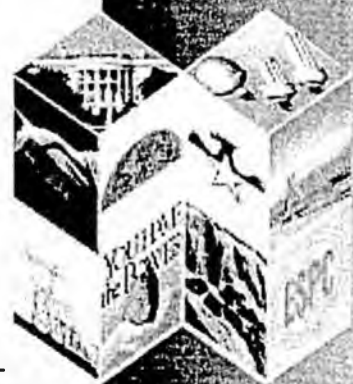
operating 24 hours per day, 365 days per year. Annual energy costs for the 270,000-square-foot facility exceeded \$300,000 for electricity and \$35,000 for natural gas.

The facility faced a series of issues that needed to be addressed. To meet new environmental codes, the facility needed to upgrade an existing underground fuel oil tank serving the facility's 600-kW emergency generator. As a result of an expansion to the facility and adding new optical mail processing equipment, the facility's peak electric demand had grown larger than the existing emergency generator could support. Upgrades were also needed to the UPS (uninterruptible power supply). In addition, the two 80-horsepower boilers (2,700,000 Btu/h), which heat the facility, also needed some improvements.



*The Mail Processing and Distribution Facility, adjacent to the Anchorage International Airport, is key to the Alaska mail system.*

Rather than solving each issue separately, the District Environmental Coordinator wanted a comprehensive solution. The answer seemed to lie in a highly reliable, highly efficient combined heat and power plant.



**Combined  
Heat and  
Power**

**Case Study**



## Project Summary

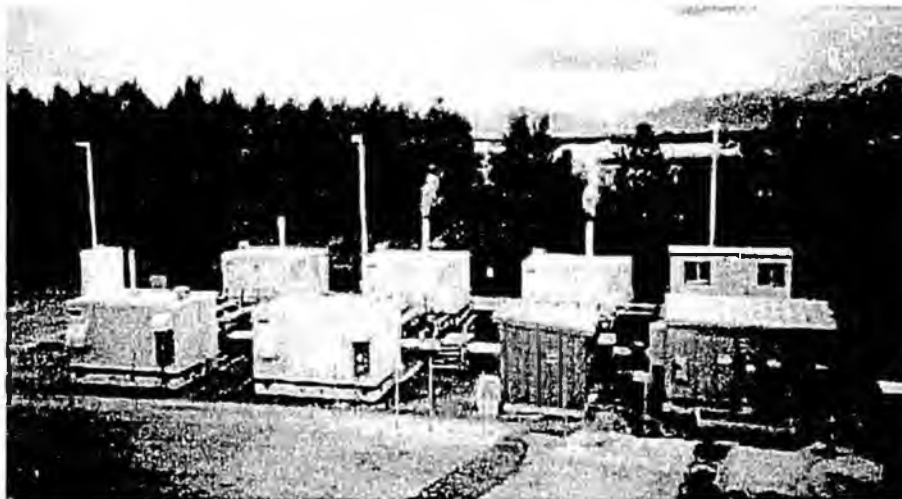
Initially, a combined heat and power plant using natural gas engine generators was proposed. However, after attending a local energy technology show, the USPS began to consider fuel cells. By coincidence Chugach Electric Association, the serving electric utility, was developing expertise in fuel cell technology and supported the USPS interest in the emerging technology.

Fuel cells produce electricity through an electrochemical reaction rather than combustion. While more expensive than conventional power generating equipment, fuel cells provide efficient, reliable power with minimal emissions. (For more information on fuel cells, see FEMP's Federal Technology Alert, "Natural Gas Fuel Cells," at [http://www.eren.doe.gov/femp/prodtech/fed\\_techalert.html](http://www.eren.doe.gov/femp/prodtech/fed_techalert.html).)

To increase overall reliability, the combined heat and power plant consists of five fuel cells with room for a future sixth unit. Thus, the system can meet the facility's peak 800-kW demand even when one fuel cell is off-line. The resulting one-megawatt (1,000-kW) combined heat and power plant consists of five fuel cells, a nitrogen tank, heat recovery equipment, a pump house, and the site management system (SMS).

The fuel cells, manufactured by International Fuel Cells, Inc. (formerly ONSI), are rated at 200 kW each and are fueled by natural gas. Nitrogen is used to purge the fuel cells during startup and shutdown cycles. The pump house is used to move the heat generated by the fuel cells to either the facility for space heating or to the cooling modules, where the excess heat is rejected.

What makes the system a success is the site management system. The SMS



*Set against the Chugach Mountains, five fuel cells supply reliable and clean power to the USPS facility.*

includes fuel cell load control, grid interconnection, and a high-speed switching system. The SMS allows the multiple fuel cell system to transfer between grid-parallel and grid-independent in under 4 milliseconds ( $1/4$  cycle in a 60-Hz system), fast enough that the highly sensitive computer systems in the USPS facility are not interrupted by the transfer. Normally, the fuel cells operate in parallel with the Chugach electric grid. Excess power generated by the fuel cells flows out into the Chugach grid. However, in the case of a grid outage, the SMS identifies the outage, isolates the USPS facility from the grid and allows the fuel cells to transfer to grid-independent mode seamlessly. The SMS was developed under this project but is now commercially available and being specified for use in other fuel cell power systems.

The entire project cost \$5.5 million, including the research and development for the SMS. Funding for the project came from the many partners involved in the effort. What made the project work economically for the U.S. Postal Service is a special contract between the USPS and Chugach

Electric. Chugach Electric owns, operates, and maintains the fuel cell power plant, which is located on the USPS property. The plant is remotely operated by Chugach Electric. The only cost to the USPS was the \$1 million up-front cost as part of a 5 $1/2$ -year contract for baseline electrical service. In return Chugach Electric provides electricity to the mail processing facility for the 5 $1/2$ -year term. If electricity requirements at the USPS facility grow above the set baseline, which the USPS believes is unlikely, additional electricity is purchased at standard rates.

In addition, the USPS facility owns the use of the heat recovered from the fuel cells. Heat energy from the fuel cells is available in the form of hot water at two temperatures: 240°F and 140°F. At this time, the higher temperature water is used for heating the facility. The lower temperature heat is rejected through the cooling modules.

## Benefits

The fuel cell CHP plant provides a number of benefits to the USPS. The most significant benefit has been the increased reliability of electric service.

Restarting the mail processing equipment after a power outage requires a significant level of effort. The increased reliability results in fewer power outages, thereby avoiding unscheduled shutdowns and restarts. The fuel cell and SMS have worked flawlessly since commissioned. In fact, the week before Christmas, on one of the busiest days of the year, construction at the airport caused a local power outage. The entire area was without power for over 4 hours. All, except the U.S. Postal Service, that is. The SMS system automatically switched the facility to operate grid-independent with no interruption. The USPS facility went on to set records, processing over 1.4 million letters and parcels that day, while the neighbors were sitting in the dark.

While the combined heat and power project does not reduce electricity consumption at the USPS facility, it does significantly reduce USPS energy costs. The contract between the USPS

and Chugach Electric provides baseline electrical service to the USPS facility for 5½ years at a cost of \$1 million. Previously, electricity for the USPS facility averaged over \$300,000 per year.

Heat recovered from the fuel cells is being used for space heating in the mail processing facility, thereby displacing the load on the original boiler heating system. In fact, savings have exceeded the original estimate. Initially, it was determined that the fuel cell heat energy could meet around 50% of the total facility space heating needs. During the first year of operation, the heat recovered has satisfied all the space heating needs. Although the winter of 2000-2001 was milder than average, heat recovered from the fuel cells has exceeded expectations.

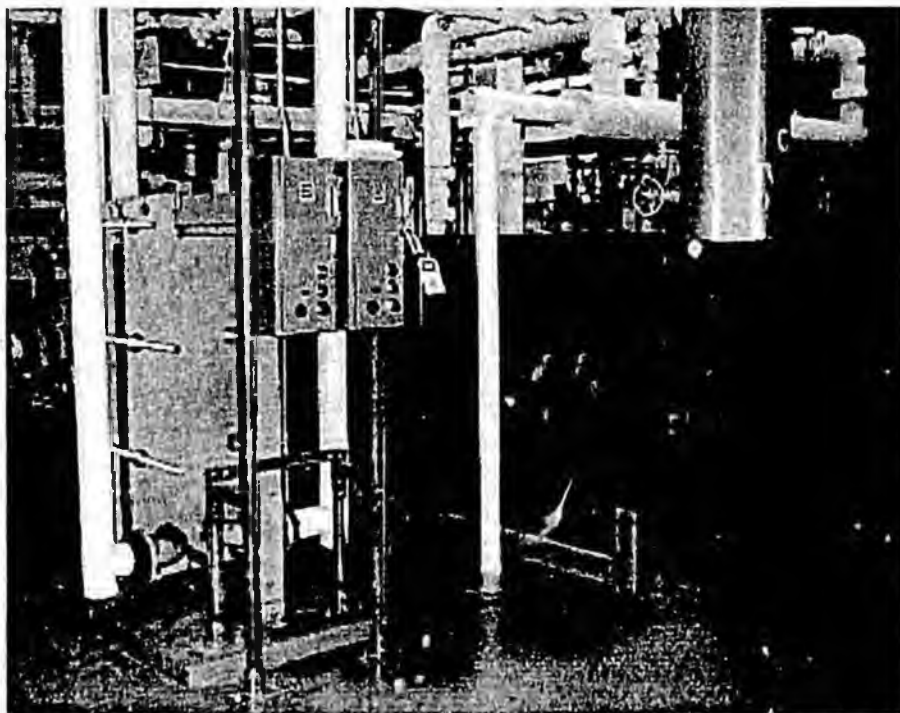
Some capital cost reductions were also achieved. The demonstrated reliability of the fuel cell and site management system has eliminated the need to upgrade

the existing emergency generator. However, the old 1000-gallon, single-wall, below-grade fuel oil tank still needed to be replaced. A new dual-wall, 500-gallon, above-ground fuel oil tank was determined to be sufficient because of the increased reliability of the new power supply system. In addition to the cost reduction from the less expensive, smaller tank, the environmental code features were also less expensive for the smaller tank size. Avoiding the need to upgrade the emergency generator and installing a smaller fuel oil tank saved the USPS an estimated \$500,000 in capital costs.

### Lessons Learned

The USPS recommends that any site thinking about a similar project should consider the following:

- Projects of this nature require “champions.” Each of the parties involved in the project recognized the value of local champions who could think outside the box, overcome barriers, and push the project through.
- Consult with the local utility, DOE regional office, and other organizations to investigate potential partnerships. Both the USPS and Chugach Electric Association believe a more effective solution was achieved as a result of the partnership.
- Take a holistic approach to solving facility needs. The USPS had to address a series of issues. Although each facility need could have been solved individually, the fuel cell combined heat and power plant solved several of the needs simultaneously and at a lower cost.



*Heat recovered from the fuel cells offsets heat supplied by the boiler system. The boilers were not needed during the winter of 2000-2001.*

THE  
FOLLOWING  
DOCUMENT(S)  
ARE  
POOR  
ORIGINAL  
COPIES

# FEDERAL ENERGY MANAGEMENT PROGRAM

Being the largest fuel cell installation of its time made this a distinctive installation. However, it will not remain unique. The development of the SMS will lead to more multi-unit fuel cell power plants with high-speed reliability.

## Looking Ahead

The USPS facility is looking for additional uses for the heat recovered from the fuel cells. While the high temperature heat recovered is perfect for space heating, there is still significant heat energy available at 140°F, which has yet to be utilized. The USPS is still investigating several potential uses for this valuable heat energy.

The SMS has additional capabilities that the USPS may use in the future. In addition to controlling fuel cell operation, the SMS is also capable of controlling peak electrical demand through load shedding. This feature could be used to prevent overloading the power plant when the electric grid is down and the fuel cells are operating independent of the electric grid. The ability to load shed while operating grid-independent could prevent a shutdown of the fuel cell power plant as a result of an overload condition.

At the end of the contract period, the USPS and Chugach Electric will renegotiate the future of the fuel cell combined heat and power plant. No one knows what the future may bring, but all agree the project has been a success.

## For More Information

### FEMP Help Desk

(800) 363-3732

International callers please use (703) 287-8391

(703) 287-8391

Web site: [www.ernp.doe.gov/femp](http://www.ernp.doe.gov/femp)

### General Contacts

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### Site Contacts

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Alaska District Environmental  
Coordinator

U.S. Postal Service

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Anchorage AK 99503-0500

Phone: (907) 564-2902

Fax: (907) 564-2880

[cgrossha@erual.usps.gov](mailto:cgrossha@erual.usps.gov)

#### Peter Poray

Energy Services Manager

Chugach Electric Association

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P.O. Box 196300

Anchorage AK 99519-6300

Phone: (907) 762-4728

Fax: (907) 762-4845

[peter\\_poray@chugachelectric.com](mailto:peter_poray@chugachelectric.com)



Produced for the U.S. Department of Energy (DOE) by the Pacific Northwest National Laboratory

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## Hydrogen: The Future of Energy



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## Why is hydrogen so important?

- ◇ New, highly versatile energy carrier
- ◇ Cleaner, safer *and* cheaper fuel choice
- ◇ When combined with super-efficient fuel cell vehicles, enables a profitable transition from oil — profitable even for oil companies
- ◇ In a hydrogen economy, U.S. energy needs can be met from North American energy sources (including local ones), providing real security
- ◇ Hydrogen can accelerate renewable energy sources, which also have stable prices
- ◇ Hydrogen-ready vehicles can revitalize Detroit



## **The hydrogen cacophony (see "Twenty Hydrogen Myths," [www.rmi.org](http://www.rmi.org))**

- ◇ Rapidly growing interest due to climate and security concerns
- ◇ Unfamiliar terms and concepts, many disciplines
- ◇ Speculation: winners, losers, hidden agendas?
  - Reinforce dominant incumbents, displace, or diversify?
  - Foolishness, panacea, or misleading and double-edged?
- ◇ Debate is overlaid on rancorous old debates
  - Oil, nuclear, renewables, climate, big business, right/left,...
- ◇ Unexpected realignments, strange bedfellows
  - Environmentalists: If President Bush, oil companies, and the nuclear industry like it, it must be bad
  - *Wall St. J.* editorial: If enviros like it, it must be bad
- ◇ Both advocates *and* opponents often poorly understand it!



## **We already *have*, invisibly, a partly hydrogen economy**

- ◇ Two-thirds of the fossil-fuel atoms being burned today are hydrogen...as a part of hydrocarbons
- ◇ A large hydrogen industry exists today: it produces 1/4 the annual volume of the natural-gas industry worldwide
- ◇ The debate is about:
  - Whether we also need to combust the last third (carbon)
  - Whether it might be cheaper and more attractive not to burn the carbon, but to use only the hydrogen
  - To what degree and at what speed the fossil-fuel hydrogen should be replaced by renewable hydrogen
  - How renewable hydrogen will compete with hydrogen produced by nuclear fission (or eventually fusion?) power
  - At what scale
  - Who does it
  - Who decides and how



## **I'll address pervasive myths with answers to eight questions:**

- ◇ What is hydrogen?
- ◇ Is hydrogen safe?
- ◇ Why is hydrogen cheaper to use for vehicles?
- ◇ How is hydrogen now produced and used?
- ◇ What is the least-cost way to make and deliver hydrogen?
- ◇ What technologies are needed to enable a hydrogen transition?
- ◇ How can the U.S. profitably transition from oil to hydrogen?
- ◇ Are there enough North American primary energy sources for this transition?



## What is it? Basic hydrogen facts

- ◇ Hydrogen is ~75% of the known universe
- ◇ On earth, it's not an energy *source* like oil or coal
  - Only an energy *carrier* like electricity or gasoline — a form of energy, derived from a source, that can be moved around
- ◇ The most versatile energy carrier
  - Can be made from any source and used for any service
  - Readily stored in large amounts
  - Fungible with the other highest-quality carrier, electricity
- ◇ Almost never found by itself; must be liberated
  - "Reform" HCs or CHs with heat and catalysts
  - "Electrolyze" water (split H<sub>2</sub>O with electricity)
  - Experimental methods: photolysis, plasma, microorganisms,...
- ◇ Can be made and used at any scale



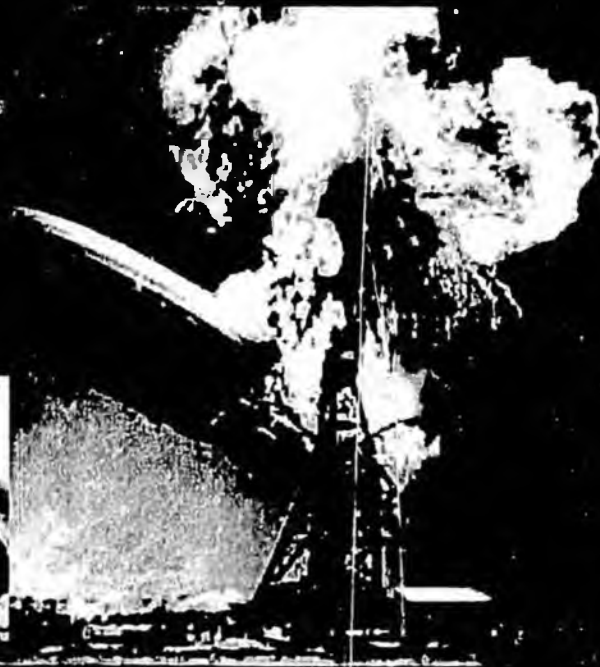
## Physical attributes of hydrogen

- ◇ Transparent, colorless, odorless, nontoxic
- ◇ Molecular hydrogen ( $H_2$ ) is the lightest element and molecule
  - Per unit of energy contained,  $H_2$  is 64% lighter than natural gas or 61% lighter than gasoline
- ◇ 1 kg of  $H_2$  contains same energy as 1 U.S. gallon of gasoline, which weighs not 2.2 but 6.2 pounds
- ◇ The flip side of lightness is bulk
  - $H_2$  has 30% the energy of  $CH_4$ , both at atmospheric pressure
  - $H_2$  at 170 bar pressure has 6% the energy/volume of gasoline
- ◇  **$H_2$  is advantaged if lightness is worth more than compactness**



## Is it safe?: A primer on Hydrogen safety

- ◇ All fuels are hazardous, but...
- ◇ Hydrogen is comparably or less so, but different
  - Buoyant ( $8\times \text{CH}_4$ ), diffusive ( $4\times \text{CH}_4$ ,  $12\times$  gasoline)
  - Clear flame can't sear you at a distance; no smoke
  - Hard to make explode; can't explode in free air; burns first
  - $4\times$  gasoline-fume concentration required to burn;  $22\times$  less explosive power
  - Rises, doesn't puddle
  - *Hindenburg* myth (1937) — *nobody* was killed by hydrogen fire
  - Completely unrelated to hydrogen bombs



# Demonstrating hydrogen vs. gasoline safety

M.R. Swain, "Fuel Leak Simulation," [www.eren.doe.gov](http://www.eren.doe.gov), 2002.



3 s: Ignition. H<sub>2</sub> @ 28 L/min, gasoline @ 0.68 L/min



60 s: H<sub>2</sub> flow subsiding; max 47°C on rear window, 19.4°C on tray behind rear seat. Zooming in on gasoline car...



90 s: H<sub>2</sub> plume nearly stopped.



140 s: Gasoline-car interior alight. Tires later burst.

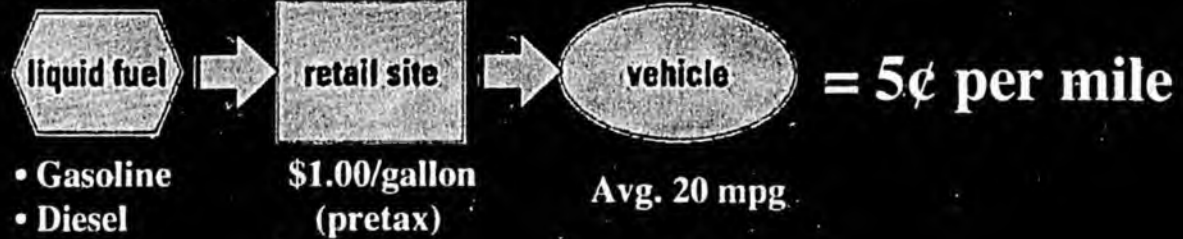
## Why is it cheaper? Basic hydrogen economics

- ◇ The most common fallacy is comparing hydrogen to other fuels in cost per unit of *energy contained*
- ◇ What matters is cost per unit of *service provided*
- ◇ *E.g.*, a hydrogen fuel cell can propel a car 2–3× as efficiently as a gasoline engine car, so even if H<sub>2</sub> cost twice as much per unit of energy, it would cost the same or less *per mile driven*
- ◇ Recovered heat from the fuel cell (and reformer), clean and silent operation, high-quality and ultra-reliable power supply, and many other “distributed benefits” may also have a big value



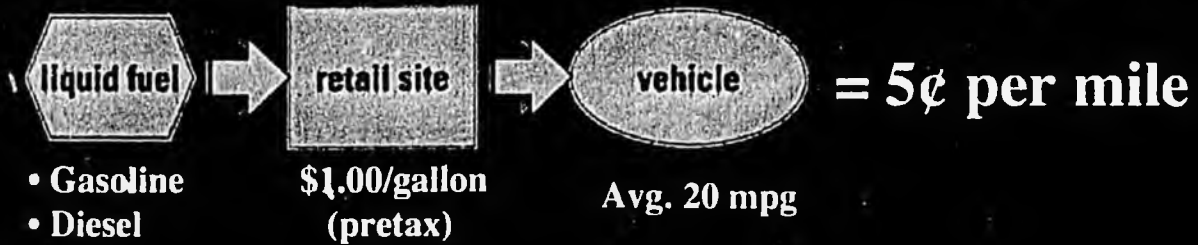
# Hydrogen cars will be cheaper per mile driven

## ◇ Gasoline

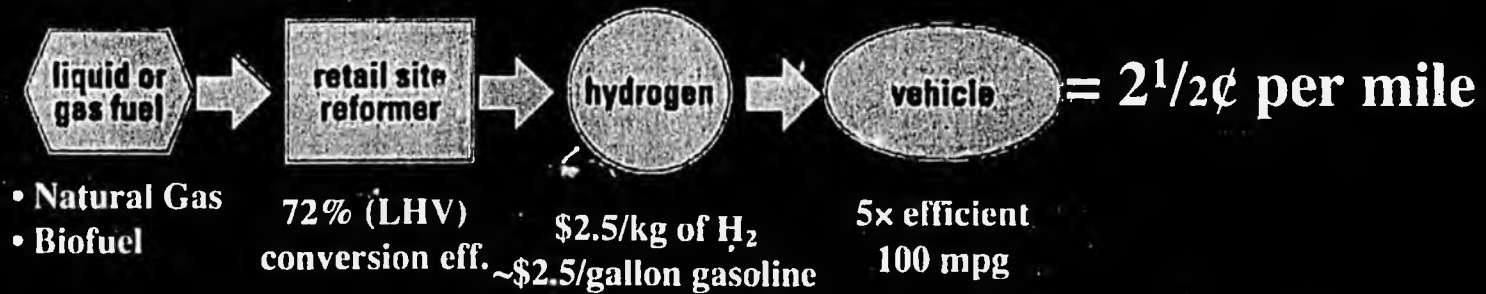


# Hydrogen cars will be cheaper per mile driven

## ◇ Gasoline

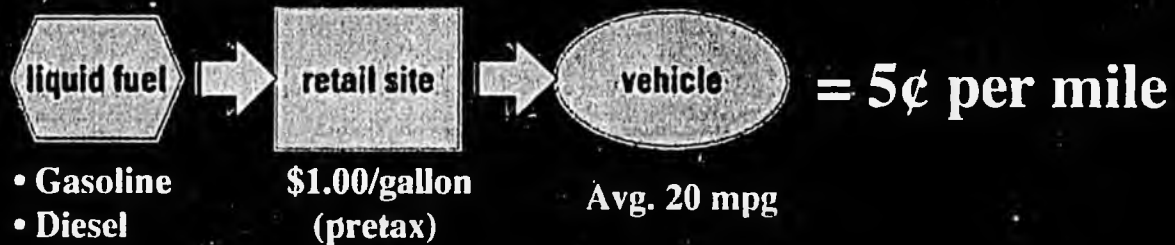


## ◇ Reformation

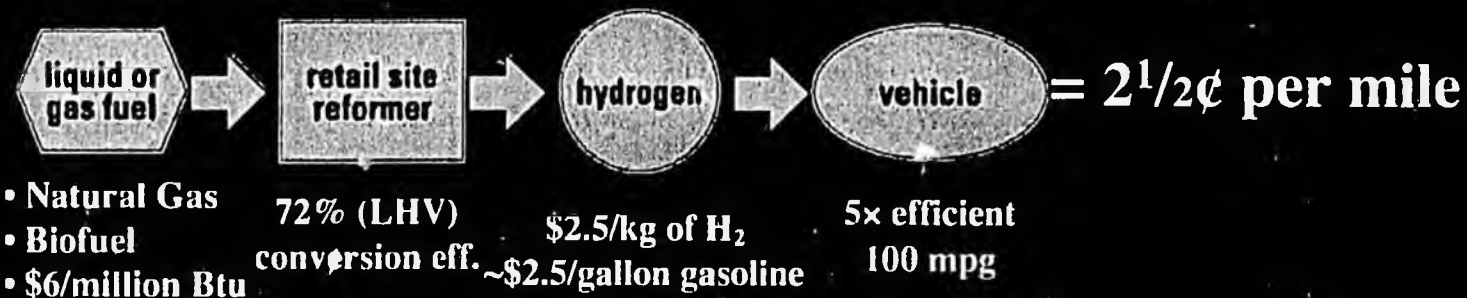


# Well-designed hydrogen cars will be cheaper per mile driven

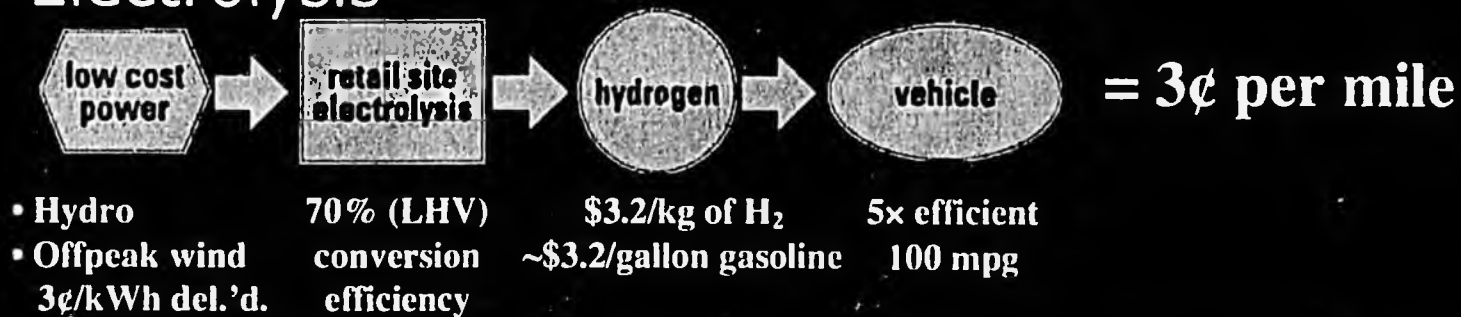
## ◇ Gasoline



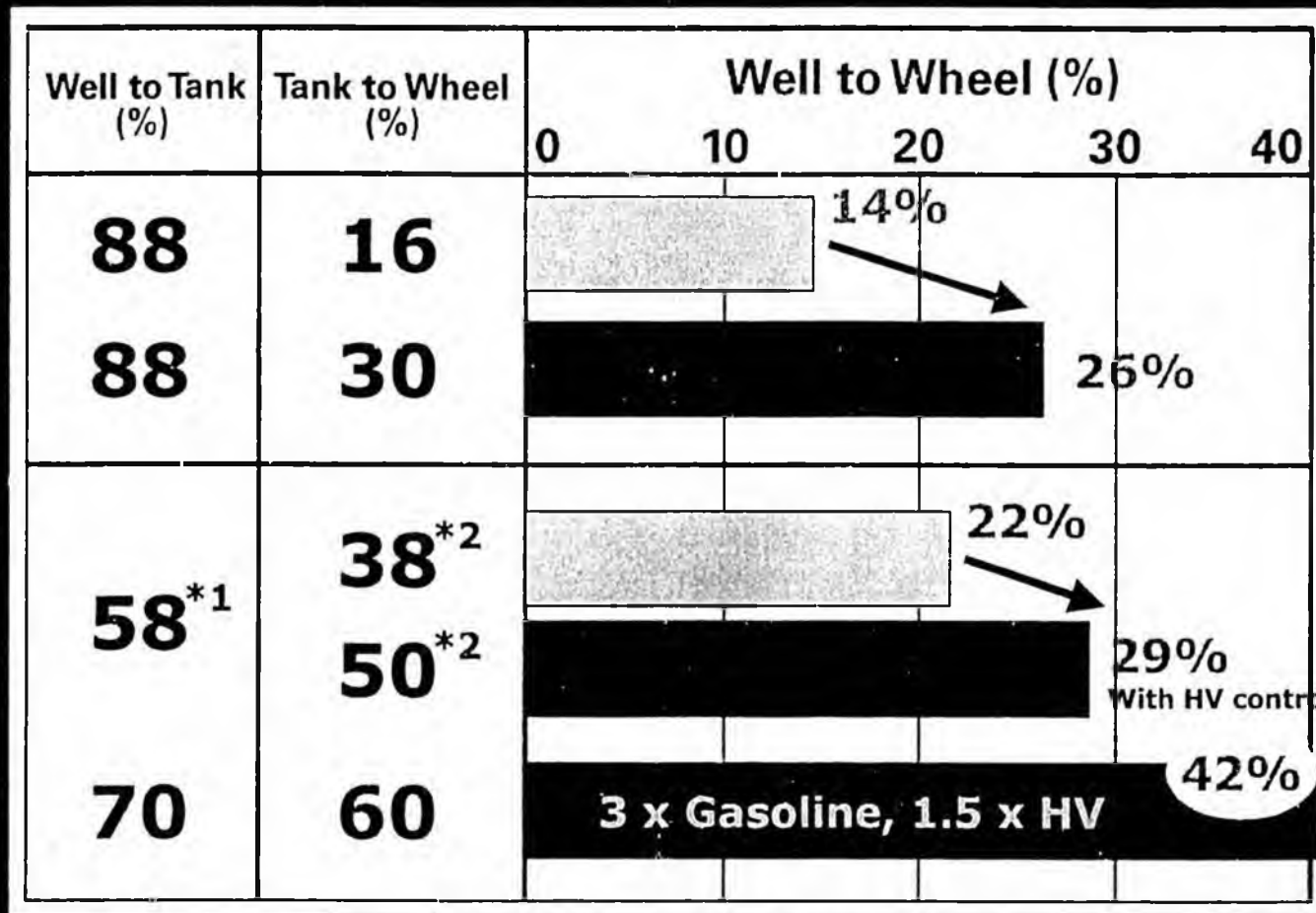
## ◇ Reformation



## ◇ Electrolysis



# Well-to-Wheels Efficiency



Japanese 10-15 Mode Toyota's estimation

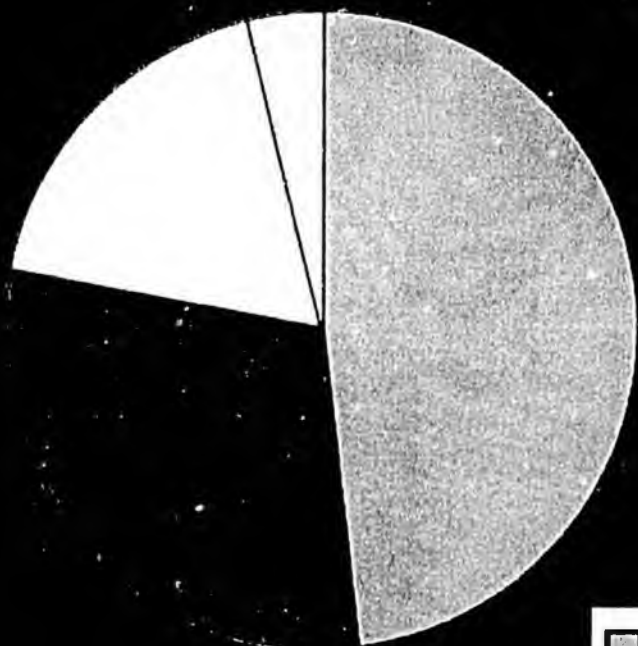
\*1 Natural gas base \*2 Measurement from the electric current

Source: Toyota Motor Corp. presentation at Shanghai Fuel Cell Vehicle Forum, 4-5 December 2002



# How is hydrogen now produced?

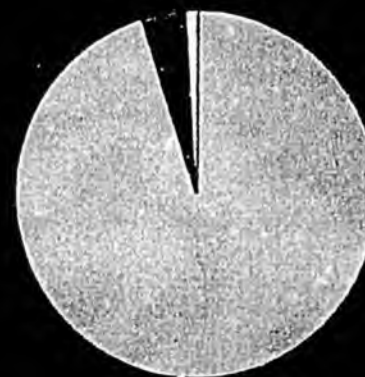
## World



~50 million tonnes/  
y global H<sub>2</sub> output,  
growing ~6-7%/y

- Natural Gas
- Oil
- Coal
- Electricity

## U.S.

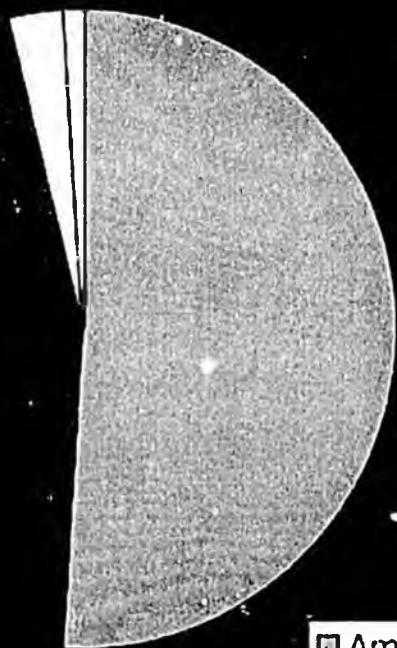


8% of U.S.  
natural gas is  
used to make H<sub>2</sub>

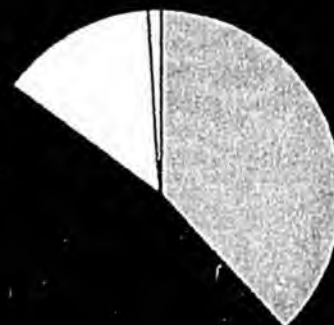


# How is hydrogen now used?

World



U.S.



- Ammonia fertilizer
- Oil refining
- Chemicals
- Food, microchips, metals, etc.

~7 million tonnes/y used to make gasoline and diesel fuel



## “Making hydrogen uses more energy than it yields”

- ◇ Of course! The laws of physics require that *any* conversion from one form of energy to another yield less useful energy than you start with — otherwise it'd be a perpetual-motion machine
  - Making gasoline from crude oil is ~73–91% efficient
  - Making coal into delivered electricity is ~29–35% efficient
  - We make these energy carriers because they're worthwhile
- ◇ Hydrogen production is quite efficient
  - ~70–82% efficient from natural gas, 75–80+% from electricity (but  $\times 1.15$  to measure the same way as for fossil fuels)
  - The rest is heat that may also be recaptured and reused
  - Conversion efficiencies continue to rise; losses may be halved
- ◇ H<sub>2</sub>'s 2–3 $\times$  greater end-use efficiency in fuel cells richly justifies the costs and losses of producing it



## How to make least-cost H<sub>2</sub>

- ◇ Proven, cost-effective, climate-safe methods already exist
  1. Reform natural gas at the wellhead and reinject the CO<sub>2</sub>
    - Reforming (~8% of U.S. gas now) & reinjection (32 MT/y) are mature
      - › Potentially three profit streams: H<sub>2</sub>, +CH<sub>x</sub>, -C
  2. Electrolyze with climate-safe electricity (hydropower, offpeak windpower)
    - Greatly improves renewable economics if electricity is converted to H<sub>2</sub> and sold as motor fuel
      - › U.S. gasoline at \$1.25/gallon is equivalent at the wheels to \$0.09–0.14/kWh electricity with a proton attached to each electron — so run dams in “Hydro-Gen” mode, shipping compressed hydrogen (a value-added product) instead of kWh (a raw commodity)
      - › H<sub>2</sub> storage makes wind/PV power firm and dispatchable
  3. In the future, hydrogen from coal, oil, and biomass (and perhaps experimental solar methods) will further hone competition...but we need only one solution and have at least two



## **"Hydrogen takes too much energy to deliver"**

- ◇ The Myth: since  $H_2$  is so light, "its physical properties are incompatible with the requirements of the energy market...because production, packaging, storage, transfer and delivery...are so energy consuming...." — Bossel & Eliasson
  - They catalogued the delivery methods that the industry has already rejected for this reason (outside special niche markets) — very long pipelines, liquid  $H_2$ , steel tube trucks,...
  - They considered only the costliest production method (electrolysis, which has 4% of the world market)
  - They considered only centralized production, incurring its high distribution costs
  - Their assessment is useful for helping others to understand (as hydrogen experts already do) how *not* to design a hydrogen economy, but gives no reasons not to design one correctly



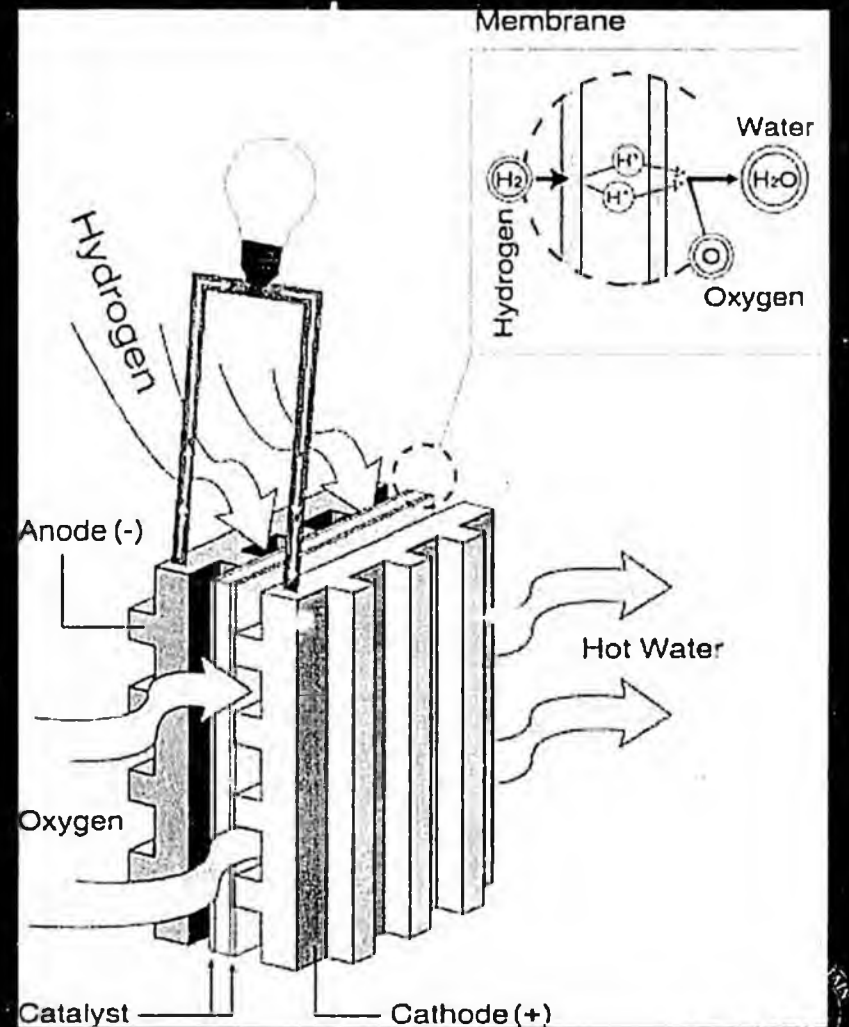
## How should we deliver hydrogen?

- ◇ Use the cheapest method by fully utilizing the existing, paid-for gas and electricity infrastructure
- ◇ Both centralized and distributed architectures
  - Centralized natural-gas reformers may or may not ultimately prove cheaper and more efficient than miniature ones
  - Distributed solution: small-scale reformers and electrolyzers
  - Cost <10% of a gas station's capital cost, or ~2<sup>1</sup>/<sub>2</sub>% of the investment in the station *plus* its upstream oil supply
  - As with diesel fuel, fewer than one-third of filling stations need conversion
  - Deutsche Shell said it could install hydrogen in all German stations in two years
  - Integrate with deployment of fuel cells in buildings
- ◇ Central solution: merchant hydrogen production at refineries near urban centers with pipelines



## Fuel cells — key to the hydrogen transition

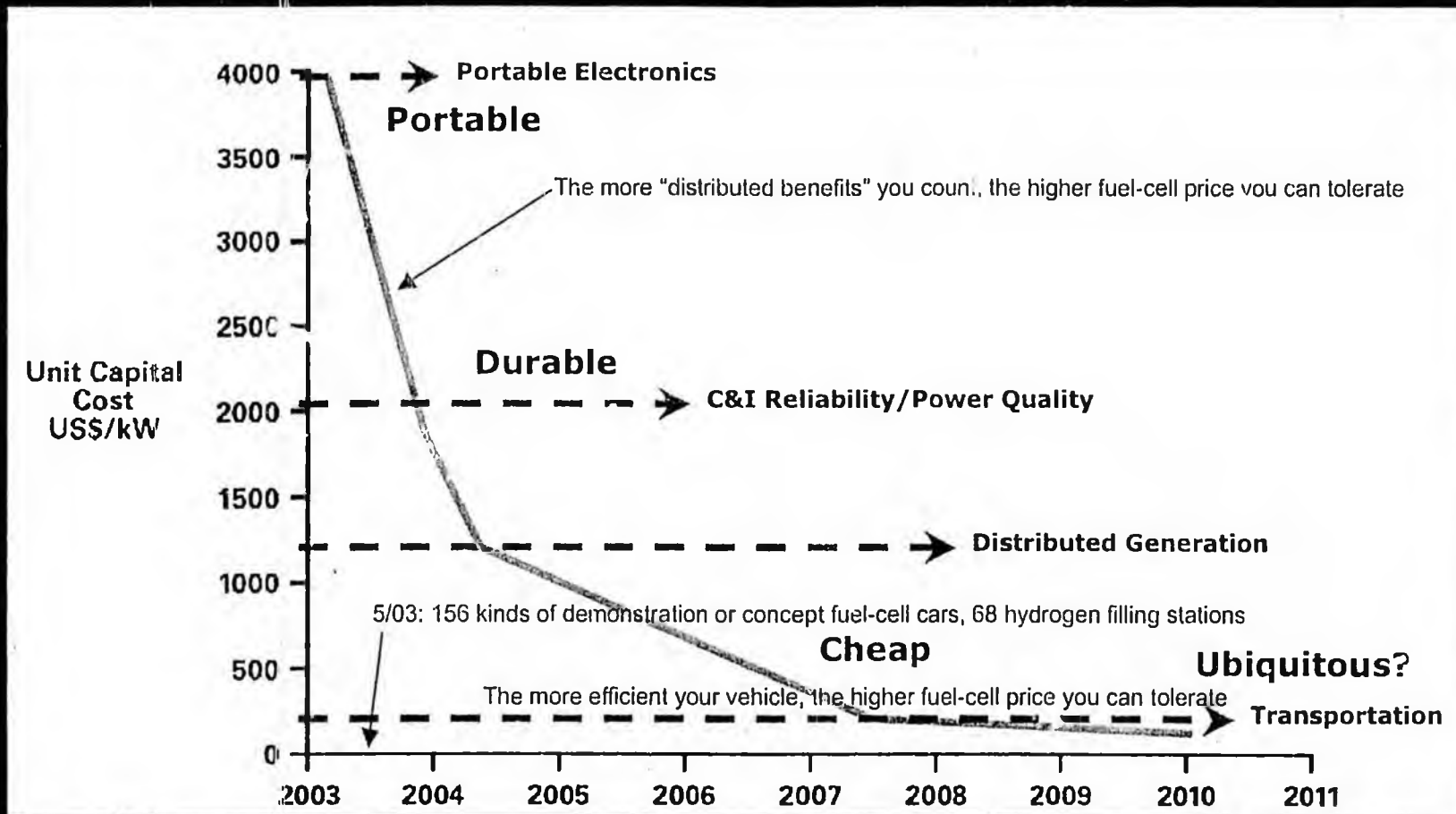
- The most efficient way to make electricity; ~50–70% efficient (the rest is recoverable heat)
- Extremely reliable, virtually silent, few or no moving parts, no combustion
- Fully scalable



# Fuel cells are already viable

## Fuel Cell Competitive Price Points

(1993-2003 Cost Reduction: % catalyst ÷ 20, cost ÷ 10, vol./kW ÷ 10)



We can make the price drop happen faster and more surely...



## Making cars ready for hydrogen

- ◇ **Standard fuel-cell car:** insert fuel cell in near-normal, high-tractive-load platform
- ◇ Fuel cell is too big and costly, so must sell many units at a loss (or wait a long time) to bring cost down
- ◇ H<sub>2</sub> tanks are too big to package, so need onboard methanol or gasoline reformer
- ◇ Reformer hell
- ◇ **Direct-hydrogen fuel-cell car:** ultralight, ultra-low-drag platform can use any driveline and fuel, but is peculiarly well suited to direct-hydrogen fuel cell
- ◇ Fuel cell is small enough to afford, even at early prices
- ◇ Now-commercial H<sub>2</sub>-gas tanks for normal range are small enough to package — **no storage problem**
- ◇ No reformer, high efficiency
- ◇ Can produce cars as soon as fuel cells are ready



## An uncompromised, same-cost, 5x-efficiency midsize SUV



© 2000 Hypercar, Inc.

*an illustrative, production-costed, manufacturable concept car developed for a few million dollars in eight months in 2000 by Hypercar, Inc. ([www.hypercar.com](http://www.hypercar.com)) — on time, on budget, with attributes never before combined in a single vehicle*

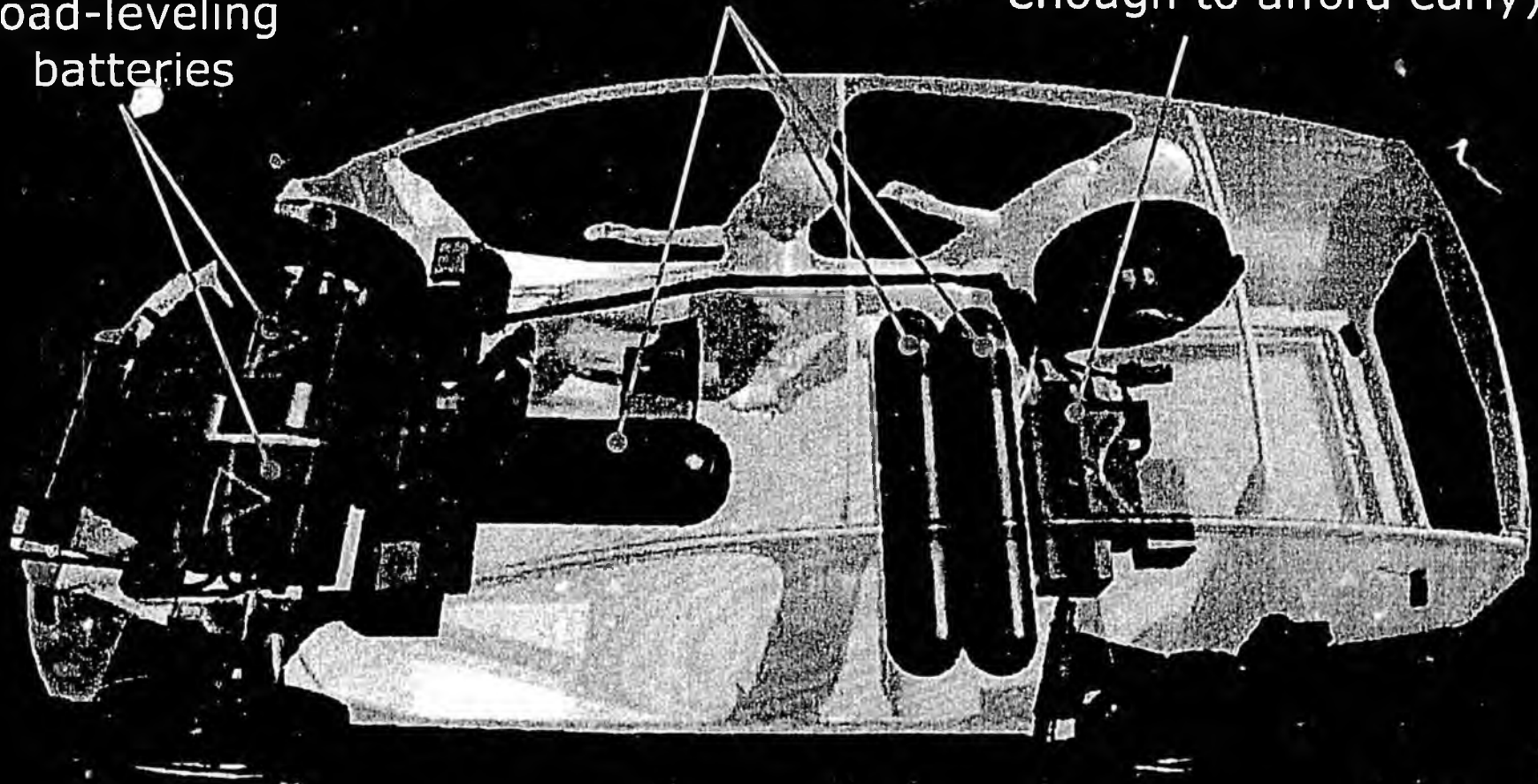
- ◇ 5 adults in comfort, up to 69 ft<sup>3</sup> of cargo
- ◇ hauls 1,012 lb up a 44% grade
- ◇ 1,889 lb (47% mass of Lexus RX300)
- ◇ sim. head-on wall crash @ 35 mph doesn't damage passenger compartment
- ◇ sim. head-on collision with car 2x its mass, each @ 30 mph, prevents serious injury
- ◇ 0-60 mph in 8.2 seconds
- ◇ 99mpg (2.38L/100 km, 42km/L, 5xRX300)
- ◇ 330 mi on 7.5 lb safely stored 5-kpsi H<sub>2</sub>
- ◇ 55 mph on just normal a/c energy
- ◇ zero-emission (hot water)
- ◇ sporty, all-wheel digital traction
- ◇ ultra-reliable, software-rich, flexible
- ◇ wireless diagnostics/upgrades/tuneups
- ◇ 200k-mi warranty, no fatigue, dent, rust
- ◇ competitive manufacturing cost expected
- ◇ decisive mfg. advantages—≤90% less capital, space, assembly, parts count
- ◇ initial production could ramp up ~2007

**55 mph on same power as normal a/c, so  
ready now for direct hydrogen fuel cells**

35-kW  
load-leveling  
batteries

137-liter 5-ksi H<sub>2</sub> storage  
(small enough to package)

35-kW fuel cell (small  
enough to afford early)



## Ready or not, here it comes

- ◇ The chairs of four major oil companies and several major car companies have said we're entering the oil endgame and starting the hydrogen era
- ◇ Royal Dutch/Shell Group Planning scenario in 2001 envisaged a China-led hydrogen leapfrog
  - H<sub>2</sub> would fuel 1/4 of the industrialized world's vehicles in 2025
  - World oil remains stagnant to 2025, then falls
  - China is already on this path, for compelling strategic reasons
- ◇ U.S. & E.U. committed >\$3b to H<sub>2</sub> R&D in 2003
- ◇ Private sector has committed far more



## **“Insoluble chicken-and-egg problem” to get to H<sub>2</sub> cars**

- ◇ Nobody would want a H<sub>2</sub> car with nowhere to fuel it, nor invest to make H<sub>2</sub> with nobody to buy it
- ◇ It's normally assumed to be too costly to cover the country with H<sub>2</sub> infrastructure before selling H<sub>2</sub> cars — probably hundreds of billions of dollars
- ◇ This actually costs less than normal investments in *oil*-based infrastructure — and can be self-financing
- ◇ Key to transition: *integrate* deployment of fuel cells in buildings and in vehicles



# How a rapid, profitable H<sub>2</sub> transition would work

gas or  
electricity

